Index

1. Accreditations
2. Code Blue
3. Code Grey
4. Code Pink
5. Code Orange
6. Code Purple
7. Code Red
8. Code of Conduct
9. Access assessment and continuity of care
10. COP 6 nursing manual 1
11. Health camps for patient care
12. PRE 8 Enhanced communication
13. Quality manual
14. SOP Care of Patients
15. SOP Continuous Quality Improvement
16. SOP Facility Management & safety
17. SOP Hospital Infection Control
18. SOP Human Resource Management
19. SOP Information Management system
20. SOP Management of Medication
21. SOP Patient Rights & Education
22. SOP Responsibilities of Management

MAHATMA GANDHI MISSION HOSPITAL
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CODE BLUE POLICY

OBJECTIVE

To provide a standard response pattern from the Code Blue Team for any cardio-pulmonary arrest or unresponsive of patient, visitor or employee in the Hospital. Optimum effort will be made in attempting to restore the patient's functional integrity by providing the necessary life support measures, under the American Heart Association Standards of Advanced Cardiac Life Support.

SCOPE

Hospital wide

PURPOSE

To provide a basis for an organized response to a cardio-pulmonary arrest within the Hospital.

POLICY

To provide a standard response pattern from the Code Blue Team for any cardio-pulmonary arrest situation in the Hospital. Optimum effort will be made in attempting to restore the patient's functional integrity by providing the necessary life support measures, under the American Heart Association Standards of Advanced Cardiac Life Support.

EQUIPMENT

- Emergency crash cart.
- Defibrillator
- Pulse oxymeter /Cardiac monitor
- Suction Machine

PROCEDURE

1. In every indicated "CODE BLUE" situation, cardio-pulmonary resuscitation (CPR) will be initiated by any trained personnel in the vicinity.
2. The Doctor / Nurse /Patient attended on site shall call the specific Hospital number to alert the "CODE BLUE" team.
    - ✓ Message will be eg : "Code Blue 1st floor room No 9 ." Repeat 3 time .
    - ✓ The message will first be announced on PA system stating: "Code Blue 1st floor room no 9." 3 time .
3. The nearest crash cart will be brought to the site immediately and positioned on the same side as the IV access. Area Doctor /nurse/Patient attendant will initiate the following as indicated till the code blue team arrives:
    - i. Bring the patient on Bed/clear surface, if required.
    - ii. Move unnecessary furniture out of the way.
    - iii. Pull curtains to provide privacy.
    - iv. Start with basic life support.

The Code Blue team will respond to the alert area in a rapid and organized manner with emergency kit.

The members of the Code Blue team are as follows:

JOB RESPONSIBILITIES

Anesthetist (The Code Captain/Code in-charge)

- CPR (ACLS & BLS)
- Intubate if necessary.
- Continuous assessment of patient.
- Calls Code end.

Sr. Resident (Medicine)

- Helping in BLS/ACLS to anesthetist
- Defibrillation, Cardiac monitoring

Area Doctor

- Ensures proper documentation of all events and counter signs the reports.

ICU Nurse

- IV access
- Draws up medications. Administers as per doctor's orders.

Area Nurse

- Documentation and
- Notes all consumables, drugs used etc.

Security

- Managing crowd
- Halt left on floor (evidence floor) for patient shifting to ICU

Housekeeping personal

- Keep stretcher with oxygen for shifting of the patient to ICU

Nursing supervisor

- Council the patients relatives,
- Help in shifting of patient.

DOCUMENTATION

- Resuscitation Flow Record will be completed by code captain, Sr. Resident (Medicine) & Nursing supervisor.
- A copy of Resuscitation Flow Record to be sent to Medical superintendent, Code blue review team & Quality assurance cell.

COMMENTS

- Crash cart is cleaned and restocked immediately after use by the nurse to crash cart.
- Counter check all contents with the checklist to ensure its completeness.
- Ensures the defibrillator is put on charge mode.
- The drawers from 1 to 6 will be sealed after replenishment and not opened unless for a code.
- The inventory of the crash cart is maintained every Day for adequate stock as per checklist, functionality of defibrillator, laryngoscope, avoidance of over stock and cleanliness.
- The checklist and contents would be the same in all areas. If any additional items are to be kept it is done so with the permission of the code blue committee chairman and the items are included in the list as addendum.

ANNEXURE

- Crash cart check list.
- Code blue review form.

Medical Superintendent
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POLICY & PROCEDURE OF CODE GREY

(INTERNAL DISASTER)

OBJECTIVE

To provide a standard response pattern from the Code Grey Team for any incident in the Hospital.

Optimum effort will be made in attempting to save patients, visitors & employee's life & property of hospital.

SCOPE

Hospital wide

PURPOSE

To provide a basis for an organized response to Internal Disaster.

EQUIPMENT

- Torch.
- Hospital all exit doors keys.
- Elevators Key.
- Wheel chairs and stretchers in situation of evacuation.

DEFINATION

CODE GREY

M.G.M. Hospital, Kamothe code grey is designated for the Internal Disaster.

It includes:-

1. Earthquake

2. Flood

3. Bomb threat
4. Building collapse
5. Terrorist attack

POINTS TO REMEMBER IN CASE OF INTERNAL DISASTER:

- Dial Emergency Number.
- Identify yourself.
- Give the exact location.
- Given the nature of disaster.

  (E.g: Ms. Lisy staff Nurse from MICU celling fall)
- Open exit door.

PROCEDURES

1. Code will be announced.
2. All emergency Doors will be open by Area Nurses/Doctors/Housekeeping personnel by using key which is secured near, by the doors.
3. Medical Superintendent (Sr. Causality Medical Officer) will take a decision of evacuation after the discussion with Command Nucleus.
4. Evacuation will be announced by telephone operator.

   "LADIES AND GENTLEMEN, YOUR ATTENTION PLEASE.THERE IS AN EMERGENCY IN THE BUILDING. PLEASE EVACUATE BY THE NEAREST STAIRCASE. FOLLOW ALL INSTRUCTIONS GIVEN BY THE STAFF. REMEMBER DO NOT USE THE LIFTS. THANK YOU"

   In case of mock drill staff, under mentioned announcement to be made:
   "LADIES AND GENTLEMEN, YOUR ATTENTION PLEASE. WE ARE CONDUCTING MOCK DRILL PRACTICE FOR OUR EMPLOYEES.
   ALL EMPLOYEES ARE REQUESTED TO PROCEED TO ASSEMBLY AREA VIA NEAREST EXIT. DO NOT USE THE ELEVATORS.
   THANK YOU".

5. Priority of evacuation is as under;-

   → ICU patients
   → OT patients
   → IPD & OPD patients
   → Attendants and visitors
   → Own and contractual staff

6. Command Nucleus will call Police Station and DCP office for providing adequate manpower to control traffic and crowd.
7. In case of terrorist attack Command Nucleus will inform RAF (Rapid Action Force) station for help.
8. After assessing condition Command Nucleus may call external agency for trained guard for evacuation of patients, visitors & staff.
9. All available emergency lights and torches to be moved by Security Supervisor especially to the exit routes when there is total power failure
10. Incharge – Emergency Medicine will do the triaging of patients and injured personnel.
11. Posted doctors will receive give first aid as per requirement.
12. Medical superintendent will contact nearby Hospital for Shifting of patients & injured personnel. (1st preference is M.G.M. Hospital Belapur, Vashi & Kalamboli.)
13. Hospital Administrator will arrange ambulances for shifting of patients to nearby Hospital.
14. All HOD will take a position to handle causalities as per there specialty.
15. Trained security supervisors along with two persons each to go around entire building including the terraces and check for any trapped/ unconscious persons and to assist in evacuating them.
16. After the emergency will over command Nucleus along Medical Superintendent will assess the status.
17. Assistant administrative officer – HRD will take a roll call of employee.
18. If everything is ok Code Grey cleared will be announced or intimated to employees.

TEAM COMPOSITION

1. COMMAND NUCLEUS

Day

Chief Security officer

Night & Holidays

On Duty Security supervisor till chief security officer arrive to the Hospital

2. MEDICAL SERVICES HEAD

Day

Medical Superintendent

Night & Holidays

Sr. Causality Medical officer till Medical Superintendent arrive to the Hospital

3. Patient Evacuation Team

Day

Area HOD (As directed by Medical Superintendent)

Matron

Area Doctor

Staff Nurses (As directed by Director of Nursing)

Area Sister Incharge

Housekeeping personnel (As directed by Housekeeping Supervisor)

Night & Holidays

Area Sr. Resident Doctors

Nursing Supervisor

Area Nurses

Housekeeping personnel

4. Assembly area Incharge

Day

Incharge – Emergency Medicine

Hospital Administrator

Night& Holidays

Night Hospital Administrator till the Incharge – Emergency Medicine &Hospital Administrator arrive to the Hospital

5. Patient transfer or shifting Incharge

Day

HOD – Anesthesia

HOD - Emergency Medicine

HOD – Medicine

HOD – Surgery

(Under the guidance of Medical Superintendent)

Night & Holidays

Sr. Resident doctor – Anesthesia

Sr. Resident – Emergency Medicine

Sr. Resident Doctor – Medicine

Sr. Resident – Surgery

(Under the guidance of Sr. Causality Medical officer)

Till the Day Team arrives.

RESPONSIBILITIES OF INDIVIDUALS AND DEPARTMENTS

Director:

- Liaison with the Press, TV News and outside media agencies.
- Coordinating, organizing & assigning duties to Head of department.

- Liaison with the Press and outside agencies – to release information to the media as and when required
- Control of the release of all photographs as per discretion of hospital authorities

Dean:

- Helping hand to Director and Medical superintendent
- Coordinating, organizing & assigning duties to Non-teaching staff.
- Coordination of various hospital activities through the heads of Administrative and Medical services.

Chief Security officer /Command Nucleus:

- Liaison with the top government agencies regarding provision of necessary services
- Ask for help from local police and volunteer organizations as deemed necessary.
- Assigning additional responsibilities to various heads of departments through Director, Dean & Medical Superintendent.
- Periodic review of the arrangements.

Site Engineer (On duty Engineer):

- He will always carry Emergency Elevator keys.
- Chief Engineer will be member of Core Emergency Command Team.

Medical Superintendent:

- Authorize announcement of evacuation.
- Coordinating, organizing, communicating and assigning duties to medical Staff. Where required the ambulances and the medical team may be asked to go to assembly area.
- Inform other Hospital regarding the shifting of Hospital Patient.
- Liaison with Government Hospitals for inter facility shift of patients
- Periodic review of the arrangements.

- Coordinating, organizing & assigning duties to the all Doctors & technical staff's.

Incharge Emergency Medicine

- Take a charge of assembly area.
- AssignDoctors as per specialty to assess patients.
- Assign Doctors for shifting of patients to other hospitals.

Hospital Administrator

- Assembly area Incharge for Non-Medical Care.
- Helping Hand to Medical Superintendent.
- Instructing Bio-medical Engineers for support where ever required.
- Arranging and supervising Medical consumable supply (Medical Gases) to Assembly area.

Administrative officer:

- Activate all resources to handle the situation.
- Ensure smooth co-ordination of all additional non-medical services.
- Assign PWOs (public welfare officer) (PWO nominated persons from HR department) to attend to emotionally disturbed relatives/casualties& Employees.
- Assign PWOs for liaison between attendants, HODS and hospital.
- Organize systematic evacuation of inpatients whenever the situation demands under the strict supervision of doctors, Nurses and patient attendants using all available own and contractual staff.
- Crowd control using own security and police personnel.

Assist. Admin:

- Establishing information services for relatives and friends.
- Take an in house patients list with relative's details.
- Take roll call of patients

- Keeps a track of patient shifting to other hospitals.
- Centralizing information about the casualties and is responsible for updating the casualty list.
- Organizing press conference, if order by Director.
- Informing the external agencies as per Director's order.

Assist. Administrative officer – HRD

- Take a print of on duty staff
- Take a roll call at assembly area

Director of Nursing

- Arrange nursing manpower for proper nursing care.
- Arrange required consumables and drugs as per requirement.

Security:

- Cordon off area affected.
- Regulate entry and exit of personnel to ensure smooth functioning of emergency services.
- Ensure Ambulance and other emergency services vehicles are allowed exit and entry freely.
- Smooth Traffic Control. Any unidentified /suspicious vehicle registration number to be noted down and forwarded to the police if required.
- Unwanted traffic and public gathering shall be controlled by Security till local police help available.
- To safeguard all the belongings of the disasters victims.
- All emergency lights to be kept ready.
- Responsible to handle the situation more efficiently.
- Lady Supervisor & Lady Guard to be posted for handling all ladies.(Outsourced)
- Help of the police department to be taken for crowd control.
- Open all the emergency exit doors in case evacuation is required

Housekeeping:

- Proper waste disposal and sanitary supervision.
- Be sure all hallways or traffic areas are clear of cleaning carts, equipment etc.
- Helping hand to Nursing and Doctors.
- Helping hand in evacuation of patients.

Kitchen Manager

- Arrange dietary requirement of Patients, Patients relatives, Doctors and All staff (Teaching & Non-Teaching)

ASSEMBLY AREA

Garden opposite to Medical College

ANNEXURE

001 – Emergency Number List

002 – Nearby Hospital Number list

Medical Superintendent
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POLICY & PROCEDURE OF CODE PINK

(CHILD ABDUCTION)

OBJECTIVE

To provide a standard response pattern from the Code Pink Team for any Child Abduction or Patient Missing in the Hospital.

SCOPE

Hospital wide

PURPOSE

To provide a basis for an organized response to Child Abduction and Patient Missing within the Hospital.

EQUIPMENT

- Hospital all Exit Door Keys,

DEFINITION

CHILD ABDUCTION

Child abduction is the unauthorized removal of a minor (a child under the age of legal adulthood) from the custody of the child's natural parents or legally appointed guardians.

POINTS TO REMEMBER TO PREVENT CHILD ABDUCTION

- Child's parents or legal guardian should always be present with the child.
- Assigned Nurse should keep a watch on child.
- Assigned Nurse should check ID band.

POINTS TO REMEMBER IN CASE OF CHILD ABDUCTION:

- Assigned Nurse & Sister Incharge - Screen for the child in washroom.
- Assigned Nurse & Sister Incharge - Screen for the parents/legal guardian.

- Sister Incharge or Sr. Nurse will close the main door and exit door of the department.
- Inform to on duty Supervisor.
- On duty Doctor will inform the incident to HOD.
- Dial Emergency Number
- Identify yourself
- Give the exact location

  (E.g: Ms. Lisy staff Nurse from MICU)
- Telephone operator will announce the code 3 times

  E.g. Code Pink MICU 3rd floor

  Code Pink MICU 3rd floor

  Code Pink MICU 3rd floor

PROCEDURES

1. Assigned Nurse & Sister Incharge - Screen for the child in area and wash room.
2. Assigned Nurse & Sister Incharge - Screen for the parents & legal guardian.
3. Once team arrives, assigned Nurse will give a description of the missing child.
4. Director of Nursing will take care of Parents/ legal guardian.
5. Command nucleus will assign the work to team.
6. Command nucleus will be present in area to control team.
7. IT manager will screen the CCTV footage along with Nursing Supervisor.
8. Security supervisor will close all doors and start frisking.
9. All outgoing personnel (Patients, Patients relatives, visitors, Employees, Housekeeping personal) will be checked including all vehicles.
10. If child is found, he/she will be handed over to Sister Incharge of the area.
11. If child is not found, Medical Superintendent will inform to Director.
12. As per Director's orders, Police will be informed accordingly.

TEAM COMPOSITION

1. COMMAND NUCLEUS

Day

Chief Security officer

Night & Holidays

On duty Security Supervisor

2. FRISKING TEAM

Day

Security Supervisor

Security personal

Area Security

Area Nurses

Area Doctor

Area Housekeeping

Night & Holidays

Security personal

Area Security

Area Nurses

Area Doctor

Area Housekeeping

3. **Director of Nursing**
4. **Nursing Supervisor**
5. **Medical Superintendent**

RESPONSIBILITIES OF INDIVIDUALS AND DEPARTMENTS

Director:

- Coordinating, organizing & assigning duties to Head of Departments as and when required.
- Guide Medical superintendent about information to Police.

Chief Security officer /Command Nucleus:

- Assess the situation.
- Assign duties to security personal according to situation.
- Inform to Medical Superintendent about the situation.
- Periodic review of the arrangements.
- Announce Code Pink clearly if baby found or as per Medical superintendent Instruction.

Medical Superintendent:

- Coordinating, organizing, communicating and assigning duties to medical Staff where ever required
- Periodic review of the arrangements.
- Updating incident to Director.
- Informing Police under the guidance of Director.

Director of Nursing (In Night & Holidays – Nursing Supervisor)

- Arrange nursing manpower for wherever required.
- Counseling and taking care of parents/legal guardian.

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POLICY & PROCEDURE OF CODE ORANGE

(EXTERNAL DISASTER)

OBJECTIVE

To provide a standard response pattern from the Code Orange Team for any External Disaster in the Hospital.

Optimum effort will be made in attempting to save Patients lives.

SCOPE

Hospital wide

PURPOSE

To provide a basis for an organized response to External Disaster.

EQUIPMENT

- Disaster cupboard

DEFINATION

CODE ORANGE

Code Orange is designated for the External Disaster in M.G.M. Hospital, Kamothe

It includes:-

Mass Causality

- Train accident,
- Bus accident,
- Poisoning cases,
- Food poisoning at social gathering or school.

- Industrial accident cases.
- Bomb blast
- Biological threat

PROCEDURES

1. Information will come through external agencies to telephone operator.
2. Telephone operator will write down the name of calling person, contact number of Caller, area of incident, type of incident & expected Number of patients.
3. Telephone operator will inform to Medical superintendent (Sr. Causality officer in Night or Holiday)
4. Medical superintendent will confirm the disaster by calling caller.
5. Medical superintendent will alert the Incharge – Emergency Medicine regarding the information.
6. After the discussion with Incharge – Emergency Medicine, Medical Superintendent will call telephone operator to announce code orange.
7. Telephone operator will announce **CODE ORANGE** three times on Public address System.
8. Command Nucleus will alert the team to handle code orange.
9. Chief security officer will instruct the main Gate security to guide only ambulance to Hospital building and rest all vehicle needs to park in other parking area.
10. Medical Superintendent will inform all HOD regarding the incident and HODs will instruct to be present in their Ward/Area to receive the patients after the stabilization from Emergency room (Causality)
11. Director of Nursing will move manpower to Emergency room as per requirement.
12. Nursing Supervisor will take charge of Mortuary after the instruction form Medical Superintendent & Director of Nursing.
13. Housekeeping supervisor will move manpower to Emergency room as per requirement.
14. For triaging procedure refer COP/004 (Policy for Provision of Triaging)
15. Medical superintendent will assess the status of code orange and inform to Director and Dean accordingly.

16. Once situation is under control Command Nucleus will inform to Medical Superintendent that code Orange is clear.
17. Medical Superintendent will instruct to telephone operator to announce code Orange clear.
18. Telephone operator will announce **CODE ORANGE CLEAR** three times on public address system.

TEAM COMPOSITION

1. COMMAND NUCLEUS

Day

Incharge – Emergency Medicine

Night & Holidays

On Duty Sr. Causality officer till Incharge – Emergency Medicine arrive to the Hospital

2. Medical Services Head

Day

Medical Superintendent

Night & Holidays

Sr. Resident - ICU till Medical Superintendent arrive to the Hospital

3. Triage Team

Sr. Resident – Emergency Medicine
Jr. Resident – Emergency Medicine
Sr. Resident – Anesthesia
Sr. Resident – Medicine
Sr. Resident – Surgery

Sr. Resident – Orthopedic

Emergency Room Staff Nurses

Emergency room Sister Incharge

On duty Nursing Supervisor

4. Patient transfer or shifting Incharge

Day

Jr. Resident - Medicine

Jr. Resident - Surgery

Jr. Resident – Anesthesia

Staff Nurse

Housekeeping

Assistant Director of Nursing

(Under the guidance of Incharge – Emergency Medicine)

Night & Holidays

Jr. Resident - Medicine

Jr. Resident - Surgery

Jr. Resident – Anesthesia

Staff Nurse

Housekeeping

(Under the guidance of Sr. Causality Medical officer)

RESPONSIBILITIES OF INDIVIDUALS AND DEPARTMENTS

Director:

- Liaison with the Press, TV News (Media) and outside agencies
- Coordinating, organizing & assigning duties to Head of department
- Liaison with the Press and outside agencies – to release information to the media as and when required

- Control of the release of all photographs as per discretion of hospital authorities

Dean:

- Helping hand to Director and Medical superintendent
- Coordinating, organizing & assigning duties to Non-teaching staff.
- Coordination of various hospital activities through the heads of Administrative and Medical services.

Incharge – Emergency Medicine /Command Nucleus

- Lead code orange,
- Co-ordinating with various departments for proper and smooth handling of code orange.
- Instruct triage team to be presented in area and give treatment as per protocol.
- Supervising the causalities and treatment given.
- Supervising on the shifting of the patients to wards/area.
- Supervising the mortuary.
- Supervising on maintenance to important documents (E.g. : patient case history , vitals , patient records etc.)
- Updating Medical Superintendent about the status of code orange.

Chief Security officer:

- Ask for help from local police and volunteer organizations as deemed necessary.
- Periodic review of the arrangements.
- Controlling the crowd.
- Supervising traffic & Parking provision.
- Any other work assign by Medical superintendent.

Medical Superintendent:

- Authorize announcement of Code.
- Coordinating, organizing, communicating and assigning duties to medical Staff. Where required the ambulances and the medical team may be asked to go to Emergency Room.
- Liaison with Government Hospitals for inter facility shift of patients if required.
- Periodic review of the arrangements.
- Coordinating, organizing & assigning duties to the all Doctors & technical staff's.

Hospital Administrator

- Incharge for Non-Medical Care.
- Helping Hand to Medical Superintendent.
- Instructing Bio-medical Engineers for support where ever required.
- Arranging and supervising Medical consumable supply (Medical Gases) to area.

Administrative officer:

- Activate all resources to handle the situation.
- Ensure smooth co-ordination of all additional non-medical services.
- Assign PWOs (public welfare officer) (PWO nominated persons from HR department) to attend to emotionally disturbed relatives/casualties.
- Assign PWOs for liaison between attendants, HODS and hospital.
- Organize systematic transfer of patients whenever the situation demands under the strict supervision of doctors, Nurses and patient attendants using all available own and contractual staff.
- Crowd control using own security and police personnel.

Assist. Admin:

- Establishing information services for relatives and friends.
- Keeps a track of patient shifting to other hospital.

- Centralizing information about the casualties and is responsible for updating the casualty list.
- Organizing press conference, if order by Director.
- Informing the external agencies as per Director's order.

Director of Nursing

- Arrange Nursing manpower for proper Nursing care.
- Arrange required consumables and drugs as per requirement.
- Instruct/Guide Nursing supervisor to take charge of Mortuary

Security:

- Regulate entry and exit of personnel to ensure smooth functioning of emergency services.
- Ensure Ambulance and other emergency services vehicles are allowed exit and entry freely.
- Smooth Traffic Control. Any unidentified /suspicious vehicle registration number to be noted down and forwarded to the police if required.
- Unwanted traffic and public gathering shall be controlled by Security till local police help available.
- To safeguard all the belongings of the disasters victims.
- All emergency lights to be kept ready.
- Responsible to handle the situation more efficiently.
- Lady Supervisor & Lady Guard to be posted for handling all ladies.(Outsourced)
- Help of the police department to be taken for crowd control.

Housekeeping:

- Proper waste disposal and sanitary supervision.
- Helping hand to Nursing and Doctors.
- Helping hand in transferring of patients.

Kitchen Manager

- Arrange dietary requirement of Patients, Patients relatives, Doctors and staff.

Pharmacy Incharge/Manager/ Pharmacist / Store Incharge

- Ensuring smooth supply of drugs and consumable as per the requirement.
- Maintaining the record of medicine and consumable dispatched to Emergency room/Ward/area.

Incharge – Blood Bank, laboratory, Radiology services

- Ensure the smooth delivery of their department services as an required.
- Incharge – Blood Bank should check & verify the stock and inform to Medical superintendent accordingly.
- Incharge – Blood Bank should intimate nearby blood banks for the extra blood and blood product requirement.

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POLICY & PROCEDURE OF CODE PURPLE

(PHYSICAL FIGHT)

OBJECTIVE

To provide a standard response pattern from the Code Purple Team for any physical fight the Hospital.

SCOPE

Hospital wide

PURPOSE

To provide a basis for an organized response to physical fight among the two or more patients, relatives, patient to Doctor, patient to Hospital staff or within Hospital staff.

DEFINATION

CODE PURPLE

Code purple is designated for any Physical Fight in M.G.M. Hospital, Kamothe.

It includes:-

- Physical fight in-between two patients, relatives, Patient and / or relatives with Doctor, in-between doctors and in-between staff.
- Serious argument which may turn in to Physical Fight.

PROCEDURES

1. Any staff finds any serious argument or physical fight in ward / area should call the On-Duty Nursing Supervisor.
2. On Duty Nursing Supervisor will try to resolve the problem. If not, then she / he will call telephone operator to announce 'Code Purple' (E.g. Ms. XYZ calling code purple on 1st floor orthopedic ward near Nurses station)
3. Telephone operator will announce 'Code Purple' three times on public address system
   Code Purple 1st floor orthopedic ward Near Nurses Station
   Code Purple 1st floor orthopedic ward Near Nurses Station
   Code Purple 1st floor orthopedic ward Near Nurses Station
4. Code Purple team will respond to area within 5 minutes and try to resolve the problem.
5. If problem is solved, the command nucleus will call the telephone operator to announce code clear.
6. Telephone operator will announce three times **CODE PURPLE CLEAR** on public address system.
7. If problem is not solved command Nucleus will inform situation to Medical Superintendent, and Medical Superintendent will try to solve the problem if not, he / she will inform to Director and take guidance for informing the Police.
8. Police will be intimated accordingly and the case / situation will handed-over.

TEAM COMPOSITION

1. COMMAND NUCLEUS

Day

Chief Security officer

Night & Holidays

On-Duty Security Supervisor.

2. Physical Fight resolving Team

Sr. Security supervisor

Security

On duty Nursing Supervisor

Area Incharge/staff Nurse

RESPONSIBILITIES OF INDIVIDUALS AND DEPARTMENTS

DIRECTOR:

- Guiding Medical Superintendent for any further action.

CHIEF SECURITY OFFICER / COMMAND NUCLEUS:

- Try to resolve the problem.
- Updating Medical superintendent.
- Guiding team for smooth and proper functioning and handling code.
- Any other work assigned by Medical superintendent.
- Announcing **Code Purple Clear** once situation is under control.

Medical Superintendent:

- Assessing status of code purple.
- Informing police after the instruction form Director.

On duty Nursing Supervisor

- Give information to telephone operator to announce code.
- Try to resolve the problem.

Telephone operator

- Announce code purple after the intimation from on duty Nursing supervisor,
- Announce code clear after the intimation from command nucleus.

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POLICY & PROCEDURE OF CODE RED

(FIRE EMERGENCY)

OBJECTIVE

To provide a standard response pattern from the Code Red Team for any Fire incident in the Hospital.

Optimum effort will be made in attempting to save Patients', visitors' & employees' life & property of hospital.

SCOPE

Hospital wide

PURPOSE

To provide a basis for an organized response to a Fire incident within the Hospital.

EQUIPMENT

- Fire extinguishers,
- Torch,
- Hospital all exit doors keys,
- Elevator Keys.
- Wheel chairs and stretchers in situation of evacuation.

DEFINATION

FIRE:

Fire can be technically defined as: The rapid oxidation of a material in the chemical process of combustion, releasing heat, light, and various reaction products.

The flame is the visible portion of the fire and consists of glowing hot gases. If hot enough, the gases may become ionized to produce plasma. Depending on the substances alight, and any impurities outside, the color of the flame and the fire's intensity might vary.

Fire in its most common form can result in conflagration, which has the potential to cause physical damage through burning. Fire is an important process that affects ecological systems across the globe. The negative effects of fire include decreased water purity, increased soil erosion, an increase in atmospheric pollutants and an increased hazard to human life.

COMPONENTS OF FIRE:

- Combustion takes place when Oxygen, Source of Heat & Combustible Material combine together & reach The Ignition Temperature.
- Hence for a fire reaction to take place, it requires a source of heat, flammable material and oxygen to complete the chain.
- The same principle has been shown below as the fire triangle.

FIRE TRIANGLE:

CLASSIFICATION OF FIRE:

Depending on the source, fire can classified in to 5 categories.

- **"A" Class Fire** – General / Domestic Fire: Fire involving ordinary combustible materials like wood, paper, textile etc.
- **"B" Class Fire** - Liquid (Oil) Fire: Fire involving inflammable liquids like oil, organic solvents, petroleum products, varnish, paints, etc.
- **"C" Class Fire** - Gaseous Fire: Fire Involving Gaseous Substances Like L.P.G. , Ammonia, Methane Etc
- **"D" Class Fire** - Metallic Fire: Fire Involving Burnings & Powders Of Combustible Metals Like Magnesium, Aluminum , Zinc Etc. where the burning is reactive to water . It Requires Special Extinguishing Agent to extinguish this type of Fire. Usually this type of Fire is encountered in industries.
- **"E" Class Fire** - Electric Fire: Fire involving electrical equipment with live electric current flowing in the equipment

METHODS OF EXTINGUISHING FIRE:

The major three types of extinguishing a fire are:

- **Starvation**
- **Smothering system**
- **Cooling system**

Starvation: - The method of removing combustible material from the fire is known as starvation. Combustible material is the food of any class of fire. Therefore this method is applicable in all classes of fires wherever it is possible to remove the combustible materials from the vicinity of fire.

Smothering system - The method of cutting off oxygen supply from the fire by blanketing is known as smothering. It can be done by a Fire blanket, Foam type extinguisher or Dry Chemical Powder, Carbon Dioxide (co2)

Cooling system - The method of cooling down the temperature, the source of heat is known as the cooling system. E.g. spraying water on burning wood.

FIRE EXTINGUISHER:

A fire extinguisher is an active fire protection device used to extinguish or control small fires, often in emergency situations. It is not intended for use on an out-of-control fire, such as one which has reached the ceiling, endangers the user (i.e. no escape route, smoke, explosion hazard, etc.), or otherwise requires the expertise of a fire department. Typically, a fire extinguisher consists of a hand-held cylindrical pressure vessel containing an agent which can be discharged to extinguish a fire.

TYPES OF FIRE EXTINGUISHER:

Depending on the type of fire, appropriate fire extinguisher is to be used to put out the fire.

- **Water type** fire extinguisher for type A fires where Cooling system works as the principle to put of the fire.
- **Carbon di oxide (CO_2)** can be used for B, C & E classes of fire and it works on the principle of smothering.
- **Foam type** fire extinguisher to be used only for Class B fire where it works on the principle of Smothering effect.
- **Dry Chemical powder** is a type of fire extinguisher where it can be used for all four classes of fire.

HOW TO USE A FIRE EXTINGUISHER:

In case of any fire, the appropriate type of fire extinguisher to be used based on the principle **PASS**:

P - Pull the pin

A - AIM Low (Aim the nozzle at the base of the fire)

S - Squeeze the handle

S - Sweep from side to side & discharge the contents of the extinguisher.

FIRE FIGHTING SYSTEM IN OUR HOSPITAL:

1. **Fire Hydrant System**
2. **Fire alarm System**
3. **Fire Extinguishers**
4. **Smoke Detectors**

POINTS TO REMEMBER TO PREVENT FIRE EMERGENCY

- Always switch "off" the electrical appliances after use.
- Always keep emergency pathways clear.
- Always extinguish match sticks before disposal.
- Follow the Hospital No Smoking Policy (Do not smoke in Hospital premises).
- Do not leave any equipment unattended when they are "on" or left on over a heat source.
- Do not keep linen near electrical panels.
- Do not use any electrical equipment without proper plug top.
- Do not allow temporary electrical connections.
- Do not overload electrical circuits.
- Do not use multi plugs.
- Do not ignore fire alarms.

POINTS TO REMEMBER IN CASE OF A FIRE:

- Dial Emergency No
- Identify yourself
- Give the exact location
- Given the nature of fire (what is burning?)

  (E.g: Ms. Lisy staff Nurse from MICU Fire on Patients bed)

- If possible fight the fire, ensuring your safety. If not wait for the fire team arrival.
- Open exit door

PROCEDURES

Minor Fire

1. Individual discovers the fire.

The individual discovering the fire will take the following actions:

I. Dials --- at Telephone reception and give details of fire with exact location of fire.

II. 'PICK UP FIRE EXTINGUISHERS FROM THE CLOSEST FIRE POINT'.

III. Starts immediate action to fight the fire (without panic) & with the assistance of colleagues in the close vicinity.

2. Telephone operator announce code Red with the help of Public Address System.
3. Team will move to location of fire.
4. Fight the fire with the assistance of others in the vicinity.
5. Site Engineer (Electrical, Electronic and Civil) Engineer will ensure adequate water supply, alert engineer control room incase oxygen / electric supply is to be switched off.
6. When the fire is extinguished, Fire Safety officer will assess the damage and submits a preliminary report to Medical superintendent.

NOTE: -

Equipment to be carried at time of Code Red by staff:

- Security -- a torch.
- Security Personnel – Security personal of Emergency room will keep the Key of all the floors.
- Extra Fire extinguishers

Major Fire (Without Evacuation)

- Even after fire fighting, if the fire is not contained / extinguished, Chief security officer (On duty security officer for Night & Holidays) will inform local fire brigade (Fire Fighting station) for an external Help.

NOTE:-

- Medical Superintendent (Sr. CMO – in night or holidays) will instruct to announce : There is a confirmed fire------type, at-----location, on PA system
- HODs (Sr. Staff Nurses and on duty Doctors – Night & Holidays) will be informed so that preparations for the evacuation start in case of fire are going out of control, in a later stage.
- Only the code red team who are already available on the floor of fire will start fighting the fire without any delay.
- Chief security officer and Dy. Director of Nursing will divide employee into 04 teams:
    - Core firefighting Team
    - Rescue Team
    - Cordon Team
    - Salvage Team
- Security Supervisor will lead all the 04 teams to the location of fire.
- All present at location of fire will fight the fire.

MAJOR FIRE (With Partial/full evacuation)

In case of a major fire a decision will be made by Chief security officer (Security supervisor – Night & Holidays) after consulting Medical superintendent (Sr. Causality Medical officer – Night & Holidays) as to whether to evacuate the Hospital or not. Three decisions, which can be made, are as follows: -

1. **NOT TO EVACUATE**

    This could be because the fire has been extinguished or can be extinguished by **Code Red Team**, without any further spreading to new area.

2. **PARTIALLY EVACUATE**

This could be because there is no danger of the fire spreading but there is sufficient smoke to cause discomfort to patients in the immediate area or because it is not certain that **Code Red Team** will be able to bring the fire under control without further spreading.

A partial evacuation would normally be up to 02 floors above and 01 floor below the floor of fire

3. **FULL EVACUATION**

Based on the fact that the fire is fully out of control

NOTE:-

The final decision to evacuate the hospital will be made by Director / Medical Superintendent /Sr. Causality Medical officer (In night & Holidays) after consulting with Chief Security officer/ Site engineer/ Administrator on duty.

TEAM COMPOSITION

1. COMMAND NUCLEUS

Day

Chief Security officer.

Night & Holidays

On Duty Security supervisor till chief security officer arrive to the Hospital.

2. MEDICAL SERVICES HEAD

Day

Medical Superintendent.

Night & Holidays

Sr. Causality Medical officer till Medical Superintendent arrive to the Hospital.

3. Fire Fighting Team

Day

Fire safety officer

Site engineer

Security personal

Area Security

Night & Holidays

Security supervisor

On duty Engineer

Security personal

Area Security

4. Patient Evacuation Team

Day

Area HOD (As directed by Medical Superintendent)

Matron

Area Doctor

Staff Nurses (As directed by Director of Nursing)

Area Sister Incharge

Housekeeping personal (As directed by Housekeeping Supervisor)

Night & Holidays

Area Sr. Resident Doctors

Night Nursing Supervisor

Area Nurses

Housekeeping personal

5. Assembly area Incharge

Day

Hospital Administrator

Night& Holidays

Night Hospital Administrator till the Hospital Administrator arrive to the Hospital.

6. Patient transfer or shifting Incharge

Day

HOD – Anesthesia

HOD - Emergency Medicine

HOD – Medicine

(Under the guidance of Medical Superintendent)

Night & Holidays

Sr. Resident doctor – Anesthesia

Sr. Resident Doctor – Medicine

Sr. Resident – Surgery

(Under the guidance of Sr. Causality Medical officer till the Day Team arrives.)

RESPONSIBILITIES OF INDIVIDUALS AND DEPARTMENTS

Director:

- Liaison with the Press, TV News (Media) and outside agencies
- Coordinating, organizing & assigning duties to Head of department
- Liaison with the Press and outside agencies – to release information to the media as and when required
- Control of the release of all photographs as per discretion of hospital authorities

Dean:

- Helping hand to Director and Medical superintendent
- Coordinating, organizing & assigning duties to Non-teaching staff.
- Coordination of various hospital activities through the heads of Administrative and Medical services.

Chief Security officer /Command Nucleus:

- Liaison with the top government agencies regarding provision of necessary services
- Ask for help from local police and volunteer organizations as deemed necessary.
- Assigning additional responsibilities to various heads of departments through Director, Dean & Medical Superintendent.
- Arranging Fire tender as an external help.
- Periodic review of the arrangements.

Fire Safety officer:

- Team leader in firefighting.
- Identify the cause of fire and instruct the team on fighting.
- Report the status of fire to command nucleus for further decision.
- Report the status of fire to medical superintendent if evacuation required.

Site Engineer (On duty Engineer):

- He will always carry Emergency Elevator keys.
- Chief Engineer will be member of Core Emergency Command Team.
- Cut off power to the affective area.
- Cut off A/C supply.
- Ensure water availability to the concerned floor
- Take part in fighting the fire.
- Engineering plant room should be manned all the time by a Responsible person.
- All AHU'S, fresh air units, exhaust fans should be switched off immediately.

- Other/ rest of engineering staff should reach the site of fire with firefighting equipment & tools.
- Switch off electricity in effected area, Activate generator if need arise.
- Ensure water & emergency power is in ready state to cater for emergency.

Medical Superintendent:

- Authorize announcement of evacuation.
- Coordinating, organizing, communicating and assigning duties to medical Staff. Where required the ambulances and the medical team may be asked to go to assembly area. Liaison with Government Hospitals for inter facility shift of patients
- Periodic review of the arrangements.
- Coordinating, organizing & assigning duties to the all Doctors & technical staff's.

Head Emergency Services

- Take a charge of assembly area.
- AssignDoctors as per specialty to assess patients.
- Assign Doctors for shifting of patients to other hospitals.

Administrative officer:

- Activate all resources to handle the situation.
- Ensure smooth co-ordination of all additional non-medical services.
- Assign PWOs (public welfare officer) (PWO nominated persons from HR department) to attend to emotionally disturbed relatives/casualties& Employees.
- Assign PWOs for liaison between attendants, HODS and hospital.
- Organize systematic evacuation of inpatients whenever the situation demands under the strict supervision of doctors, Nurses and patient attendants using all available own and contractual staff.
- Crowd control using own security and police personnel.

Assist. Admin:

- Establishing information services for relatives and friends.
- Take an in house patients list with relative's details.
- Take roll call of patients
- Keep a track of patient shifting to other hospital.
- Centralizing information about the casualties and is responsible for updating the casualty list.
- Organizing press conference, if order by Director.
- Informing the external agencies as per Director's order.

Assist. Administrative officer – HRD

- Take a print of on duty staff
- Take a roll call at assembly area

Director of Nursing

- Arrange Nursing manpower for proper Nursing care.
- Arrange required consumables and drugs as per requirement.

Security:

- Take charge of firefighting.
- Cordon off area affected.
- Regulate entry and exit of personnel to ensure smooth functioning of emergency services.
- Ensure Ambulance and other emergency services vehicles are allowed exit and entry freely.
- Smooth Traffic Control. Any unidentified /suspicious vehicle registration number to be noted down and forwarded to the police if required.
- Unwanted traffic and public gathering shall be controlled by Security till local police help available.
- To safeguard all the belongings of the disasters victims.

- All emergency lights to be kept ready.
- Also responsible to handle the situation more efficiently.
- Lady Supervisor & Lady Guard to be posted for handling all ladies.(Outsourced)
- Help of the police department to be taken for crowd control.
- Open all the emergency exit doors in case evacuation is required

Housekeeping:

- Proper waste disposal and Sanitary supervision.
- Be sure all hallways or traffic areas are clear of cleaning carts, equipment etc.
- Helping hand to Nursing and Doctors.
- Helping hand in evacuation of patients.

Kitchen Manager

- Arrange dietary requirement of Patients, Patients relatives, Doctors and All staff (Teaching & Non-Teaching)

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

MAHATMA GANDHI MISSION HOSPITAL
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CODE OF CONDUCT OF THE EMPLOYEES

1. Rules, regulations and responsibilities of the employees

As part of the Hospital employee, must do his/her best to carry his/her responsibility, as the outcome of everyone depends on the care and service the patient will receive. The employee must appear to work on time and give whole-hearted attention to the job.

All employees have certain rules and regulations which help them to work together successfully. Because as the Hospital employees to which we belong is concerned with human life, our responsibility is to help, save and preserve it. Some of the rules and regulations that we must follow are necessary and more exacting than on other jobs. The patient's interest comes first, his/her welfare gets first consideration, and his/her needs your prompt action. For their sake we shall accept these restrictions.

It is responsibility of employees to abide by all rules and regulations set forth by MGM Hospital. All the instructions as mentioned in the appointment letter shall be deemed applicable to the employees and hospital expects employees to follow the same.

2. Rights of the Employees

The employees of the Hospital, will have all the rights as specified by Hospital management.

Every health care provider has certain rights, both, vis-à-vis the establishment as well as the user. He / She shall face ***no discrimination*** in matters concerning employment and conditions of employment on age, sex, economic status, place of residence, religion, caste, physical or mental ability, mental health status or HIV/AIDS status.

Every health care establishment shall provide ***measures to prevent any injury or damage*** to the person or property of all health care providers during the course of his/her employment.

It shall be the duty of the user to adhere to the rules of the health care establishment and behave with health care providers with dignity and respect.

3. Evaluation of the orientation of the employees:

To ensure that all the employees have been oriented to hospital policies, rules, regulations, necessary information to infection control, patients' rights, safety and other concerns, an orientation programme is conducted at the time of joining . They will be asked to fill an objective type questionnaire which will contain questions on various subjects related to hospital and its policies. Based on their response, sufficiency of **their orientation will be evaluated.**

4. Performance evaluation

Performance shall be evaluated annually on the basis of conduct for the whole year. **All the events relating for the year shall be recorded in personal file**. Based on their annual evaluation their increment / promotion / training requirement and other decisions related to personal development will be taken.

5. Co-worker relationships

It is imperative that employees make every effort to work well with their co-workers. There are times when friction may arise between the employees. Do all in their power not to let this situation carry on and become apparent to others. If they find this impossible to do, then it is their duty to talk this over with their department head. If they are still dissatisfied, they should request to meet with the Medical Superintendent / Administrator.

6. Equal opportunity policy

It is the policy of the Hospital to hire job applicants and promote employees that it believes to be the best qualified. Employment selection and all other employment decisions are made without regard to race, colour, creed, religion, national origin, sex, disability or handicap, age, height, weight, veteran status, marital status, or any other reason prohibited by law.

7. Punctuality

All employees are expected to be punctual and report on time to their work area. Kindly report on duty 15 minutes prior. If there is a necessity to leave the Hospital during working hours, the employees must get permission from the Medical Superintendent/Admin/HR.

8. Harassment

Hospital prohibits harassment of any employee because of his/her race, colour, national origin, religion, sex, marital status, disability or handicap, age, height or weight or other characteristic protected by law. Such harassment is unlawful and is inconsistent with the Hospital's policies, practices and management philosophy. Disciplinary action may be initiated against the defaulter.

9. Uniforms

All employees, professional and non-professional, who are required to wear uniforms, must be in "full uniform" at all times while on duty, as prescribed by the respective departments. All employees are responsible for their own uniforms.

10. Neatness in Dress

The grooming and dress of the employees reflects upon the image of the Hospital and all of the many daily contacts and activities as a health care institution. Therefore, it is necessary to maintain high standards for grooming dress. All employees are expected to be well groomed and conform to the dress codes of the Hospital.

11. Updates

In order to keep the employees informed of Hospital policies, personnel changes and other information pertinent to employment and hospital functioning, circular shall be issued in the name of their department head in such cases. They are expected to be proactive to keep themself informed about such updates.

12. Absence and Tardiness

If the employees are absent or late for reporting to duty, notify their Department Head /admin / HR head as soon as possible so that arrangements can be made for coverage in that area.

13. Personal records of the Employees - (both manual and electronic)

The hospital administration can best serve them if their individual records are up to date. Any change such as new address, telephone number, change in marital status, number of dependents, achievement of new qualification or training etc., must be reported to the administrative office as soon as possible after the change occurs.

14. Training

Hospital organizes training Programs on identified training needs for various categories of staff from time to time. Information about this will be communicated to them through their department head/immediate superior. This is done to further improve their competency and specific areas as required by their job profile or for other hospital concerns. It is their responsibility to honour the training Program and gain maximum benefits out of it.

15. Grievance procedure

The grievance procedure is designed to bring satisfaction in all areas where there are problems to be solved or grievances to be aired and resolved.

The employees must first bring the problem to the attention of his/her supervisor. The supervisor will investigate the problem and attempt to resolve it. If he/she cannot resolve it, he/she will refer it to the department head and if the department head cannot resolve it, it should be brought to the attention of Hospital Management and has to be discussed in the grievance committee.

16. The Conduct of the Employees

- Any employee whose actions are contrary to the best interest of the Hospital, its patients or employees will be subject to corrective disciplinary action.
- Loitering or idleness in halls, rooms, or other places is prohibited.
- Genuine consideration to the recovery of the sick means speaking in a subdued tone of voice, handling trays and dishes with care, and in general being as quiet as possible in patient areas. Disturbing voices and conversations hinder recovery.
- When corrective action is deemed necessary by their department head or supervisor, a written report as to the specific infraction that has occurred, the date of the incident and the action to be taken shall be completely discussed with them and submitted to the hospital management for inclusion in their personal files.

17. Smoking

Smoking is strictly **prohibited** in all areas of the Hospital. A necessary **disciplinary action** shall be taken against the person violating this policy.

18. Parking

The employees should not park their vehicles in places, which may affect the general and vehicular traffic movement or other such inappropriate places.

19. Lost and Found

Any articles found on property should be taken to the Admin office. All inquiries regarding lost articles should be made there. Every effort will be made to restore lost articles to their owners.

20. The following acts and commissions on the part of the employees shall amount to misconduct, as per Model Standing Orders provided under the Industrial Employment Standing Orders Act,1946.

a. Willful insubordination or disobedience, whether or not in combination with another or others, of any lawful and reasonable order of a superior;
b. Going on illegal strike or abetting, inciting, instigating or acting in furtherance thereof;
c. Willful slowing down in performance of work, or abetment or instigation thereof;
d. Theft, fraud, or dishonesty in connection with the employers' business or property or the theft or property of another workman within the premises of the establishment ;
e. Taking or giving bribes or any illegal gratification;
f. Habitual absence without leave, or absence without leave for more than ten consecutive days or overstaying the sanctioned leave without sufficient ground or proper or satisfactory explanation;
g. Late attendance on not less than four occasions within a month;

h. Habitual breach of any Standing Order or any law applicable to the establishment or any rule made thereunder;
i. Collection without the permission of the Manager of any money within the premises of the establishment except as sanctioned by any law for the time being in force;
j. Engaging in trade within the premises of the establishment;
k. Drunkenness, riotous, disorderly or indecent behavior on the premises of the establishment;
l. Commission of any act subversive of discipline or good behavior on the premises of the establishment;
m. Habitual neglect of work, gross or habitual negligence;
n. Habitual breach of any rules or instruction for the maintenance and running of any department, or the maintenance of the cleanliness of any portion of the establishment;
o. Habitual commission of any act or omission for which a fine may be imposed under the Payment of Wages Act, 1936;
p. Canvassing of union membership, or the collection of union dues within the premises of the establishment except in accordance with any law or with the permission of the Manager;
q. Willful damage to work in process or to any property of the establishment;
r. Holding meeting inside the premises of the establishment without the previous permission of the Manager or except in accordance with the provision in the course of his work;
s. Disclosing of any unauthorised person any information in regards to the processes of the establishment which may come into the possession of the workman in the course of his work;
t. Gambling within the premises of the establishment;
u. Smoking or spitting on the premises of the establishment where it is prohibited by the employer;
v. Failure to observe safety instructions notified by the employer or interference with any safety device or equipment installed within the establishment;
w. Distributing or exhibiting within the premises of the establishment hand-bills, pamphlets, and such other things or causing to be displayed by means of signs or writing or other visible representation or any matter without previous sanction of the Manager;
x. Refusal to accept a charge-sheet, order or other communication served in accordance with these Standing Orders;
y. Unauthorised possession of any lethal weapon in the establishment;

[(z) Sexual harassment which includes such unwelcome sexual determined behavior(whether directly or by implication) such as:-

i. Physical contact and advances; or
ii. a demand or request for sexual favours; or
iii. sexually coloured remarks; or
iv. showing pornography; or
v. any other unwelcome physical, verbal or non-verbal conduct of sexual nature.]

SUSPENSION

i) What is suspension?

Suspension from duty means keeping an employee away from work-place temporarily for reasons of discipline. Suspension order does not mean removal from service. If a person is suspended, he continues to be in service but is in a state as it were of suspended animation.

ii) When to suspend?

The suspension of an employee from duty often arises under the following three different types of situations.

iii) Suspension pending domestic enquiry

If an employee has committed serious acts of misconduct such as assault, sabotage etc. and his presence inside the work premises poses a threat to the safety of the man and material, he may be kept under suspension immediately, pending investigations. This is called **Suspension Pending Domestic Enquiry.** At this stage, a suspension can not be called a punishment. The charge-sheet must follow within 10 days of issue of suspension order.

iv) Suspension Pending Courts Order

The Disciplinary Authority has the right to keep an employee under suspension, if he/she is accused in a court of law for any criminal offence, until the disposal of trial.

v) Suspension as Punishment

Even though an employee is not suspended pending enquiry, if it is decided to punish him by way of suspension for the acts of misconduct committed by him. the Disciplinary Authority may do so after the conclusion of enquiry in which case the suspended employee will not be entitled to any payment for the period of suspension since it is punishment imposed on him.

vi) Status of Suspended Employee

a) During the period of suspension, the suspended employee shall not enter thework premises without the permission of the Disciplinary Authority or any other Authority competent to do so.

b) The suspended employee shall not leave the station without the written permission of the competent Authority.

c) The employee suspended pending enquiry shall be paid subsistence allowance as admissible to him under Standing Orders which will increase or decrease depending upon the merits of the case if the period of suspension get prolonged.

d) No leave shall be granted to the suspended employee during the period of suspension.

e) The suspended employee will not be paid subsistence allowance if he is engaged in any other employment.

f) If any employee suspended pending enquiry submits resignation, it is normally not accepted unless it is in the Hospital's interest.

vii) Subsistence Allowance

The rate of subsistence allowance payable to the employee suspended pending investigation or inquiry into complaints or charge of misconduct against him/her is:

a. For the first 90 days of the suspension period	50 % of basic wages and dearness allowance
b. For 90 days to 180 days of the suspension period	75 % of basic wages and dearness allowance
c. For the remaining days of the suspension period	100% of basic wages and dearness allowance

The payment of the above subsistence allowance will be subject to a written declaration by the employee concerned that he is not engaged in other employment.

If the suspended employee is found not guilty of the misconduct, he shall be paid the difference between the subsistence allowance already paid and the emoluments consisting of pay and allowances which he would have received if he had not been suspended.

PRINCIPALS OF NATURAL JUSTICE:

i) The procedure for taking disciplinary action against any delinquent employee must be based on the principles of "natural justice" which again are in conformity with the principles of a Welfare State.

ii) To hold an enquiry in conformity with the natural justice the following conditions are to be met with :

a. The employee against whom enquiry is proceeded has been informed clearly of the charges levelled against him,

b. The witnesses are examined ordinarily in the presence of the employee in respect of the charges,

c. The employee is given a fair opportunity to cross-examine the witnesses,

d. The employee is given fair opportunity to examine his witness, including himself in his defence, if he so wishes;

e. The Enquiry Officer records his findings with reasons for the same in his report.

Punishments :

On the basis of the conclusions arrived at in the domestic enquiry, if it is found that the charges levelled against the employee are not proved, he/she may be exonerated and a letter to that effect may be issued. If any of the charges or all the charges are proved, then the appropriate punishment may be given to the employee. The minor and major punishments are given as under:

Minor Punishments :

a) Warning
b) Censure :
c) Fine
d) Stoppage of increment with or without cumulative effect
e) Suspension without pay upto 4 days

Major Punishments:

a. Demotion to junior post or lower grade.
b. Discharge/ termination.
c. Dismissal.

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Appeal:

An employee may appeal against an order of punishment awarded by the Displinary Authority. An appeal shall be preferred within one month from the date of communication of the order appealed against. The appeal shall be addressed to the Appellate Authority. The appellate Authority shall consider whether the findings are justified or whether the punishment is excessive or inadequate and pass appropriate orders within one month from the date of the appeal. The Appellate authority may pass an order confirming, enhancing, reducing or setting aside the punishment awarded to employee by the Displinary Authority. For this purpose, the Hon'ble Medical Director will be the Appellate Authority.

I _____ do hereby solemnly declare & certify that I have read carefully the information mentioned herein above. In break of any code of conduct, Hospital has full authority to take any legal & disciplinary action against me.

Date: **Signature of the Employee:_____**

Place: **Name of the Employee:_____**

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

M.G.M Medical College and Hospital, Kamothe	Access assessment and Continuity of care		
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CONTROL COPY HOLDERS	
Chief Of Quality	Dr. Gauri Shivani

CONTENTS

S.No	Standards
AAC 1	Scope of Services
AAC 2	Registration ,Admission , Transfer and Referral
AAC 3	Mechanism for Transfer (in And Out) or Referral of Patients
AAC 4 & 5	Established initial Assessment & Regular Reassessment
AAC 6 & 7	Laboratory Services & Laboratory Quality Assurance Program
AAC 8	Laboratory safety Program
AAC9	Imaging Services
AAC10 & 11	Imaging Quality Assurance Program & Imaging safety Program
AAC 12	Continuous and Multi Disciplinary Care
AAC 13& 14	Discharge process & Discharge summary

AAC 1 Scope of Services

THE ORGANIZATION DEFINES AND DISPLAYS THE HEALTH CARE SERVICES THAT IT PROVIDES

I. PURPOSE:

To define health care services being provided and orient staffs to these.

II. SCOPE :

Hospital Wide – Reception, Registration, OPD, IPD

III. RESPONSIBILITIES :

Medical Superintendent is Responsible to Implement the Policy and Procedure.

IV. POLICY :

1. The Health care services provided at MGMH are defined
2. The defined health care services have outpatient and Inpatient facilities regularly functioning.
3. The defined Health care Services are provided by qualified Medical and Nursing Personnel.
4. The defined Health Care services are prominently displayed.
5. All the staffs are oriented to the defined Health care services.

V. PROCEDURE:

1. Medical Superintendent ensures that any change in facility of services is updated in the Health care services are displayed in an area visible to all patients entering the Hospital in English & Marathi
2. Signage Boards are displayed in Relevant Areas in English & Marathi
   Display board and Signage Board immediately.
3. Medical Superintendent regularly gives orientation to the staff of Help Desk, Reception, Admission counter, Billing counter, OPD department, Diagnostic Services, Pharmacy services, Causality about the Scope of Services through Training Program or Manual and Maintains a Record of the same. Induction program provides the information regarding the scope of services to all category of staff.

Annexure :

1. List of OPD Departments
2. List of Diagnostic Services & Other Departments
3. List of IPD Departments with Bed strength
4. List of Critic cal Care departments with Bed strength

AAC 2 Registration ,Admission , Transfer and Referral

THE ORGANIZATION HAS WELL DEFINED REGISTRATION AND ADMISSION PROCESS

I. PURPOSE

To have a smooth and well defined registration and admission process.

II. SCOPE

Front office and Emergency Room

III. RESPONSIBILITY

Registration & Reception Clerks, OPD & Emergency Staffs

IV. POLICY

1) Patients are accepted only if the organization can provide the required service
2) No patient shall be denied admissions due to race, color, religion, national or financial class
3) The patient has the right to considerate, respectful care at all the times and under all circumstances.
4) The patient and his/her family members are explained about the purposed care
5) It is the patient's right to make decisions regarding medical care and to accept or refuse the treatment.
6) The organization has a well defined Procedure for managing patients during non availability of beds.
7) Patients can be admitted through OPD or Emergency and on advice if admission is required from the HOD & consultant with admission rights.
8) Stable Patients arriving at Fixed OPD hours will be consulted at OPD & those arriving after OPD hours or needing emergency treatment will be consulted at Casualty by the CMO.
9) Patients requiring admission for certain small procedures can be admitted in half day/full day care.
10) Only those cases to be admitted for which services are available in the hospital
11) Minor patients are to be accompanied by adult guardians.
12) Patients for free admission should have a valid MJPJAY card or they should give undertaking that they will provide the required documents within 48 hours.
13) Paying Patients are to pay the advance deposit according to bed category at the time of admission
14) All staffs handling registration and Admission are trained on the Policy & Procedure of Registration & Admission.

V. PROCEDURE

1) Registration Process:

a) The patients who come to the OPD for the first time are registered and given a OPD case Sheet with a OPD number & unique hospital identification number (UHID).

b) The patient has to pay a fixed registration fee for Registration.

c) The Receptionist directs the patient to the concerned OPD

d) This OPD /UHID is referred to whenever these patients are admitted or any investigation or procedure is done.

2) OPD Consultation:

a) OPD Nurse Records the Registration Number in the Department OPD Register

b) Patient is directed to the waiting area.

c) The ideal waiting time should not be more than 30 minutes

d) Vulnerable patients Like Pediatric / Old /disabled are Given Priority

e) After consultation patient may be advised OPD Treatment/ Investigation / Admission.

f) Consultant /Treating Doctor confirms the availability of Bed in case admission is advised

g) Consultant /Treating Doctor write admission notes mentioning the ward and Unit where the patient is to be admitted

3) IPD Registration & Admission Process

a) All patients who are to be admitted should be directed to Registration Counter for an IPD registration Number by OPD Nurse

b) Billing clerk explains the tariff details, types of Beds Available and collects the admission fees.

c) An IPD file will be created which contains

- OPD Consultation sheet indicating admission
- Consent forms
- Admission sheet from IPD
- Investigation Reports if any
- Billing Sheet

d) The Registration clerk informs the concerned Ward about the Admission Details

e) The Patient is directed to the Ward either by self / wheel chair as required accompanied by OPD House Keeping

f) If patient's condition is unsatisfactory OPD Nurse/ Doctor is detailed with the patient during transfer from OPD to ward.

g) Unstable Patients attended at Casualty are stabilized and shifted to ICU /Ward after the IPD Registration

h) Unidentified patients are registered as "UNKNOWN" by the billing clerk

4) Procedure for Non Availability of Beds

a) Admitting Doctor discusses with the Medical Superintendent to decide on arranging / adding more beds within the available space.

b) The patient is allotted the best alternative rooms available.

c) In case all ICU's are full and no ICU bed can be made available at this hospital , the CMO with permission from Medical Superintendent will confirm availability of bed in other hospital ICU's.

d) A list of such hospitals with facilities of ICU's will be made available at casualty

e) The patient will be stabilized and transferred after confirming availability of bed.

5) Admission for MLC Cases:

Refer Hop. Doc. No : NABH/MGMH/KAM/COP /01-22 (COP 2, COP 3, COP 9, COP 15, COP 22,) Various Procedures for MLC within the Organization

Annexure

- List of Hospitals for Referral
- OPD Case sheet Format

AAC 3 Mechanism for Transfer (in And Out) or Referral of Patients

THERE IS AN APPROPRIATE MECHANISM FOR TRANSFER (IN AND OUT) OR REFERRAL OF PATIENTS

I. PURPOSE:

To define standard procedures for referring the patients who do not match the organizational resources ,to other facility.

II. SCOPE:

Hospital wide

III. RESPONSIBILITY:

Treating Doctor & HOD

IV. POLICY:

1) Patient can be accepted from other hospital if the case is within scope of service & vacant bed/s available
2) Patient can be transferred to other hospital only if the case is not within the scope of service & no vacant beds available. It is done with the permission from Medical Superintendent
3) Patient's transfer should take place smoothly
4) Patient's safety & comfort is ensured during transfer.

V. PROCEDURE:

1) Transfer in of stable / Unstable Patients

a) In case of information of Transfer in of Patients from other Hospital or from the site of an accident or any other location the CMO will inform the HOD and Medical superintendent about the number & condition of Patients to be received.
b) CMO will telephonically confirm and makes availability of Beds as Required
c) Details of treatment given before transfer will be confirmed by the CMO from the transferring Doctor

2) Transfer out / referral of stable patients to other organization:

a) The patient on admission is assessed.
b) If it is found that the patient is suffering from an ailment, which requires intervention, not provided by the hospital, the patient may be referred/ transferred to the organization/ hospital having that specialty.
c) CMO shall contact the faculty of the receiving hospital to ensure that eligibility guidelines are met.
d) Transportation arrangements shall be made through the Emergency Head.
e) The stable patients are referred along with attendants.
f) If the patient is admitted for some time, then transferred/ referred, a Transfer summary is given explaining the patient's condition and mentioning the significant findings and the

treatment given along with all Investigation Reports (if Paying Patients)/ copies of Reports if (charity & MLC Patients).

g) A copy of the Transfer summary is attached with the Patients File.

3) <u>Transfer of Unstable Patient to other facility:</u>

a) On duty HOD & doctor decides patient transfer.

b) 2Doctor confirms with the concerned authority regarding availability of the services in the facility of the receiving hospital

c) Inform attendant the reason of transfer.

d) Once attendant agrees, transfer consent is taken for inter hospital transfer.

e) Cardiac Ambulance availability is confirmed by nursing staff.

f) Doctor will prepare the Transfer Summary.

g) Nursing documentation to be completed for transferring patient.

h) Nurse will hand over all diagnostic reports to the attendant (if Paying Patients)/ copies of Reports(if charity & MLC Patients).

i) Patient is then transported out safely from the ICU with life support to the ambulance accompanied by the doctor and nurse. One attendant can accompany the patient in the ambulance.

j) Doctor will inform the receiving hospital at the time of departure.

k) Doctor and Nurse accompany the patient to the receiving hospital and handover the patient with the transfer summary.

l) A copy of the Transfer summary is attached with the Patients File.

<u>Annexure</u> :

- Patient Out Side Transfer Summary

AAC 4 PATIENTS CARED FOR BY THE ORGANIZATION UNDERGO AN ESTABLISHED INITIAL ASSESSMENT.

I. POLICY:

Every patient of the hospital (OPD, IPD and Emergency services) shall be appropriately assessed for his / her clinical conditions on the basis of standard norms of medical practice. The initial assessment shall result in a plan of care.

II. PURPOSE:

To follow a uniform protocol for initial clinical assessments of patients requiring healthcare service in OPD, IPD and Emergency services

III. SCOPE:

Patient care Department, Clinical

IV. RESPONSIBILITY:

All clinical

V. DISTRIBUTION:

Emergency Head of the department, Medical Superintendent, Resident Medical Officer, Head of Nursing

VI. ABBREVIATION:

Abbreviations are as follows:
OPD – Outpatient Department
IPD – Inpatient Department
BP – Blood Pressure
Hb – Haemoglobin
HTN – Hypertension

VII. PROCESS DETAILS:

Initial assessment at Emergency shall be carried out by concerned doctor / staff nurse within 10-15 minutes. Initial assessment at emergency shall be started as soon as possible. In no case the time should exceed 1 hour after registration/ reaching at emergency.

All patients coming to Emergency for first time shall be assessed for following
By nursing

1. Vitals(Temperature, Blood Pressure and Respiration)
2. History of illness

3. Height and weight
4. Pain screening
5. Mental status
6. Allergies or any associated disease
7. By Doctors
8. Chief complaints
9. Triaging
10. Medical/Surgical History
11. Previous investigation findings
12. Last oral Intake
13. Medico legal information
14. Plan of care

In patient - Initial assessment

Every patient being admitted shall undergo the established initial clinical assessment. Initial assessments of the patient are undertaken by the duty doctor and nurse within one hour. However for patients in critical conditions the initial assessment shall be done immediately after admission.

Following initial assessments and timelines shall be followed for every patient admitted.

Following initial assessments and timelines shall be followed for every patient admitted.

S. No.	Assessment	Person authorized and responsible for assessment	Time lines for assessment and its documentation
1.	Nursing Admission Assessment	Staff nurse	Within 1 hour of admission
2.	Admission History and Physical Initial Assessment (including plan of care)	Resident Doctor	Within 2 hours of admission
3.	Nutritional screening	Resident Doctors/Staff Nurse	Within 2 hours of admission

S. No.	Activity	Responsibility
Initial assessment for OPD		
1	Each patient is initially screened on following parameters by nursing: o Vitals o Chief Presenting complaints o History of present illness o Height and weight(if required)	Nursing staff Consultant

	○ Allergies(Food, drug, other, and No known allergy) ○ Medical/Surgical History	
2	If required Patient's physical, psychological, social status and nutritional needs shall be assessed.	Consultant
3	The assessment process for an infant, child, or adolescent patient shall be individualized.	Consultant
4	Special needs of patients who are possible victims of alleged or suspected abuse or neglect shall be addressed	Consultant
5	Special needs of the patients who are receiving treatment for emotional or behavioural disorders shall be addressed.	Consultant
6	On the basis of the information collected in the initial assessment form the doctor shall document the treatment plan	Consultant
Assessment at emergency		
1	All patients attending emergency shall be assessed by emergency medical officer on duty	Resident Doctor
3	In case of mass casualties triage shall be followed first followed by assessment	Resident Doctor / Staff Nurse
4	Specialist shall be called and required assessment made on discretion of casualty medical officer.	Resident Doctor / Staff Nurse
Initial assessment of admitted patient		
1	Each patient is initially screened on following parameters by nursing: ○ History of illness ○ Height and weight ○ Temperature, pressure and respiration, BP. ○ Pain scale. ○ Fall Risks assessment ○ Mental status ○ Vulnerable Assessment. ○ Allergies or any associated disease: ○ Screening for nutritional needs ○ Physical examination ○ Provisional diagnosis made and treatment given ○ Investigations suggested ○ Current medication. ○ Plan of care that with preventive, curative and rehabilitative aspects of care.	Nursing staff Resident Doctor
2	Initial assessment is documented in Continuation sheet / Progress Notes	Resident Doctor

3	The assessment shall include generic and individualized elements specific to patient age, diagnosis and condition.	Resident Doctor
4	Following elements shall be considered in addition for assessment as per requirement. These are generic in nature o Cognitive status; o Psychosocial status; o Communication status; o Special precautions; o Substance abuse; o Domestic violence/neglect/abuse screening* o Communicable disease exposure; o Personal routines and self-care needs; o Physiotherapy assessment; o Spiritual / cultural practices; o Advance Directives (adults ≥ 18 years); o Educational status o Financial concerns o Belongings inventory and disposition.	Resident Doctor / Staff nurse

AAC 5 Established initial Assessment & Regular Reassessment

PATIENTS CARED FOR BY THE ORGANIZATION UNDERGO A REGULAR REASSESSMENT.

I. PURPOSE:

To ascertain guidelines for initial assessment of the patients cared for by the organization.

II. SCOPE:

OPD, emergency Department, IPD

III. RESPONSIBILITY:

Doctors, Nurses, Dietician

IV. POLICY:

1) Patients cared for by the organization undergo an established initial assessment at Emergency Department, OPD, IPD by Doctors & Nurses.

2) Initial Assessment to be completed immediately and documented at the earliest within 01 hour of Patient entering the hospital.

3) Patient at high risk to be Assessed Continuously while stable patients to be assessed at least once in a day in non critical care units.

4) Reassessment to be performed and documented throughout hospitalization

5) All findings are documented with date, Time of Assessment Full details and Signature of the Person assessed.

6) Based on Initial Assessment Plan of care is to be documented which includes, plan of investigations , care needs, medication management, surgical management , cross consultation by another specialty , physiotherapy treatment plan , Nursing care, diet Plan.

V. PROCEDURE:

1) OPD Initial Assessment

a) Initial Assessment at OPD is done by the Resident Doctor under supervision of The HOD

b) Vital Parameters, Local General & systemic Examination is completed and Relevant Investigation is advised as required.

c) All findings are documented in the OPD Case Sheet with date, Time of Assessment Full details and Signature of the Person assessed.

2) Initial assessment -EMERGENCY WARD

a) Initial Assessment At Emergency Ward is Carried Out by CMO / duty Doctor & Nurse immediately and he/ she informs the concerned consultant and starts necessary Treatment and Investigations as required.

b) Initial Assessment Done by CMO & Nurses is documented within 30 minutes of patient Arrival.

c) Treating Doctor should Document Plan of Care base on initial Assessment Findings which includes preventive actions.

d) The nutritional functional assessment is done by dietician based on the need ascertained by the treating Doctor based on the clinical assessment of the patient

3) Initial Assessment – IPD Patients

a) Initial Assessment of Patients to be carried out by the RMO within 1 hour of Admission and plan of care is documented.

b) Nursing initial assessment is carried out immediately and Documented on receiving the patient in the ward and Nursing Care plan is completed within 30 minutes of patient's arrival to the ward.

c) Reassessment

d) Reassessment to be performed by Doctors and Nurses and documented

e) Multi disciplinary approach to be adopted for performing patient assessment involving dietician, Physiotherapist etc.

f) Plan of care is reviewed based on the reassessment and the same is documented.

Annexure:

1) Emergency Room Nurses Assessment Format

2) Nursing Admission Assessment Form

3) Daily Nursing reassessment Form

4) Nursing Care plan format

AAC.6 LABORATORY SERVICES ARE PROVIDED AS PER THE SCOPE OF THE SERVICES OF THE ORGANIZATION

AAC.7 THERE IS AN ESTABLISHED LABORATORY QUALITY ASSURANCE PROGRAM

AAC.8 THERE IS AN ESTABLISHED LABORATORY SAFETY PROGRAM

Prepared by :	Designation : Head of EMS ICU, Lab Director Name: Dr Sagar Sinha, Dr Ujjwala Maheshwari
Approved By :	Designation : Medical Superintendent Name: Dr K R Salgotra
Reviewed by & Responsibility of Updating	Designation : Chief Of Quality Name: Dr Gauri Shivani

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Chief Of Quality	Dr Gauri Shivani

I. PURPOSE:

To provide smooth and well defined laboratory services.

II. SCOPE:

All Out Patient and In Patient services

III. RESPONSIBILITY:

Head of Department of Pathology, Microbiology, Bio chemist, Laboratory Technicians

IV. POLICY:

1) Laboratory services are in commensurate with the scope of Services provided by the organization
2) Laboratory services are Available Round the clock.
3)
4) Qualified and Trained Professionals perform, supervise and interpret the investigations
5) Laboratory Safety Program is followed as in Quality System Manual

V. PROCEDURE:

Refer MGM Lab Manual.

Appendix - MGM/CL/QM/04: QUALITY SYSTEM MANUAL

AAC 9. IMAGING SERVICES ARE PROVIDED AS PER THE SCOPE OF SERVICES OF THE ORGANIZATION

Prepared by :	Designation : Head Radio-Diagnosis Name: Dr Priti Kapoor
Approved By :	Designation :Medical Superintendent Name: Dr K R Salgotra
Reviewed by & Responsibility of Updating	Designation : Chief Of Quality Name: Dr Gauri Shivani

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Chief Of Quality	Dr Gauri Shivani

I. POLICY:

Hospital shall provide all imaging services which are generally required with the scope of clinical services offered by the hospital. Radiology shall possess the staff that are suitably qualified and trained to carry out imaging tests. Minimum criteria, as given below, shall be followed for employing staff in Radiology department. Patient shall be transported (internally) in a safe manner and shall always be accompanied by a hospital staff. The test results for the Imaging tests performed in the hospital shall be available to the patient / relatives / ward in-charge in the defined time frame. All the critical imaging results shall be informed to the treating consultant at the earliest on phone followed by written report

II. PURPOSE:

- To effectively provide all radiology services as required by the scope of clinical services of the hospital
- To adhere with the quality of diagnostic techniques
- To avoid any mistake in managing the department and getting expected result on time.
- To establish an appropriate mechanism for transfer imaging patients throughout
- To have a defined time frame for each test.
- To have monitoring system for the same
- To take preventive and corrective action against preventable and correctable measure hospital
- To make available imaging reports to the patient with the defined time frame.
- To monitor the system to identify any gaps from hospital point of view.
- To take corrective and preventive action against preventable and correctable measures
- To Provide better clinical care to the patients

III. SCOPE:

Imaging Services, IPD, OPD, Emergency Department, Front Office

IV. RESPONSIBILITY

Radiology Department, Human Resource Department, Administration Department, Front Office, Clinical staff

V. DEFINITION:

1. TAT: The interval between when a test is requested to the time a treatment decision is made
2. Critical: A test results beyond the normal variation with a high probability of a significant increase in morbidity and/or mortality in the foreseeable future and requires rapid communication of results for determination of intervention.
3. Read Back**:** The individual accepting the critical test result must record and then read back the critical test result, in its entirety, to the reporter at the time the result is given

VI. ABBREVIATION:

Abbreviations are as follows:

IP	In Patients
OP	Out Patients
OTC	Over the Counter
US	Ultra Sound
USS	Ultra Sound Scanning
RDT	Radio Diagnostic Technology
CT	Computed Tomography
MRI	Magnetic Resonance Imaging
TLD	Thermo Luminescent Dosimeter
RIS	Radiology information system
PNDT	Pre – natal Diagnostic Technique
TAT	Turnaround time

PROCESS DETAILS:

1. Legal compliances

Atomic Energy Regulatory Board (AERB) is the Indian Regulatory Board with the mission to ensure that the use of ionizing radiation and nuclear energy in India does not cause undue risk to health and environment.

2. Principles of AERB

The current radiation protection standards are based on three general principles:-

1) Justification of a practice i.e. no practice involving exposures to radiation should be adopted unless it provides sufficient benefit to offset the detrimental effects of radiation
2) Protection should be optimized in relation to the magnitude of doses, number of people exposed and also to optimize it for all social and economic strata of patients.
3) Dose limitation, on the other hand, deals with the idea of establishing annual dose limits for occupational exposures, public exposures, and exposures to the embryo and foetus.

3. Statutory Requirements

1) The Radiology Department will operate within all applicable legislation, regulations and Registration requirements.
2) All laws, regulations, directives, guidelines and registration requirements of Atomic Energy Regulatory Board (AERB), will be met and followed.
3) Radiology Department will have at all times a valid and current Radiology AERB Registration
4) Commissioning and Decommissioning of X-ray Equipment has to be registered with AERB.

5) X-rays equipment meeting design certification and type approval requirement by AERB only shall be used.
6) The following legal requirements shall be complied with

a. <u>Registration certificates:</u>

- AERB layout Approval

b. <u>Acts</u>:

- PNDT Act 1996
- AERB Safety code No: AERB/SC/MED-2(REV-1)2001
- Atomic Energy Act 1962
- Radiation protection Rules 1971
- Radiation Surveillance Procedures for Medical Applications of Radiation,1989
- The Bio-Medical Waste (Management and Handling) Rules,1998

c. <u>AERB Guidelines</u>

- All investigations involving exposure of the patient to radiation must be justified
- All radiation exposures to patients and personnel are to be kept as low as possible while still obtaining the accurate diagnostic information needed from the procedure through ALARA(As Low As Reasonably Possible) and ORP(Optimum Radiation Process) techniques
- Examinations involving radiation to the foetus should be avoided between 8 to 15 weeks of pregnancy.
- Repeat exposures should be avoided by employing proper exposure factors, and maintaining a proper record of films so that repeat examinations can be avoided wherever possible
- Beam Collimation and beam filtration should be done in order to ensure minimum radiation exposure
- Radiation exposure can be minimize by three ways :
- Time: Shorter exposure time means a lower dose.
- Shielding**:** radiation protection can be also achieved by shielding which includes a) Tube Shielding b) Room Shielding c) Personnel Shielding d) Patient Shielding

TUBE SHIELDING- The x-ray tube housing is lined with thin sheets of lead intended to protect both patients and personnel from leakage radiation. AERB recommends a maximum allowable leakage radiation from tube housing not greater than 1mGy per hour per 100 cm2

ROOM SHIELDING - room Area for general purpose radiography and conventional fluoroscopy, Wall for direct beam fall, Wall for scattered beam ,Wall for adjacent area of lead sheet, Opening for ventilation is as per AERB recommendations

Patient waiting area

Red warning light with the notation “X-RAY ON” when the X-ray tube is activate.

X-ray control Room

Wall should have a protective covering of 1.5 mm lead equivalent

Distance between control panel and X-ray unit is as per AERB recommendations

CT room should not be less than 25 sq m

PERSONAL SHIELDING- The protective barrier between the operator and X-ray tube should have a minimum lead equivalence of 1.5mm. Protective aprons and gloves should have a minimum lead equivalence of 0.25mm, and gonad shields should have a minimum lead equivalence of 0.5mm

Thermo luminescent dosimeter (TLD) badges shall be worn by the staff to monitor Radiation exposure. These badges shall be sent to the AERB regional centres every 3 months

PATIENT SHIELDING-It has been recommended that the thyroid, breast and gonads be shielded, to protect these organs especially in children and young adults. In gonad shielding, a lead apron is placed appropriately on the patient to protect the gonads from primary beam radiation exposure

4. Services Offered

Realm	Insight
Magnetic Resonance Imaging	MRI uses magnets and radioactive waves to create pictures of the human body parts suspected of any underlying disease

5. Departmental Policies:

1) Identification of Radiology Patients:

Outpatients

- All registered patients are given a unique identification no. (UHID)
- The bill generated shall mention the test to be performed and the patients and the UHID of the patient

Bedside Inpatients

- At the time of admission, the nurse provides an ID band to the patient
- The ID band is tied and sealed on the right hand of the patient

Patient shall be identified in appropriate manner as per the prescribed procedure before

- Medication administration
- Minor procedures
- Transportation of patient
- Carrying out of imaging investigation
- Collection of samples
- Other similar situations

2) Transportation of patients to Imaging Department

Safe transportation: Patient shall be transported safely within the hospital from one department to another. Following protocols shall be followed while transporting the patient:

- Reason for transportation shall be clearly explain to the patient /relative
- For stable patient attendant shall accompany the patient while transportation
- For unstable patient nurse/medical officer as appropriate shall accompany the patient while transportation. These patients shall be transported along with resuscitation kit.
- Patients' medical file shall be carried along with the patient if requested for.
- The Staff nurse from the unit will accompany patients during transport to and from Radiology and remain in Radiology if the patient is in an ICU monitored bed. (For Outsourced tests patient will be transported to Outsourced facility in an ambulance).
- The Staff nurse from the unit/floor shall accompany all thermodynamically unstable or potentially high risk patients during transport to and from the Radiology Department and remain with the patient during the procedure
- Case file of the patient will be carried along with the patient
- When the lift is used for any patient during transport, one staff must be present on the lift.
- All wheelchair will have wheel locked when the wheel chair is on the lift and while the patient is entering or existing the wheelchair.
- When a trolley is used for the transportation of the patient, the side rails will always be up. Trolley wheel must be locked while trolley is on lift.
- The Staff nurse shall accompany all monitored patients not in an ICU. The Staff nurse responsible for the patient will determine (in collaboration with the physician) the need to

continue or discontinue monitoring during transport and will obtain a physician's order when discontinuation of monitoring for transport and procedure time is deemed appropriate.

Following procedure shall be followed for safe transfer for patient:

3) Turnaround time

- All the normal X-rays reports (outpatient as well as inpatients), ultrasound shall be available on the same day
- The emergency reports shall be intimated verbally to the Emergency Medical Officer
- The inpatient reports shall be dispatched to the respective wards within 24 hours
- All the outsourced tests shall also have a defined time frame of reporting
- All patients shall be informed about the time of reports dispatch at the time of procedure

4) Turnaround time for reports for all Procedures:

Investigation	Time
X-Ray	• Routine- 24 Hours • Emergency- 4 Hours (Provisional report)
Sonography	• Routine- 24 Hours • Emergency- 4 Hours (Provisional report)
CT Scan	• Routine- 24 Hours • Emergency- 4 Hours (Provisional report)
MRI	• Routine- 24 Hours • Emergency- 4 Hours (Provisional report)
Mammography	• Routine- 6 Hours
Public Holiday/ Sunday	• Emergency- 4 Hours (Provisional report)

5) Critical Results reporting

All critical reports are provisional diagnosis will be given in duplicate in writing with carbon copy and the person issuing with date and time. The person receiving will sign with date and timing.

Radiology

With any applicable communication system failure, the radiologist will give an in person verbal report to the ordering physician or their assistant.

1.1 Critical Test Results Reporting and Documentation

- The radiographer shall strictly monitor all the results of the patients undergoing the imaging and radiology procedures
- If he/she comes around any critical value he/ she shall report the same to the consultant radiologist, treating consultant and also the concerned nursing staff in case of an inpatient

S. No	Procedural	Responsibility

6) Reporting of Results:

a) Investigations

- All patients will be welcomed and explained the process of the diagnostic investigation in detail before starting the process.
- All Patients will also be explained when and how their reports can be collected.
- While undergoing the investigation, all necessary precautions related to patient safety is explained & followed.
- Special care is taken while undergoing Investigations of infants and Geriatric patients. The parent / next to the kin of such patients are kept informed of the process before investigations are started.
- Special care shall be taken in case of female patients. All imaging procedures shall be done on female patients in presence of another female for privacy.

- Investigation requiring undressing of the patient e.g. X ray chest, mammography etc must be explained to the patient maintaining the patient's dignity
- Changing rooms are available for privacy of patients. Clothes are secure there.
- Attention of the patient will be drawn to the hygiene and safety aspects before undergoing the Investigation.
- All necessary steps will be taken to reduce /minimize /eliminate discomfort /pain while conducting the Investigation.

b) Special Investigations

1.2 Contrast Procedures:

1.3 Contrast is given to the patient by three methods

1. Oral Contrast
2. Rectal Contrast
3. Intravenous Contrast

- In some cases the patient may be allergic to the contrast which is explained by the radiologist to the patient before preparing the patient for the test.
- The possible side effects are explained to the patient by Radiologist
- In some cases if a plain study is not sufficient the radiologist may suggest a contrast study to be performed which will be explained clearly to the patient.
- For performing the contrast procedures the patient may be asked to come on 4-6 hours fasting according to the requirement of the test & treating consultant is informed.

Oral Contrast

- Oral contrast is the method in which the patient is given the contrast orally
- The dosage/type is according to the investigation requirement which is decided by the radiologist
- After giving the contrast the patient has to wait, according to the time gap given by the radiographer and then taken for investigations
- In case of In-patients contrast is mixed as per radiologist dose recommendations. The nurse is informed of the frequency of administration of the contrast with the dose.

Rectal Contrast

- Rectal contrast is given through the rectum by a nurse/resident.
- The patient may be asked for the bowel preparation for performing the investigation with this contrast
- Enema can is used with disposable connectors.

Intravenous Contrast

- Contrast is given through intravenous
- Dosage is decided by the radiologist
- Contrast is injected by the Nurse/resident
- Test dose is given after obtaining Informed consent & checking Serum creatinine value.

CT Guided Procedures

- CT guided procedures are biopsies and aspirations.
- Along with the radiologist and pathologist a technologist from pathology will also participate in these procedures.
- A nurse will be present during the procedure.
- To check if any Supporting Lab tests are required.
- Informed Consent form is checked before starting the procedure.
- For all contrast studies: Test dose is given and monitored
- Informed consent should be checked before giving test dose
- Informed consent should be taken after confirming Serum creatinine value.

c) Reporting of Results:

Reports shall include the name of the hospital (in case of outsourced imaging centre, the name of the same), the patient's name, the unique identification number, and the name and signature of the person reporting the test result.

- In case of any unavoidable delay, patients are kept informed for the reason for the delay and by what time the investigations/delivery of reports are likely to be completed.
- Any patient query regarding the reports will be dealt with immediately and clearly explained, and further consultation arranged. In case of complaints see complaint handling standards/protocols.
- All critical reports are verbally informed to the concerned consultant immediately by the Radiologist.
- No test results are given to Patient verbally or over telephone.
- Patient Reports are to be treated as completely confidential.

d) Outsourcing of Imaging Tests

Patient shall be send to outsourced centre along with on duty attendant or staff nurse or medical officer as per clinical condition of the patient (refer document 'transfer of unstable patient). In no case patient shall be send unattended by hospital staff.

The hospital shall identify the tests that need to be outsourced
It shall take into consideration the outside facilities that can render those services
It shall consider quality aspect, distance to the facility, turnaround time etc before finalising
The imaging facility should fulfil the following criteria:

- Should be accredited by a recognized body
- Should maintain confidentiality of patient records.
- Should have a low turnaround time

An MOU is signed between the hospital and the outsourced organisation

S. No	Procedural	Responsibility

The hospital also has a policy to define the image viewing rights available on PACS/ HIMS:

- The hospital will provide unique user name and password to employees [Doctors, Administrators etc]
- The information access will be made available according to the person designation.
- Patient will be admitted under the name of a treating consultant.
- Patient related information [PACS/HIMS] will be assessed only by treating consultant and his team.
- His team members will have access to the patient related medical information under the name of treating consultant.
- Every log in entry will be registered; it will lead to identification of user.
- In case of cross consultation is required, treating consultant will make entry for cross consultation or transfer to other consultant.
- In case of cross consultation the access rights will be available for limited period [1 day].
- In case of transfer, complete access rights will be transferred. After this transfer, primary consultant will not be able to access that patient related information.

AAC10 THERE IS AN ESTABLISHED QUALITY ASSURANCE PROGRAM FOR IMAGING SERVICES

AAC 11. THERE IS AN ESTABLISHED SAFETY PROGRAM IN THE IMAGING SERVICES

I. Policy:

Quality Assurance program is focused on following key characteristics. These key characteristics shall meet the specified acceptance criteria / norms and are monitored on weekly basis to ensure that they meet the acceptance criteria.

A record for this is maintained in quality assurance register of the department.

- To verify and validate imaging results
- For surveillance of imaging results
- To take corrective and preventive actions

Radiation Safety Program : Hospital shall ensure that the risk associated with imaging, interventional and therapeutic procedure is minimized by adhering to relevant radiation protection legislations and appropriate radiation safety measured

II. ABBREVIATIONS

AAC	Access, Assessment and Continuity of Care
C T	Computerized Tomography
CD	Compact disc
DNB	Diplomate of the National Board
DXIT	Diploma in X-Ray & Imaging Technology
FDA	Front Desk Assistant
HOD	Head of Department
IPD	In-patient department
IV	Intravenous
NABH	National Accreditation Board for Hospitals & Healthcare Providers
OPD	Out-patient department
RSO	Radiation Safety Officer
SOP	Standard Operating Procedure
SR	Senior Resident
US	Ultrasound

CTID	Chief Technician Incharge of Department
MIT	Medical Imaging Technician
MSVC	Maharashtra state vocational course
ST	Senior Technician
TLD	Thermo Luminescent Dosimeter
MRI	Magnetic Resonance Imaging

III. INTRODUCTION

The Department of Radio-Diagnosis and Imaging in MGM Hospital & Medical College, Kamothe has been functional since 1992 and on the present day boasts of a well-equipped diagnostic armamentarium inclusive of all modalities and a well-manned work force with faculty, Resident Radiologists and Radiographers providing 'round-the-clock' services 24x7. The department of Radio-diagnosis and Imaging remains the backbone of the hospital supporting the other specialties completely and committed to constant evolvement and betterment in step with the constant evolving trends of Radio-diagnosis and Imaging.

IV. OBJECTIVE OF IMAGING SERVICES

To ensure that diagnostic Radiological Investigations are done to individual satisfaction in a highly professional ambience within a reasonable span of time.

V. PURPOSE

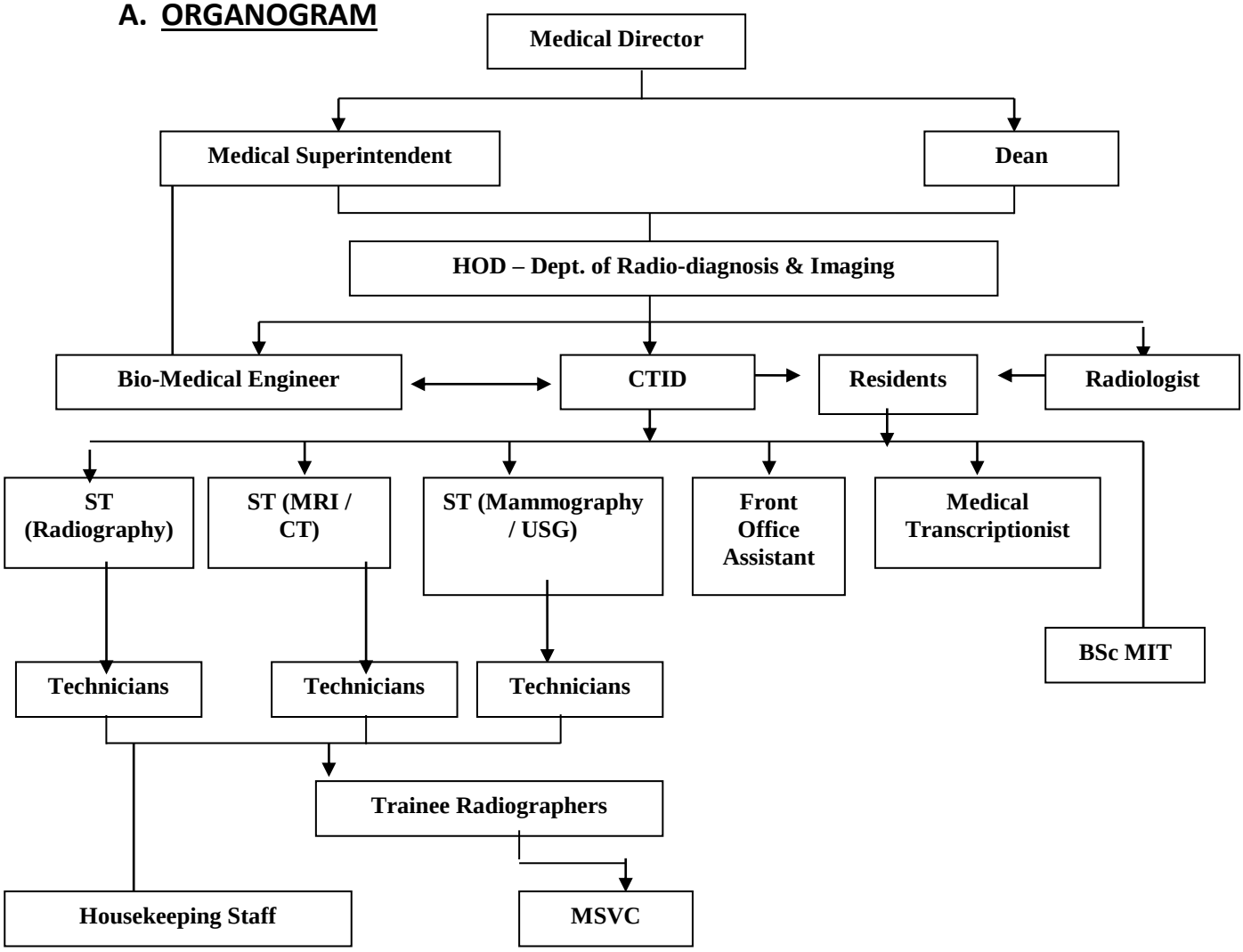
- The purpose of this document is to specify the workflow, scope and responsibility of personnel, standard procedures, instructions and documentations to be followed in the department of Radio-diagnosis and Imaging.
- It includes safety considerations, adherence to regulatory guidelines, quality assurance, emergency preparedness, and corrective and preventive action descriptions.

SCOPE OF IMAGING SERVICES.

Sr No	Type of Equipment	Quantity	Manufacture	Model
1	MRI 1.5T Machine	1	Toshiba	Excelart Vartage
2	MRI 0.3T Machine	1	Xinao MDT	MPF3000-III
3	CT Scan 16 Slice	1	Toshiba	ACTIVION-16
4	CT Scan Single slice	1	Toshiba	Asteion-KG
5	800mA X-Ray machine with I.I. T.V. Systems	1	Siemens	Tridoros 6 R
6	800mA X-Ray machine with I.I. T.V. Systems	1	Allengers	MARS 50+
7	600mA X-Ray Machine with I.I. T.V. Systems	1	Siemens	Heliophos- D

8	600mA X-Ray machine with Fluoroscopy Systems	1	Allengers	MARS-50
9	300mA X-Ray Machine	1	M/s Siemens Ltd.	Pleophos- D
10	100mA, X-Ray Machine (Mobile)	2	SOMA	SOMEX 100
11	100mA , X-Ray Machine (Mobile	2	Allengers	100CBM
12	60mA X-Ray Machine, (Mobile)	1	Wipro GE	Genius-60
13	Mammography	1	Siemens	3000 NOVA
14	USG Machine Color Doppler	1	Philips	HD-11 XE
15	USG Machine Color Doppler	1	Wipro GE	Logiq P5
16	USG Machine Color Doppler	1	Philips	HD-15
17	USG Machine	1	Mindray	DP-6600
18	CR Systems	1	Carestream	Classic 6850
19	CR Systems	1	AGFA	CR 30-X

A. ORGANOGRAM



1. Work Timing

The Department will function routinely from 8:30 a.m. to 4:30 p.m. on weekdays. The Departmental Office will remain closed on Sunday for routine work. General & Emergency work continues for 24 hours on all days of the week, including Sunday. Doctors will attend Emergency calls on a Rotational basis.

2. RESPONSIBILITIES

1) HOD
2) Faculty
3) CTID-Chief Technician-in-charge of Department
4) Radiographer / Technicians
5) Residents
6) Staff Nurse
7) Trainee Radiographers
8) Front Office Assistant
9) Data Entry Operator / Medical Transcriptionist
10) General Duty Assistant
11) Housekeeping Staff
12) Radiation Safety Officer (RSO)

3. Head of the Department

1) He/ She is the guardian of the department and has the overall work-related and moral responsibility of the department.
2) He/ She will liase with different departments.
3) He/ She will make sure all the reports are in place & on time.
4) He/ She will check all the registers maintained.
5) He/ She will supervise the cash generated in the department & coordinate with the Accounts Section with the help of CTID.
6) He/ She will ensure that all measures are implemented for patient satisfaction.
7) He/ She will make sure that the reports are dispatched on time.
8) He/ She will address patients'/staff and students' /other departmental staff's/ customers' queries & ensure redressal of complaints, if any.
9) He/ She will keep in touch with the management regarding the daily happenings of the Department.
10) He/ She will ensure efficient vendor management.

4. CTID - Chief Technician Incharge of Department

1) He will ensure smooth operations in the department with easy flow of patients.
2) He will assist HOD with administrative duties.
3) He will guide the Senior Technicians, who will be working under him, namely the ST – CT/MRI, ST – USG/Mammography and ST – General radiology
4) He will liase with the Radiologists.
5) He will check that all necessary records are maintained by radiographers.
6) He will keep Inventory.
7) He will check all indents.
8) He will be in charge of the medical equipment of the department.

9) He will look after the reading of TLD Badges- usages- submission.
10) He will arrange duty Rotation.
11) He will ensure that all pregnant patients going for USG scans have filled the **PC-PNDT ACT – Form F with assistance of ST(USG).**
12) He will make sure all requisite **Consent Forms** are filled before different tests.

5. Senior Technician (ST)

He/ She will maintain strict vigilance over the Technicians under him / her and inform the CTID regularly about the day-to-day activities in their respective units.

6. Radiographer / Technician

1) He / She will perform all radiological imaging tests / procedures.
2) He / She will explain briefly to every patient about the test.
3) All female patients to be accompanied by female radiographer / Staff Nurse.
4) He / She must understand & fulfill the required test accurately and ensure it is carried out using proper methods.
5) He / She will take guidance from Radiologist for all Radiological procedures
6) He / She will be courteous and polite to all patients.

7. Staff Nurse

1) To keep Inventory.
2) To take care of the clinical needs of the department.
3) To assist the doctor.
4) To undertake procedures like phlebotomy.
5) To assist the female patient for the radiological procedure.
6) To check the appointment scheduling & other registers.
7) To look after Radiological requirement from CSSD.
8) To look after Radiological requirement from laundry.
9) To control the flow of the patient file among different tests.
10) To check whether all reports are in place.
11) To answer patients' queries.
12) To ensure proper disposal of biomedical waste.

8. Front Office Assistant (FOA)/ receptionist

1) To greet & welcome people.
2) To attend to phone calls & other queries.
3) To do the registrations & other formalities.
4) To schedule & maintain the appointment register.
5) To attend to customers.
6) To maintain all the registers.
7) To submit the daily revenue generated to accounts department.
8) Maintain a constant interdepartmental communication.

9. Data Entry Operator / Medical Transcriptionist

1) To type the Radiological Imaging Reports.
2) To keep the typed reports in the folder & make them ready for dispatch.

3) To ensure compliance with hospital rules regarding archiving / issuing duplicate reports / any untoward occurrence.

10. GDA/Attendant

1) Take 2 rounds of inpatient areas at the start of the day, to deliver reports and collect unreported films.

2) To inform radiographer of patient arrival and give instruction for changing clothes if required.

3) To carry the appointment scheduling & other registers to other departments and ensure entry in registers by duty staff.

4) To keep the department neat & clean.

11. House Keeping Staff

1) To keep the department neat & clean.

2) To empty the dustbin 4 times a day.

3) To make easy availability of water facilities for the Patients going for USG.

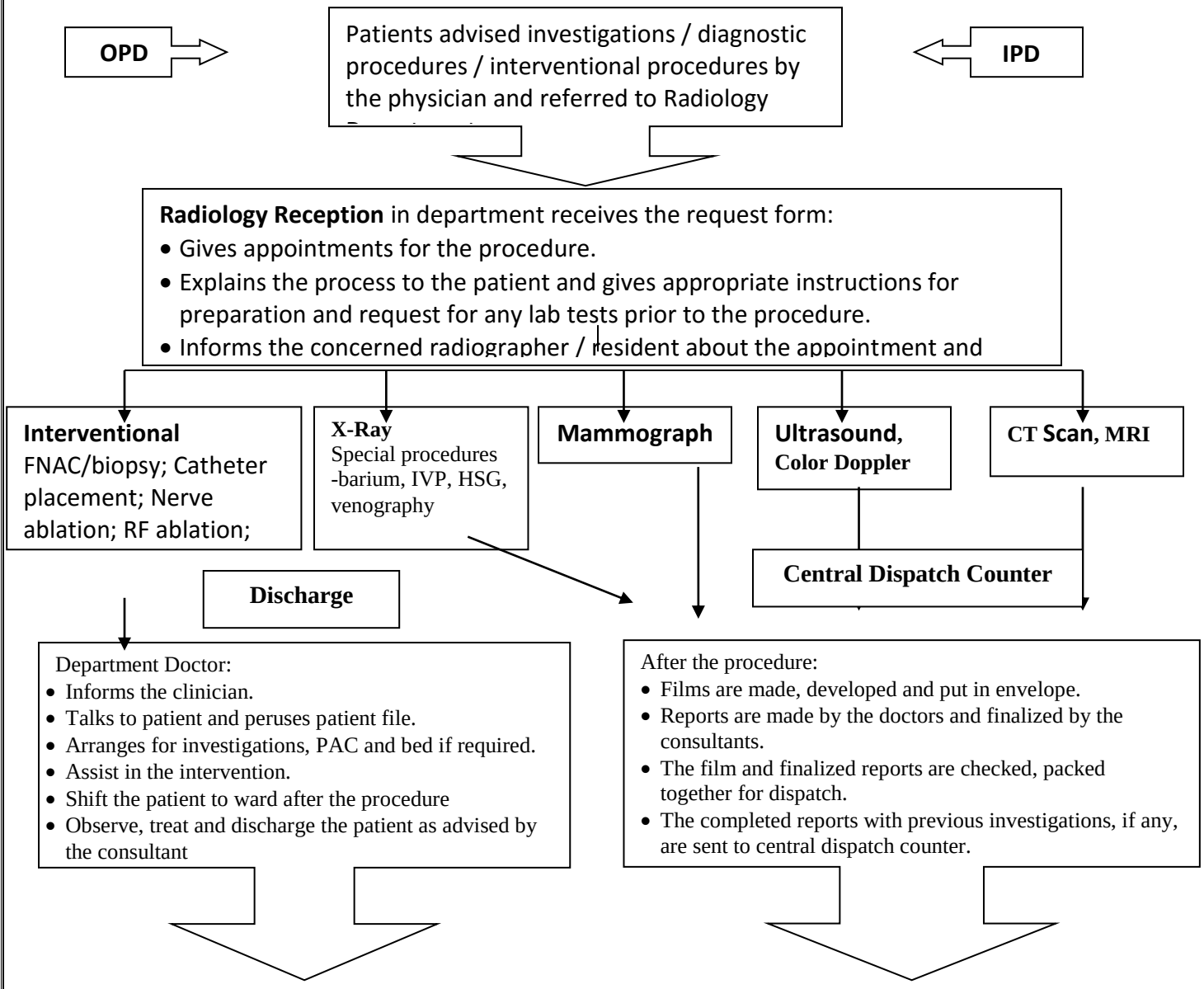
4) To mop the Department area regularly.

B. PROCESS FLOW

1. Appointments and Enquiry.
2. Cancellation of Appointments.
3. Patient Registration.
4. Billing & Payment.
5. Conducting Radiological Test.
6. Patient-handling off working hours including emergencies.
7. Patient Preparation
8. Report Generation.
9. Dispatch of Reports.
10. Maintenance of Dispatch registers.
11. Archiving of medical records.
12. Disposal of uncollected reports.
13. Corporate Patients.
14. Inventory Checking.
15. Indenting Pharmacy Materials.
16. Indenting Store Materials.
17. Sending & Receiving CSSD Material.
18. Investigational Drugs
19. Radiation Safety Measures.
20. Radiation Safety Device.
21. Training of Personnel on Radiation Safety.
22. Equipment Break Down Report.
23. Quality Assurance
24. Used Material Disposal.
25. Disciplinary Matters
26. Nonconformance registers

27. Counselling registers
28. Vendor Management
29. PCPNDT Act Compliance
30. Public Relations
31. Medico-legal cases.
32. Disclosure of Intra Uterine Fetal Demise to a pregnant lady.
33. Handling a pregnant minor on an Obstetric USG study.
34. Disclosure of diagnosis of fatal illness
35. Confidentiality of reports.
36. Feedback from patients and staff

C. Functional Workflow Chart



VI. PROCESS FLOW

1. ENQUIRY

1) The Enquiry will be of two types: Personal and Telephonic.
2) The Receptionist will greet the person in the following way:
3) Over telephone, she/he will say: "Namaskar, Radiology. How may I help you? "
4) If the person comes to the department, she will say "Namaskar, Radiology. How may I help you?"
5) All queries related to Radiology will be answered by the radiology reception.
6) All queries related to the Radiology that comes to the other Departments of the Hospital will be diverted to the Radiology Reception.
7) The details would include the time taken for each test & the time taken as a whole**.** (Radiology performance Record).
8) The individual will not be kept waiting at the reception for more than few minutes.
9) Any medical queries will be answered by a medical professional.
10) Medical information if not rapidly available, will not be rendered immediately. The individual will be told that this will be done after suitable consultation.
11) The individual will be asked if an appointment can be taken.

2. APPOINTMENT SCHEDULING

1) While taking appointment, the receptionist will ask the patient if he or she is coming for the first time or is already registered with us. The receptionist will take proper information regarding patient's details-Name, Age, Sex & contact number and address, and for new registrations, carefully record the details in the register, ensuring that the names are correctly spelt. In case, the individual is already registered with our hospital, the receptionist will confirm with our records and then she or he will note down the hospital number beside the name.
2) Accurate information about costs of the test will be given.
3) The individual will be informed about the pre-requisites for the chosen test (fasting, medications etc.)
4) Information about the reporting time, date and venue will be given clearly.
5) The individual will be conveyed that in case of any cancellations, it should be done well in advance, at least a day before.
6) The individual will be advised to report on time & the drawbacks of delay explained to him or her, eg. "Sir/ Madam, if you reach late, you will possibly have to patiently wait if other scheduled patients are taken in. We request you to kindly understand and comply"

3. CANCELLATION OF APPOINTMENT

1) Cancellation will be either from the individual side or from the hospital side.
2) If cancellation is from individual's side:
3) The details of appointment to be cancelled will be confirmed and noted down in the appointment Register.
4) The reason of cancellation will be asked and noted down in the register.
5) A fresh date will be provided if he/she wants to postpone the check up.

6) If the individual wishes to cancel his appointment for any reason related to unsatisfactory performances of the hospital, the HOD will be informed immediately.

7) If cancellation is from the hospital's side, it is mainly for technical reasons.

8) The Bio-medical Engineering department should inform the radiology reception well in advance, ' in writing' about the technical problem.

9) If alternative arrangement is not possible, the patient will be informed. Apology will be rendered & expression of the inability to carry out the tests will be conveyed.

10) The individual will be assured that he or she will be informed immediately once the technical problem is solved and given preference in appointment booking.

RECEPTION

1. Welcome

1) The individual will be first attended by the reception at ground floor.

2) The front office staff at the reception will intimate the radiology reception about the patient's arrival.

2. Registration

1) The individual will be asked whether already registered with the hospital.

2) If not, the patient will be handed over the registration form & asked to fill it up. The details will be entered into the system and UHID No. will be generated.

3) OPD/IPD. No. will be noted on the folder for further references.

3. Payments

1) The chosen test will be confirmed from the person.

2) Confirmation will be taken for any additional tests required.

3) The charge will be explained & verbal/ oral (only is fine!?) consent will be taken.

4) The payments will be accepted, the cash counted & the payment voucher generated handed over to the patient.

5) In case of card payment, the card will be swiped and the card number will be noted. The individual will be requested to sign the payment copy of the memo.

6) Demand Drafts and pay orders will also be accepted. The code number will be referred for further correspondence.

7) At the end of the shift, the amount will be handed over to the cashier and receipt will be taken. A report showing the total collection of the day will be generated and handed over to the finance department.

X – Ray Process

Sr. No.	Activity	Responsibility
1	Receive Request Form and check that patient's Name, Age, Sex, IPD/OPD No., Examination requested and other columns are properly filled.	Receptionist
2	Check for prior appointment or obtain fresh appointment for the examination after consulting technician / doctor.	Receptionist
3	Direct the patient to examination room and inform the duty technician. Ensure that the patient is safely transported.	Receptionist
4	Check the Request form and Charge Slip. Record patient data in Department Register and send IPD Charge Slip to the FDA for charge entry. Confirm correct payment for the procedure and enter charge slip reference in relevant column of the register.	Technician
5	Ensure that patient has come as per the appointment and is adequately prepared for the examination. Patient should be briefed about the procedure, expected time of completion and need for oral/rectal/IV medication if relevant.	Technician
6	If required, put up the form along with patient records and investigations to the duty doctor for instructions on protocol to be followed for the examination.	Technician
7	Take a short history of illness and any other relevant information from patient and the records. Peruse prior investigations where relevant. Ensure that the prerequisite blood investigations (where needed) are within normal limits. Discuss the procedure with patient and get the Informed Consent Form signed by patient if needed. Make endorsement on the form for the protocol to be followed by the Technician.	Doctor on duty
8	In case the patient is seriously ill, disoriented or on life support system, co-ordinate with referring doctor regarding emergency care and need for attending doctor / anesthetist to be present during the procedure. Decide regarding sedation / anesthesia for the examination and coordinate with the Anesthetist.	Doctor on duty Referring doctor Anesthetist
9	Supervise patient preparation, pre-medication, change into hospital gown, safe transport to examination area, positioning and examination with or without contrast administration as per protocol. Review the examination, take additional views as per requirement or terminate the procedure. Doctor should instruct the technician regarding filming and the measurements to be printed.	Doctor on duty Technician Nursing Staff

Sr. No.	Activity	Responsibility
10	Safely transport the patient out of the examination area, remove IV cannula if put and instruct to change back into own clothes. Give post procedure precautions / instructions and inform to collect the report from central dispatch after 1 working day. Patient should then be safely transported back to ward if IPD.	Technician Nursing Staff
11	In case of an urgent / emergency examination, review the examination with consultant and convey the report immediately to the referring doctor on telephone endorsing it in the department register.	Doctor on duty
12	Print the film as soon as possible after the completion of investigation. Give the film to the Doctor on duty for initial reporting along with the File, Form and any other previous investigations. Select and send relevant images to PACS for archiving and make a CD for the study if required.	Technician
13	Analyze and write the report for the examination including comparison with previous study if any. Display films and report in Reporting Room for final discussion with Consultant / HOD. The finalized reports to be printed signed and then sent to the Central dispatch along with the films.	Doctor on duty FDA Technician
14	Maintain Request Form & Duplicate payment slip in chronological order for record. File the Informed Consent document in patient file.	Technician
15	Day to day cleaning and up keep of equipments. Preventive maintenance and calibration of equipment as per schedule with maintenance of Logbook. In case of equipment failure biomedical engineer to be informed and the complaint booked on the relevant telephone number. Renewal and updations of TLD badges, regulatory approvals for equipments and relevant documents.	Technician Radiographer Biomedical Engr. RSO
16	Inventory maintenance of consumables and non-consumables. Preparation and submission of indents to stores and entry of the received materials in the appropriate registers.	Technician
17	Send waste films and other condemned materials to stores for disposal and record in Material Return Note.	Technician
18	Any non-conformances observed while carrying out above activities to be recorded in Non-Conformance Register and informed to HOD. Investigate the root cause and initiate corrective action.	Consultant Technician

Mammography Process

Sr. No.	Activity	Responsibility
1	Receive Request Form and check that patient's Name, Age, Sex, CR No, Examination requested and other columns are properly filled.	Receptionist
2	Check for prior appointment or obtain fresh appointment for the examination after consulting technician/doctor.	Receptionist
3	Direct the patient to examination room and inform the duty technician. Ensure that the patient is safely transported.	Receptionist
4	Check the Request form and Charge Slip. Record patient data in Department Register and send IPD Charge Slip to the FDA for charge entry. Confirm correct payment for the procedure and enter charge slip reference in relevant column of the register.	Technician
5	Ensure that patient has come as per the appointment and is adequately prepared for the examination. Patient should be briefed about the procedure, expected time of completion and need for oral / rectal / IV medication if relevant.	Technician
6	If required, put up the form along with patient records and investigations to the duty doctor for instructions on protocol to be followed for the examination.	Technician
7	Take a short history of illness and any other relevant information from patient and the records. Peruse prior investigations where relevant. Ensure that the prerequisite blood investigations (where needed) are within normal limits. Discuss the procedure with patient and get the Informed Consent Form signed by patient if needed. Make endorsement on the form for the protocol to be followed by the Technician.	Doctor on duty
8	In case the patient is seriously ill, disoriented or on life support system, co-ordinate with referring doctor regarding emergency care and need for attending doctor / anesthetist to be present during the procedure. Decide regarding sedation / anesthesia for the examination and coordinate with the Anesthetist.	Doctor on duty Referring doctor Anesthetist
9	Supervise patient preparation, pre-medication, change into hospital gown, safe transport to examination area, positioning and examination with or without contrast administration as per protocol. Review the examination, take additional views as per requirement or terminate the procedure. Doctor should instruct the technician regarding filming and the measurements to be printed.	Doctor on duty Technician Nursing Staff

Sr. No.	Activity	Responsibility
10	Safely transport the patient out of the examination area, remove IV cannula if put and instruct to change back into own clothes. Give post procedure precautions / instructions and inform to collect the report from central dispatch after 1 working day. Patient should then be safely transported back to ward if IPD.	Technician Nursing Staff
11	In case of an urgent / emergency examination, review the examination with consultant and convey the report immediately to the referring doctor on telephone endorsing it in the department register.	Doctor on duty
12	Print the film as soon as possible after the completion of investigation. Give the film to the Doctor on duty for initial reporting along with the File, Form and any other previous investigations. Select and send relevant images to PACS for archiving and make a CD for the study if required.	Technician
13	Analyze and write the report for the examination including comparison with previous study if any. Display films and report in Reporting Room for final discussion with Consultant / HOD. The finalized reports to be printed, signed and then sent to the Central dispatch along with the films.	Doctor on duty FDA Technician
14	Maintain Request Form & Duplicate payment slip in chronological order for record. File the Informed Consent document in patient file.	Technician
15	Day to day cleaning and up keep of equipments. Preventive maintenance and calibration of equipment as per schedule with maintenance of Logbook. In case of equipment failure biomedical engineer to be informed and the complaint booked on the relevant telephone number. Renewal and updations of TLD badges, regulatory approvals for equipments and relevant documents.	Technician Radiographer Biomedical Engr. RSO
16	Inventory maintenance of consumables and non-consumables. Preparation and submission of indents to stores and entry of the received materials in the appropriate registers.	Technician
17	Send waste films and other condemned materials to stores for disposal and record in Material Return Note.	Technician
18	Any non-conformances observed while carrying out above activities to be recorded in Non- Conformance Register and informed to HOD. Investigate the root cause and initiate corrective action.	Consultant Technician

Ultrasound & Doppler Scan Process

Sr. No.	Activity	Responsibility
1	Receive Request Form and check that patient's Name, Age, Sex, CR No, Examination requested and other columns are properly filled.	Receptionist
2	Check for prior appointment or obtain fresh appointment for the examination after consulting technician/doctor.	Receptionist
3	Direct the patient to examination room and inform the duty technician. Ensure that the patient is safely transported.	Receptionist
4	Check the Request form and Charge Slip. Record patient data in Department Register and send IPD Charge Slip to the FDA for charge entry. Confirm correct payment for the procedure and enter charge slip reference in relevant column of the register.	Technician
5	Ensure that patient has come as per the appointment and is adequately prepared for the examination. Patient should be briefed about the procedure, expected time of completion and need for oral / rectal / IV medication if relevant.	Technician
6	If required, put up the form along with patient records and investigations to the duty doctor for instructions on protocol to be followed for the examination.	Technician
7	Take a short history of illness and any other relevant information from patient and the records. Peruse prior investigations where relevant. Ensure that the prerequisite blood investigations (where needed) are within normal limits. Discuss the procedure with patient and get the Informed Consent Form signed by patient if needed. Make endorsement on the form for the protocol to be followed by the Technician.	Doctor on duty
8	In case the patient is seriously ill, disoriented or on life support system, co-ordinate with referring doctor regarding emergency care and need for attending doctor / anesthetist to be present during the procedure. Decide regarding sedation / anesthesia for the examination and coordinate with the Anesthetist.	Doctor on duty Referring doctor Anesthetist
9	Supervise patient preparation, pre-medication, change into hospital gown, safe transport to examination area, positioning and examination with or without contrast administration as per protocol. Review the examination, take additional views as per requirement or terminate the procedure. Doctor should instruct the technician regarding filming and the measurements to be printed.	Doctor on duty Technician Nursing Staff

Sr. No.	Activity	Responsibility
10	Safely transport the patient out of the examination area, remove IV cannula if put and instruct to change back into own clothes. Give post procedure precautions / instructions and inform to collect the report from central dispatch after 1 working day. Patient should then be safely transported back to ward if IPD.	Technician Nursing Staff
11	In case of an urgent / emergency examination, review the examination with consultant and convey the report immediately to the referring doctor on telephone endorsing it in the department register.	Doctor on duty
12	Print the film as soon as possible after the completion of investigation. Give the film to the Doctor on duty for initial reporting along with the File, Form and any other previous investigations. Select and send relevant images to PACS for archiving and make a CD for the study if required.	Technician
13	Analyze and write the report for the examination including comparison with previous study if any. Display films and report in Reporting Room for final discussion with Consultant / HOD. The finalized reports to be printed, signed and then sent to the Central dispatch along with the films.	Doctor on duty FDA Technician
14	Maintain Request Form & Duplicate payment slip in chronological order for record. File the Informed Consent document in patient file.	Technician
15	Day to day cleaning and up keep of equipments. Preventive maintenance and calibration of equipment as per schedule with maintenance of Logbook. In case of equipment failure biomedical engineer to be informed and the complaint booked on the relevant telephone number. Renewal and updations of TLD badges, regulatory approvals for equipments and relevant documents.	Technician Radiographer Biomedical Engr. RSO
16	Inventory maintenance of consumables and non-consumables. Preparation and submission of indents to stores and entry of the received materials in the appropriate registers.	Technician
17	Send waste films and other condemned materials to stores for disposal and record in Material Return Note.	Technician
18	Any non-conformances observed while carrying out above activities to be recorded in Non- Conformance Register and informed to HOD. Investigate the root cause and initiate corrective action.	Consultant Technician

CT Scan Process

Sr. No.	Activity	Responsibility
1	Receive Request Form and check that patient's Name, Age, Sex, CR No, Examination requested and other columns are properly filled.	Receptionist
2	Check for prior appointment or obtain fresh appointment for the examination after consulting technician/doctor.	Receptionist
3	Direct the patient to examination room and inform the duty technician. Ensure that the patient is safely transported.	Receptionist
4	Check the Request form and Charge Slip. Record patient data in Department Register and send IPD Charge Slip to the FDA for charge entry. Confirm correct payment for the procedure and enter charge slip reference in relevant column of the register.	Technician
5	Ensure that patient has come as per the appointment and is adequately prepared for the examination. Patient should be briefed about the procedure, expected time of completion and need for oral / rectal / IV medication if relevant.	Technician
6	If required, put up the form along with patient records and investigations to the duty doctor for instructions on protocol to be followed for the examination.	Technician
7	Take a short history of illness and any other relevant information from patient and the records. Peruse prior investigations where relevant. Ensure that the prerequisite blood investigations (where needed) are within normal limits. Discuss the procedure with patient and get the Informed Consent Form signed by patient if needed. Make endorsement on the form for the protocol to be followed by the Technician.	Doctor on duty
8	In case the patient is seriously ill, disoriented or on life support system, co-ordinate with referring doctor regarding emergency care and need for attending doctor / anesthetist to be present during the procedure. Decide regarding sedation / anesthesia for the examination and coordinate with the Anesthetist.	Doctor on duty Referring doctor Anesthetist
9	Supervise patient preparation, pre-medication, change into hospital gown, safe transport to examination area, positioning and examination with or without contrast administration as per protocol. Review the examination, take additional views as per requirement or terminate the procedure. Doctor should instruct the technician regarding filming and the measurements to be printed.	Doctor on duty Technician Nursing Staff

Sr. No.	Activity	Responsibility
10	Safely transport the patient out of the examination area, remove IV cannula if put and instruct to change back into own clothes. Give post procedure precautions / instructions and inform to collect the report from central dispatch after 1 working day. Patient should then be safely transported back to ward if IPD.	Technician Nursing Staff
11	In case of an urgent / emergency examination, review the examination with consultant and convey the report immediately to the referring doctor on telephone endorsing it in the department register.	Doctor on duty
12	Print the film as soon as possible after the completion of investigation. Give the film to the Doctor on duty for initial reporting along with the File, Form and any other previous investigations. Select and send relevant images to PACS for archiving and make a CD for the study if required.	Technician
13	Analyze and write the report for the examination including comparison with previous study if any. Display films and report in Reporting Room for final discussion with Consultant / HOD. The finalized reports to be printed, signed and then sent to the Central dispatch along with the films.	Doctor on duty FDA Technician
14	Maintain Request Form & Duplicate payment slip in chronological order for record. File the Informed Consent document in patient file.	Technician
15	Day to day cleaning and up keep of equipments. Preventive maintenance and calibration of equipment as per schedule with maintenance of Logbook. In case of equipment failure biomedical engineer to be informed and the complaint booked on the relevant telephone number. Renewal and updations of TLD badges, regulatory approvals for equipments and relevant documents.	Technician Radiographer Biomedical Engr. RSO
16	Inventory maintenance of consumables and non-consumables. Preparation and submission of indents to stores and entry of the received materials in the appropriate registers.	Technician
17	Send waste films and other condemned materials to stores for disposal and record in Material Return Note.	Technician
18	Any non-conformances observed while carrying out above activities to be recorded in Non- Conformance Register and informed to HOD. Investigate the root cause and initiate corrective action.	Consultant Technician

Interventional Radiology Process

Sr. No.	Activity	Responsibility
1	Receive Request Form and check that patient's Name, Age, Sex, CR No, Examination requested and other columns are properly filled.	Receptionist
2	Check for prior appointment or obtain fresh appointment for the examination after consulting technician/doctor.	Receptionist
3	Direct the patient to examination room and inform the duty technician. Ensure that the patient is safely transported.	Receptionist
4	Check the Request form and Charge Slip. Record patient data in Department Register and send IPD Charge Slip to the FDA for charge entry. Confirm correct payment for the procedure and enter charge slip reference in relevant column of the register.	Technician
5	Ensure that patient has come as per the appointment and is adequately prepared for the examination. Patient should be briefed about the procedure, expected time of completion and need for oral / rectal / IV medication if relevant.	Technician
6	Put up the form along with patient records and investigations to the duty doctor for instructions on protocol to be followed for the examination.	Technician
7	Take a short history of illness and any other relevant information from patient and the records. Peruse prior investigations where relevant. Ensure that the prerequisite blood investigations (where needed) are within normal limits. Discuss the procedure with patient and get the Informed Consent Form signed by patient if needed. Make endorsement on the form for the protocol to be followed by the Technician.	Doctor on duty
8	In case the patient is seriously ill, disoriented or on life support system, co-ordinate with referring doctor regarding emergency care and need for attending doctor / anesthetist to be present during the procedure. Decide regarding sedation / anesthesia for the examination and coordinate with the Anesthetist.	Doctor on duty Referring doctor Anesthetist
9	Supervise patient preparation, pre-medication, change into hospital gown, safe transport to examination area, positioning and examination with or without contrast administration as per protocol. Perform the intervention as needed under local or general anesthesia.	Doctor on duty Technician Nursing Staff

Sr. No.	Activity	Responsibility
10	Safely transport the patient out of the examination area, remove IV cannula if put and instruct to change back into own clothes. Give post procedure precautions / instructions and inform to collect the report from central dispatch after 1 working day. Patient should then be safely transported back toward if IPD. Document instruction to the ward staff in the patient file for care and monitoring in post procedure period. Review of the patient in the ward after 2 hours or when asked by the ward staff. In case of variance from expected parameters, appropriate investigation and treatment measures to be initiated and the referring doctor to be informed. If patient is kept in ward specifically for post procedure monitoring, a further review is done. Patient is discharged if found stable and with normal vital parameters	Doctor on duty Technician Nursing Staff
11	In case of an urgent / emergency examination, review the examination with consultant and convey the report immediately to the referring doctor on telephone endorsing it in the department register.	Doctor on duty
12	Print the film as soon as possible after the completion of investigation. Give the film to the Doctor on duty for initial reporting along with the File, Form and any other previous investigations. Select and send relevant images to PACS for archiving and make a CD for the study if required.	Technician
13	Analyze and write the report for the examination including comparison with previous study if any. Display films and report in Reporting Room for final discussion with Consultant / HOD. The finalized reports to be printed, signed and then sent to the Central dispatch along with the films.	Doctor on duty FDA Technician
14	Maintain Request Form & Duplicate payment slip in chronological order for record. File the Informed Consent document in patient file.	Technician
15	Any non-conformances observed while carrying out above activities to be recorded in Non- Conformance Register and informed to HOD. Investigate the root cause and initiate corrective action.	Consultant Technician

Bedside Investigation Process

Sr. No.	Activity	Responsibility
1	Receive Request Form and check that patient's Name, Age, Sex, CR No, Examination requested and other columns are properly filled.	Receptionist
2	Check for prior appointment or obtain fresh appointment for the examination after consulting technician/doctor.	Receptionist
3	Direct the patient to examination room and inform the duty technician. Ensure that the patient is safely transported.	Receptionist
4	Check the Request form and Charge Slip. Record patient data in Department Register and send IPD Charge Slip to the FDA for charge entry. Confirm correct payment for the procedure and enter charge slip reference in relevant column of the register.	Technician
5	Arrange a radiographer to safely transport the portable machine (X-ray/Ultrasound) to designated bedside at the appointed time.	Technician
6	Put up the form along with patient records and investigations to the duty doctor for instructions on protocol to be followed for the examination.	Technician
7	Take a short history of illness and any other relevant information from patient and the records. Peruse prior investigations where relevant. Ensure that the prerequisite blood investigations (where needed) are within normal limits. Discuss the procedure with patient and get the Informed Consent Form signed by patient if needed. Make endorsement on the form for the protocol to be followed by the Technician.	Doctor on duty
8	In case the patient is seriously ill, disoriented or on life support system, co-ordinate with referring doctor regarding emergency care and need for attending doctor / anesthetist to be present during the procedure. Decide regarding sedation / anesthesia for the examination and coordinate with the Anesthetist.	Doctor on duty Referring doctor Anesthetist
9	Supervise patient preparation, pre-medication, change into hospital gown, safe transport to examination area, positioning and examination with or without contrast administration as per protocol. Review the examination, take additional views as per requirement or terminate the procedure. Doctor should instruct the technician regarding filming and the measurements to be printed.	Doctor on duty Technician Nursing Staff

Sr. No.	Activity	Responsibility
10	In case of an urgent / emergency examination, review the examination with consultant and convey the report immediately to the referring doctor on telephone endorsing it in the department register.	Doctor on duty
11	Print the film as soon as possible after the completion of investigation. Give the film to the Doctor on duty for initial reporting along with the File, Form and any other previous investigations. Select and send relevant images to PACS for archiving and make a CD for the study if required.	Technician
12	Analyze and write the report for the examination including comparison with previous study if any. Display films and report in Reporting Room for final discussion with Consultant / HOD. The finalized reports to be printed, signed and then sent to the Central dispatch along with the films.	Doctor on duty FDA Technician
13	Maintain Request Form & Duplicate payment slip in chronological order for record. File the Informed Consent document in patient file.	Technician
14	Day to day cleaning and up keep of equipments. Preventive maintenance and calibration of equipment as per schedule with maintenance of Logbook. In case of equipment failure biomedical engineer to be informed and the complaint booked on the relevant telephone number. Renewal and updations of TLD badges, regulatory approvals for equipments and relevant documents.	Technician Radiographer Biomedical Engr. RSO
15	Any non-conformances observed while carrying out above activities to be recorded in Non- Conformance Register and informed to HOD. Investigate the root cause and initiate corrective action.	Consultant Technician

Review of Outside Investigations Process

Sr. No.	Activity	Responsibility
1	Receive Request Form and check that patient's Name, Age, Sex, CR No, Examination requested and other columns are properly filled.	Receptionist
2	Check for prior appointment or obtain fresh appointment for the examination after consulting technician/doctor.	Receptionist
3	Check the Request form and Charge Slip. Record patient data in Department Register and send IPD Charge Slip to the FDA for charge entry. Confirm correct payment for the procedure and enter charge slip reference in relevant column of the register.	Technician
4	Collect all the investigations sent for review and enquire about any prior studies.	Technician
5	Put up the form along with patient records and investigations to the duty doctor for reporting.	Technician
6	In case of an urgent / emergency examination, review the examination with consultant and convey the report immediately to the referring doctor on telephone endorsing it in the department register.	Doctor on duty
7	Analyze and write the report for the examination including comparison with previous study if any. Display films and report in Reporting Room for final discussion with Consultant / HOD. The finalized reports to be printed, signed and then sent to the Central dispatch along with the films.	Doctor on duty FDA Technician
8	Maintain Request Form & Duplicate payment slip in chronological order for record.	Technician
9	Any non-conformances observed while carrying out above activities to be recorded in Non- Conformance Register and informed to HOD. Investigate the root cause and initiate corrective action.	Consultant Technician

SOP FOR CONDUCTING RADIOLOGICAL TESTS

- The individual will be first attended by the reception desk.
- The registration, payment will be done at the reception.
- Individual will be guided to the Radiology Lounge.
- The Radiographer will write the details in the register.
- For USG / CT the patient will be asked to drink water/ oral contrast, as required.
- Obstetric patients will fill out the PNDT form F declaring,
- **"No SEX DETERMINATION "**
- CT & MRI patient will be given contrast & explained the procedure with written contrast consent form.
- The wait time for each individual test will be explained.
- Patients with appointment will be taken according to their allotted slots.
- Emergency patient will take precedence over all patients.
- Walk in patients will be explained the waiting periods. If not acceptable, they will be scheduled for an appointment.
- Fasting and indoor patient will be done early morning. Others will be scheduled for an appointment.

The Hard Copy will be assessed by the radiologist. The report will be kept for typing.

- The receptionist will confirm the mode of delivery of reports once again and thank the patient.

1. PROCEDURE FOR PATIENT PREPARATION

1) Responsibility for preparation of in-door patients rests with the ward staff, the department of Radio-diagnosis and imaging shall ensure information is dissipated and shall guide the ward staff when they get in touch telephonically or personally. Similarly the OPD Doctors shall seek guidance from the department of Radio-diagnosis and imaging while referring their patients.

2) Patients for CT scan studies requiring IV contrast – Abdomen, pelvis, chest, brain, neck, spine, Angiography, & Urography etc. have to be kept NBM for at least 4 hours. If any are allergic to any medication, it has to be mentioned specially on the CT requisition form.

3) Patients for CT scan abdomen and pelvis require IV as well as oral contrast. Hence after 4 hours NBM, they have to be given oral contrast which will be sent from the radiology department on intimation by the respective ward nurse. If the patient is a diabetic, it has to be beforehand. The scan will start only 30-45 minutes after the completion of the oral contrast. Kindly explain this to the patient as they become very apprehensive. If for some reason, the patient is unable to consume the contrast or the consultant has advised strict NBM for some other reason then kindly inform the radiologist while taking the appointment.

4) Patients for USG – If the focus of scan is the gall bladder, then it is advisable to send the patient fasting for minimum 6 hours (only plain water intake is permitted). Pelvic scans require a full bladder (No restriction on water).

5) Patients for barium studies – NBM overnight. No tea / coffee in the morning (only plain water is permitted) Bowel preparation required.

6) Patients for IVP/ X-RAY KUB – NBM for minimum 4 hours. Bowel preparation required

7) Patients for USG /CT guided FNAC / fluid tapping – Inj. atropine to be given to the patient & informed consent has to be taken before sending the patient from the ward. The sister in the department of Radio-diagnosis and imaging will put the vent-flow when required.

8) Prior appointments have to be taken for all radiological studies and respective nurses will have to inform the front office before transferring the patient from the ward. This is to prevent any unforeseen misunderstandings.

9) All radiological investigations will be done only on receipt of written requisition on proper forms.

10) Bowel preparation: Tab Dimol 2 hs & Tab Dulcolax - 2 HS to be given previous night.

2. PROCEDURE FOR REPORT PREPARATION

1) Reports are prepared by doctors on the PACS systems of the hospital. Each report is dedicated to the data entry operator, typed and then rechecked by the radiologist. The PACS system is equipped with all formatted reports for all modalities, which are then modified as per the requirement in individual cases.

2) The following Format of reports is generated:

- X-RAY CHEST P.A. VIEW
- Both lungs fields are clear.
- The heart & aorta are within normal limits.
- Both hila are normal.
- The domes are intact.
- There is no pleural Pathology.
- The visualized bony thorax appears normal
- **IMPRESSION: Normal chest X-ray.**

- The data entry operator will:
- Take final advice from doctor on the report.
- Type the report in the pre-formatted area of PACS.
- Attach all the reports to the hard copy.
- Give it for correction to the doctor.
- Take the doctors signature on the corrected, final report.
- Note down in the register the date of typing & signature.
- Courier, if necessary, and mention the date in the dispatch register.
- If the patient comes personally, take his signature in the register.
- Make sure all the reports are in place.
- Keep a record of the pending reports.

3. DISPACTHING OF REPORTS

- **On OPD Basis:**

Routine reports are given to the patient by 2pm the next day.

- **On Emergency Basis:**

In case of emergency, provisional reports to be given with in one hour. The hard copy of the report to be given in the evening or the next day before 2pm and the same is communicated to the patient.

4. FOR CORPORATE PATIENTS

- The front office staff will:
- Ask for the referral letter from the company.
- Confirm on the payments procedure whether Cash or credit.
- Make sure from the company about the confidentiality of the report, whether she can disclose the information to the patient or not.
- Duplicate copy of the bill of all patients, will be kept in the department.
- In case a person referred by his company wants to undergo some additional tests, he will be asked to pay for the extra.

SOP FOR INVENTORY CHECKING

- Inventory checking in radiology is carried out according to shift, once in a day, start of the day and end of the day.
- Shift wise inventory checking is done by the nurses at the start of various
- Duties like 7am, 9am, 12 noon which includes all the emergency drugs,
- Equipments and contrast which is countersigned by the radiographer in-charge.
- Inventory checking of the stock is carried out twice a week for pharmacy items on every Tuesday and Fridays & indent is to be put online on Wednesday and Saturday before 12 noon.
- The stock should be received in the department before 4pm along with printed request issue form which is counter checked in the department by the staff nurse and maintained in the pharmacy issue file.

1. INDENTING PHARMACY MATERIALS

1) Make an entry of required material in material indent book.
2) Confirm the availability of required product.
3) Put indent.
4) Record indent number in indent register.
5) Inform material personnel about your indent in
6) Regular consumption material should be indented twice in a week
7) If any item is not available, send an e mail to respective head for making it available immediately.

2. INDENTING STORES MATERIALS

1) Make an entry of required material in material indent book.
2) Confirm the availability of required product.
3) Put indent manual
4) Record indent number in indent register.

5) Inform materials' management personnel/stores' personnel about your indent.
6) Regular consumption material should be indented twice in a week
7) If any item is not available, send an e mail to respective head for making it available immediately.

3. SENDING AND RECEIVING OF C.S.S.D MATERIALS

1) Manual or Online request will be send by radiology staff nurse for next day's required material.
2) In case of any additional cases staff nurse will send on line request on same day.
3) Sterile instruments / material will be collected by GDA on sterile trolley.
4) Staff nurse will make necessary paper work and will send request online.

4. SOP FOR INVESTIGATIONAL DRUGS

1) Preparation of all investigational drugs / contrast material is done by trained and qualified personnel in the radiology department.
2) Before using of an investigational drug like contrast material, the patient will be informed about the use of the same.
3) The patient will specifically be enquired for any known reaction or hypersensitive to contrast material / investigation drugs,
4) Patient will be constantly monitored after contrast material / investigational drug is injected.
5) Strict aseptic conditions will be followed while injecting the contrast material and only trained personnel will be used for the same.
6) All adverse reactions will be entered in the patient's file.
7) All the investigation drugs / contrast materials will be indented for, and on receipt will be stored in the radiology department's cupboard in cool and dry conditions.
8) After use, the empty/ broken containers will be disposed as per bio-medical waste disposal guidelines.

5. RADIATION SAFETY MEASURES

1) This Hospital does not handle any radioactive hazardous material. However, X-ray / CT Tubes, when requiring replacements, are replaced with a fresh tube by the concerned vendors. The department has to take in writing from the vendor that they dispose the tube taken from us in a scientific manner.
2) X-ray machine operators (x-ray technician) must wear monitoring devices (TLD badge) when on duty. The film badge should be worn on body.
3) Lead aprons of the highest ISO quality provided for protection.
4) TLD badges to quantify radiation doses.
5) Never wear another person's TLD dosimeter.
6) If a lead apron is worn, dosimeter underneath the lead apron to be worn.
7) Technique chart to be posted at control panel specifying parameters for routine examinations.
8) Appropriate exposure factors for each Radiographic examination.

9) Use of employee and patient protective devices including lead aprons, lead screens, thyroid shield.

- In the dark room daily check of developer temperature for proper chemical activity.

10) Appropriate structural shielding shall be provided for walls,doors,ceiling and floor of the room housing x-ray unit so that doses received by workers and the members of public are kept to the minimum and shall not exceed the respective annual effective doses as prescribed by the competent authority.

11) The distance between control panel and the X-ray unit shall not be less than 3 m.

12) Patient waiting area shall be provided outside the x-ray room.

13) Appointment of **Radiation Safety Officer**.

14) Suitable warning signals such as red light and "CAUTION - X-RAY'' kept "ON" when the unit is in use, shall be provided outside the x-ray room.

15) Control TLD batches to be placed out side the radiation rooms for radiation leakage monitoring, e.g. in Sonography rooms.

16) The dark room shall be located adjacent to the x-ray room such that no primary or secondary x-rays reach inside the dark room.

17) Avoiding unnecessary exposure to the patient's relative is to be ensured.

6. RADIATION SAFETY DEVICES

1) TLD badges issued to all radiographer. Badges are procured from BARC approved vendor and sent back periodically for measurement of radiation doses are within the defined safety limits. TLD badges are sent back to the BARC approved vendor after a period of 3 months, for renewal.

2) All records maintained in a register.

7. TRANING OF PERSONNEL ON RADIATION SAFETY MEASUREMENTS

1) Training of personnel on radiation safety by BARC. (Quarterly session).

2) Course material and record maintained.

8. EQUIPMENT BREAKDOWN REPORT

1) Note down the breakdown and instrument detail

2) (Lot no., Model & breakage detail) in maintenance & log register.

3) Prepare incident report and inform the Bio-medical engineer & concerned authority about damage in writing in registers marked specifically for them respectively.

4) If possible take replacement from bio medical department.

9. QUALITY ASSURANCE

1) Radiology Machines: periodic verification are performed by the vendor, records are available with the department. In case of any deviations noted from the laid down quality assurance test, the corrective and preventive actions to be taken.

2) Original Contract documents with vendors and documents of AMC and CMC for all equipment are maintained (Log books) and the services records are kept with the bio-medical engineering department.

3) Materials: All consumables, including contrast material, drugs and other medication stored under strict aseptic conditions. All expired goods returned to the stores, registers maintained.

4) Manpower: All radiographers certified and qualified with reputed institutes from all over the country.

5) Surveillance of imaging results.

6) The imaging results are audited for accuracy and quality of reporting by an External Radiology services provider.

7) Verification and validation of imaging methods.

10. USED MATERIAL DISPOSABLE

1) After use the empty/broken containers will be disposed as per biomedical waste disposal guidelines.

2) Staff nurse should maintain record for destroyed material.

11. IMAGING SIGNAGES/ INSTRUCTIONS PROTOCOLS

1) Signages are appropriately displayed in the lobby, in the corridors leading to the department and in the department each room has further instructions as applicable.

2) Glow bulbs and "CAUTION - X-RAY '' have been put up outside X-Ray / C.T. SCAN rooms, which will be activated to indicate if any procedure is in progress.

3) Signages – "No Sex Determination Related Queries Will Be Entertained".

4) Signages like – "Pregnant Patients Are Requested to Strictly Inform the Radiology Reception" "Do not talk on your cell while in the procedure room" "Do not knock on / enter the door when the red light is on in the Xray room" "Patients are requested to switch off their cellular phones.''

5) ''Elderly patients and children to be accompanied by a relative.''

6) ''All belongings are the sole responsibility of the patient.''will be displayed.

12. LEAVE TAKING PROTOCOLS

1) Leave will be in accordance to the existing hospital rules which are subject to change periodically.

2) All planned leave should be applied one month before.

3) For any casual leave, 2 days prior notice required.

4) Leave will be sanctioned by the head of the department.

13. PHYSICAL & OTHER CONTROLS

1) Interdepartmental Communication.

2) There should be constant interdepartmental communication so that the availability of all the required activities on a particular date can be confirmed and these activities can be conducted properly.

3) Departments to be in constant touch with are:

- Laboratory
- ICU/Wards
- Accounts and Billing.

4) 1 Day in advance, before leaving the counter the receptionist will make an appointment summary sheet.

5) Provision for late appointments and walk–ins will be kept.

6) Before leaving every day, the department should be inspected thoroughly for neatness and cleanliness.

7) Old magazines and news papers should be removed and fresh ones kept.

8) **Hourly cleaning of toilets should be done. Display cards about cleanship routines will be put up in each bathroom and signed regularly.**

9) Toilets should have all the requirements in place.

10) All medical equipments should be in place in the consulting rooms. The nurse should look into it.

AAC- 12 PATIENT CARE IS CONTINUOUS AND MULTI DISCIPLINARY IN NATURE

I. PURPOSE:

To render continuous, multidisciplinary care by health professionals during all phases of treatment in hospital.

II. SCOPE:

Hospital Wide

III. POLICY:

1) During all Phases Patient care is performed by qualified health Professionals.
2) Communication within department and Interdepartmental is documented by doctors & Nurse
3) Information exchange between Shift take over is documented by all health Professionals.
4) Patient Transfer Interdepartmental is done adhering to safe Practices.

IV. PROCEDURE:

1) Exchange of Patient Information

a) A consultant doctor on ward rounds is always accompanied by staff nurse / nursing supervisor and resident doctor.
b) The shift handing over and taking over of staff nurse is done at bedside and signatures with time are documented in structured Format.
c) Clinical Hand over by the Doctors between shifts is documented

2) Referral /Transfer Between units / Departments

a) In case of Referrals / Transfer to a different Unit / specialty the same will be communicated mentioning the urgency by the treating Doctor telephonically and in writing to the other Department of the same Seniority.
b) Routine Referrals will be seen within 24 hours from receiving the Referral information & Urgent Referrals should be seen immediately within 5 minutes or as soon as possible.
c) While shifting or transferring a patient to other unit or facility, a complete handing over/taking over is completed including documents, medicines, investigations and other special instructions
d) If the patient is moved for imaging or other investigation from ward, Nursing staff / Housekeeping should accompany the patient with case sheet depending upon the condition of the patient.
e) In case of inter ward transfer of patient one staff nurse should accompany the stable patient.
f) If consultant / nursing staff feel the patient's requirement, one resident doctor / medical officer should accompany the patient at the time of transfer.
g) From ICU to ICU transfer, RMO/Doctor on duty has to accompany the patient.

V. PROCESS DETAILS:

All the staff are adequately qualified and having a sufficient experience. The credentialing can be obtained from the Human Resource department.

1. To ensure adequate and proper communication between various levels of care and different people participating in giving the care to the patient's regular and complete documentation updating is done.
2. Doctors write their progress notes in Medipro5. The medication orders are written on a different sheet so that not to miss any medicine. The records are maintained after every visit of the patient whether it is the consultant, Jr. Consultant or a resident.
3. Nurses document include nurses notes which is done at least once in each nursing shift (in Medipro5).
4. Other healthcare providers like physiotherapy, dietetics etc also writes their patient notes in the patient files.
5. To ensure proper exchange the information between the care providers in between shifts there is a nurses handing take over notes which are written in the nurse's focus notes.
6. In case of transfer of the patient the information sent along the patient is mentioned in the transfer policy.

Steps involved in patient care:

S. No	Activity	Responsibility
1	At least once a day visit is done by the consultants/clinician in-charge to assess and evaluate the progress of the condition of the patient	Clinician
2	At least once a day visit is mandatory for the Jr. Consultant to evaluate the progress of the patients.	Jr. Consultant
3	The 24x7 coverage of all the floors is present .	Junior / Senior residents
4	The nursing in-charge takes a round of all the patients admitted at least once a day to supervise if the nursing care of the patients is upto the mark.	Nurse In-charge
5	The nurses visit the patient's bed/room for every medical need or the need of the patient	Nursing Staff

For OPD patients:

S. No	Activity	Responsibility
1.0	**OPD Registration**	
1.1	Patient is registered in OPD, unique patient ID number generated, case file made and directed to doctor for OPD consultation	Billing staff
2.0	**Doctor's meeting**	
	Patients are given appointment based on doctor's availability.Patients having an appointment should be given priority over walk in patients.	
2.1	Patient details, illness history, presenting complaints and symptoms are noted.	Resident /Consultant doctor
2.2	Systems' examination done and provisional diagnosis made, investigations suggested for confirmation	Consultant doctor /Resident
2.3	Most times, initial medication written to cover immediate symptoms of patient.	Consultant doctor/Resident
2.4	Based on the investigation / diagnosis patient is educated and briefed by doctor who records the follow up activities like referring for laboratory test / radiology/ or prescribe treatment. Investigations and prescriptions are entered on the prescription sheet.	Consultant doctor / Resident
2.5	The above details are noted in the patient's case file	Consulting Doctor / Resident
2.6	Based on the condition of the patient treatment plan is finalized and final list of medications prescribed and patient sent home / advised or patient can be advised admission for medical or surgical treatment.	Consulting doctor/ Resident
2.7	Cases where follow up visit is advised, the same is written in the prescription sheet	Consulting Doctor /Resident
2.8	Patient is given the date and time of appointment after the doctor's OPD schedule and list of appointments for that day are reviewed.	Resident
3.0	**Nursing process in OPD**	
3.1	Examination of a lady patient is done in presence of another female – student/staff nurse called for support	Staff/Student nurse

S. No	Activity	Responsibility
3.2	Treatment / dressing room in the OPD, also used for administering injections, vaccinations, etc.	OPD Nurse
4	**The payment for investigations shall be done**	Billing counter
5	**Collection of the sample in phlebotomy room shall be done**	Phlebotomist
6	**Collection of report by patient**	Report dispatch counter

For IPD patients:

S. No	Activity	Responsibility
1.0	**Receiving Patient in Ward**	
1.1	Orientation of patient and patient's attendants about hospital policy on visitors, visiting time, etc.	Admission counter
1.2	Admission paper received from Admission counter	Ward nurse
1.3	Patient room / bed readied – ensuring cleanliness and readiness	Ward nurse
1.4	Patient received in ward and escorted to bed	Ward nurse
1.5	Checking Patient name, ID number, consultant and treatment details on patient file	Ward nurse
1.6	Securing patient ID tag on patient's wrist	Ward nurse
1.7	Entry of patient name into Ward register	Ward nurse
2.0	**Initiation of Patient treatment**	
2.1	Duty / floor doctor informed about patient arrival	Ward nurse
2.2	Patient file checked for investigations to be done and immediate treatment plan	Ward nurse
2.3	For investigations – necessary investigations slips made, stamped, signed, specimen taken, requests and sample sent to Lab	Ward nurse / Duty Doctor
2.4	For Radiology – request filled and signed and sent to Radiology	Duty doctor / nurse,
2.5	Vital signs checked and recorded	Nurse
2.6	Detailed history taken and systemic' examination done	Duty/ Floor doctor

S. No	Activity	Responsibility
2.7	Admitting / treating consultant or senior resident informed about bed number and patient status	Duty/ Floor doctor
2.8	Pharmacy request for drugs and consumables as prescribed in patient file and as per patient type (paid, package, corporate etc.)	Nurse / Duty Doctor
2.9	Dietician informed for diet	Nurse
2.10	Patient treatment plan reviewed, new additions / deletions to the plan made, plan of treatment discussed at length with patient, including possible length of stay, disease course, prognosis, medications, etc.	Treating consultant & Senior resident
2.11	Other specialist consultant referrals if necessary	Primary consultant / ward nurse
3.0	**Continuity of Patient treatment and care**	
3.1	Investigation reports received – nurse signs under received column in lab register	Lab attendant / Ward nurse
3.2	Report entered into patient case file on investigation sheet and report placed in patient file.	Nurse
3.2	Patient reviewed • at least twice a day for progress • treatment plan updated • investigation reports checked	Primary consultant / Resident Medical Officer
3.3	Other specialist referrals if necessary for review, referral orders to be put in medipro / written	Primary consultant
3.4	Patient Daily Drug sheet maintained in patient file – updated daily	Duty/ Floor doctor
3.5	Treatments including primary and supportive given Patient's vitals monitored every 4 hours or as per doctor's orders and documented Patient diet, hygiene, treatment and progress documented in nurse's chart and case file.	Ward nurse
3.6	Co-ordination of treatment between different treating consultant	RMO / Nurse
4.0	**Emergency alert process**	
4.1	Patient emergency in the ward due to sudden drop in vital signs, loss of consciousness, excessive bleeding, cardiac arrest - Telephone operator contacted and information sent to concerned doctors' /	Ward nurse / telephone operator /Resident

S. No	Activity	Responsibility
	Administrators / Support Staff.	
4.2	Emergency measures instituted, patient stabilized	Nurse / Resident
5.0	**Patient shifting to ICU in an emergency**	
5.1	OT /ICU nurse in charge consulted about bed / OT availability and informed about transfer	Nurse / Resident
5.2	Patient shifted to OT / ICU	Nurse / Anaesthetist / Nursing aid / Senior resident
6.0	**Other Ward activities**	
6.1	Checking availability of beds	Ward Nurse
6.2	Admission and discharge for the last 24 hours checked and tallied with patient census to maintain bed availability status for next day	Ward Nurse
7.0	**Patient discharge from hospital**	
8.0	**Records Generated**	
	Physical Examination & Patient case notes History sheet, Investigation request slip – Laboratory & Radiology, other investigations Investigation report – Laboratory & Radiology Treatment Sheet Nurse's Daily records Nurses' Patient census record In take & Out-Put Records Diabetic Chart Consultation Record (Medipro5) Progress & Doctor's Orders (Medipro5) Daily Consultation's Visit (Medipro5) Diet chart	
9.0	**Associated Processes**	
	Pre operative process CSSD process Laundry process Pharmacy and stores related process Bill generation & payment process Dietician & Food Management process Infection Control Process Patient discharge process	

AAC 13.THE ORGANIZATION HAS A DOCUMENTED DISCHARGE PROCESS

I. PURPOSE

To establish and document a well defined discharge process for in-patients.

II. SCOPE

Hospital wide

III. RESPONSIBILITY:

Doctors, Nurses, Billing department clerk**.**

IV. POLICY:

1. The consultant determines the fitness for Discharge in discussion with the patient and Family
2. In case of MLC Police Will be informed prior to Discharge
3. In case of LAMA /DAMA Consent is taken and Treatment summary Sheet to be handed over

V. PROCEDURE

1. Discharges for General Patients

1) Patient's discharge is planned in consultation with the patient and / or family members.

2) Discharge is planned a day before and conveyed to the patient and/or attendants by the treating consultant.

3) They are briefed about the discharge activities and procedure to be followed for discharge by the shift-in-charge of the concerned ward.

4) Resident doctor prepares hand written discharge summary. (10 mins – 20 mins)

5) Draft is sent to the respective consultant for final checking. (15 mins – 20 mins)

6) Finalized discharge summary is signed by the respective consultant / resident. (5 mins)

7) All unused medicines are returned to the IP Pharmacy by the assigned staff nurse.

8) Patient's File is sent to Billing department and a final bill is prepared by the billing department

9) For general patients bill is printed at the IPD Reception. A call is made to the patient or his/her attendants for final payment to settle the bill and a clearance for discharge is issued

10) After obtaining final clearance slip for discharge, permission for leaving hospital is to be taken from the nursing counter after checking of linen, instrument, equipments which are used by the patient.

11) While leaving hospital after discharge, patient/ attendant should ensure to collect all the lab reports, radiological reports and related documents. (For TPA cases only photocopies are given). (05 mins – 10 mins)

12) Finalized discharge summary is handed over to patient / attendant after obtaining the clearance slip from the IPD. (5 mins)

13) All patients are explained in their understandable language regarding the Follow up and Treatment advised on Discharge.

14) Non ambulatory patients to be transported by stretcher / wheel chair accompanied by a house keeping staff.

15) IPD patient file is completed by attaching the duplicate copy of the Discharge summary countersigned by treating doctor and dispatched to Medical Records Section by the ward Incharge

Minimum time for Discharge – 2hrs Maximum Time Required – 6 hrs. For corporate /RGJAY – time Required 6-7 hrs

2. <u>Discharges for LAMA patients:</u>

1) The unwillingness of the patient or his/her attendants to continue the treatment in the hospital is conveyed to the consultant or the RMO on duty.

2) Signatures of the patient or his / her attendants are obtained on the LAMA form explaining to them about the present condition of the patient and all possible the consequences due to discontinuation of treatment.

3) The discharge process is completed in the normal time frame as discussed above.

4) LAMA summary is handed over to the patient or his/her attendants instead of discharge summary at the time of leaving the hospital.

5) If Paying Patient All original Investigation Reports are handed over to patients and Copies are kept in IPD Files.

6) If Charity patients only copies of Investigation Reports are Given along with LAMA Summary

3. <u>Discharge/Death in Medico Legal Cases:</u>

1) <u>MLC Discharge</u>

a) Discharge process be carried out as a normal discharge

b) Treatment Summary to be written and Original to be handed over to the Police and Duplicate to be attached to the IPD File

c) MLC Original Form to be given to the Police

d) If the patient / relatives of MLC cases insist for report, then they have to be explained that they will have to pay extra amount for the duplicate reports (e.g. CT, MRI or X-Ray plates).

2) <u>MLC Death</u>

a) In case of Death, Body along with Treatment Summary, MLC Form is to be handed over to the concerned police ONLY.

b) In case the police are delayed for more than 2 hours, the body may be shifted to the mortuary

c) Signatures with complete detail of Police personnel accepting the body are to be obtained on the mortuary register.

d) Only Death Summary and Municipal Corporation notification form are handed over to the attendants of the deceased patient

3) <u>Clearance in case of Death</u>

a) In case of death, discharge process be carried out as a normal discharge but priority is to be given for early clearance to clear the dead body from the hospital at the earliest.

b) Dead Body with the IPD File and Original Death certificate should be handed over to the causality and documentation to be made in Death Register.

c) Dead body is handed over to the relative and the signature is obtained in the Death register.

d) Copy of Death Certificate is attached to the IPD File

e) Original Death Certificate Municipal Corporation notification form are handed over to the attendants of the deceased patient

Annexure

1. Treatment Summary

2. LAMA summary

3. Death Summary

AAC-14. ORGANIZATION DEFINES THE CONTENT OF THE DISCHARGE SUMMARY

I. PURPOSE

To frame guidelines for the system and contents for the discharge summary

II. SCOPE :

Emergency Department & IPD

III. RESPONSIBILITY :

Doctors and Nurses'

IV. POLICY

1) All patients leaving the Hospital will be issued with a Discharge Summary / LAMA summary / Treatment Summary/ Death Summary.

2) Discharge Summary / LAMA summary / Treatment Summary/ Death Summary should contain contents and guidelines defined by the organization.

Contents of Discharge Summary

Patients Name , IP & OP NO , Date of Admission , Date of Discharge, Reason for Admission, Significant Findings, Diagnosis, Investigation results, procedures performed, medications administered , Treatment given, Patients Condition at the Time of Discharge, Follow up medication , other instructions, Name of the Primary Physician and other Doctors Involved . When to obtain urgent care is to be included in the summary. Contact number for urgent communication is present on the Discharge Summary.

4. The IPD case sheet will contain discharge notes with date and Time when the patient is advised discharge during Doctors Rounds.

5. Discharge summary is immediately completed after Doctors Rounds.

6. Discharge summary is handed over to patient along with the investigation reports after patient clears all billing dues.

Annexure:

- Discharge Summary

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

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AMENDMENT SHEET

Sr.No.	Section no. & Page no.	Details of Amendment	Reasons	Signature of the Preparatory Authority

CONTENTS

Sr.No	Standards	Page no.
COP 1	Uniform care to patients is provided in all settings of the organization and is guided by the applicable laws, regulations and guidelines	
COP 2	Emergency services are guided by documented policies , policies and applicable laws and regulations	
COP 3	The ambulance services are commensurate with the scope of the services provided by the organization	
COP 4	The organization plans for handling community emergencies, epidemics and other disasters	
COP 5	Documented policies and procedures guide the care of patients requiring cardio pulmonary resuscitation	
COP 6	**Documented policies and procedures guide Nursing care**	
COP 7	Documented procedures guide the performance of various procedure	
COP 8	Documented policies and procedures define rational use of blood and blood products	
COP 9	Documented policies and procedures guide the care of patients in the intensive care and high dependency units	
COP 10	Documented policies and Procedures guide the care of vulnerable patients	
COP 11	Documented policies and procedures guide obstetric Care	
COP 12	Documented policies and procedures guide Paediatric services	
COP 13	Documented policies and procedures guide the care of patients undergoing moderate sedation	
COP 14	Documented policies and procedures guide the administration of an aesthesia	
COP 15	Documented policies and procedures guide care of patients undergoing surgical procedures	
COP 16	Documented policies and procedures guide organ transplant programmme in the organization	
COP 17	Documented policies and procedures guide the care of patients under restraints(Physical & / or chemical restrain)	
COP 18	Documented policies and procedures guide appropriate Pain	

	management	
COP 19	Documented policies and procedures guide appropriate rehabilitative services	
COP 20	Documented policies and procedures guide all research activities	
COP 21	Documented policies and procedures guide nutrition therapy	
COP 22	Documented policies and procedures guide the end of life care	

COP 6: DOCUMENTED POLICIES AND PROCEDURES GUIDE NURSING CARE

I. PURPOSE:

To set guidelines for all activities of Nursing Services and to standardize the activities of the unit.

II. SCOPE:

Hospital Wide

III. RESPONSIBILITY :

Nursing Department

IV. POLICY & PROCEDURE :

Refer: Nursing - SOP & Nursing Procedure Manual

Appendix - NURSING MANUAL

A. Purpose

To provide guideline instructions for General Nursing care with the aims that

- ❖ Needs and expectations of patients are established,
- ❖ Patient satisfaction is enhanced on continual basis.

B. Scope

It covers all in patients receiving treatment in the hospital.

C. Responsibility

Nursing Superintendent, Assistant Nursing Superintendent, Nursing In-charge and Staff nurses.

D. General Instructions for Nurses

1. **Discipline**

APPLIABLE FOR NURSE'S TO

- Attend duty in Complete uniform.
- Report 10 minutes prior to duty time
- Always wear Identity Card.
- Takeover of inventory articles by counting each item and reord in the inventory register.
- Take over each patient from previous staff with minute details.

NOT PERMITTED FOR NURSE'S TO

- Come late for duty
- Use nail polish, have long nails or wear extra ornaments.
- Accept gifts/ money from patients/attendants.
- Use cell phones/mobile phones on duty.

2. **Orientation to patients and their attendants at the time of admission.**
   - **APPLIABLE FOR NURSE'S TO**

- Address the patients/relatives courteously.
- Accompany the patient to room
- Offer the bed to patient and make him/her feel comfortable
- Make sure nurses are always available at the time of call.
- Inform the patients about
  - Visiting hours and regulations
  - Timings of hot water availability
  - Location of the pharmacy to get medications.
  - Location of drinking water
  - Provision of water supply
  - Food timings.
  - Availability of barber in day time.
- Remove ornaments & valuables in the presence of a relative.
- Record and get it signed by the relative in "Admission & Discharge register"
- Note down the name and number of each item on the back of "Admission & Discharge register"
- Get the name, signature and the relationship of the receiver.
- Record activities like sponge bath, back care, mouth care, after giving to the needy patients.
- Inform the patient well in advance about various procedures like operation/investigations etc.
- Make sure the patient is seen by the doctor soon after admission and whenever there is a complaint.
- Informs the medical officer –in-charge on the spot in case the doctor on duty doesn't respond to the call.

3. Courtesy

- **APPLIABLE FOR NURSE'S TO**
- Be polite and courteous to the patients/attendants/visitors.
- Attend to the patient on one call.
- **NOT PERMITTED TO**
- Talk improperly/ rudely to the patients/attendants
- Argue with patients/ attendants/ Visitors/ Co-workers/ Supervisors
- Ignore any problem mentioned by the patient/ attendants
- Allow smoking or drinking in the premises
- Allow eatables and flowers into the hospital.
- Engage in lengthy talks over telephone.

4. Procedures /Investigations

- **APPLIABLE FOR NURSE'S TO**
- Send patients to other departments or for investigations with Ward attendants only.
- Send the blood sample to Blood Bank through ward attendant (along with a relative)
- Collect blood from Blood Bank through ward attendant.
- Start blood transfusion with the knowledge of patient/relative only.
- Switch off electrical appliances when not in use (geysers, needle destroyers, hot plates, fans, refrigerators etc.)
- Always lock vacant rooms after getting thoroughly cleaned.

- **NOT PERMITTED TO**

- Allow valuables and money with the patient
- Allow attendants to sit or sleep on patient's bed
- Allow the patient to leave hospital without written permission from the doctor
- Leave the medical record in patient's room/bed
- Allow the patient/attendants to carry the medical record to any place.
- Filling of investigation forms by nursing staff
- Send the patients without rails or cover sheets/blankets
- Allow the Ward attendant & Sanitary Attendants to leave the ward/department without information.
- Allow the Ward attendant & Sanitary Attendants to leave the ward/ department before handing over the responsibility to next shift person.

5. Medicines & I.V. Fluids

- **APPLIABLE FOR NURSE'S TO**
- Start medications immediately after admission/orders
- Remember 5 "R" before administering any medication

○ Right Drugs	○ Right history and Assessment
○ Right Dose	○ Right to Refuse
○ Right Route	○ Right Evaluation
○ Right Time	○ Right Information
○ Right Patient	○ Right Document

- Make sure the patient takes the medicine in your presence
- Check blood sugar before the food reaches the patient.
- Give insulin injection before relative/ patient reminds you
- Make a loop and fix the I.V. tube – prevent cannula from coming out.
- Put date to I.V. Cannula site, I.V. tubing's, urinary catheters, Ryle's Tubes etc.
- Regular care of I.V. sites always (after removing cannula also)
- Procure medicines speedily from pharmacy
- Check the balance of medicines before indenting
- Inform Nursing Matron /Consultant –in-charge on the spot about medicines not available.
- Check portable O2 Cylinders in each shift, note down reading in register.
- Ensure enough water in O2 humidifiers.

- **NOT PERMITTED TO**

- Record before giving medicine/injections.

6. Infection Control/ Waste Management

- **APPLIABLE FOR NURSE'S TO**
- Follow Hand wash in between procedures to avoid spread of infection.
- Ensure waste segregation, burning of needles, cutting the tips of syringes, cutting tubing after each use and keep them in 1:9 Sodium hypochlorite solutions.

- Change Sodium hypochlorite solution in every shift
- Use color coded bags after proper segregation of the waste
- Keep infected waste in yellow bag only
- Ensure cleaning of suction jars after every use.
- Ensure barrier nursing universal precautions to infectious patients.
- Ensure deep cleaning of the beds and the unit after a patient is discharged to keep the room ready for next patient.

- **NOT PERMITTED FOR**

- Wearing ICCU/ Cath Lab/ OT dress/ slippers out of the department
- Keeping infected dressing materials in dressing trolley
- Keeping sterile gauze drum for more than 24 hours.
- Keeping the CSSD items for more than 48 hours
- Pricking more than once during venipuncture
- Touching the area of I.V. site after cleaning and before inserting the cannula.

7. Discharge Process

- **APPLIABLE FOR NURSE'S TO**
- Remove I.V. cannula at the time of discharge
- Send the file with discharge summary to accounts office with the ward attendant accompanied by the relative of the patient.
- Check the payment receipt number from accounts section before releasing patients (for paying patients only).
- Hand over the discharge summary, master chart to patients/relatives with instructions.
- Send the patient on wheel chair up to the entrance with the Ward attendant.

- **NOT PERMITTED TO**

- Take more than 3 hours for discharge process

Table of content

Protocol No	Topic	Page No
GNP 1	**Patient Assessment Protocols**	
GNP 1.1.1	Temperature, Pulse, Respiration Monitoring	
GNP 1.2.2	Blood Pressure Monitoring	
GNP 1.3.3	Blood Pressure recording from monitor	
GNP 1.4.4	Measuring of weight and Height	
GNP 1.5.5	Neurological Observation	
GNP 1.6.6	Neurovascular Limb Observation	
GNP 1.7.7	Ear Examination	
GNP 1.8.8	Throat Examination	
GNP 2	**Hygiene Protocols**	
GNP 2.1.9	Hygiene Care	
GNP 2.2.10	Oral Hygiene	
GNP 2.3.11	Eye Care	
GNP 2.4.12	Hair Care	
GNP 3	**Comfort Measures**	
GNP 3.1.13	Local Application of Heat	
GNP 3.2.14	Use of Warm Blankets	
GNP 3.3.15	Local Application of Cold	
GNP 3.4.16	Pain Assessment and Management	
GNP 4	**Patient Safety Protocols**	
GNP 4.1.17	Patient Identification	
GNP 4.2.18	Care of Vulnerable Patients	
GNP 4.3.19	Prevention of patient falls	
GNP 4.4.20	Application of Physical Restraints	
GNP 4.5.21	Prevention of Pressure Ulcer	
GNP 5	**Nursing Documentation**	
GNP 5.1.22	Documentation in Nurse's Notes	

GNP 6	**Blood Transfusion Protocols**	
GNP 6.1.23	Indenting/procuring Blood and blood products	
GNP 6.2.24	Administering Blood and Blood Products	
GNP 7	**8. Lab Investigation related protocols**	
GNP 7.1.25	Blood Sampling	
GNP 7.2.26	Vene-puncture with Vacutainer	
GNP 7.3.27	Arterial Blood Sampling	
GNP 7.4.28	Blood Culture sampling	
GNP 7.5.29	Blood Glucose Monitoring	
GNP 7.6.30	Urine sample Collection from Catheter	
GNP 7.7.31	Mid-Stream Urine Specimen Collection	
GNP 7.8.32	24 hour Urine Collection	
GNP 7.9.33	Specimen transport	
GNP 8	**Intravenous Procedures**	
GNP 8.1.34	Insertion of Intravenous Cannula	
GNP 8.2.35	Intravenous Therapy	
GNP 8.3.36	Peripheral Cannula Dressing	
GNP 8.4.37	Removal of peripheral Catheter	
GNP 8.5.38	Insertion Of Central Venous Catheter	
GNP 8.6.39	Flushing of Central Venous Catheter	
GNP 8.7.40	Removal Of Central Venous Catheter	
GNP 9	**Assisting in Invasive Procedures**	
GNP 9.1.41	Pleural Aspiration	
GNP 9.2.42	Lumbar Puncture	
GNP9.3.43	Liver Biopsy	
GNP 9.4.44	Removal of Epidural catheter	
GNP 9.5.45	Assisting with Paracentesis	

GNP 10	11. Medication Management Protocols	
GNP 10.1.46	Administration of Medications	
GNP 10.2.47	Eye Drop Instillation	
GNP 10.3.48	Eye Ointment Application	
GNP 10.4.49	Application Of Transdermal Medication	
GNP 10.5.50	Ear Drop Instillation	
GNP 10.6.51	Intramuscular Injections	
GNP 10.7.52	Intravenous Injections	
GNP 10.8.53	Intradermal injections	
GNP 10.9.54	Insulin Administration – Subcutaneous,	
	IV Bolus, Intravenous Administration	
GNP 10.10.55	Insulin Intravenous Administration	
GNP 10.11.56	Narcotics Administration And Documentation	
GNP 10.12.57	Verbal Orders	
GNP 10.13.58	High Alert Medications	
GNP 10.14.59	Use Of Multi-Dose Vail	
GNP 10.15.60	Medication Error Reporting	
GNP 10.16.61	Crash Cart Maintenance	
GNP 10.17.62	Narcotic Drugs : Checking & Administering	
GNP 11	**13. Emergency Protocols**	
GNP 11.1.63	Code Blue Management	
GNP 11.2.64	Defibrillation	
GNP 12	**Patient Rights Protocols**	
GNP 12.1.65	Protecting Patient Rights	
GNP 12.2.66	Consents	
GNP 12.3.67	Health Teaching	
GNP 13	**Infection Control Protocols**	
GNP 13.1.68	Hand Hygiene	
GNP 13.2.69	Aseptic Technique	
GNP 13.3.70	Needle Stick Injury	

GNP 14	**Wound Care**	
GNP 14.1.71	Wound Dressing	
GNP 14.2.72	Incision line care	
GNP 14.3.73	Wound and sinus irrigation and probing	
GNP 14.4.74	Drain Measurement and Management	
GNP 14.5.75	Suture, Clip and Staple Removal	
GNP 15	**Other Procedures**	
GNP 15.1.76	Urinary Catheterization	
GNP 15.2.77	Urinary drain Management	
GNP 15.3.78	Naso-gastric Tube Insertion	
GNP 15.4.79	Nasogastric Tube removal	
GNP 15.5.80	Enteral feeding	
GNP 15.6.81	Non Retention Enema	
GNP 15.7.82	Rectal Suppository Insertion	
GNP 15.8.83	Colostomy Care	
GNP 15.9.84	Ear Syringing	
GNP 15.10.85	Airway Management	
GNP 15.11.86	Tracheostomy Dressing	
GNP 15.12.87	Tracheostomy Suction	
GNP 15.13.88	Oxygen Therapy	
GNP 15.14.89	Monitoring of Peripheral Oxygen Saturation	
GNP 15.15.90	Nebulization Therapy	
GNP 15.16.91	Pre-operative care	
GNP 15.17.92	Removal Of Implanted Devices	
GNP 15.18.93	Care of Dead	

Table of content

Protocol No	Topic	Page No
GNP 1	**Patient Assessment Protocols**	
GNP 1.1.1	Temperature, Pulse, Respiration Monitoring	
GNP 1.2.2	Blood Pressure Monitoring	
GNP 1.3.3	Blood Pressure recording from monitor	
GNP 1.4.4	Measuring of weight and Height	
GNP 1.5.5	Neurological Observation	
GNP 1.6.6	Neurovascular Limb Observation	
GNP 1.7.7	Ear Examination	
GNP 1.8.8	Throat Examination	

TEMPERATURE, PULSE, RESPIRATION MONITORING

As routine, temperature, pulse and respiration should be monitored simultaneously.

I. TEMPERATURE

1.0 PURPOSE

1.1 To measure body temperature;

1.1.1 To establish a baseline value.

1.1.2 To monitor fluctuations.

2.0 POLICY

2.1 Axillary temperature is the method used for checking temperature, unless otherwise ordered by a medical officer

3.0 EQUIPMENT

3.1 Digital/Glass thermometer.

3.1 Alcohol swab.

3.2 TPR chart

4.0 PROCEDURE

4.1 ***Digital thermometer***

4.1.1 Before use, remove the thermometer from its cover. Explain the procedure to the patient. Ensure privacy. Wash hands.

4.1.2 Switch the thermometer on till the screen reads “Low”

4.1.3 Place the thermometer under the patient's axilla till an alarm is given out.

4.1.4 Observe display on thermometer unit & note down the temperature.

4.1.5 Wipe with alcohol swab and replace it into the thermometer cover protector.

4.1.6 Leave patient comfortable.

4.2 ***Glass thermometer***

4.2.1 Clean the thermometer with an alcohol swab. Ensure the thermometer is dry and the reading below 35° C.

4.2.2 Place the thermometer in the axilla for three minutes. Remove and read.

4.2.3 Clean the thermometer with alcohol swab and shake mercury to below 35° C.

4.2.4 Leave patient comfortable.

II. MONITORING OF PULSE

1.0 PURPOSE

1.1 Pulse measurement is taken:

1.1.1 To establish a baseline data/ pulse rate;

1.1.2 To monitor fluctuations.

2.0 POLICY

2.1 Pulse sites include:

Temporal, Carotid, Ulnar, Brachial, Radial, Femoral, Tibial, Popliteal, Pedal and Apical.

2.2 The radial pulse is the most common method for assessment of a patients pulse.

2.3 The apical pulse is measured for:

2.3.1 Newborn infants and children up to three (3) yrs.; and

2.3.2 Very obese or elderly patients whose peripheral pulses are difficult to palpate;

2.3.3 Patients with specific arrhythmias;

2.3.4 Patients receiving cardiac medications, e.g. digitalis.

2.4 The apical and radial pulse measurement is used if a pulse deficit exists.

2.5 The pedal pulse is checked in case of:

2.5.1 Patients in a plaster cast;

2.5.2 Patients post cardiac catheterization or procedures performed via the femoral artery approach.

3.0 EQUIPMENT

3.1 Wrist Watch with a second hand needle.

3.2 Stethoscope for apical pulse measurement if required.

4.0 PROCEDURE

4.1 Peripheral pulse.

4.1.1. Explain the procedure to the patient. Use hand rub.

4.1.2. Assist the patient into a comfortable resting position (sitting/lying down).

4.1.3. Palpate the artery.

4.1.4. If the pulse is regular, count for fifteen seconds and multiply with four. If irregular or any abnormality identified, count for 60 seconds. Assess the pulse rhythm.

4.1.5. Immediately note it down in the TPR chart.
4.1.6. Report to the in case any abnormality in pulse in form.

4.2 Apical Pulse Measurement

4.2.1 Locate the apex beat with the stethoscope (fifth inter costal space, mid-clavicular line).

4.2.2 Count the heartbeat for sixty (60) seconds. Assess the rate & rhythm.

III. RECORDING OF RESPIRATION

1.0 PURPOSE

1.1 The respiration rate is evaluated:

1.1.1 To establish a baseline Data/respiratory rate.

1.1.2 To monitor fluctuation.

2.0 POLICY

2.1 Respiration is recorded fourth hourly and:

2.1.1 On admission

2.1.2 Postoperatively;

2.1.3 For patients with respiratory problems;

2.1.4 For patients receiving drugs affecting respiration e.g. Narcotic infusion;

2.1.5 For patients with acute head injuries;

2.1.6 If a patient's condition deteriorates;

2.1.7 As prescribed by the Doctor.

3.0 EQUIPMENT

3.1 Watch with a second hand needle.

4.0 PROCEDURE

4.1 Measure the respiratory status without informing the patient. Attempt to count the respiration when the patient is at rest. It is convenient to count the respiratory rate while counting the pulse. If it is regular and normal, count for 15 min and multiply with four. In case of any abnormality, count it for 60 seconds and report to the doctor immediately.

4.2 Observe the respirations for:

4.2.1 Depth:

4.2.2 Rhythm:

4.2.3 Sound:

4.2.4 Effort required for breathing.

5.0 DOCUMENTATION

5.1 Record temperature, pulse rate and respiration rate on the Vital Signs chart.

5.2. Record the Rhythm of pulse and respiration in the Daily Nurses flow sheet.

6.0 COMMENTS

6.1 Oral Temperature must not be assessed using mercury thermometer.

6.2. For Pediatric patient's thermometer must be placed parallel to the body.

6.3 For patient & employee safety, mercury free thermometers must be used.

BLOOD PRESSURE MONITORING

1.0 PURPOSE

1.1 Blood pressure is measured:

1.1.1 To establish a baseline data.

1.1.2 To monitor fluctuations.

2.0 POLICY

2.1 Blood pressure is recorded fourth hourly and:
On admission; postoperatively; during blood transfusions; for patients receiving antihypertensive therapy;
If the patient's condition deteriorates; as prescribed by a doctor.

3.0 EQUIPMENT

3.1 Sphygmomanometer (mercury/aneroid/digital)

3.2 Stethoscope.

4.0 PROCEDURE

4.1 Use hand rub.

4.2 Explain procedure to the patient.

4.3 Ensure the patient is in the desired position, lying or sitting.

4.4 Select appropriate size blood pressure cuff.

4.5 Apply the cuff to the arm and palm facing upwards above the ante-cubital fossa or to the leg above the Popliteal fossa.

4.6 The manometer must be placed at the phlebostatic axis.

4.7 Place the bell of the stethoscope over the artery.

4.8 Inflate the cuff to a point approximately 20-30 mmHg above the previous reading or until the peripheral pulse can no longer be felt.

4.9 Deflate the cuff slowly. Note on the manometer the point at which the Korotkoff's sound becomes audible.

4.10 Continue to release the pressure slowly. Listen for continuing regular sounds until the first muffled sound is audible.

4.11 Note the point on the manometer when the sound is no longer audible. Remove cuff & document it on the vital signs monitoring record.

4.11 Leave patient positioned comfortably.

4.12 Use hand rub.

5.0 DOCUMENTATION

5.1 Record blood pressure on Vital Signs chart.

RECORDING BLOOD PRESSURE FROM MONITOR

1.0 PURPOSE

1.1 To assess cardio vascular status.

1.2 To assess for factor that influence blood pressure.

1.2.1 Altered tissue perfusion.

1.2.2 Decreased cardiac output.

1.2.3 Fluid volume deficit.

2.0 POLICY

2.1 All patients should have their blood pressure measured and documented as per doctor's orders and patient needs.

3.0 EQUIPMENT

3.1 Monitor

3.2 NIBP cuff

4.0 PROCEDURE

4.1 Use hand rub.

4.2 Select the arm and tie B.P. cuff **two inches above the elbow** joint. Arrow mark on the cuff should coincide with the artery

4.3 Open the main screen.

4.4 Press the STAT key and record the blood pressure.

4.5 Record reading accurately and promptly in the TPR sheet.

4.6 Set the alarm limits to alert the nurse if blood pressure measurement is outside desired parameters.

5.0 DOCUMENTATION

5.1 Vital signs flow sheet.

6.0 COMMENTS

6.1 Do not set auto recording unnecessarily as it will disturb the patient at night.

6.2 Change the cuff to another hand after twelve hours.

6.3 Do not tie the cuff on a hand in which IV line is inserted or an AV fistula is made.

6.4 Do not tie the cuff on the ipsilateral hand of a post-mastectomy or post-surgery patient

Observe the cuff site for any allergies / redness.

MEASURING HEIGHT AND WEIGHT

1.0 PURPOSE

1.1 The height and weight measurement are recorded for:

1.1.1 To calculate therapeutic drugs, anesthetic doses or kilo joule requirements;

1.1.2 To monitor a patient's progress.

1.1.3 To monitor growth for children.

2.0 POLICY

2.1 Height is recorded:

2.1.1 On admission or as soon as practicable.

2.2 Weight is recorded:

2.2.1 On admission or as soon as practicable;

2.2.2 Preoperatively;

2.2.3 As indicated in medical conditions.

3.0 EQUIPMENT

3.1 Heightometer/ Infantometer

3.2 Weighing Scale

4.0 PROCEDURE

4.1 Explain procedure to the patient.

4.1.1 Weight on a bathroom scale

4.1.1.1 Ensure balanced scales.

4.1.1.2 Record weight.

4.1.2 Weight on a digital weighing scale

4.1.2.1 Ensure display reads 0.00

4.1.2.2 Request patient to stand on the scale

4.1.2.3 Note weight on the display after the weight fluctuations on the screen stabilizes.

4.1.3 Height

4.1.4.1 Request patient to remove footwear.

4.1.4.2 Request patient to stand as erect as possible.

4.1.4.3 Measure height.

5.0 DOCUMENTATION

5.1 Record height and weight measurement on the Nurses Initial Assessment sheet or Daily Nurses Flow sheet.

NEUROLOGICAL OBSERVATIONS

1.0 PURPOSE

1.1 To detect subtle or overt changes in the level of consciousness, pupillary and motor response as indicators of improvement or deterioration of overall brain functions.

2.0 POLICY

2.1 The Neurological Observation Chart (Glasgow coma) provides repeated clinical assessment of conscious level over a period of time by a number of different observers with as little variability as possible.

2.2 To ensure consistency and accuracy of measurement of a patient's neurological status, all subsequent assessments are to be performed using the guide as outlined on the reverse of the Neurological Observation Chart.

3.0 EQUIPMENT

Pencil torch, Neurological Observation Chart

4.0 PROCEDURE

Neurological Observations chart consists of: -

4.1 Motor Response (M) - 6 grades: Apply varied painful stimulus: trapezius squeeze, earlobe pinch, supraorbital pressure, sternal rub, nail-bed pressure etc.:

1. No response to pain.
2. Extensor posturing to pain: The stimulus causes limb extension (abduction, internal rotation of shoulder, pronation of forearm, wrist extension) - decerebrate posture.
3. Abnormal flexor response to pain: Stimulus causes abnormal flexion of limbs (adduction of arm, internal rotation of shoulder, pronation of forearm, wrist flexion - decorticate posture.
4. Withdraws to pain: Pulls limb away from painful stimulus.

Localizing response to pain: Purposeful movements towards changing painful stimuli is a 'localizing' response.

Obeying command: The patient does simple things you ask (beware of accepting a grasp reflex in this category).

4.2 Verbal Response (V) - 5 grades: Record best level of speech. If patient is intubated, a "derived verbal score" is calculated via a linear regression prediction.

1. No verbal response.
2. Incomprehensible speech: Moaning but no words.
   Infant: Inconsolable, agitated.
3. Inappropriate speech: Random or exclamatory articulated speech, but no conversational exchange.

Confused conversation: Patient responds to questions in a conversational Manner but some disorientation and confusion.

Orientated: Patient 'knows who he is, where he is and why, the year, season, and month.

4.3 Best eye response (E) - 4 grades

1. No eye opening;
2. Opening to response to pain to limbs as above
3. Eye opening in response any speech (or shout, not necessarily request to open eyes);
4. Spontaneous eye opening.

4.4 Pupil Reaction - determine size by using neuro chart examples. Switch off over head lights & open both eyes simultaneously. Measure size of pupils by

4.4.1.1 Bring the torch laterally from the temple toward the nose.

4.4.1.2 Shine the torch into each eye in turn and note the pupil response.

5.0 DOCUMENTATION

5.1 Record observations on Neurological Observation Chart.

5.2 Report any adverse changes.

6.0 COMMENTS

5.1 Not applicable.

NEUROVASCULAR LIMB OBSERVATIONS

1.0 PURPOSE

1.1 To assess the neurovascular status of the affected extremity following an orthopedic procedure, e.g. splint or cast application; following cath lab procedures

2.0 POLICY

2.1 Not applicable

3.0 EQUIPMENT

3.1 Not applicable

4.0 PROCEDURE

4.1 Explain procedure to patient.

4.2 Inspect the color of the fingers or toes.

4.3 Compare with other limb to detect edema or swelling.

4.5 Simultaneously assess the temperature of the unaffected and affected extremities by palpation& compare the degree of warmth.

4.6 Assess capillary refill by compressing the distal tip of one digit until it blanches. Release pressure and note rate of capillary return. If greater than two (3) seconds, report to the Medical Officer.

4.7 Assess sensation by touching the fingers or toes and asking the patient to describe the feeling. Note any numbness or tingling.

4.8 Assess motor function. Request the patient to perform full range of movement of fingers and toes.

4.9 Palpate distal pulses. Compare with the other limb.

5.0 DOCUMENTATION

5.1 Record neurovascular observations: -

5.1.1 Hourly for 24 hours in case of cath lab procedures

5.1.2 Four (4) hourly in patients with plaster cast..

5.1.3 As prescribed by the Doctor.

5.2 Record any abnormal findings in the patient's clinical record.

6.0 COMMENTS

1.1 Not applicable.

ASSISTING FOR EAR EXAMINATION

1.0 PURPOSE

1.1 Assisting for Ear Examination

2.0 POLICY

2.1 Performed by a Doctor, assisted by a Nurse.

3.0 EQUIPMENT

3.1 Otoscope

3.2 Aural specula of varying sizes

3.3 Aural and angle forceps

3.4 Swab sticks

3.5 Gauze swabs

3.6 Tuning fork

3.7 Torch

3.8 Specific equipment as requested by a doctor.

4.0 PROCEDURE

4.1 Explain procedure to patient.

4.2 Apply hand rub. Assemble equipment.

4.3 Assist the patient to a sitting position.

4.4 Request the patient to avoid any sudden movement during the procedure.

4.5 Assist the Medical officer as required.

5.0 DOCUMENTATION

5.1 Record any complaints of reduction or loss of hearing post examination in the patient's Clinical Record. Notify the Doctor on duty.

ASSISTING IN THROAT EXAMINATION

1.0 PURPOSE

1.1 To examine the throat.

2.0 POLICY

2.1 Performed by a Doctor, assisted by a Nurse.

3.0 EQUIPMENT

a. Tongue depressor Disposable/ non-disposable
b. Nasal speculum set
c. Post-nasal and laryngeal mirrors
d. Gauze swabs
e. Kidney dish
f. Head mirror with bulls eye lamp
g. Xylocaine spray
h. Pencil torch
i. Warmer- to warm the laryngeal mirror

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Wash hands. Assemble equipment.

4.3 Position the patient upright or sitting in a chair.

4.4 Assist the Doctor as required.

5.0 DOCUMENTATION

5.1 Record procedure and the patient's response in the Clinical Record.

Table of Contents

Protocol No	Topic	Page No
GNP 2	**Hygiene Protocols**	
GNP 2.1.9	Hygiene Care	
GNP 2.2.10	Oral Hygiene	
GNP 2.3.11	Eye Care	
GNP 2.4.12	Hair Care	

CARE OF PATIENT'S HYGIENE

1.0 PURPOSE

1.1 To provide comfort and well-being.

1.2 To assess physical conditions such as skin turgor and conditions, area of potential Break down and tissue perfusion.

1.3 To promote therapeutic relation and to learn about clients emotional needs.

2.0 POLICY

2.1 Nurses are responsible for maintaining hygiene of all patients.

3.0 EQUIPMENT

3.1 Bath towels/ commercially available wet wipes

3.2 Set of clean clothes

3.3 Soap, Oil, oral hygiene kit

3.4 Hygienic aids such as skin lotion, deodorant

3.5 Stainless Steel Basin

3.6 Clean bed linen

3.7 Bedpan or urinal

3.8 Gloves

3.9 Luke Warm Water

4.0 PROCEDURE

Follow the below mentioned hygiene schedule.

4.1 Early Morning Care ("Done by Night Duty Staff)

4.1.1 Provide a bedpan or urinal if the client is not ambulatory.

4.1.2 Provide sponge bath for bedridden patients & assists for bath or shower for ambulatory patients.

4.1.3 Provide oral care for unconscious, ventilated & to clients confined to bed.

4.1.4 Give a back rub & changing the client's clothes.

4.1.5 Change bed linens

4.1.6 Prepare the patient for scheduled tests, or early morning surgery

4.1.7 Tidy the client's bedside, unit and room

4.1.8 Prepare for breakfast

4.1.9 Provide foot, nail, and hair care as per the need

4.1.10 Get the beard shaved if required

4.1.11 Comb & groom patient (as per choice, if conscious)

4.2 Late Morning Care

4.2.1 Provide a bedpan or urinal to clients confined to bed

4.2.3 Provide back rub for bedridden patients.

4.2.4 Change linen if required

4.2.5 Tidy the unit & make patient comfortable.

4.3 Afternoon Care.

4.3.1 Hospitalized clients often undergo many exhausting diagnostic tests or procedures in the morning. They may also participate in physiotherapy

4.3.2 Provide hand hygiene & mouth care before lunch

4.3.3Rest as same as late morning care if required

4.4 Evening

4.4.1 Change linen if required

4.4.2 Tidy the unit & make patient comfortable

4.4.3 Comb & groom patient (as per choice, if conscious)

4.4.4 Serve tea/coffee/snacks.

4.5 Before bedtime offer personal hygiene care that helps a client relaxes to promote sleep. This may include changing soiled bed linen, gowns or pajamas, assisting the clients in washing the face and hands, providing oral hygiene, giving a back massage, and providing bed pan or urinal to non-ambulatory clients.

4.6 Ask the patient his preferred timing for morning care.

4.7 DOCUMENTATION

5.1 Document in daily nurses flow sheet & specific observations in nurses notes.

5.0 COMMENTS

5.1 Daily Bath preferably before the Dr's rounds.

5.2 Mouth Care to be provided once a shift for unconscious patients & minimum once a day for conscious patients

5.3 Foley's Catheter care along with perinea care Q 8 H

5.4 Hair was to be provided once a week

5.5 Foot Care if required

5.6 Back Care & change positions two hourly for bed ridden patients.

5.7 Nail Care as required.

ORAL HYGIENE

1.0 1.0 PURPOSE

1.1 To maintain cleanliness of oral cavity

1.2 To Removes halitosis and helps to prevent infection.

1.3 To enhance appreciation to food and to improve appetite and nutrition.

1.4 To get a sense of well-being.

2.0 POLICY

2.1 Performed by a Registered nurse using clean technique

3.0 EQUIPMENT

3.1 Soft bristled toothbrush and toothpaste..

3.2 Emesis basin or kidney tray

3.3 Towel or facial tissues.

3.4 Disposable Water glass.

3.5 Gloves.

3.6 Gauze piece.

3.7 Petroleum jelly.

3.8 Tooth paste & brush or chlorhexidine solution

3.9 Hand towels

3.10 Luke warm water

1.0 PROCEDURE

Conscious patients

1.1 Explain procedure to patient. Ensure privacy.

1.2 Issue a mouth care kit from the housekeeping or ensure mouth care kit is available with the patient.

1.3 Wash hands and wear gloves

1.4 Place towel under patient's face.

1.5 Provide brush & paste at the bed side along with the emesis basin or encourage the patient to go to the washroom to brush teeth if the condition of the patient permits

1.6 Provide water in disposable glass to rinse the mouth.

Unconscious patients

1.7 Position patients head to side towards nurse and raise bed to working level and lower the side rails.

1.8 Place towel under patient's face and kidney-basin under patients chin.

1.9 Carefully separate patient's jaws, clean the mouth using brush with fluoride

paste/ Cleansing agent or an artery forceps & gauze piece.

1.10 Clean inner and outer teeth surfaces and swab the roof of mouth, tongue and inside cheek.

1.11 Apply lubricant to lips to provide moisture.

1.12 Remove gloves and dispose

1.13 Position patient for comfort raise side rails and lower bed

1.14 Replace the equipment, wash hands.

2.0 DOCUMENTATION

2.1 Record Procedure and document observation if any such as gum bleeding or ulceration.

2.2 Document patient's response and any unusual findings.

3.0 COMMENTS

3.1 All patient's whether conscious/unconscious must receive oral hygiene once every day or depending upon oral condition.

EYE CARE

1.0 Purpose

1.1 To maintain corneal health.

1.2 To prevent discomfort to the patient.

2.0 Policy

2.1 Eye care will be given at least twice a day to all patients who are unable to perform their own eye care or as indicated by the physician

3.0 Equipment's

3.1 Sterile eye care set

3.2 2 ampoules of sterile water

3.3 Tissue papers

3.4 Kidney dish

3.5 Prescribed ointment if required

3.6 Gauze pieces.

4.0 Procedures

4.1 Explain procedure to the patient.

4.2 Provide privacy by placing screen curtain.

4.3 Assemble all articles and arrange conveniently.

4.4 Wash hands paying special attention to fingertips and dry thoroughly

4.5 Assist patient into required position.

4.6 Pour in sterile water in to the eye. Set a sterile bowl with gauge piece

4.7 Pick one swab from the bowl and squeeze to remove excess water

4.8 Open eye using thumb and index finger of the non-dominant hand and gently swab the upper lid of the cleanest eye first, from the outer to inner canthus with dominant hand

4.9 Repeat, using a new gauze each time until all discharge has been removed

4.10 Gently swab the lower lid of the same eye in the same way

4.11 Clean the other eye by repeating steps 4.7 to 4.10.

4.12 Dry the eye from outside if wet, using dry gauze

4.13 Administer prescribed eye drops or artificial tears, if indicated, to maintain adequate

4.14 Apply eye ointment & close eyes with a thin micropore to avoid exposure keratitis in Lubrication

unconscious patients if eyes do not close spontaneously

4.15 Discard used swabs in red bags. Wash instruments, dry them and send it for autoclaving

4.16 Wash hands and dry. Reposition patient as required

5.0 Documentation

Document the procedure in Daily Nurses Flow sheets

Inform any abnormal condition to ward incharge and consultant if required & note the same in the nurses notes in the Daily Nurses flow sheet..

6.0 Comments

6.1 Do not use saline as there is some evidence to suggest that saline causes tear film depletion.

HAIR CARE

1.0 Purpose

1.1To remove tangles from hair of a bedfast patient.

1.2To give a sense of well-being.

1.3To help a patient who is unable to do self- care.

2.0 Policy

2.1 Hair wash will be given to all patients who are unable to Perform their own hair care.

3.0 Equipments

3.1 Bath towels

3.2 A bucket of warm water and a jug.

3.3 Shampoo.

3.4 Mackintosh/ plastic disposable sheet and a bucket.

3.5 Comb or hairbrush.

3.6 Hair cream if required.

3.7 Gauze pieces.

4.0 Procedures

4.1 Explain procedure to the patient.

4.2 Provide privacy.

4.3 Assemble all articles and arrange conveniently.

4.4 Wash hands

4.5 Position patient close to one side of bed

4.6 Position bath towel under patient's neck to minimize discomfort.

4.7 Brush and comb patient's hair to remove tangles.

4.8 Obtain water in the bucket and check the water on the back of your hand.

4.9 If patient is able, instruct patient to hold gauze pieces over the eyes otherwise tape it.

4.10 Completely wet hair, and pour shampoo on your hand and apply over the hair.

4.11 Massages scalp with fingertips and not nails. Shampoo hairline, back of neck (lift head slightly) and sides of hair to ensure thorough cleansing and increase scalp circulation

4.12 Rinse thoroughly and apply more shampoo for long hair and repeat step 11.

4.13 Rinse and repeat rinsing until hair is free of shampoo to prevent scalp irritation.

4.14 Wrap dry towel around patient's head .Dry patient's face, neck and shoulders .Dry

hair and scalp.

4.15 Comb hair and/or dry with blow dryer as quickly as possible to prevent patient from chilling.

4.16 Complete hair care, and position patient for comfort

4.17 Empty bucket in the bathroom & get it cleaned

4.18 Wash hands.

4.19 Offer hot drink if possible

5.0 Documentation

5.1 Document in nurses notes (Daily Nurses Flow Sheet)

5.2 Inform any abnormal condition to your superiors.

6.0 Comments

6.1 Proper hair care is important to the patient's self –image. Combing, brushing and shampooing are basic hygiene measures for all patients

Table of Contents

Protocol No	Topic	Page No
GNP 3	**Comfort Measures**	
GNP 3.1.13	Local Application of Heat	
GNP 3.2.14	Use of Warm Blankets	
GNP 3.3.15	Local Application of Cold	
GNP 3.4.16	Pain Assessment and Management	

LOCAL APPLICATION OF HEAT

1.0 Purpose

1.1 To stimulate circulation.

1.2 To promote suppuration.

1.3 To promote healing and pain.

1.4 To reduce inflammation and congestion.

1.5 To supply warmth and comfort.

1.6 To relieve muscle spasm.

1.7 To relieve retention of urine.

2.0 Policy

2.1 Hot water bottle as a routine is not applied so as to eliminate the chances of iatrogenic burns. However in exceptional circumstances (patient insistence) it may be used with extreme caution.

2.2 It is advisable that the hot water bag is kept with the supervisor & given to units on demand & following up for patients for whom it is used.

2.3 Assess the general condition of the patient & the ability to follow instructions before giving hot water bag.

3.0 Equipments

3.1 Hot water bag.

3.2 Turkish towel.

4.0 Procedures

4.1 Check the bottle for any leakage by filling water in to it.

4.2 Fill 1/3 to ½ with hot water (120 degree – 149 degree F) or 49 – 65 degree C.).

4.3 Place the cork tightly. Invert the bag and check for leakage.

4.4 Dry the bottle from outside.

4.5 Cover the hot water bottle with a Turkish towel.

4.6 Apply the hot water bottle over the area and cover it with a sheet or blanket.

4.7 Check the site after 15 minutes. The heat exposure should not exceed 10-15 minutes.

4.8 Remove the bag when treatment is complete.

4.9 Dry the area if moist with perspiration.

4.10 Inspect the area for any redness.

4.11 Report any redness and document it in nurse's note in daily nurse's flow sheet

4.12 Empty the bag and hang it upside down.

5.0 Documentation

5.1 Document in nurse's notes.

5.2 Report any abnormal condition to your superiors.

6.0 Comments

6.1 Never use any bottle that is cracked and is leaking.

6.2 Nursing Alert: Hospital acquired burned is a sentinel event. Hence at most care need to be taken for heat applications.

6.3 Microwavable gel pads when used must follow instructions given by the manufacturer. It must be applied to the patient after placing in a Turkish towel/ 2 layers of sterile sheet.

6.4 Neonatal embrace gel must be appropriately heaters & must be placed in the embrace pouch & should not come in direct contact with the baby

USE OF WARM BLANKETS

1.0 PURPOSE

1.1 To provide guidelines for the correct usage of the warming machine / blankets.

2.0 POLICY

2.1 The use of this machine on the general ward must be ordered by the Doctor if the patient's temperature is below 35° C. A written order by a Doctor may not be required in a critical care area.

2.2 This is performed by the Registered Nurse.

3.0 EQUIPMENT

3.1 Hyperthermia blanket - foil or warm blankets from the warming cabinet.

3.4 Temperature regulating thermometer.

4.0 PROCEDURE

4.1 Prepare the patient and give full explanation of procedure to be performed.

4.2 Foil / space blanket - when using applies directly over the patient, placing bed sheets and blankets on top.

4.3 Warm / blankets (from warming cabinet) - apply directly onto patient.

4.4 Warm touch warming machine - when using this system place the warm touch blanket next to the patient. Do not cover with woolen blanket as this can cause burns. If required, an extra blanket should be draped over the bedsides, tent-style, to avoid weighing down the warming blanket.

4.5 Attach the blanket to the warm touch machine.

4.6 Turn on the machine and set to desired required temperature.

4.8 Monitor patient's temperature.

4.9 Turn off the machine when patient's temperature is 1° - 2°C more than the desired level.

4.9 The patient's baseline observations, heart rate, blood pressure temperature must be recorded before commencement of treatment.

4.10 Temperature must be checked half hourly once therapy is in place.

5.0 DOCUMENTATION

5.1 Type of therapy used and how long therapy is in place must be documented in the patient's progress notes.

6.0 COMMENTS

6.1 Patient with warm blankets require close monitoring to assess temperature & prevent burn injury.

LOCAL APPLICATION OF COLD

1.0 PURPOSE

1.1 To decrease edema and pain associated with fractures, soft tissue injuries, sprains, strains and surgical procedures.

2.0 POLICY

2.1 Application of cold is to be performed by a Registered Nurse as ordered by a doctor.

2.2 Cold packs are to be kept in the freezer compartment of the refrigerator.

2.3 Cold packs are to be wrapped with a clean cloth or placed in a cover prior to use, and NOT to be placed directly against the skin. This will prevent skin damage.

2.4 Gel/cold packs should be applied for no longer than 15 minutes at any one time. If discomfort occurs, discontinue use.

2.5 The "Cryo Cuff " may be used for 20-30 minutes at a time. Refer the detailed manufacturer's instructions.

3.0 EQUIPMENT

3.1 Commercial gel cold pack with clean towel or cold pack cover.

3.2 Ice cap/bag with ice.

4.0 PROCEDURE

4.1 Explain procedure to patient and ensure privacy.

4.2 Wash hands and assemble equipment.

4.3 Place covered cold pack over indicated site. It may require gentle taping or bandaging to be kept in place.

4.4 Cold packs should be applied for a maximum period of 15 minutes.

4.5 Observe the patient for discomfort during the treatment.

5.0 DOCUMENTATION

5.1 Document time of application and effectiveness in the Daily Nurses Flow sheet.

6.0 COMMENTS

6.1 The application of cold stimulates vasoconstriction, inhibits local circulation, suppuration and tissue metabolism. It relieves congestion, slows bacterial activity, and acts as a temporary anesthetic. Because cold relieves inflammation, prevents edema and stops bleeding, it is an effective initial treatment after trauma.

6.2 Avoid cold therapy in patients with a history of severe peripheral vascular disease and venous insufficiency.

PAIN ASSESSMENT AND MANAGEMENT

1.0 PURPOSE

1.1 To provide guidelines for a comprehensive approach to the needs of patients who experience acute & chronic pain.

2.0 POLICY

2.1 All patients will be assessed for pain in every shift & reassessed as needed.

2.2 The nurses will take appropriate measures to monitor patient's pain & obtain physicians order for management of pain.

3.0 EQUIPMENT

3.1 As applicable.

4.0 PROCEDURE

4.1 The nurse will assess her patients for pain at the time of admission & thereafter monitor patient for pain post operatively or after any invasive procedure:

4.1.1 Fourth hourly in case of presence of pain.

4.1.2 When an intervention or treatment to relieve pain is provided.

4.1.3 When the caregiver changes.

4.1.4 When the patients level or location of pain changes.

4.2 If the patient confirms current or recent pain at the time of admission, record on pain scale score (0-10) on the nursing initial assessment sheet, vital signs flow sheet & daily nurses flow sheet and inform the attending physician.

4.3 Use visual analog for all patients who are unable to rate pain verbally (e.g. patients on ventilator).

4.4 Screen patients unable to rate their pain further for non-verbal signs of pain.

4.5 FLACC (Face, Legs, Activity, Cry, Consolability) scale may be used for patients below 7yrs of age & NIPS (Neonatal Infant Pain Scale, Facial expression, Cry, Breathing, Arms, Legs, State of arousal)

4.6 Use non-invasive methods (e.g. repositioning, massage, distraction & music etc.) for patients lying on bed for longer time.

4.7 If required obtain PRN order for post-operative patients & ensure patient is pain free post-operatively.

4.8 Educate patient & family how & when to request interventions for comfort.

4.9 Pain management whenever warranted by the patient's condition should be stated in the discharge summary.

5.0 DOCUMENTATION

5.1 Pain screening, on the admission within one hour of admission in nursing initial assessment sheet.

5.2 Pain assessment, at least once each shift and when there is a change in the patient's condition or primary caregiver in daily nurses flow sheet & vital signs flow sheet.

5.3 Patient/family teaching regarding pain management.

5.4 Discharge instruction regarding pain management.

6.0 COMMENTS

6.1 Ensure that the discharge summary has the name & telephone number of the consultant to contact in case he/she has excessive discomfort.

Table of Contents

Protocol No	Topic	Page No
GNP 4	**Patient Safety Protocols**	
GNP 4.1.17	Patient Identification	
GNP 4.2.18	Care of Vulnerable Patients	
GNP 4.3.19	Prevention of patient falls	
GNP 4.4.20	Application of Physical Restraints	
GNP 4.5.21	Prevention of Pressure Ulcer	

PATIENT IDENTIFICATION

1.0 PURPOSE

1.1 To reliably identify the individual as the person for whom the service or treatment is Intended and to match the service or treatment to that individual.

2.0 POLICY

2.1 All patients will be identified & given an ID band at the time of admission in MGM HOSPITAL
2.2 At least 2 patient identifiers will be used for the following {i.e. full name of patient & UID number (ADHAR CARD and PAN CARD)}

2.2.1 Before administering medication.

2.2.2 Before administration of blood & blood products.

2.2.3 Before taking samples & other specimen for clinical testing.

2.2.4 Before providing any treatment or procedures.

2.2.5 Before shifting the patient from one unit to another

3.0 EQUIPMENT

3.1 ID band.

3.2 Patients file.

4.0 PROCEDURE

All patients admitted at MGM HOSPITAL will have the following information in the
4.1 admission sheet

4.1.1 Name/Age/Sex.

4.1.2 Name of mother & father/spouse.

4.1.3 Date of Birth.

4.1.4 Residence address and telephone number.

4.2 For all conscious patients the nurse will check & apply. ID Band on patient's wrist of non-dominant hand after asking the patient to state his/her name

4.3 The nurse will also check the UID Number of the patient as the second Identifier

4.4 For an unconscious patient, the name of the patient is verbally confirmed with the next of kin (Spouse, parents, siblings, Children, Guardian)

4.5If the patient's medical condition prohibits the application of the identification band to the patient's extremity (wrist or ankle), the identification band must be attached to a visible part of the patient's body using tape appropriate to the patient's condition/allergies.

4.6 If the identification band is removed by patients or not legible a new band shall be made,

Identification re-confirmed, and the band placed on the patient's wrist.

5.0 DOCUMENTATION

5.1 The nurse paste on every sheet being used in patients file.

6.0 COMMENTS

6.1 If the nurse is unable to identify a patient she must inform the nursing supervisor.

6.2 Addressograph of patient containing patients name, IPID, age/sex, & treating Consultant must be pasted on each sheet of IP file

4.7 Before a patient is transferred, the nurse verifies that the identification band is in place.

CARE OF VULNERABLE PATIENTS

1.0 PURPOSE

1.1 To ensure patient safety & reduce the risk of adverse events those are caused during the course of medical/nursing care.

2.0 POLICY

2.1 Assessment of vulnerable group of patients will be based on the characteristics of each patient population at the time of admission & once in each shift.

3.0 PROCEDURE

3.1 All patients will be assessed on admission for the following characteristics by assigned nurse

- 3.1.1 Very young patients. Birth to 12 years of age (refer to hospital policy for age in COP)
- 3.1.2 Older Adult (refer to hospital policy for age in COP)
- 3.1.3 Physically & mentally challenged patients & those who are dependent for the activities of daily living
- 3.1.4 Victims of abuse & neglect.
- 3.1.5 Critically ill patients.

3.2 The nurse will inform the attendants about vulnerability of the patient. Nurses wil take the help of interpreter or use charts for people with impaired communications.

3.3 All patients will be reassessed in each shift or at intervals appropriate to their condition & need. & documented in the Daily Nurses flow Sheet.

3.4 These patients will be assess for pressure ulcers at the time of admission & once in each shift & note it down in the Daily Nurses Flow Sheet

3.5 Necessary measures will be taken to keep terminally ill patients pain free (use of pain scale 0 – 10 for assessment).

3.6 Prevention of nosocomial infections following hand hygiene.

3.7 Nurses will liaise with dietetics department to ensure appropriate nutrition to all vulnerable patients.

3.8 Nurses can take help of interpreter or charts for people with impaired communications.

3.9 Vulnerable patients shall be placed on bed near to nurse's station as far as possible

3.10 They should always be accompanied by an attendant in ward.

4.0 EQUIPMENT

4.1 As applicable

5.0 DOCUMENTATION

5.1 The nurse will record all events accurately and completely in nurse's notes

6.0 COMMENTS

6.1 All patients are potentially at some or the other risk for encountering adverse events during hospitalization. Identifying those at high risk will help in planning preventive action

PREVENTION OF PATIENT FALLS

1.0 PREAMBLE:

While it could be argued that all patients are at some degree of risk of falling during hospitalization, some patient characteristics have been identified as being associated with increased risk of falling. These include age, mental status, a history of fall, special toileting needs and some medical diagnosis.

II. PURPOSE:

To achieve 0% fall incidents in MGM HOSPITAL.

Fall Prevention Interventions

Assessment

All patients will be assessed for risk of fall at the time of admission & at the time of transfers for risk of fall. The "PTF" (potential to fall) precaution will be maintained for all patients who will be assessed as high risk of fall throughout hospitalization. However universal fall precautions will be continued for ALL PATIENTS.

Education

Educational activities will be part of the fall prevention program and will be as follows:

a. Staff training to increase awareness of high risk patients and prevention strategies
b. All nurses will be familiarized with the fall prevention program and evaluated
c. Educating the patient and family about the risk of falls, safety issues and their mobility limitations. The same will be documented in patient records.
d. Teaching patients to make position changes slowly.
e. Orienting all patients to their bed area, ward facilities and how to get assistance.
f. Explaining the use of grab bars in toilets to all patients
g. Reinforcing education to all high risk patients on a regular basis (every shift) and on transfer between two wards
h. Side rails to be kept raised at all times for all high risk patients.
i. Place call bell & other necessary items like spectacles, drinking water etc. within patients reach
j. Hourly visit to all patients to ensure all basic needs are met & all necessary items & call bell is kept with the patients reach.
k. Side rails to be kept raised at all times for all high risk patients.

l. Place call bell & other necessary items like spectacles, drinking water etc. within patients reach

m. Hourly visit to all patients to ensure all basic needs are met & all necessary items & call bell is kept with the patients reach.

Elimination

Interventions to support the patient's elimination needs include:

a. Placing patients with urgency near toilets
b. Checking patients who are receiving laxatives and diuretics
c. Toileting at risk patients routinely (offering bed pan and urinal at regular intervals)
d. Instructing male patients prone to dizziness to sit while urinating
e. If need to stand, ensure someone is there with the patient
f. Emergency call bell must be placed inside toilets

Medications

Activities related to medication include:

a. Assessing patients receiving laxatives, diuretics, anti-hypertensive's etc.

Mobility

Interventions related to mobility:

a. Non-skid footwear
b. Providing physiotherapy
c. Instructing patients to rise slowly
d. Assistance while walking for "PTF" patients
e. Repeating activity limitation instruction to patient and family
f. Assisting "PTF" patients during transfer
g. Assisting "PTF" patients to increase mobility by walking patients in corridor if there is no medical contraindication.

Mental State

h.

Altered mental status is one of the common identified risk factor for falling and the intervention includes:

a. Reorienting confused patients regularly
b. Orienting patients to the hospital environment
c. Keeping confused patients near nurse's station
d. Using family members to be with confused patients at all times

Bed Rest

Interventions that aim to reduce the risk of falling while patient is on the bed include:

a. Ensure bed is in "Low" position

b. Ensure bed is locked.

c. Ensure bed side-rails are in "UP" position

d. Ensure patients can reach necessary items

Wheel Chairs & Chairs

To prevent fall involving wheel chairs include:

a. Use safety straps or seat belts in chairs

b. Ensure support to prevent slipping from chairs

c. Selecting suitable chairs for sitting.

Miscellaneous

a. Use "PTF" stickers or charts

b. Seek help for physical disability

c. Involve family in care

d. Warning all staff concerned on "PTF" status

e. Reassuring staffing needs in relation to high risk patients

III. Procedure:

1. **All patients (Level I) will be nursed under universal fall precautions**. (All patients are considered to carry a risk of fall during hospitalization)

   a. The beds will be always maintained at a "LOW" position except for procedures needing higher heights of bed

      N.B: When the need is over, the nurse must ensure that the bed is returned back to "Low" position.

   b. All the side rails must be in "UP" position all the time.

   c. The assigned nurse will ensure that the call bell is within reach at all the times. The return demonstration from patient will be takes on admission and on transfer

   d. The patient and family will be oriented to the needs of keeping the side rails "UP"

   e. The bedside of the patient will be maintained uncluttered at all times.

   f. The foot stool will be placed at the right place to facilitate patient's getting down from bed in case of fixed height bed.

   g. The brakes of beds, wheel chair and trolleys will always be kept locked h. All patients will be visited hourly by the assigned nurse/GDA

2. The high risk patients will be identified as per the fall scale (Nursing Initial assessment sheet)
   a. All critically ill patients are placed under the category (PTF: Potential to Fall). If the score is less than 7 the counseling will be documented in the Patient & Family Education Record
   b. One Attendant will be allowed with the patient at all times except in the critical care areas.
   c. The patient with "PTF" identified will not be allowed to move out of bed without supervision.
   d. These patients will never be left alone in the toilets, even if the patient insists to be left alone.
   e. All "PTF" patients will be transferred from ICU only if the attendant is present.
   f. All "PTF" patients will be especially checked before settling at night

3. LEVELS OF INTERVENTION

Level	Patient: Description	Interventions
Level II	Oriented, appropriate, aware of deficits. Deficits may include one or more of the following: a. Mobility/balance impairment b. Visual/Auditory impairment c. Bowel/Bladder alteration d. Medication side effects e. Age > 65 years	1. Instruct patient to call for assistance when he/she needs to move from bed, chair, wheelchair, toilet etc. 2. Keep all four-side rails "up" when in bed. 3. Establish a bowel and/or bladder routine/program as appropriate 4. Instruct patient /family regarding medication responses, side effects and precautions as appropriate 5. Explain for patient / family the need for these precautions and encourage family assistance and cooperation 6. Alert all other staff on the fall precautions
Level III	a. Cognitive impairment b. Attempts to get out of bed, chair, etc. unassisted.	1. Frequently re-orient and repetitively reinforce the need to call for assistance. 2. Utilize soft chest restrain, seatbelt, or limbs restraint as appropriate (obtain a physician order) & informed consent from next of kin. (refer to restrain policy) 3. Explain patient/family the need for these precautions and encourage family assistance

		and cooperation 4. Alert all staff on the fall prevention
Level IV	a. Repetitive attempts to get out of bed, chair, etc. unassisted b. Agitated /Combative c. High potential for injury d. Restraints inappropriate or do not protect patient adequately	1. Provide close observation as appropriate 2. Explain patient / family the need for restrain & other precautions and encourage family assistance & cooperation 3. Get physician's order for restrain (physical or chemical) 4. Alert all staff on the fall prevention

IV. EVALUATION OF FALL PREVENTION INTERVENTIONS

a. Monitor and record all patient falls (CQI From)

b. Evaluate the situation that led to fall and suggest changes (CQI From)

c. Implement changes and modifications to the program in response to evaluations

APPLICATION OF PHYSICAL RESTRAINTS

1.0 PURPOSE

1.1 To prevent injury to patients, staff/faculty and others by providing for the safe and appropriate use of patient restraint devices.

2.0 POLICY

2.1 Use of restraint devices shall be limited to those situations where it is clearly necessary for the purposes of preventing harm by a patient to him/herself or others.

2.2 Use of restraint devices shall be limited to those where less restrictive methods have been evaluated and have been determined to be unsuccessful or inappropriate for that purpose.

2.3 Use of restraints requires a written doctor's order on restrain form with surrogate consent valid for 12hrs.

3.0 EQUIPMENT

3.1 Appropriate restraint.

3.2 Physicians order sheet & restrain consent

3.3 Pads, bandages, commercially available restrain

4.0 PROCEDURE

4.1 Ensure physicians order that defines reason, type & duration of restraint.

4.2 New orders from physician's are required, if restrain to be continued beyond 12hrs.

4.3 Verbal restraint orders must be signed by the physician with in 4 hrs of the initiation of the restraint.

4.4 Restraint will be initiated by a registered nurse after appropriate assessment of patient.

4.5 Have appropriate personnel available when applying restraints.

4.6 Restraint shall be applied by the staff that have completed initial education and ongoing competency demonstration.

4.7 If the initiation of restraint is based on a significant change in the patient condition, the registered nurse will notify the physician immediately & document the same in daily nurse's flow sheet

4.8 Patient shall be monitored for the following every **2 hrs**.

4.8.1 Position, circulation, and skin integrity of restrained area.

4.8.2 Privacy and comfortable body and room temperature.

4.8.3 Appropriate application of the device(s).

4.8.4 Toileting and fluid needs etc.

4.8.5 Nutrition offered.

4.8.6 Range of motion.

4.8.7 Evaluate need for restraint reduction or removal at the earliest.

4.9 Patient shall be in position for safety & comfort.

4.10 Patient shall have active or passive range of motion to the affected joint(s) as medically necessary.

4.11 The patient and / or family, whenever possible, shall be educated regarding:

4.11.1 Reason for restraint

4.11.2 Patients safety, duration & precautions to be taken

4.12 The restraint shall be discontinued when the patient's activities are no longer a threat to himself/herself or to others.

5.0 DOCUMENTATION

5.1 Physical Restrain & Monitoring Sheet

5.2 Nurse's notes.

6.0 COMMENTS

6.1 Protocol not applicable under the following circumstances.

6.1.1 Use of restrain associated with medical, dental, diagnostic, or surgical procedures when such use is based on standard practice for the applicable procedure.

6.1.2 Devices used to meet the assessed needs of a patient who requires adaptive support or medical protective devices (e.g., braces, helmets, etc.)

6.1.3 Therapeutic holding or comforting of children or time-out of thirty (30) minutes or less.

PREVENTION & CARE OF PRESSURE ULCER

1.0 PURPOSE

1.1 To prevent complications

2.0 POLICY

2.1 To ensure pressure ulcer prevention measures are carried out so as to prevent the development of **Hospital Acquired Pressure Ulcer** (HAPU)

2.2 Adequate number of staff to reposition bedridden patients every 2hourly.

2.3 Unit I/C and shift supervisors to ensure that bedridden patients are repositioned at Proper intervals.

3.0 EQUIPMENT

3.1 Body lotion

3.2 Dressing as required

3.3 Pressure reducing devices-(water mattress, air mattress, pillows etc.)

4.0 PROCEDURE

4.1 Assess skin, and identify stages of ulcer development
Inspect skin of all bedridden patients two hourly & document it in the Daily Nurses Flow Sheet

4.2 Massage area gently to increase circulation using lotion/ moisturizer.
Turn & position the bedridden patients every two hours & document in daily nurses Flow sheet

4.3 Reposition chair bound patients every hour. If he can shift his weight, he should be Taught to do so every 15 minutes

4.4 Provide good skin care by keeping the skin clean and dry.
Specific treatment of bedsore is determined by senior nurse based on type & area of sore.

4.5 Maintain asepsis when doing dressing for a pressure ulcer

4.6 Management of HAPU

Stage 1	Relieve Pressure off the affected area
Stage 2	□ For friction prone area apply thin dressing/transparent dressing. □ For non -friction prone area, clean the area with betadine & leave it open to dry
Stage 3	□ Wound environment regulator dressing must be used
Stage4	□ Wound environment regulator dressing must be used □ May consider using vaccusuc dressing in case of large quantity of secretions

5.0 DOCUMENTATION

5.1 Make an incident report when:

5.1.1 A patient is received with pressure ulcers on admission.

5.1.2 A patient develops redness/peeling or any alteration in skin condition.

5.2 Document change of position and the care given in the Daily nurse's flow sheet.

5.3 If a patient develops Pressure Ulcer, document the assessment & care of the ulcer in the Pressure ulcer prevention & monitoring record.

COMMENTS

5.4 Products that might damage fragile skin and prevent epithelialization (formation of new cells), such as hydrogen peroxide or alcohol, should be used with caution.

5.5 The following lesions/ skin injury may be excluded from Hospital acquired pressure ulcer.

5.6 If pressure ulcer at the time of admission is reported 24hrs later, it must be considered as hospital acquired pressure ulcer

Protocol No	Topic	Page No
GNP 5	**Nursing Documentation**	
GNP 5.1.22	Documentation in Nurse's Notes	

NURSING CLINICAL DOCUMENTATION

1.0 PURPOSE

1.1 To record information about the patient's health status and care in order to carry out a comprehensive plan of care.

1.2 Communicating change in health status

1.3 Demonstrating accountability.

2.0 POLICY

2.1 All nurses in MGM HOSPITAL must record information about clients in their unit accurately, completely and efficiently.

3.0 EQUIPMENT

3.1 Appropriate pen. (Red, Blue or Black)

4.0 PROCEDURE

4.1 Always begin each entry with date and time.

4.2 Write neatly and legibly.

4.3 Use appropriate pen.

First documentation of the shift should be NOTED DOWN with in thirty minutes after assessment of the assigned patient thereafter as per patient's status.

4.4 Draw a line for any unused space. Do not leave a blank space in nurse's notes.

4.5 Do not erase, apply correction fluid, or scratch out errors made while recording. Draw single line through error, write word 'error' & sign your name or initials. For example: - patient vomited twice.

4.6 Do not write critical comments about client or care by other health care professionals.

4.7 Chart only for yourself and never anyone else.

4.8 Use only approved abbreviations.

4.9 When a patient leaves the unit (e.g. to go to X – Ray, lab, etc.) write the time and method of transportation on departure and return.

4.10 At the time of discharge / transfer to another unit write the following on the in house transfer form :-

4.10.1 Date and time of discharge / transfer.

4.10.2 Condition of patient at the time of discharge / transfer.

4.12.3 Whether medications, valuables and health teaching given.

4.12.4 Record latest vital signs.

4.12.5 Mode of transportation used (wheel chair, trolley, walking etc.)

4.11 End each entry with signature, Emp ID, date & time.

4.12 Only special observations or information should be noted down which are not included in the routine assessment mentioned in the Daily nurses flow sheet.

5.0 DOCUMENTATION

5.1 Nursing initial assessment sheet

5.2 Daily nurses flow sheet

5.3 Vital signs flow sheet

5.4 Intake output sheet

5.5 Other documents like risk assessment form for vulnerable group, diabetic flow sheet, physical restrain & monitoring sheet, neurological observation chart, blood transfusion record, pressure ulcer prevention & monitoring record.

6.0 COMMENTS

Follow the basic rules of charting.

6.1 All sheets should have the correct patient name, date and time .

6.2 Be timely, specific, accurate and complete.

6.3 Chart after providing care not before.

6.4 Chart as soon and as often as possible.

6.5 Chart only for yourself and never for anyone else.

6.6 Sign in the block of charting or entry with full signature and title.

6.7 Write (NPO for lab, off unit, refused, sleeping, etc.) when an order is not carried out in the remarks column.

6.8 Use appropriate pens / symbols for charting.

6.9 If an error is made draw a line through faulty information and write the word error and sign.

6.10 Never erase or use correcting fluids on the charts.

6.11 Follow institution's policies and procedures for charting.

Protocol No	Topic	Page No
GNP 6	**Blood Transfusion Protocols**	
GNP 6.1.23	Indenting/procuring Blood and blood products	
GNP 6.2.24	Administering Blood and Blood Products	

INDENTING/PROCURING & ADMINISTERATION OF BLOOD AND BLOOD PRODUCTS

1.0 1.0 PURPOSE

1.1 To increase circulatory blood volume following surgery, trauma or hemorrhage.

1.2 To increase the number of RBC's and hemoglobin levels in clients with severe anemia.

1.3 To provide selected cellular components as replacement therapy (e.g. clotting factors, platelets, albumin).

2.0 POLICY

2.1 The Blood / Blood Component Requisition Form must be filled by Doctor on duty / Medical Officer.

2.2 The Blood or Blood Components should always be transported in carry box

2.3 Once Blood or Blood Components issued will not be accepted in the Blood Bank after 30min even if unused. Therefore request only the required amount. (Refer blood bank policy)

2.4 In case of any transfusion reactions refer the back page of compatibility form.

2.5 Blood transfusion must be initiated within 30minutes of issuing.

3.0 EQUIPMENT

3.1 Blood / Blood component requisition form,

3.2 Informed consent

3.3 Issue Slip.

3.4 Donor Aphaeresis Form

3.5 Blood Product.

3.6 Blood transfusion record sheet

3.7 Inj. Avil/ Inj. hydrocortisone

3.8 Normal Saline 500ml

4.0 PROCEDURE

4.1 Order for Blood components from the blood bank only if there is a clinicians order.

4.2 Ensure that the physician obtains informed consent for "Transfusion Of Blood Products"

4.3 Send request for blood and its components, accompanied by an EDTA blood sample,(lavender top vacutainer)& a plain vial of blood (Red Top vacutainer) to blood bank on a blood requisition form.

4.4 Send another EDTA blood sample, (lavender top vacutainer) to the lab if Grouping is not done.

4.5 Send another plain vial of blood (Red Top vacutainer) to the lab for all other investigations to be done before Blood transfusion like HIV, HCV, HbSAg.

4.6 Mention on the requisition form if sample is not being sent to the lab.

4.7 Mention on the requisition form that the sample has been sent for investigations if the blood is required on an urgent basis.

4.8 Mention special requirement or modifications, e.g. irradiation, leucocyte depletion etc. on the requisition form.

4.9 Fill in the blood donation slip & send patient's bystanders to blood bank for donation

4.10 Confirm if the order has been received in Blood bank by checking under the title' blood bank details' section in the ward computer or confirm over phone & note the name of blood bank personnel.

4.11 As soon as the blood is ready "blood bank details" is updated on the computer, confirm and ensure patient is ready for transfusion send the issue book/note to blood bank mentioning patients name, IP number, and blood component required.

4.12 Blood arranged in the blood bank before a surgical procedure must be issued within48hrs, else all the procedure for issuing should be carried out from the beginning

4.13 An Issue slip is sent along with a requisition once the blood is ready.

4.14 The blood bag is checked by the assigned staff, Unit doctor. & signs in the Blood transfusion Record.

This sheet is a color coded sheet indicating the patients blood group

Color

Blue

Yellow

Pink

White

4.15 The assigned staff assesses patient's baseline vital signs and record values before giving any blood products because a change in vital signs can indicate a transfusion reaction.

4.16 Explain the patient reason for transfusing blood. Ask for any previous transfusions and any transfusion reactions

4.17 If the patient already has an I/V in place, check the patency and gauge (22G being the smallest) and restart the line if necessary.

4.18 Check for doctors' order with the product received from blood bank.

4.19 Check the patient's identification band to verify that the UID number and name match the blood transfusion record, which accompanies the bag.

4.20 Three people must identify the patient and blood product and must sign with their names and titles on the Blood Transfusion Record (BTR).

4.20.1 Check that the blood donor no. and the type on the bag label match that on Issue slip

4.20.2 Compare the patient's ABO Rh type on the (BTR) with the ABO Rh of the donor on the BTR to see that they are compatible as stated by the blood bank on BTR.

4.20.3 Compare the donor information (No. ABO Rh) on the bag label and the BTR compatibility record.

4.20.4 Check expiry date on the bag

4.20.5 Check medical orders with respect to product type, special requirements (e.g. Irradiation, leukocyte depletion) and administration requirements (e.g. Volume, rate)

4.21 Examine blood / blood products for gas bubbles, cloudiness or abnormal color if you are concerned about the appearance of the product **DO NOT TRANSFUSE and** report to blood bank immeadiately.

4.22 Ensure IV access is patent and viable for infusion.

4.23 Prime blood administration set. Start the transfusion. Regulate the blood flow approximately 5 drops per minutes for 1st five minutes. (25 to 30 ml is transfused slowly).

4.24 Observe the patient for any signs of transfusion reaction for at least the first 15 minutes of transfusion.

4.25 Vital Signs should be checked and documented on appropriate form, 15 minutes after initiation of product, and at the completion of transfusion. Vitals should be assessed at more frequent intervals if patient condition warrants.

4.26 Regulate the rate of infusion so as to complete transfusion in 4hrs or as advised by the physician during special situations.

4.27 If any time signs and symptoms of transfusion reaction occurs: Refer to transfusion reaction policy.

4.28 At the completion of the transfusion Remove the BT set & flush the cannula. Assess patient's Vitals and record on the BTR

4.29 Document transfusion and observation on appropriate form.

4.30 After completion of transfusion, the transfusion reaction form must be filled & returned back to blood bank.

4.31 In case of transfusion reaction the reaction form must be sent to blood bank along with patient's blood & urine sample and implicated blood bag for reaction work up.

4.32 Record the volume of transfusion on the appropriate patient form intake output & TPR Record.

4.33 The empty blood bag and used blood infusion set should be discarded according to infection control policy (Red bag).

4.34 Inj Avil &or Inj Hydrocortisone should be available in the ward before starting the transfusion to fight adverse reaction. 500 ml Normal saline to be placed at the patient's bedside to initiate at the time of any transfusion.

4.35 File all documents related to blood and blood component transfusions in the patients file. Following are the documents:-

5.0 DOCUMENTATION

5.1 Nurses notes.

5.2 Informed Consent- Transfusion of Blood Products

5.3 Blood/Blood Component Requisition Form

5.4 Blood Issue Slip

5.5 Donor Aphaeresis form

5.6 Blood Transfusion Monitoring Record

5.7 Transfusion reaction card/form

6.0 COMMENTS

6.1 Rate of Infusion.

6.1.1 Always start at the rate of 5 drops per minute for first 5 minutes.

6.1.2 First half hour is usually slow.

6.1.3 If patient is hemodynamicaly stable, transfuse over 2 hours.

6.1.4 Platelet concentrate and FFP transfusion should be completed within 20 minutes.

6.2 Selection of Needle

6.2.1 Selection of venous access device depends upon integrity of patients vein and expected IV therapy.

6.2.2 Use 20-gauge needle as far as possible as it provides good flow rate for cellular components.

6.2.3 Thin walled 23-gauge needle may be used for transfusion of pediatric patients and adults whose large veins are inaccessible.

6.2.4 Blood flow would be slower in thin bore needles which may cause hemolysis.

6.3 Starting time

6.3.1 Administer blood within 30 minutes of issue from blood bank (the blood reaches at 10 degree C temperature within half hour)

6.3.2 Blood components like cryoprecipitate and FFP should be used within 6 hours of issue.

6.3.3 Platelets should be administered ASAP.

6.4 Warming blood

6.4.1 For routine transfusion blood warming is not required.

6.4.2 As blood flows drop by drop it attains the body temperature quickly.

6.4.3 Infusion of blood without warming is not responsible for febrile reactions or any other transfusion reaction.

6.4.4 Blood warming results in increased metabolism and increased risk of bacterial overgrowth.

6.5 Addition of Drugs

6.5.1 No other medications or electrolytes to be infused along with blood.

6.5.2 Addition of drugs may cause a change in the blood e.g. ringers lactate results in clotting of blood and is contraindicated along with blood.

6.5.3 Dextrose 5% results in hemolysis.

6.5.4 Changes in drug can occur because of PH & ionic molecular constituent.

Table of Contents

Protocol No	Topic	Page No
GNP 7	**7. Lab Investigation related protocols**	
GNP 7.1.25	Blood Sampling	
GNP 7.2.26	Vene-puncture with Vacutainer	
GNP 7.3.27	Arterial Blood Sampling	
GNP 7.4.28	Blood Culture sampling	
GNP 7.5.29	Blood Glucose Monitoring	
GNP 7.6.30	Urine sample Collection from Catheter	
GNP 7.7.31	Mid-Stream Urine Specimen Collection	
GNP 7.8.32	24 hour Urine Collection	
GNP 7.9.33	Specimen transport	

BLOOD SAMPLING & VENU-PUNCTURE WITH VACUTANIER

1.0 PURPOSE

1.1 To obtain blood samples for investigation.

2.0 POLICY

2.1 To be performed by a doctor, privileged nurse, paramedics (certified in venipuncture) or Laboratory technician using aseptic technique.

2.2 All blood specimens must be transported in a biohazard bag and/or sealed transport box, clearly labeled and accompanied by a completed request form.

2.3 All bloods shall be taken using the vacutainer method where possible. Angiocath (IV cannula) may be used for blood cultures, pediatrics, neonates and difficult draws. Blood should not be taken using a needle and syringe.

2.4 A physicians order must be obtained for each test.

3.0 EQUIPMENTS

3.1 21 Gauge vacutainer straight needle

3.2 If inserting cannula, use three way/leur lock adaptor (Blue).

3.3 Appropriate specimen tubes with labels.

3.4 Alcohol swabs.

3.5 Gauge piece.

3.6 Tourniquet

3.7 Disposable gloves.

3.8 Plastic bags for specific transport.

3.9 Appropriate lab requisition.

3.10 Band-Aid

3.11 Sharps container

4.0 PROCEDURE

4.1 Identify patient and cross check full name, IPID, on patient file/pathology form/investigation request with ID band.

4.2 Explain reason for procedure and receive verbal consent.

4.3 Ensure privacy.

4.4 Have the patient lie semi-recumbent or sitting in a chair.

4.2 Position patient's arm.

4.3 Select site for venipuncture.

4.4 Apply tourniquet proximal to chosen site.

4.5 When performing venipuncture, ensure your face is kept a suitable, safe working distance away (splash-back does occur).

4.6 If vein is not prominent

4.6.1 Have patient open and close hand, two times.

4.6.2 Lightly tape vein site.

4.6.3 Take tourniquet off, then place extremity in a dependent position for a few minutes.

4.6.4 Reapply tourniquet.

4.7 Put on gloves.

4.8 Clean site and surrounding area with alcohol & allow it to air dry.

4.9 Stabilize the extremity and using thumb, hold the skin below prepared area distill to intended puncture site.

4.10 At a 15^{o} angle insert a vacutainer needle / butterfly with bevel up through the skin parallel to vein.

4.11 Insert needle smoothly under the skin and into vein. The needle valve will initially prevent any flow of blood.

4.12 Slide collection vial into the plastic vacutainer holder and onto the needle valve to puncture the rubber diaphragm. The vial will automatically fill with blood to the required level then flow will cease.

4.13 Remove vial to tray. The rubber diaphragm will return to cover the end of the valve needle, preventing leaking.

4.14 If further samples are required, leave needle in situ and introduce appropriate vials onto needle valve in holder.

4.15 If inserting cannula then use three way/ leur lock adaptor (Blue).

4.16 Follow the recommended order of filling multiple tubes.

Sl no	Colour of cap	Anticoagulant	Used for
1	Bactec bottle/green	Transport media/heparin	Microbial cultures
2	blue	Sodium citrate	Coagulation studies
3	Red/yellow	none	Tests requiring sera
4	green	Sodium heparin	Flow cytometry/cytogenetic
5	lavender	EDTA	Hematology
6	grey	Sodium fluoride and potassium oxalate	Glucose
7	black	Sodium citrate	ESR

4.17 Withdraw desired amount of blood and invert the tube gently about 4-5 times.

4.18 Release tourniquet.

4.19 When using the straight vacutainer needle remove tube from needle holder to relieve vacuum before removing from vein.

4.20 Withdraw needle from vein and discard immediately into sharps container.

4.21 Cover puncture site with dry gauze and apply gentle pressure for one minute.

4.22 Once bleeding has stopped cover with Band-Aid dressing.

4.23 Ensure tops of blood tubes are clean, if not wipe blood away with alcohol swab.

4.24 Remove gloves, wash hands.

4.21 Check venipuncture site before leaving the room.

4.22 Transport samples in appropriate specimen transport container/bag after entering patient details & investigation in lab register.

6.0 DOCUMENTATION

6.1 Documentation as per unit policy (investigation record/ Lab book etc.)

6.2 Manual/ System generated investigation request

7.0 COMMENTS

6.1 If hematoma develops apply warm local application.

7.1 Fix patient details over the vacutainer before sample collection.

7.2 Mention sample collection date & time & name of the person collecting the sample on the vacutainer.

ARTERIAL BLOOD SAMPLING

1.0 PURPOSE

1.1 To obtain an arterial blood sample in order to assess the patient's acid base status and adequacy of ventilation and oxygenation.

2.0 POLICY

2.1 Performed by a privileged doctor or a certified Registered Nurse using aseptic technique.

3.0 EQUIPMENT

3.1 Arterial blood collection syringe (pre-impregnated with heparin)

3.2 Needle, 25G, 23G

3.3 Kidney dish

3.4 Ice pack if sample has to be transported to other unit for ABG analysis

3.5 Gloves

3.6 Alcohol swabs

3.7 Gauze swabs

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Wash hands. Prepare equipment.

4.3 Perform Allen's test Before the Procedure. (Compress both the Radial & Ulnar arteries until the distal palm blanches then relieve pressure from one artery at a time. If blood perfusion through the radial artery is adequate, the hand should flush and resume its normal pinkish coloration in less than 5 sec. Repeat the same with Ulnar artery)

4.3 Position the patient according to the selected site:

4.3.1 Radial artery puncture - stabilize the arm on a pillow or with a rolled towel under patient's wrist for support.

4.4 During the collection of the specimen note the following:

4.4.1 The time the specimen was collected.

4.4.2 The patient's respiratory rate.

4.4.3 Whether the patient is breathing room air or is on oxygen.

4.4.4 The concentration and method of oxygen administered.

4.5 Apply pressure over the puncture site with dry gauze for 5 minutes.

4.6 Discard equipment. Wash Hands.

4.7 Observe the puncture site for bleeding or hematoma.

4.8 If bleeding continues, reapply pressure for a further 5 min. or until bleeding has ceased.

4.9 Observe the puncture site for swelling pain, numbness, tingling, and discoloration of the extremity.

4.10 Notify the Medical Officer of any abnormal observations.

5.0 DOCUMENTATION

5.1 Ensure the results slip is secured in the patient's clinical record.

5.2 Record all details in the Nurse's notes.

5.3 Record the specimen collection time, the puncture site, the type and amount of oxygen therapy, if appropriate.

6.0 COMMENTS

6.1 A hematoma may form if insufficient pressure is applied to the site after the puncture.

6.2 The risk is greater in patients taking anticoagulants and those with coagulation disorders.

6.3 While drawing an ABG sample, brachial or femoral artery should be used only as a last resort due to higher rates of hematoma and infection.

BLOOD CULTURE SAMPLING

1.0 PURPOSE

1.1 To obtain specimen for bacteriological studies

1.3 To minimize the risk of bacterial contamination

2.0 POLICY

2.1 Performed by a Doctor or a certified Registered Nurse using aseptic technique.

3.0 EQUIPMENT

3.1 Appropriate blood culture bottles with labels

3.2 One pair of sterile gloves

3.3 Tourniquet

3.4 20 G needle / Vacutainer needle

3.5 10 ml syringe

3.6 Alcohol pad or swab stick

3.7 Povidone-iodine pad or swab stick

3.8 Band aid

3.9 Sterile gauze pieces

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.1.1 Prepare equipment

4.1.2 Wash hands and don gloves.

4.1.3 Position the patient comfortably

4.1.4 Apply tourniquet above the area chosen for venipuncture. Tie in a manner so that the tourniquet can be released by pulling on one end

4.1.5 Use the tip of the index or second finger to palpate the area across the arm at the elbow.

4.1.6 Instruct patient to make a fist and open and close hand several times, ending with clenched fist

4.1.7 If lidocaine cream is to be used, then apply to site selected for venipuncture for pediatric patents

4.2 Wear sterile gloves & open a sterile bowl with gauze

4.3 Prepare site, beginning with the alcohol swab starting at the puncture site, cleanse outward. Using a circular motion while applying friction. After the alcohol has dried, continue cleansing in a similar fashion using the povidone-
iodine/ chlorhexidine swab. Allow the prepared area to dry (30 seconds to 2 minutes)

4.4 Open the seal of culture bottle.

4.5 Draw the skin just below the venipuncture site taut using the thumb of the non-dominant hand.

4.6 Position the needle with the bevel up and the shaft parallel to the path of the vein.

4.7 Insert the needle through the skin at a 15 to 30 degree angle and ¼ to ½ in below the intended entry into the vein

4.8 If a syringe is being used, observe for blood in the hub. Withdraw blood slowly by pulling gently on the plunger of the syringe until the required sample (10 ml) is obtained

4.9 Release tourniquet & place sterile gauze pad over the puncture site and gently remove the needle

4.10 Keeping the bottles steady on a firm place inject 5 ml of blood

4.11 Apply continuous pressure to the gauze pad over the puncture site for 2 to 3 minutes.

4.12 Once hemostasis has been established, apply an adhesive band-aid to the venipuncture site.

4.13 Gently shake the bottle and label specimens of each bottle. **(DO NOT PUT THE STICKER ON THE BAR CODE)**
Send 2 different request forms in case both Aerobic and Anaerobic bottles are sent

4.15 Place needle and adaptor directly into the sharp container.

4.16 Dispose of gloves and equipments properly and wash hands.

5.0 DOCUMENTATION

4.1 Record the procedure as practiced by the unit.

4.2 Note the specimen collection time and the puncture site on the culture bottle.

5.0 COMMENTS

5.1 A hematoma may form if insufficient pressure is applied to the site after the puncture.

5.2 The risk is greater in patients taking medications and those with coagulation disorders.

5.3 Blood sample may be taken in both aerobic and anaerobic containers. The specimen should always be collected first into the aerobic bottle.

5.4 Preliminary results are usually reported after 24 hours

5.5 Avoid drawing blood through indwelling intravenous or intra arterial catheter unless blood cannot be obtained by venipuncture or unless the diagnosis of catheter sepsis is suspected.

5.6 There should be maximum 10min gap between the two culture samples

5.7 While collecting sample from a central line, clean the part with betadine, withdraw 3-5ml of blood& discard it, then again withdraw 5ml of sample for culture. Flush the line with heparin saline/heplock.

BLOOD GLUCOSE MONITORING

1.0 **PURPOSE**

1.1 To determine capillary blood glucose levels.

2.0 **POLICY**

2.1 The procedure is to be performed by a Registered Nurse.

3.0 **EQUIPMENT**

3.1 Glucometer

3.2 Test Strip

3.3 26G needle

3.4 Lancet

3.5 Dry Gauze

3.6 Band-Aid

3.7 Alcohol swab

4.0 **PROCEDURE**

4.1 Explain the procedure to the patient.

4.3 Ensure site from where the blood is to be removed is cleaned with alcohol swab & let the site dry completely.

4.4 Encourage blood flow to patient's fingers by holding the hand in a downward position.

4.4 Operate the Glucometer according to its manual.

4.5 Using the lancet, puncture the selected site. Wipe off the first drop of blood. Make sure that you have a hanging drop of blood before you apply it to test strip.

5.0 **DOCUMENTATION**

5.1 Record result on diabetic chart.

5.2 Specific details of escalation in case blood sugar is extremely high or low must be noted on nurse's notes

1.0 COMMENTS

1.1 Glucometer to lab for quality control check on Sundays.

1.2 Use the sides of the fingers no lower than the base of the nail.

1.4 Rotate finger puncture sites.

URINE SAMPLE COLLECTION FROM CATHETER

1.0 PURPOSE

1.1 To obtain a sterile specimen of urine via a urinary catheter.

2.0 POLICY

2.1 Prescribed by a doctor and performed by a Registered Nurse.

3.0 EQUIPMENT

3.1 Alcohol swabs

3.2 10ml syringe

3.3 23G needle

3.4 Catheter clamp

3.5 Urine specimen container.

3.6 Gloves

4.0 PROCEDURE

4.1 Explain the procedure to the patient and ensure privacy.

4.2 Wash hands and prepare equipment.

4.3 Clamp tubing's of urobag for a few minutes or until there is enough urine in the tubing for a specimen - approximately 2 ml.

4.4 Clean aspiration port or Foley's catheter below bifurcation with alcohol swab.

4.5 Insert syringe into port or puncture Foley's (in case urobag does not have a port) using sterile needle & syringe & withdraw urine sample for investigation.

4.6 Place urine in specimen container.

4.7 Unclamp catheter and ensuring draining.

4.8 Label specimen with ID label, date, time and ward. specimen sample Along with request form send to Laboratory.

5.0 DOCUMENTATION

5.1 Record procedure on investigation record as practiced by the unit.

6.0 COMMENTS

6.1 Not applicable.

MIDSTREAM URINE SPECIMEN COLLECTION

1.0 PURPOSE

1.1 To obtain an uncontaminated specimen of urine for laboratory analysis.

2.0 EQUIPMENT

Sterile:	***Clean:***
Tissue paper	Bedpan or urinal
Specimen container	Gloves
water	Soap

3.0 PROCEDURE

3.1 Explain procedure to the patient. Ensure privacy.

3.2 Ask the patient to wash the genitals thoroughly with soap & water and then to commence voiding.

3.3 Ask the patient to pass initial urine & collect 5-10ml of mid-stream urine in the container

3.4 When patient voids in a bed pan allow the patient to pass 40 ml urine, then collect 5-10ml of urine in the specimen container as described above using a clean gloves.

3.5 Send specimen to laboratory.

4.0 COMMENTS

4.1 Patient must also be explained to keep the lid upside down & in case of culture sample the inner part of the lid must be untouched.

24 HOURS URINE COLLECTION

1.0 PURPOSE

1.1 To obtain a timed interval specimen of urine for the purpose of quantitative substance measurement.

2.0 POLICY

2.1 All urine passed in the 24-hour period is collected.

2.2 A large labeled container specific to the test is obtained from the laboratory.

3.0 EQUIPMENT

3.1 24-hour urine specimen container.

4.0 PROCEDURE

4.1 Inform the patient of the reason for the test and the need to retain all urine voided.

4.2 Request the patient to void upon waking up in the morning.

4.3 Note the time of voiding & the 24 hr. sample collection starts from this time & note it in the Nurses Notes.

4.4 Start collecting 24 hours collection first into a urinal then pour into the specimen container.

4.5 Collect all urine voided within the following 24-hour period.

4.6 On the following morning the patient is requested to void at the same time as the discarded specimen on the previous day. This specimen is collected in the container.

5.0 DOCUMENTATION

5.1 Record the time of start in the patient's medical record (Nurses Notes in the Daily Nurses Flow Sheet).

6.0 COMMENTS

6.1 If any specimens of urine are discarded within the 24-hour period, the collection becomes invalid and a new 24-hour period of collection must be commenced.

6.2 Ensure that the assigned nursing staff & shift Incharge in all the shifts are aware that a 24 hour urine collection is in progress.

SPECIMEN TRANSPORT

1.0 PURPOSE

1.1 To eliminate contaminated specimens from further infecting others.

1.2 To deliver the specimen safely and correctly.

2.0 POLICY

2.1 To deliver the specimen to the laboratory safely and correctly.

2.2 To be packaged correctly by the nurse and carried to the laboratory by the porter/house keeping / Pneumatic chute.

3.0 EQUIPMENT

3.1 Gloves

3.2 Specimen transport container

3.3 Requisitions

3.4 Capsule if transporting through pneumatic chute

3.5 Lab Register

4.0 PROCEDURE

4.1 Wear gloves.

4.2 Insert specimen into specimen transport container/ bag.

4.4 Remove gloves and wash hands

4.5 Hand over requisition with the specimen to the ward boy.

4.6 If the sample is transported through the pneumatic chute, put the specimen with bag in the capsule & dial the code of the desired destination & press enter.

4.6 Document patient details & name of test along with date & time in the in the lab register.

5.0 DOCUMENTATION

5.1 Date and time specimen was drawn and sent, specific tests to be done, results of tests and whether or not doctor was notified to be noted down in the nurse's notes.

Table of Contents

Protocol No	Topic	Page No
GNP 8	**Intravenous Procedures**	
GNP 8.1.34	Insertion of Intravenous Cannula	
GNP 8.2.35	Intravenous Therapy	
GNP 8.3.36	Peripheral Cannula Dressing	
GNP 8.4.37	Removal of peripheral Catheter	
GNP 8.5.38	Insertion Of Central Venous Catheter	
GNP 8.6.39	Flushing of Central Venous Catheter	
GNP 8.7.40	Removal Of Central Venous Catheter	

INSERTION OF A PERIPHERAL INTRAVENOUS CANNULA

PURPOSE

1.1 To provide access to the venous circulation.

2.0 POLICY

2.1 Cannula is inserted using aseptic technique.

2.2 Cannulation is performed by a Doctor, Paramedic or a Registered Nurse who has successfully completed competency assessment & is privileged to insert an IV Cannula.

2.3 Peripheral cannula are maintained healthy for 72 hours unless removed due to discontinuation of infusions or discharge of the patient

2.4 Cannula is removed at the first indication of inflammation, pain or redness.

2.5 Peripheral cannula sites are assessed for inflammation or pain in each shift and Whenever administering intravenous therapy or medications.
The Registered Nurse is responsible for regular flushing & maintaining the patency of the cannula

3.0 EQUIPMENT

Sterile	Clean
Cannula of appropriate sizes	Tourniquet
Syringes, 2ml or 5ml	Hair Trimmer
Alcohol swab	NS Flush in a syringe
Extension line	Clean Gloves
Transparent Adhesive	Splint and bandage

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Wash hands. Assemble equipment.

4.3 Position the patient comfortably, supporting the proposed area of insertion.

4.4 Clip the proposed site.

4.5 Don gloves & clean the site with spirit swab.

4.6 Tie a tourniquet & insert an appropriate sized cannula.

4.7 Remove tourniquet & flush the cannula to confirm placement.

4.8 Secure the cannula with a transparent dressing.

4.9 Place a self-sealing extension line & secure it with a micropore if required

4.10 Write the date & time of insertion on the cannula dressing

4.11 Splint and bandage the limb **ONLY IF** necessary.

4.12 Commence intravenous therapy as prescribed.

5.0 DOCUMENTATION

5.1 Record volume of fluid infused on the patient's Fluid Balance Chart.

5.2 Record procedure in the Daily Nurses Flow Sheet.

6.0 COMMENTS

6.1 Flush the line once in a shift & after the administration of medications

6.2 It is advisable to restrict the attempts of cannula insertion to two by the same privileged nurse

INTRAVENOUS THERAPY MANAGEMENT

1.0 PURPOSE

1.1 To provide guidelines for the delivery of intravenous fluids at an appropriate rate in a constant, accurate manner, to achieve the desired therapeutic response and to prevent complications.

2.0 POLICY

2.1 The Doctor is responsible for ordering (in legible writing) the intravenous fluid, additive if required, flow rate, duration of infusion and cessation of therapy.

2.2 A Registered Nurse may administer and commence the intravenous therapy regime. The nurse has a responsibility to determine the correct rate in individual circumstances and to maintain that rate throughout the infusion.

2.3 A Registered Nurse can add medications to a micro drip set/ buritrol & use flow regulator, infusion pump, syringe pump to administer the accurate amount of fluid.

3.0 EQUIPMENT

3.1 Medication administration record

3.2 Intravenous fluid prescribed

3.3 Infusion set (Micro/Macro drip set)

3.4 Flow regulator/ infusion pump/ syringe pump

3.5 Syringe, needle, additive label, if applicable

3.6 Additive, if applicable

3.7 Alcohol swab

4.0 PROCEDURE

4.1 Verify the intravenous therapy order on the prescription chart with another Registered Nurse, noting the date, time, name, duration and volume of fluid to be infused

4.2 The Registered Nurse commencing the infusion is responsible for signing the Intravenous Fluid Chart and Additive Order label, documenting the date and time commenced and the date and time the previous pint was ceased in the Intake output chart4.3 Rate of flow & date & time of commencement must be mentioned in the label in the IV bag.

4.4 The volume of previous fluid transfused, must be mentioned on the intake output chart.

4.4 Infusions pumps are not used for administration of blood or blood product infusion.

4.6 Infusion pumps are to be connected to an AC power source at all times except during patient transfer.

4.7 All Pediatric patients should have a Pediatric burette.

4.8 In all intravenous therapy management, the nurse's responsibilities include:

4.8.1 Checking the infusion fluid and container for any obvious faults or contamination.

4.8.2 Ensuring the administration of the prescribed fluid to the correct patient.

4.8.3 Observing whether the intravenous line remains patent.

4.8.4 Inspecting the cannula site at least once per shift, preferably four hourly and reporting and recording abnormalities.

4.8.5 Controlling the rate of flow as prescribed.

4.8.6 Monitoring the condition of the patient and reporting any changes.

4.8.7 Maintaining appropriate records.

4.9 The management of all aspects of intravenous therapy requires aseptic technique.

4.10 The fluid should be labeled with appropriate label mentioning the additive, concentration, date & time of preparation & Initials of the staff preparing it.

4.11 Frequent assessment, i.e. at least hourly, of the infusion apparatus is required for the following:

4.10.1 Patency

4.10.2 Absence of kinks in the tubing

4.10.3 Correct flow rate

4.10.4 Correct fluid level in the flask and drip chamber.

5.0 DOCUMENTATION

5.3 Intake Output Chart

5.4 Medication administration record

6.0 COMMENTS

6.3 IV tubing must always be closed. Sterile IV cap is preferred over needles to prevent needle stick injury

PERIPHERAL CANNULA DRESSING

1.0 PURPOSE

1.1 To dress and stabilize a cannula site.

2.0 POLICY

2.1 The cannula site is dressed.

2.1.1 Up on insertion

2.1.2 When the dressing becomes dislodged or soiled.

2.2 Performed by a Registered nurse using aseptic technique.

2.3 The cannula site is dressed by a transparent dressing/ micropore/ dynaplast.

3.0 EQUIPMENT

Sterile

Antiseptic skin solution

Transparent Dressing

Splint and bandage

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Wash hands. Prepare equipment.

4.3 Position the patient comfortably. Support the proposed site.

4.4 Remove and discard the soiled dressing take care not to disconnect or dislodge the cannula.

4.5 Observe the cannula site for signs of inflammation, infection or infiltration. Remove the cannula if these conditions are apparent. Wash hands.

4.6 If the cannula site appears healthy, swab the cannula site.

4.7 Apply transparent dressing.

4.7.1 Clearly mark the date and time of insertion in pen on the border of the dressing.

4.7.2 If intravenous tubing is connected to the cannula, secure with micro pore to prevent mechanical phlebitis

5.0 **DOCUMENTATION**

5.1 Record the procedure in cannula care in daily nurses flow sheet.

REMOVAL OF PERIPHERAL CATHETER

1.0 PURPOSE

1.1 To remove a cannula with minimal tissue trauma.

2.0 POLICY

2.1 Performed by a Registered Nurse using aseptic technique.

3.0 EQUIPMENT

Sterile Clean

Alcohol swab

Gauze swabs Adhesive tape/band aid

Scissors, if required

4.0 PROCEDURE

4.1 Explain procedure to patient/ Ensure privacy.

4.2 Wash hands. Prepare equipment.

4.3 Cease the intravenous therapy if in progress.

4.4 Loosen the occlusive dressing and tapes.

4.5 Grasp the insertion site firmly with dry gauze and slowly withdraw the cannula.

4.7 Immediately apply firm pressure with gauze swab. Apply pressure to the site until bleeding ceases.

4.8 Inspect the cannula site for signs of inflammation or infection & clean it with an alcohol swab

4.9 Ensure that bleeding/ooze is controlled & apply band-aid.

4.10 If intravenous fluids were in progress up to the time of cannula removal, note volume of fluid remaining in the vac.

4.11 Observe venipuncture site for oozing.

5.0 DOCUMENTATION

5.1 Record volume of fluid infused on the patient's Fluid Balance Chart.

5.2 Record date & time of removal in the patient's Daily Nurses Flow Sheet.

5.0 COMMENTS

5.1 IV catheter is removed on patient discharge or discontinuation of medication or fluids.

5.2 If there are chances of restarting fluids, the cannula may not be removed

5.3 Cannula must not be removed for critical patients if alternative venous access is not available

5.4 Requirement of cannula may be reassessed in each shift

ASSISTING IN INSERTION OF CENTRAL VENOUS CATHETER

1.0 Purpose

1.1These Central Venous Catheters (CVC) are used when prolonged Intravenous (IV) therapy for the administration of multiple medications, cytotoxic agents, parenteral nutrition (PN), blood products and drawing of blood samples is required.

2.0 policy

2.1 Patient assessment and the selection of the appropriate device type is important.

2.2 cannula is inserted using aseptic technique.

2.3 Cannulation is performed by a Resident Doctor, Nurse practitioner who is competent and is privileged to insertion of central venous catheter or under the supervision of lecturer/Associate Professor.

2.4 consent from patient is obtained after giving proper explanation.

2.5 Use the following anagram 'BITTEM' as a quick reference guide to describe or identify risk to patient when obtaining patient consent for a PICC insertion

3.0 **EQUIPMENT**

3.1 Sterile mask, gloves, and gown.
3.2 Standard monitors, such as pulse Oximeter, blood pressure cuff, and ECG
3.3 When possible, peripheral IV with infusion solution
3.4 Sterile prep solution (e.g. sterillium)
3.5 Sterile drapes
3.6 5-mL sterile syringe with 25- or 30-gauge needle for local anesthetic infiltration
3.7 Local anesthetic (usually 1% lidocaine)
3.8 22-gauge, 1.5-inch needle
3.9 18- or 20-gauge intravenous catheter (over a needle) on a syringe, or 18-gauge hollow-bore needle
3.10 Heparin flush
3.11 Pressure tubing
3.12 **Guide wire**
3.13 No. 11 scalpel blade
3.14 **Central venous catheter** with transducer kit.
3.15 3.0 suture on cutting needle.
3.16 Tegaderm/dyanaplast adhesive tape.
3.17 Normal Saline viaflex.

4.0 **PROCEDURE**

4.1 Explain to the patient what you are about to do.
4.2 Choose the site for insertion: the jugular and femoral veins carry less bleeding risk and low risk of pneumothorax; the subclavian vein is a cleaner site and is technically more difficult – we have not covered the technique here. The femoral vein is probably the easiest site. Put on your gloves and gown. Clean and drape the site.
4.3 Tilt the head end of the bed down by 10°–15°.

4.4 Draw up 10 ml of lidocaine; raise a bleb on the skin with a 27-gauge needle.

4.5 Infiltrate local anesthetic all around the site, working down toward the vein. Pull back on the plunger before injecting each time to ensure that you don't inject into the vein.

4.6 Have the assistant open the central line pack and take all of the items out. Ensure that the wire moves freely on its reel – you will need to advance the wire one-handed.

4.7 Flush each port of the central line with saline or heparin saline, and close off each line except the distal (usually brown) line; the wire threads through this line.

4.8 Attach a syringe to the large needle provided, and then proceed as follows:
– right femoral line: find the arterial pulse and enter the skin 1 cm medial to this, at a 45° angle to the vertical and heading parallel to the artery. Advance slowly, aspirating all the time, until you enter the vein
– right jugular line: palpate the carotid artery with your left hand, covering the artery with your fingers. Insert the needle 0.5–1 cm laterally to the artery, aiming at a 45°angle to the vertical. In men, aim for the right nipple; in women, aim for the iliac crest. Advance slowly, aspirating all the time, until you enter the vein. If you fail to aspirate blood after entering 3–4 cm, withdraw, re-enter at the same point, but aim slightly more medially

4.9 When the needle is in the vein, ensure that you can reliably aspirate blood. Remove the syringe, keeping the needle very still, and immediately put your thumb over the end of the needle.

4.10 Insert the wire into the end of the needle, and advance the wire until at least 30 cm are inserted. The wire should advance very easily – do not force it.

4.11 Keeping one hand on the wire at all times, remove the needle, keeping the wire in place. Make a nick in the skin where the wire enters the skin. Insert the dilator over the wire and push into the skin as far as it will go. Remove the dilator.

4.12 Insert the central line over the wire. Keep one hand on the wire at all times. When the central line is 2 cm away from the skin, slowly withdraw the wire back through the central line until the wire tip appears from the line port. Hold the wire here while you insert the line. Leave a few centimeters of the line outside the skin. Withdraw the wire and immediately clip off the remaining port.

4.13 Attach the line to the skin with sutures. Tie loosely so as not to pinch the skin; this causes necrosis and detachment of the line. Clean the skin around the line once more, dry, and cover with occlusive dressings.

4.14 Ensure that you can aspirate blood from each lumen of the line, then flush each lumen with saline or heparin saline.

4.15 Order a chest x-ray to check for line position and pneumothorax if a jugular or subclavian line has been inserted. Femoral lines do not require an x-ray.

5.0 NURSING CARE

5.1 Flush lumens on catheter with saline.

5.2 Obtain chest radiograph to confirm position of catheter and exclude pneumothorax.

5.3 Use sterile technique when injecting drugs or connecting tubing to lumens of catheter.

5.4 Routinely replace sterile dressings, cleansing the site with chlorhexidine before applying a new dressing.

5.5 Examine the insertion site daily for signs of infection.

5.6 While the catheter is in place, leave sterile caps in place at all times and cleanse ports with alcohol before connecting anything to them.

5.7 When preparing to remove the catheter, place the patient in Trendelenburg's position. Ask the patient to exhale as the catheter is removed, to prevent air embolism, and apply pressure over the site for 1 to 2 minutes for hemostasis.

6.0 Documentation:

6.1 Record procedure in the daily nurses flow sheet.

6.2 Document the procedure in CLABSI form.

6.3 Record date and time of insertion in nurse's notes, care bundle.

6.4 Record patient's condition.

7.0 Comments:

7.1 Flush the line twice in a shift and after the administration of medications.

FLUSHING CENTRAL VENOUS CATHETER CHEMO PORT PICC LINE

1.0 PURPOSE

2.1 All catheters must be flushed with Normal Saline/Hep-Saline/Hep lock ampoules or prepared Heparin solution. In general 10 U / ml (3 – 5 ml) will be used for all catheters.

2.2 When not using central lines for more than 12 hrs. it must be flushed with Heparinised solution once a shift.

2.3 Weakly flushing of chemo-ports 10 ml (10 U / ml) of Hep-Saline.

3.0 EQUIPMENT

3.1 Sterile gloves.

3.2 Hep-saline or prepared heparinized solution/Preloaded heparinized saline

3.3 10 ml syringe.

3.4 Alcohol swabs.

4.0 PROCEDURE

4.1 Wash hands and explain procedure to patient.

4.1 Wear Sterile Gloves

4.2 Remove the cap and clean with 70% alcohol. Clean the tip of the close system end (Clave or Q site)

4.3 Allow it to dry and keep it upside down.

4.4 Aspirate blood to confirm the patency of CVC / Chemoport.

4.5 When reddish blood tinge is observed in the line, flush with 5 to 10 CC of normal saline.

4.6 Flush again with 5 to 10 CC of normal saline.

4.8 Flush with Hep-Saline 3 to 5 ml (100 U / ml). If not using the line for 12 hrs.

4.9 No need to flush with Hep-Saline if the line is being used continuously or CVP is monitored with a PM Kit.

4.10 Follow steps 5 to 7 before giving any medication.

4.11 After flushing the catheter, maintain positive pressure by keeping your thumb on the plunger of the syringe while with drawing & clamp the line before removal.

4.12 Replace the cap or use a sterile stopper.

4.13 Ensure CVC is well secured.

4.14 Wash hands and disposes of articles as per hospital policies.

5.0 DOCUMENTATION

5.1 Write the date and time of flushing in nurse's notes and flow sheets as applicable.

6.0 COMMENTS

6.1 If the system remains unused for a long time, flush port with 5 ml (100units/ml) of heparinised saline solution once every four weeks

REMOVAL OF CENTRAL VENOUS CATHETER

1.0 PURPOSE

1.1 To provide guidelines for the removal of a central venous catheter.

2.0 POLICY

2.1 All aspects of central venous catheter management are attended using meticulous aseptic technique.

2.2 Removal of the central venous catheter may be undertaken by a registered nurse proficient in the procedure and as advised by the attending medical officer.

2.3 If appropriate, be aware of patient's coagulation profile.

2.4 Long term central venous catheters must be removed by a Doctor.

2.5 If the central venous catheter is considered a source of infection, blood cultures are obtained from the catheter line prior to removal.

2.6 If there are apparent signs of infection the tip of the central venous catheter may be sent for culture.

3.0 EQUIPMENT

3.1 Sterile dressing pack.

3.2 Suture cutting forceps

3.3 Betadine/Chlorhexidine swab to cleanse.

3.4 Appropriate occlusive dressing.

3.5 Sterile specimen pot / sterile scissors / culture swab.

3.6 Sterile gloves.

3.7 Dynaplast & gauze for pressure dressing

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy and comfortable position.

4.2 Wash hands. Prepare equipment.

4.3 Remove old dressing and inspect area and take culture swab if necessary, clean the area using betadine.

4.4 Cut and remove suture.

4.5 Ask patient to take a deep breath and hold it (Valsalva) while you apply firm pressure with sterile gauze square and steadily withdraw catheter without contaminating tip.

4.6 While applying gauze square pads firmly, ask patient to breathe out.

4.7 Apply firm pressure for a few minutes until bleeding stops and then apply pressure dressing using dynaplast. Inspect catheter tip to ensure it is intact.

4.8 Clean the area with betadine gauze before applying pressure dressing

4.9 Cut the tip off the removed catheter using sterile scissors or surgical blade and send to Laboratory for culture if a sign of infection is evident as advised by the physician.

4.9 Monitor patient for signs of breathlessness, tachycardia and restlessness.

5.0 DOCUMENTATION

5.1 Document in the Daily Nurses Flow Sheet.

5.2 Date and time of removal.

5.3 Whether tip was sent for culture.

5.4 Patient and site condition.

6.0 COMMENTS

6.1 Not applicable.

Table of Contents

Protocol No	Topic	Page No
GNP 9	**Assisting in Invasive Procedures**	
GNP 9.1.41	Pleural Aspiration	
GNP 9.2.42	Lumbar Puncture	
GNP9.3.43	Liver Biopsy	
GNP 9.4.44	Removal of Epidural catheter	
GNP 9.5.45	Assisting with Paracentesis	

PLEURAL ASPIRATION

1.0 PURPOSE

1.1 To remove fluid from the pleural cavity in order to: -

1.1.1 Obtain a specimen for pathological examination and diagnostic purposes.

1.1.2 Relieve pressure from serous fluid, blood or pus.

2.0 POLICY

2.1 This procedure will be performed by a doctor, who will be assisted by a registered nurse.
2.2 Written consent must be obtained from the patient prior to the procedure being performed.
2.3 Strict aseptic technique will be adhered to (this is an invasive procedure into a sterile body cavity).
2.4 Principles of universal blood and body fluid infection control precautions will be adhered to by staff.
2.5Patient will be monitored post-procedure as instructed by attending doctor (output / drainage, B.P. pulse, respirations, and aspiration site for leakage etc.).

3.0 EQUIPMENT

3.1 Sterile chest aspiration set

3.2 Sterile Measuring jug (1 liter)

3.3 Syringe, 10ml & 50ml

3.4 Needles/ IV Cannula as required by the doctor

3.5 Sterile gown

3.6 Sterile gloves

3.7 Antiseptic solution

3.8 Xylocane 2%

3.9 Specimen containers

3.10 Microspore

3.11 Dynaplast

3.12 Sterile Gauze

3.13 Sample container

3.14 Hole Towel

3.15 Gown

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Wash hands & open a sterile set.

4.3 Position the patient:

4.3.1 Upright and leaning over a bed table.

4.3.2 Sitting on a chair at the bedside with the patient's head and folded arms resting on the bed.

4.3.3 Semi fowlers position with ipsilateral hand at the back of the head.

4.4 Clean the area using betadine gauze

4.5 Keep Xylocaine 2% ready for local anesthesia. A thick bore needle/ blunt filter needle may be used for withdrawing & a thin bore needle for administering.

4.6 Open IV cannula (18G/16G) & 50cc syringe with a thick bore needle & place it on the sterile field.

4.7 Once the fluid is aspirated by medical officer, keep labeled specimen containers ready.

4.6 Observe the patient closely for signs and symptoms of respiratory distress.

4.7 Measure the amount of fluid withdrawn.

4.8 Ensure that specimens are labeled and sent to the laboratory with the appropriate request form.

4.9 The initial specimen taken out must be sent for culture.

4.9 Remove and dispose of equipment as appropriate.

4.10 Observe blood pressure / pulse and respiration ¼ hourly for the first ½ hour then ½ hourly for the next 2 hours. Watch for any signs of respiratory distress or shock.

5.0 DOCUMENTATION

5.1 Record the following in the patient's clinical record: -

5.1.1 The color, consistency and amount of pleural fluid removed.

5.1.2 The number of specimens sent to the laboratory.

5.1.3 The patient's response to the procedure.

5.2 Consent form.

5.3 Laboratory request forms.

LUMBAR PUNCTURE

1.0 PURPOSE

1.1 To insert a needle into the lumbar subarachnoid space in order to withdraw cerebrospinal fluid for diagnostic and therapeutic purposes.

2.0 POLICY

2.2 This procedure will be performed by a doctor, who will be assisted by a registered nurse.

2.3 Written consent must be obtained from the patient prior to the procedure being performed.

2.5 Strict aseptic technique will be adhered to (this is an invasive procedure into a sterile body cavity).

2.6 Principles of universal blood and body fluid infection control precautions will be adhered to by staff

2.7 Patient will be monitored post-procedure as instructed by attending doctor (output / drainage, B.P. pulse, respirations, site for leakage etc.).

3.0 EQUIPMENT

Sterile	Clean
Dressing (or Band-Aid)	Antiseptic skin
Fenestrated drape	preparation
Basic dressing pack	
Lumbar puncture set	
Gown, gloves	
Syringes, 5ml x 2, 10ml x 2	
LP Needles 19G, 23G and 25G	
Xylocaine 2%	
Sterile specimen bottles x 3	

4.0 PROCEDURE

4.1 Explain procedure to patient. Take written consent. Ensure privacy.

4.2 Wash hands. Prepare equipment.

4.3 Record baseline vital signs and neurological status.

4.4 Position the patient in the lateral position i.e. arched back close to the edge of the bed, knees flexed on the abdomen, or in a sitting position bent over pillows or over bed table.

4.5 Open LP needle into sterile area.

4.6 Once CSF is aspirated, keep labeled specimen containers ready. May open it into

the sterile field.

4.7 Stand in front of the patient, support the back of the patient's neck and knees if patient needs help to remain still.

4.8 Encourage the patient to breathe normally and relax as much as possible.

4.9 Observe closely the patient's, respiration and level during of consciousness the procedure.

4.10 Secure the sterile dressing/Band-Aid over the puncture site.

4.11 Send specimens to Laboratory.

4.12 Assist the patient to a supine position without pillow for 6-12 hours or a prescribed by the medical officer.

4.13 A flat position may minimize the risk of severe headache post procedure.

4.14 Observe the puncture site frequently for the first two (2) hours for C.S.F. Leakage, swelling or bleeding. Notify the doctor if signs persist.

4.15 Encourage fluids.

4.16 Administer analgesic as indicated.

4.17 Remove and dispose of equipment as appropriate.

5.0 DOCUMENTATION

5.1 Record procedure and patient response in the patient's Clinical Record.

5.2 Consent form.

5.3 Laboratory forms.

5.4 Nurses notes in daily nurses flow sheet.

LIVER BIOPSY

1.0 PURPOSE

1.1 To biopsy liver tissue for diagnostic purposes.

2.0 POLICY

2.3 This procedure will be performed by a doctor, who will be assisted by a registered nurse.

2.4 Written consent must be obtained from the patient prior to the procedure being performed.

2.7 Strict aseptic technique will be adhered to (this is an invasive procedure into a sterile body cavity).

2.8 Principles of universal blood and body fluid infection control precautions will be adhered to by staff.

2.8 Patient will be monitored post-procedure as instructed by attending doctor (output / drainage, B.P. pulse, respirations etc.).

3.0 EQUIPMENT

Sterile	Clean
Basic dressing pack or	Antiseptic skin preparation
Pre-made sterile liver biopsy set	
Fenestrated drape or 2 sterile drapes	Micropore and Dynaplast
Scalpel blade, size 15	Skin marker
Biopsy needle e.g. true-cut	
Syringe 1 x 10ml	Specimen jars (containing
Needles 19G, 23G and 25G	Formalin) or sterile saline
Sterile Gown	
Local anesthetic ampoules x 2	
Sterile Gloves	
Normal Saline	

4.0 PROCEDURE

4.1 Coagulation profile must be within normal limits

4.1 Explain the procedure to the patient. Ensure privacy.

4.2 Record baseline blood pressure, pulse and respiration.

4.3 Administer premedication, if prescribed.

4.4 Position the patient full left lateral.

4.5 Instruct the patient to practice the breathing technique of maximum inhalation and hold.

4.6 Wash hands and prepare equipment.

4.7 Assist the doctor as required.

4.8 Supervise the patient's breathing technique by ensuring that the patient breathes in and hold a breath while the biopsy is being taken.

4.9 Instruct the patient to lie supine for four (4) hours with the first hour on the right side.

4.10 The patient is to remain in bed for eight (8) hours post procedure.

4.11 Observe puncture site for bleeding in 15min interval for the first one hour.

4.12 Remove and dispose off equipment appropriately.

4.13 Observe vital signs & abdominal girth

4.14 Ensure specimens and request forms are transported to the Laboratory immediately.

5.0 DOCUMENTATION

5.1 Record pulse and blood pressure:

5.1.1 Every 15 minutes for one hour

5.1.2 Every 30 minutes for two hours

5.1.3 Every hour for six hours

5.1.4 Then 4 hourly

5.2 Record procedure and patient response in the patient's Clinical Record.

5.3 Consent form.

5.4 Laboratory request forms.

6.0 COMMENTS

6.1 as liver is a highly vascularized organ, there is high risk of bleeding post procedure which needs to be closely observed, preferably in the ICU

hour for six

ASSISTING FOR REMOVAL OF EPIDURAL CATHETER

1.0 PURPOSE

1.1 To remove epidural catheter aseptically to prevent a portal for infection.

2.0 POLICY

2.4 This procedure will be performed by a doctor, who will be assisted by a registered nurse.

2.9 Strict aseptic technique will be adhered to (this is an invasive procedure into a sterile body cavity).

2.10 Principles of universal blood and body fluid infection control precautions will be adhered to by staff

2.9 Patient will be monitored post-procedure as instructed by attending doctor (output / drainage, B.P. pulse, respirations etc.).

3.0 EQUIPMENT

3.1 Dressing trolley.

3.2 Dressing pack.

3.3 Antiseptic solution.

3.4 Occlusive dressing.

3.5 Sterile scissors.

3.7 Sterile dry specimen pot.

3.8 Sterile gloves

3.9 Culture swabs only if required

4.0 PROCEDURE

4.1 Ensure total privacy of the patient. Explain to the patient the procedure to be carried out.

4.2 Assist patient to lateral position with the spine flexed or sitting position leaning n a pillow or cardiac table.

4.3 Wash hands and prepare equipment.

4.4 The anesthetist removes the adhesive used for securing the catheter& discard it in red bin to be placed on the bedside.

4.5 Provide sterile gloves

4.6 Provide betadine to clean the site

4.7 The anesthetist removes the catheter & throws it in the red bin & applies pressure dressing

4.6 Observe the site for any signs of infection or inflammation

4.7 Once removed, cover with an occlusive dressing straight away.

4.8 Examine catheter visually to ensure it has been removed intact.

4.9 Place patient back in the supine position.

4.10 Observe patient for any signs of dizziness or headache.

5.0 DOCUMENTATION

5.2 Document in the patient's notes that epidural catheter has been removed and Document any reactions to procedure.

ASSISTING WITH PARACENTESIS

1.0 PURPOSE

1.1 To provide guidelines for nursing staff when assisting with a procedure for paracentesis.

1.2 To ensure adherence to hand washing, standard precautions and principles of aseptic technique during the procedure.

1.3 To obtain samples from the peritoneal cavity for diagnostic purposes.

2.0 POLICY

2.5 This procedure will be performed by a doctor, who will be assisted by a registered nurse.

2.5 Written consent must be obtained from the patient prior to the procedure being performed.

2.11 Strict aseptic technique will be adhered to (this is an invasive procedure into a sterile body cavity).

2.12 Principles of universal blood and body fluid infection control precautions will be adhered to by staff

2.10 Patient will be monitored post-procedure as instructed by attending doctor (output / drainage, B.P. pulse, respirations etc.).

3.0 EQUIPMENT

3.1 Sterile (pre-made) paracentesis pack or

3.2 Sterile dressing pack containing: -

3.1 Sterile gloves and gown.

3.4 Local anesthetic (2 % Lignocaine)

3.6 Antiseptic skin prep (Providence Iodine/ Chlorhexidine)

3.7 10 ml syringes x 3

3.8 50 ml syringes x 1

3.9 18G, 21G and 25G needles

3.10 Scalpel blade (No. 11)

3.11 Three-way stopcock

3.12 Sterile drainage bag and connecting tubing and connectors.

3.13 3/0 nylon suture on R.C. needles and / or steristrips

3.14 Gate clamp

3.15 Sterile dry non-adherent dressings.

3.16 Adhesive tape

3.17 Protective pads

4.0 PROCEDURE

4.1 Prepare position and explain procedure to patient. Take written consent. Ensure privacy.
N.B. Position - sitting in Fowler's position or lying in bed.

4.2 Have patient void prior to procedure: to avoid risk of the bladder being punctured.

4.3 Perform baseline set of vital signs.

4.4 Wash hands and give items to doctor as he prepares the sterile field.

4.5 Assist doctor as required, ensure patient maintains position, and observe for hypovolemic shock.

4.6 If I.V. cannula / trocar are to remain in situ, assist with fixing the cannula in place.

4.7 Apply and secure sterile dressing.

4.8 Attach cannula / trocar to closed drainage bag system. Doctor to order rate of drainage i.e. free drainage or controlled.

4.9 If cannula / trocar to be removed

4.10 Remove gloves, wash hands.

4.11 Reposition patient and ensure comfort.

4.12 Take observations - vital signs, drainage, wound for oozing/bleeding, ¼ hourly for first ½ hour then ½ hourly for 2 hours.

4.13 Record amount and characteristics of fluid aspirated.

4.14 Send sterile peritoneal fluid samples directly to Laboratory with completed forms.

4.15 Remove trolley to dirty utility for appropriate disposal of used items and cleaning of trolley. (Sharps must be removed and disposed of in sharps container by the doctor who has used them.)

4.16 monitor patient's vital signs and observe site for any leakage.

5.0 DOCUMENTATION

5.1 Doctors order sheet.

5.2 Patient progress notes.

5.3 Fluid balance and nurses' observation charts.

6.0 COMMENTS

6.1 Not applicable

Protocol No	Topic	Page No
GNP 10	**11. Medication Management Protocols**	
GNP 10.1.46	Administration of Medications	
GNP 10.2.47	Eye Drop Instillation	
GNP 10.3.48	Eye Ointment Application	
GNP 10.4.49	Application Of Transdermal Medication	
GNP 10.5.50	Ear Drop Instillation	
GNP 10.6.51	Intramuscular Injections	
GNP 10.7.52	Intravenous Injections	
GNP 10.8.53	Intradermal injections	
GNP 10.9.54	Insulin Administration – Subcutaneous, IV Bolus, Intravenous Administration	
GNP 10.10.55	Insulin Intravenous Administration	
GNP 10.11.56	Narcotics Administration And Documentation	
GNP 10.12.57	Verbal Orders	
GNP 10.13.58	High Alert Medications	
GNP 10.14.59	Use Of Multi-Dose Vail	
GNP 10.15.60	Medication Error Reporting	
GNP 10.16.61	Crash Cart Maintenance	
GNP 10.17.62	Narcotic Drugs : Checking & Administering	

ADMINISTRATION OF MEDICATIONS

1.0 POLICY

1.1 Medications are administered only for the patient for whom they are prescribed.

1.2 Medications are administered to patients by registered nurse referring directly to the medication chart.

1.3 The complete name, strength and form of the medication and the expiry date if applicable, must always be checked. If details are not legible, return to Pharmacy.

1.4 Medications that must be checked by 2 persons are:

- narcotics

-High risk Medications

1.5 Medication should be left at the patient's bedside locked.

1.6 Do not administer a medication prepared by another person.

1.7 Patients who are fasting for a specified period are to continue to receive all medications unless otherwise instructed by the doctor. Specific orders are to be obtained for hypoglycemic agents.

1.8 Pre-medication must not be given if a patient's consent has not yet been signed.

1.9 If for any reason a medication is not given it must be documented in the appropriate section of the medication chart and the nurse's notes.

1.0 PURPOSE

1.1 To ensure accurate preparation and administration of medication dosages.

1.2 To eliminate or minimize medication errors

2.0 POLICY

2.1 Before administering any drug the nurse will check the 10 "R's" religiously.

3.0 EQUIPMENT

3.1 Drug chart.

3.2 Drugs (Enteral or parenteral).

3.3 Medication cup.

3.4 Glass of water.

3.5 Tissue paper.

5.0 PROCEDURE

4.1 RIGHT MEDICATION

4.1.1 Check the label on its container three times.

5.1.1.1Check the label / strength / dosage when taking medication from the drug cabinet.

5.1.1.2 Read the label again when taking medication out from it leaflet or withdrawing injection from a vial.

5.1.1.3 Check the label / strength / dosage when discarding the vial or the wrapper.

5.1.2 Be familiar with the Generic and Trade names.

5.2 RIGHT DOSE

5.2.1 Check the label on the container for the dose per/ml or dose per tablet.

5.2.2 Check if the dose is consistent with the age of the patient, the diagnose or the gender of patient.

5.2.3 Check if the number of tablets or the number of milliliters in the syringe "look" or "sound" reasonable?

5.2.4 Check for the decimal place in the dosage ordered. A decimal in the wrong place can cause a serious drug error.

5.3 RIGHT TIME

5.3.1 Place any new drug ordered ASAP.

5.3.2 Observe the standard schedules and give on time.

5.3.3 If it is not possible to give exactly at the schedule time, give it at least 30 minutes of the scheduled time.

5.3.4 Antibiotics in particular should be given on time to maintain therapeutic blood levels.

5.3.5 If a patient is scheduled for investigations and the medication is not withheld, give him half hour before time so that you don't miss a dose.

5.4 RIGHT ROUTE

5.4.1 Always check the drug order and make sure that the route is written legibly (IV, IM, ID, SC & PO)

5.4.2 If in doubt, ask the doctor to write again legibly.

5.4.3 Read the label. Usually it is mentioned on the label if the drug is contraindicated in a particular route.

5.5 RIGHT PATIENT

5.5.1 Identify the patient, call by name, check ID band.

5.5.2 Make sure that you have the correct file / drug order sheet.

5.5.3 Ask the patient to spell his name and check the IP number on his ID band.

5.5.4 An unconscious patient cannot identify himself/herself, his safety depends on you. Never give medications if he does not have ID band.

5.5.5 Check with the family member / visitor if they are there on the bedside, but do not always rely on other to identify patients.

5.6 RIGHT EDUCATION

5.6.1 Patient must be educated before administering the drug about the action & side effects of each medication administered.

5.7 RIGHT TO REFUSE

5.7.1 Patient has the right to refuse when educating about the drug.

5.8 RIGHT ASSESSMENT

5.8.1 Patient must be assessed before administration of certain drugs like analgesics, antihypertensive, antipyretics etc.

5.9 RIGHT EVALUATION

5.9.1 Patient must be assessed for side effects of the medication after administration within half an hour of administration

5.10 RIGHT DOCUMENTATION

5.10.1 The documentation of the right drug at the tight time by the person who has administered the drug.

6.0 DOCUMENTATION

5.1 Nurse's Notes, critical care flow sheets & Drug Chart.

6.0 COMMENTS

6.1 Follow 10 'R's" and performing the "three label checks", using universal precautions, practicing good hand hygiene is very important for medication safety.

6.2 Ref to high alert drug list. All high alert drugs must be checked & signed by 2 nurses.

6.3 The nurse must explain the patient.

6.3.1 Action of drug in simple language.

6.3.2 Side effects/adverse reactions.

6.3.3 Monitoring of therapeutic effect wherever applicable

EYE DROP INSTILLATION

1.0 PURPOSE

1.1 To instill eye drops for diagnostic or therapeutic purposes.

2.0 POLICY

2.1 Prescribed by a Doctor.

2.2 Administered by a Registered Nurse using aseptic technique.

3.0 EQUIPMENT

3.1 Sterile Clean Eye/clean pad, if required.

3.2 Prescribed medication

3.3 Gauze swabs

3.4 Tissue paper if required

4.0 PROCEDURE

4.1 Explain procedure to the patient and inform that the eye drops may cause transient discomfort or blurring of vision.

4.2 Ensure privacy. Wash hands.

4.3 Position patient sitting with head backwards or lying supine.

4.4 Check medication prescription.

4.5 Stand in front of patient on the affected side.

4.6 Ask the patient to look upwards.

4.7 Gently pull the lower lid and instill the drops into the conjunctival sac.

4.8 Ask the patient to rotate the eye balls to distribute the drug evenly into the eye.

5.0 DOCUMENTATION

5.1 Yellow medication Chart and nurse's notes.

6.0 COMMENTS

6.1 Not applicable

EYE OINTMENT ADMINISTRATION

1.0 PURPOSE

1.1 To apply ointment to the eye.

2.0 POLICY

2.1 Prescribed by a Doctor.

2.2 Administered by a Registered Nurse using aseptic technique.

3.0 EQUIPMENT

Sterile	Clean
	Prescribed medication
Eye pad	Paper tape
Sodium chloride 0.9%	
Gauze Piece	

4.0 PROCEDURE

4.1 Wash hands. Prepare equipment.

4.3 Position the patient sitting or supine, as appropriate. Tilt patient's head toward the affected eye.

4.4 Remove the soiled dressing and inspect the eye.

4.5 Gently swab the eye with sodium chloride 0.9% wiping from the outer to the inner canthus, using each swab once only.

4.6 Discard the first bead of ointment from the tube without the tip of the tube touching any surface.

4.7 Ask the patient to look upward. Avert the lower lid and gently squeeze a small amount of ointment into the lower fornix in the center of the lid.

4.8 Gently close the eyelid.

4.9 Gently remove the excess ointment form the eyelid, wiping from the inner to the outer canthus.

4.10 Apply an eye pad, if indicated. Secure with paper tape.

4.11 Dispose of equipment. Wash hands.

5.0 DOCUMENTATION

5.1 Record ointment administration on the patient's Medication Chart (yellow) and nurse's notes.

5.2 Record in the patient's Clinical Record.

5.2.1 The appearance of the eye

5.2.2 The presence of orbital swelling or discharge

5.2.3 Specimen or swabs collected.

APPLICATION OF TRANSDERMAL MEDICATION

1.0 PURPOSE

1.1 To apply a medication through an adhesive disc or measured dose of ointment to the skin.

1.2 Transdermal drugs supply constant, controlled medication directly into the bloodstream for prolonged systemic effect.

2.0 POLICY

2.1 Prescribed by a Medical Officer

2.2 Administered by a Registered Nurse.

3.0 EQUIPMENT

3.1 Medication as prescribed.

3.2 Prescription Chart.

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Wash hands. Prepared equipment.

4.3 Check the medication prescription chart

4.4 Check the medication to be used with another senior nurse in case of narcotic for dose and expiry date

4.5 Confirm patient identity by asking name and checking the identification band.

4.6 Ensure that the area to have medication applied to is clean. Observe condition of proposed site.

4.7 Apply medication to a dry hairless area of the body to allow maximum absorption.

4.7.1 Chest

4.7.2 inside arm

4.8 Apply in the morning, remove in the evening (not to be left on for 24 hours)

4.9 Do not use the same area for 5 - 6 days.

4.10 Discard equipment. Wash hands.

4.11 Remove patch after 24hrs

5.0 DOCUMENTATION

5.1 Record medication administration on the patient's Medication Chart immediately after administration at the bed site.

5.2 Report and record in the patient's clinical record:

5.2.1 The patient's response to the medication

5.2.2 Any abnormality noted

5.2.3 Date and time to be documented on medication chart.

6.0 COMMENTS

6.1 Not applicable

INSTALLATION OF EAR DROPS

1.0 PURPOSE

1.1 To instill medication into the external auditory canal in order to:

1.1.1 Relieve pain

1.1.2 Dry secretions

1.1.3 Soften earwax.

1.1.4 Treat inflammation or infection

2.0 POLICY

2.1 Prescribed by a Medical Officer.

2.2 Administered by a Registered Nurse.

2.3 Aseptic technique is required for the administration of eardrops to a patient recovering form recent ear surgery.

3.0 EQUIPMENT

3.1 Medication as prescribed

3.2 Gloves

3.3 Cotton wool ball

3.4 Gauze swabs

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Wash hands. Prepare equipment.

4.3 Position the patient upright with the head tilted towards the contra lateral side

4.4 Ensure patient's head is tilted away from Nurse.

4.5 Check the medication prescription.

4.6 Confirm patient identity by asking name and checking the identification band.

4.7 Using the free hand to draw the pinna of the affected ear upwards and backwards.

4.8 Place the tip of the ear dropper into the floor of the external meatus. DO NOT OCCLUDE THE CANAL.

4.9 Squeeze the cap allowing the prescribed number of drops to run gently down the side of the external canal.

4.10 Gently press the tragus after administration to expel air bubbles.

4.11 Have the patient rest the head, with the affected ear uppermost for 10-15 minutes.

4.12 If the patient is unable to hold the position or if both ears require medication make a loose fitting wick from a cotton swab.

4.13 Smear the wick with petroleum jelly to prevent the wick absorbing the medication.

4.14 Insert the wick to fit loosely in the ear. Remove after ten (10) minutes.

Discard equipment. Wash hands.

4.15 Discard drops after 28days of opening

5.0 DOCUMENTATION

5.1 Record administration on the patient's Medication Chart.

5.2 Record the following details in the patient's Clinical Record if required:

5.2.1 The patient's response to the procedure

5.2.2 Abnormal findings

5.2.3 Specimens or swabs collected.

ADMINISTRATION OF INTRAMUSCULAR INJECTION

1.0 PURPOSE

1.1 To administer medication into deep muscle tissue.

2.0 POLICY

2.1 Mediation ordered by Doctor and administered by Registered Nurse.

2.2 Each patient's parenteral medication must be drawn up individually (i.e. one at a time) and administered immediately.

2.3 Medications are not mixed in a single syringe unless specifically prescribed by a Doctor and checked for compatibility with Pharmacy.

2.4 When medications are to be repeatedly given by subcutaneous (S.C.) or Intramuscular (I.M.) injection, the site must be varied.

3.0 EQUIPMENT

Sterile	***Clean***
Syringe, 5 ml	Prescribed medication
Needles, one for drawing up, one for administration	Patient's medication chart
Alcohol swabs x 2	

COMMENTS

THE SITE FOR AN INTRAMUSCULAR INJECTION MUST BE CHOSEN CAREFULLY, TAKING INTO ACCOUNT THE PATIENT'S GENERAL PHYSICAL STATUS AND THE PURPOSE OF THE INJECTION. NEEDLE LENGTH DEPENDS ON THE CHOSEN INJECTION SITE, THE PATIENT'S SIZE AND THE AMOUNT OF SUBCUTANEOUS FAT COVERING THE TISSUE.

4.0 PROCEDURE

4.1 Verify the medication order. Note the patient's allergies.

4.2 Inspect the prescribed medication for color and clarity.

4.3 Wash hands, assemble equipment and prepare injection. Expel air bubbles.

4.4 Confirm the patient's identity.

4.5 Explain the procedure to the patient. Ensure privacy.

4.6 Select an appropriate injection site.

4.6.1 The upper deltoid muscle

4.6.2 The mid and lateral thigh muscle

4.6.3 Gluteus Maximus (upper outer quadrant)

4.7 Position the patient according to the site chosen.

4.8 Clean the injection site with an alcohol swab. Allow drying.

4.9 With the thumb and index finger of your non-dominant hand, gently stretch the skin of the injection site.

4.10 Insert the needle at an appropriate angle, level 1/3 of the needle exposed, withdraw plunger to aspirate for blood. If no blood is apparent, inject medication and withdraw needle.

4.11 Administration Angles

4.11.1 Intramuscular injections are given at a 90° angle.

4.12 Press alcohol swab over site. Do not rub.

4.13 Dispose of equipment. Wash hands.

4.14 do not discard the needle & throw it into a sharp container

VARIATIONS FOR A Z-TRACK INJECTION

Rationale

This variation of the standard intramuscular injection technique is used to administer I.M. Medications that are highly irritating to subcutaneous and skin tissue (e.g. iron).

a. Follow standard procedure to prepare, assemble and draw up medication.
b. Attach a clean sterile needle of appropriate size to the syringe.
c. Pull the skin and subcutaneous tissue about 2.5 cm to 3.5 cm (1 to 1 1/2 inches) to one side at the injection site.
d. Insert the syringe and inject medication as described in standard procedure.
e. Maintain the traction for ten (10) seconds, then remove the needle and permit the skin to return to its normal position

Rationale

When the skin is returned to its normal position, the needle track is interrupted, and the medication does not seep into the needle track or subcutaneous tissue. a. Do not massage.

5.0 DOCUMENTATION:

5.1 Record medication on medication chart

ADMINISTRATION OF INTRAVENOUS INJECTION

1.0 PURPOSE

1.1 To provide guidelines for the safe administration of intravenous medication.

2.0 POLICY

2.1Intravenous medication is administered via a venous route using a peripheral or central access.

2.2All medications must be prescribed by a Doctor, administered by a Registered Nurse or Doctor.

2.3 All intravenous medications must be checked by two Registered Nurses or one Registered Nurse and Doctor.

2.4 I.V. antibiotics and other medications which are diluted in mini bags may be Administered by a Registered Nurse

2.5 Additives must be checked by 2 nurses and signed for on the additive label which is attached to the pint or burette

2.6 Registered Nurses are to consult appropriate Pharmacology reference books or the Pharmacist if medications are unfamiliar to them.

3.0 EQUIPMENT

A Tray containing :

3.1 Syringe

3.2 Needles x 2, one for drawing up, one for administration.

3.3 Alcohol swab

3.4 Additive label if applicable

3.5 Inpatient Prescription Chart / Medication Chart.

3.6 Prescribed Medication

3.7 Sterile diluents

4.0 PROCEDURE

4.1 Wash hands. Prepare equipment.

4.2 Verify the medication prescription using ten rights (Right patient, Right Drug, Right Dose, Right Route and Right Time Right Assessment, Right Evaluation, Right Documentation, Right Education & Right to Refuse). Also check expiry of medication. Then date and time to be checked, with the second person.

4.3 Prepare the medication according to the manufacturer's directions.

4.4 Take the medication in a tray and the patient's Prescription / Medication Chart to the bedside.

4.5 Explain procedure to the patient.

4.6 Confirm the patient's identity with second registered nurse.

4.7 Ensure access line is patent.

4.8 Observe intravenous site for swelling, redness or phlebitis.

4.9 For a bolus dose, inject the drug in recommended time frame and flush with normal saline 5 - 10 ml. Remove syringe and place stopper " into the cannula port

4.10 Ask the patient to inform you of any different or unpleasant sensation.

4.11Discard equipment appropriately according to biomedical waste management protocols. Wash hands.

5.0 DOCUMENTATION

5.1 Record medication administration by signing the Inpatient Prescription / Medication Chart.

5.2 Complete drug additive label and fix to bag

6.0 COMMENTS

6.4 Not applicable

ADMINISTRATION OF INTRADERMAL INJECTION

1.0 **PURPOSE**

1.1 To administer medical substances into the Intradermal layer

2.0 **POLICY**

2.1 Test and medication is ordered by the physician

2.2 For skin test, the registered nurse reads it in 30min

2.3 For Mantoux test, the laboratory personnel or phlebotomist administers the drug & reads it after 48-72hrs

2.3 The physician will perform multiple site skin testing, (Note: Mantoux test or other single dose/site Intradermal injections can be done by the Registered Nurse) assisted by Registered Nurse.

2.4 Results are to be read and documented within 48 - 72 hours by Registered Nurse or Physician unless otherwise ordered.

3.0 **EQUIPMENT**

3.1 Pre-attached syringe with gradation of 1/100 or 1/40 of a ml. needle size 24 gauge

3.2 Antiseptic swab

3.3 Medication, antigen ampoule or vial

3.4 Medication card or immunization record

3.5 Normal saline solution (if required)

3.6 Marking Pen

4.0 **PROCEDURE**

4.1 Identify patient by checking identification band and asking name

4.2 Explain the procedure to the patient

4.3 Select appropriate injection site; normally the inner aspect of the forearm. Inspect skin surface over site for bruises, inflammation or edema. Note lesions or discoloration of injection site.

4.4 Notify the physician if the patient has had history of allergy reaction

4.5 Assist patient to comfortable position, have patient extend elbow and support it and forearm on flat surface

4.6 Wash hands thoroughly

4.7 Clean the area with alcohol swab to remove skin oil that may interfere with test results and allow the skin to dry

4.8 Hold syringe correctly between thumb and fore finger of dominant hand

4.9 Hold bevel of needle pointing up. With non-dominant hand, stretch skin over site with fore finger or thumb

4.10 With needle almost against patient's skin, insert it slowly at 5 - 15 degree angle until resistance is felt. Then advance needle through epidermis to approximately 3mm below surface. Needle tip can be seen through skin.

4.11 It is unnecessary to aspirate intra-dermal injection

4.12 Inject medication slowly, it is normal to feel resistance, if not, needle is too deep

4.13 Note formation of small bleb of 1cm resembling a mosquito bite on skin surface, withdraw needle.

4.14 Dispose of the syringe and needle in the sharp box.

4.15 Do not massage the site of injection, which may affect the test result

4.16 Draw circle around perimeter of injection site with marking pen and label each site according to the antigen given (for skin testing purposes only)

4.17 Instruct the patient to refrain from washing off the circles until the test is completed (for skin testing purposes only)

4.18 If control is required, inject normal saline solution or test diluents into the other arm, following the same procedure

4.19 Instruct the patient when the results of the test are to be read (48 - 72 hours post injection) if for skin testing purposes only.

4.20 In the Nurses Notes, the nurse will

4.20.1 Record area of injection, amount and type of testing substance, date and time

4.20.2 Record size of in duration

4.20.3 Record any abnormal reaction seen

5.0 DOCUMENTATION

5.1 Medication Chart or Immunization Record

5.2 Patient Progress Notes

6.0 COMMENTS

6.1 Not applicable

SUBCUTENOUS INSULIN ADMINISTRATION

1.0 PURPOSE

1.1 To administer an injection of insulin via the subcutaneous route in order to reduce blood glucose levels to an acceptable range, (e.g. between 3.5 and 8 mmol/liter.) or as ordered by the physician.

2.0 POLICY

2.1 Prescribed by Doctor.

2.2 Administered by Registered Nurse or patient.

3.0 EQUIPMENT

3.1 Tray containing: -

3.1.1 Sterile insulin syringe

3.1.2 Insulin vial as prescribed

3.1.3 Inpatient Prescription Chart / Mediation Chart.

4.0 PROCEDURE

4.1 Refer to the patient's blood glucose level record to ascertain the patient's blood glucose level. If the level is less check with the Doctor to verify if the prescribed insulin dose should be altered and to verify patient's responsiveness to the current prescribed insulin regime.

4.2 Refer to Inpatient Prescription Chart for the date, time, and type of insulin, and dose to be administered.

4.3 Wash hands. Assemble equipment.

4.4 Insulin must be checked prior to administration by two Registered Nurses / a Registered Nurse and Medical Officer.

4.5 When drawing up single insulin the vial is checked for the correct type of insulin, date vial opened, expiry date and dose to be prescribed.

4.6 Gently rotate the vial to mix the insulin. This is especially important with cloudy insulin (long acting).

4.6.1 Wipe the vial cap with an alcohol swab.

4.6.2 Withdraw syringe plunger to draw in air equal to the insulin dose.

4.6.3 Put the needle in the vial of insulin, which is placed on a flat surface. Inject air without allowing the needle to enter the insulin.

4.6.4 Invert the vial, draw out exact dose. Withdraw needle from vial.

4.7 Injection Administration

4.7.1 Explain procedure to patient. Ensure privacy. Check ID band with prescription chart.

4.7.2 Select site for administration from the following: -

4.7.2.1 The abdomen, wherever able to pinch up fat leaving approximately 4 cm diameter around the lower part of the umbilicus.

4.7.2.2 The upper arm, anterior outer quadrant.

4.7.2.3 The thighs, anterior outer quadrant.

4.7.2.4 The buttocks, upper outer quadrant, just below the hipbone.

4.7.3 Pinch the skin and insert needle at a 90º angle. Do not withdraw the syringe plunger. Keep skin pinched until all the insulin is injected.

4.7.4 Inject dose and withdraw needle and put gentle pressure.

4.7.5 Destroy and dispose of single-use syringe safely.

4.7.6 **Note**: When instructing patient to self –inject insulin, use the following guidelines (if appropriate):

4.7.7 Aspiration need not be done before injection.

4.7.8 Disposable syringes can be reused for several injections

5.0 DOCUMENTATION

5.1 Record injection on the Diabetic Chart.

6.0 COMMENTS

6.1 Storage of insulin: -

6.1.2 Insulin vial / cartridges to be kept refrigerated first shelf on the refrigerator door Temperature ideally between 2° - 8° C.

6.1.3 Insulin vial to be endorsed with date and time opened& name of the patient & UID number. To be discarded after 1 month of opening.

6.2 Insulin administration requires the appropriate syringes.

6.3 Most commercial insulin is available as 100 Unit and 40 Unit.

6.4 100 Unit insulin must be used with a 100 Unit marked syringe.

6.4.2 Remember 100 Unit syringes are marked in 2 Unit increments, whereas 50 Unit & 30 Unit are marked in 1 Unit increment

6.4.3 Nova pens with insulin cartridges inserted, not to be kept in a refrigerator.

ADMINISTRATION OF INTRAVENOUS INSULIN INJECTION

1.0 PURPOSE

1.1 An insulin infusion, as prescribed by a Doctor, is indicated in a diabetic patient in the following circumstances:

1.1.1 Metabolic ketoacidosis

1.1.2 Hyperglycemia requiring stabilization

1.1.3 During labor

1.1.4 Prior to procedures

1.1.5 Prior to surgery

2.0 POLICY

2.1 All intravenous insulin boluses to be administered by a Medical Officer.

2.2 Short acting insulin is used in an insulin infusion e.g. Actrapid or Novorapid.

2.4 If an insulin infusion is required.

Prior to procedure this is commenced at least two (2) hours beforehand in order to enable at least three (3) glucose measurements to be taken and to ensure metabolic stability.

2.5 An insulin infusion is administered via an infusion pump.

2.6 The insulin infusion is the primacy infusion. Other fluids e.g. dextrose, are administered via secondary sideline infusion. Check first to ensure compatibility.

2.7 For a sideline infusion of dextrose, an infusion pump is required.

2.8 IV Insulin must be prepared by adding 1ml (40IU) of Insulin to 39 ml NS (1IU/ml)

2.9 A pouch of sugar/chocolate(Simple sugar) must be kept at the patient's bedside before starting the infusion for a conscious patient. 25% dextrose is placed on the bedside for an unconscious patient

IF THE INSULIN IS INFUSED IN TISSUES, RECANNULATION MUST BE ATTEMPTED IMMEDIATELY. INTRAVENOUS INSULIN HAS A VERY SORT HALF-LIFE AND KETOACIDOSIS CAN DEVELOP RAPIDLY

2.8 Criteria for cessation of insulin infusion must include:

2.8.1 An order given by a Medical Officer

2.8.2 The patient tolerating an adequate diet

2.8.3 No ketoneuria for 24 hours

2.8.4 Blood glucose level within the recommended normal range.

3.0 EQUIPMENT

3.1 Insulin.

3.2 Syringe (50 ml)

3.3 Sterile medi-swabs.

3.4 PM Line

3.5 Syringe pump.

4.0 PROCEDURE

4.1 Prepare insulin infusion as prescribed by the Medical Officer, on the prescription chart.

4.2 The insulin infusion must be checked by two registered nurses prior to commencement.

4.3 Identify the patient by name if conscious and check identification band.

4.4 Explain procedure clearly to the patient prior to commencement.

4.5 Prime Mario meter tubing and set up syringe pump.

4.6 Double check infusion rate.

4.7 Monitor blood glucose level hourly or as prescribed.

4.8 Insulin infusion should be titrated to maintain blood glucose levels to within 48 mmol/liter.

NURSING ALERT

INFORM THE MEDICAL OFFICER IMMEDIATELY IF BLOOD GLUCOSE LEVEL FALLS <50mg/dl

4.9 Test all urine for glucose and ketones.

5.0 DOCUMENTATION

5.1 Record on the patient's insulin infusion chart:

5.1.1 Insulin administered

5.1.2 Blood glucose measurements

5.1.3 Urine test results

5.1.4 Intravenous fluids administered

5.2 Maintain a fluid balance chart

NARCOTICS ADMINISTRATION AND DOCUMENTATION

1.0 POLICY

1.1 A register of all drugs of Dependence and Accountability is to be maintained in the wards.

1.2 Drugs of dependence are to be checked, administered and recorded in the prescribed manner. Two registered nurses must check the drug, the remaining balance of the drug, prepare the drug and then sign in full signature the drug register prior to administration.

1.3 Both persons must identify the patient, the drug and witness the administration of the drug. The person administering the drug then signs the Medication Chart.

1.4 All drugs of Dependency and Accountability must be stored in a safe of certain specifications attached to the wall. Items other than these drugs are not stored in this cupboard.

1.5 Keys to this cupboard must be carried by the Registered Nurse who is designated in charge of the ward at the time.

1.6 The key holders are not permitted to leave the ward with key.

1.7 If the Registered Nurse leaves the ward area the keys must be handed to the Registered Nurse remaining who is then in charge of the ward.

1.8 In the event that the drug keys are taken from the hospital every effort must be made to contact the person identified as having the keys for their return as soon as possible.

1.9 A check and count of all Drugs and Dependence by two Registered Nurses (one form the oncoming shift and one form the off going shift) must be performed at the commencement of each shift.

1.10 In the event of loss or breakage of a drug of dependence notify the senior nurse and the Pharmacist at the earliest opportunity.

1.11 One of these persons must personally sight the evidence then complete the appropriate section of the drug register.

1.12 In the event that a portion of a Drug of Dependence remains unused, the unused portion may be discarded personally by the Registered Nurse and a second witnessing person.

1.13 Both persons must document clearly in the Drug Register the amount of drug given as well as the amount of drug discarded.

1.14 This includes narcotic infusions, which have been ceased prior to completion of contents.

1.15 Out of date or unused drugs must be returned to the Pharmacist.

Both persons sign the register.

VERBAL ORDERS FOR ALL MEDICATIONS

1.0 POLICY

1.1 In an emergency, a Registered Nurse may take a telephone order for medication in The presence of a second nurse.

1.2 The nurse repeats the medication order in the presence of a second nurse, verifies the Doctor's name and confirms that the verbal order is the same as the transcribed order.

1.3 The Verbal Order is noted down in the stat order/verbal order column by the nurse taking verbal order.

1.4 The order must be endorsed as "phone order by doctor..." plus the date and time of receipt of the order in the stat medication column in the medication chart. 1.7

1.5 The telephone order is transcribed to progress noted within 48hrs.

16 All medications prescribed for a patient must be written on a medication chart.

HIGH ALERT MEDICATION

1.0 PURPOSE

1.1 To support safe use of medications.

1.2 To reduce medication errors.

2.0 POLICY

1.1 All medications will be treated with extra precautions in order to avoid inadvertent use of these medications in their undiluted forms.

1.2 Before administration of high alert drugs always ensure that the correct patient is getting the correct drug, in the correct dosage, at the correct times, by the correct route.

2.0 EQUIPMENT

2.1 Special high alert labels.

2.2 Drug chart.

3.0 PROCEDURE

(a) Procedure for storage and labeling.

3.1 All high alert medications are identified by specific labels, which will be placed on all storage locations for high alert medications

4.2 The high alert medications will be placed separately from the other stock.

4.3 All high alert medications should be kept under lock and key and always available with the shift in-charge.

4.4 Two nurses will sign in the sign out register when taking out any high alert medication from the cabinet.

4.5 Patient specific dose will be dispensed with a small high alert label which may be formulated as

"**High Alert Medication"**

Double check drug and strength

(b) Procedure for patient specific dispensing.

4.6 IV Hypertonic Saline (NACL 23.4%/30ml) is provided for:.

a. Brain edema unresponsive to other therapies.

b. Treatment of cramping in dialysis patients.

c. Electrolyte replacement in a fluid restricted baby in the NICU (diluted via buritrol/burette set).
d. Cosmetic/Plastic Surgery/Dermatology for vein sclerosizing.

4.7 IV Potassium Chloride (KCL 40mEq/20ml) is provided for:

a. OB GYN for selective reduction therapy.

b. Issued directly to perfusionists for induction of a systole in cardiac surgical procedures.

NOTE: KCL for addittion to dialysate is added to dialysate by the pharmacy.

4.8 IV Potassium Phosphate is not dispensed in concentrated form.

4.9 Insulin drips are dispensed in concentrations of 1 unit/ml to all inpatient areas of the hospital as ordered by the physician.

4.0 DOCUMENTATION

4.1 All high alert medications will be immediately documented in the medication chart.

4.2 Two nurses must sign in the medication chart.

6.0 COMMENTS

Medications that have highest risk of causing injury when involved in an error are known as "High Alert Medications". The top high alert medications identified by the Institute for Safe Medication Practices (ISMP) are:

a. Insulin
b. Opiates & Narcotics.
c. Injectable Potassium Chloride Concentrate.
d. Injection Heparin.
e. Sodium Chloride Solutions above 0.9%.

Here are a few common risk factors and suggested strategies for increasing patient safety with respect to these high-alert medications.

Insulin

Common Risk Factors

a. Lack of dose check systems
b. Insulin and heparin vials kept in close proximity to each other on a nursing unit, leading to mix-ups.
c. Use of "U" as an abbreviation for "units" in orders, which can be confused with "O". resulting in a 10-fold overdose).
d. Incorrect rates being programmed into an infusion pump.

Suggested Strategies

a. Establish a check system whereby one nurse prepares the dose and another nurse reviews it.
b. Do not store insulin and heparin near each other.
c. Spell out the word "units" instead of "U".
d. Build in an independent check system for infusion pump rates and concentrate settings.

Opiates and Narcotics

Common Risk Factors

a. Parenteral narcotics stored in nursing areas as floor stock.
b. Patient-controlled analgesia (PCA) errors regarding concentration and rate.

Suggested Strategies

a. Limit the opiates and narcotics available in floor stock.
b. Implement PCA protocols that include double-checks of the drug, pump setting and dosage.

Injectable Potassium Chloride or Phosphate Concentrate

Common Risk Factors

Storing concentrated potassium chloride/phosphate outside of the pharmacy.

a. Mixing potassium chloride/phosphate extemporaneously.
b. Requests for unusual concentrations.

Suggested Strategies

a. Remove potassium chloride/phosphate from floor stock.
b. Move drug preparation off units and use commercially available premixed IV solutions.
c. Standardize and limit drug concentrations.

Intravenous Anticoagulants (Heparin)

Common Risk Factors

a. Unclear labeling regarding concentration and total volume.
b. Multi-dose containers.
c. Confusion between heparin and insulin due to similar measurement units and proximity.

Suggested Strategies

a. Standardize concentrations and use premixed solutions.
b. Use only single-dose containers.
c. Separate heparin and insulin and remove heparin from the top of medication carts.

Sodium Chloride Solutions above 0.9 percent

Common Risk Factors

a. Storing sodium chloride solutions (above 0.9 percent) on nursing units.
b. Large number of concentrations/formulations available.
c. No double check system in place.

Suggested Strategies

a. Limit access of sodium chloride solutions (above 0.9 percent) and remove from nursing units.
b. Standardize and limit drug concentrations.
c. Double check pumps rate, drug, and concentration and line attachments.

MULTI-DOSE VIAL USAGE (MDV)

1.0 PURPOSE

1.1 To support safe use of medications.

1.2 To prevent patients from unnecessary adverse reactions.

2.0 POLICY

A. General

2.1 MDV will expire according to the manufacturer's expiration date after they are opened, unless the manufacturer recommends discarding the vial after initial entry within a certain time frame (for e.g. epoetin, MDV, discard 21 days after initial entry).

Specific

2.2 MDV containing preservatives and labeled as such by the manufacturer, will not be dated or initialed when they are opened.

2.3 MDV will be discarded when empty or when the manufacturers expiration date has been reached or after one month (30days) from the date of opening, whichever comes first.

2.4 Those vials containing medications that have limited storage capability should be dated and initialed and disposed of in accordance with the manufacturers recommended instructions.

3.0 EQUIPMENT

3.1 Multi dose vials.

3.2 Alcohol swabs.

3.3 Sterile needle and syringe/appropriate device.

3.4 Sharp containers.

4.0 PROCEDURE

4.1 When reconstituting a multi dose vial of drugs, the container must be labeled with the amount and type of diluent, the drug concentration, date and time prepared and initials of the person preparing the drug.

4.2 MDV should always be capped when not in use.

4.3 Wash hands and don gloves.

4.4 Remove the cap and wipe the top of vial with 70% isopropyl alcohol/spirit.

4.5 Allow it to dry for 30 seconds to 1 minute.

4.6 Inspect the vial for any particulate matter each time before the medication is withdrawn.

4.7 Use a sterile device each time a MDV is accessed

4.8 Avoid touch contamination of the device before penetrating the rubber diaphragm.

4.9 Replace the cap.

4.10 Label the vial with the patients name and store it in patient's drawer.

4.11 Discard MDV when empty, when suspended or visible contamination occurs or when the manufacturers stated expiration date is reached.

4.12 Single vials of saline or water, which do not contain preservatives, are discarded after a single use.

4.13 Medications dispensed in droppers (e.g., ophthalmic preparations) are to be dated and discarded after 30 days (unless the expiration date assigned by the pharmacy is shorter).

4.14 Opened, undated multi-dose vials are labeled with date opened.

5.0 DOCUMENTATION

5.1 Drug chart.

6.0 COMMENTS

6.1 The previous policy required MDV to expire within 30 days of opening. This applies to MDV containing a bacteriostatic preservative including heparin flush (preserved) bacteriostatic 0.9% sodium chloride, bacteriostatic sterile water, and lidocaine (1% and 2% with and without epinephrine). These policy changes are consistent with the 1996 CDC document "Guideline for Prevention of Intravascular Device Related Infections".

DRUG ERROR REPORTING

1.0 PURPOSE

1.1 To prevent events that may cause or lead to an inappropriate medication use or harm patient while administering medication.

1.2 To identify & document the cause of error in order to develop systems that minimizes Recurrence of such events in future.

2.0 POLICY

2.1 All preventable, non-preventable, near misses drug errors will be reported through an CQI record or medication error reporting form generated from the area where the incident occurred or could occur (e.g. IPD, Pharmacy).

3.0 EQUIPMENT

3.1 As applicable.

4.0 PROCEDURE

4.1 All relevant information will be documented in the CQI/MERF form, whenever a mediation error is discovered or reported.

4.2 All medication errors with actual or potential harm to the patient will be reported to the Area supervisor & patient's physician immediately after the incident.

4.3 Supervisor will refer the incidents to the Nursing Education department who will Analyze the circumstances leading to medication errors. NE will submit the report to Nursing Superintendent.

4.4 Medication error causing serious injury or death will be referred to the Risk Management Committee (RMC) headed by Medical Superintendent, who will call for an inquiry (members of RMC – MS, NS, Clinical Pharmacology, Legal Advisor, HR head, patient's consultant).

4.5 The Risk Management Committee (RMC) will do a root cause analysis & suggest Methods to prevent future medication errors.

5.0 DOCUMENTATION

5.1 Incident report.

5.2 Medication Error Reporting Form (MERF).

5.3 Root cause analysis form

6.0 COMMENTS

Monthly stock verification of all IPD, OPD, pharmacy & other areas where medications are stocked, will be conducted by the RMC. potential for

6.1 future errors

CRASH CART MAINTENANCE

1.0 PURPOSE

1.1 To have a uniform system of checking crash carts in all patients care areas.

2.0 POLICY

2.1 All crash carts must be conveniently placed in all in-patient units & OPD areas.

2.2 All crash carts will have an inventory of medications, equipments & IV fluids listed by the contents of each drawer of the crash cart. The same will be laminated & hanged at the side of crash cart/ in a file.

2.3 The inventory will be checked weekly by the shift in-charge.

3.0 EQUIPMENT

3.1 Crash Cart.

4.0 PROCEDURE

4.1 The assigned nurse -ward in charge will ensure that the crash cart is conveniently placed.

4.2 The ward in charge will assign a nurse to check inventory and make a physical check of medication, equipment & IV fluids as per the list attached once in 15days.

4.3 The nurse will check whether the inventory and physically check of medication & IV fluids contain the name, strength, amount & expiration date of the drug.

4.4 The nurse will get replaced the medications nearing the expiry date ASAP (within 3 months of expiry).

4.5 The nurse will check & ensure that the crash cart is locked & has an integrity seal.

4.6 The nurse will check the defibrillator & document the same on the strip with signature& date.

4.7 The nurse will verify the written printout of the joules discharged with the digital Read out on the monitor.

4.8 The nurse will check the oxygen cylinder secured to the crash cart is filled & in Working order.

4.9 Once the crash cart is used, the nurse involved in code blue will inform the pharmacy immediately to replenish the crash cart with drugs & other consumables. The nurse incharge will record all the medications used from the crash cart on the resuscitation flow sheet & ensure that the crash cart is locked with in 1hr.

4.10 The pharmacy shall replenish the crash cart & place a breakable seal on the crash cart cover.

4.11 The pharmacy shall maintain a log of when a crash cart is to be reviewed for removal of expired drugs.

4.12 The staff nurse will clean the crash cart. Shift in-charge to counter check for its cleanliness.

4.13 The staff nurse will put the defibrillator on charge at all times.

5.0 DOCUMENTATION

5.1 Resuscitation flow sheet.

5.2 Crash cart inventory list.

2.0 COMMENTS

2.1 All nurses & doctors using crash cart must be BLS & ACLS certified.

2.2 Code blue drills involving the usage of crash carts, will be conducted by the Nursing Education Department every 3-months.

2.2 Code blue committee will review the list of drugs, equipment's & other contents of the crash cart as & when required.

NARCOTICS CHECKING & PROCURING

1.0 PURPOSE

1.1 To standardize how narcotics and controlled drugs are procured.

1.2 To standardize how narcotic and controlled drugs are checked in the nursing departments.

1.3 To ensure that narcotic and controlled drugs are properly recorded and checked by the nursing staff.

1.4 To ensure that all legal requirements are strictly adhered to at MGM HOSPITAL

2.0 POLICY

2.1 Ward stock is decided and approved by medical Superintendent.

2.2 Drugs are kept under the charge of the nurse.

2.3 All narcotic and controlled drugs are to be kept under double lock and key and in a hospital approved cabinet at all times.

2.4 All narcotics and controlled drugs should be written down in the doctors order sheet and the patients individual bill form by the ordering doctor. All narcotic drugs will be indented with doctor incharge signature.

2.5 No narcotic and/or controlled drug can be administered by a nurse without a written order by the treating Doctor. A verbal/telephone order can be accepted **only** under unusual circumstances as per nursing policy, which should be countersigned by the doctors within 12 hrs.

2.6 All narcotic and controlled drugs are to be properly recorded by the nurse in the Narcotic and Controlled Drug Count book located in each department. This will routinely be done when the drug is being drawn up and prior to the drug being administered to the patient.

2.7 No eraseres and/or whiteout can be used on the Narcotic and Controlled Drug Count sheet and the pharmacy sheet. The use of a line drawn through the entry and marked “ERROR” can be utilized when

necessary. Two nurse signatures will also be needed on that line in this particular situation.

2.8 All narcotic and controlled drugs that are administered are properly recorded as soon as possible by the nurse in the medical record and/or

the patient’s medication record and the pharmacy sheet.

2.9 An on-coming and off-going registered nurse must physically count the drugs and the empty ampoules together and sign their names/titles on the Narcotic and Controlled Drug Count form. Two nurses from the same shift cannot count the Narcotics and Controlled Drugs.

2.10 Narcotic / Controlled drugs can be restocked from the pharmacy after returning the empty ampoules, pharmacy sheet by the designated nurse.

Note: No department can go beyond 12 hours without a formal count being done between changes of shifts.

3.0 EQUIPMENT

3.1 Not applicable

4.0 PROCEDURE

4.1 Please refer to Medication administration Policy

5.0 DOCUMENTATION

5.1 Narcotics and Controlled Drug Count form, Narcotics and controlled drug pharmacy Sheet/book.

5.2 Proper departmental medical record form once administered to the patient e.g. medication record.

6.0 COMMENTS

6.1 Any drug discrepancies must be immediately reported to the Departmental I/C Nurse on duty. The Pharmacist on duty/on-call will be notified by the Nurse Incharge.

6.2 No nursing staff member can go off duty until the drug discrepancy has been corrected unless approved by the Nurse I/C.

1.1 A hospital incident report is to be completed if this policy has not been followed and/or a drug discrepancy is found and not able to be rectified.

Table of Contents

Protocol No	Topic	Page No
GNP 11	**11. Emergency Protocols**	
GNP 11.1.66	Code Blue Management	
GNP 11.2.67	Defibrillation	

CODE BLUE MANAGEMENT

1.0 PURPOSE

1.1 To provide a basis for an organized response to a cardio-pulmonary arrest within the hospital.

2.0 POLICY

2.1 To provide a standard response pattern from the Code Blue Team for any cardio-pulmonary arrest situation in the hospital. Optimum effort will be made in attempting to restore the patient's functional integrity by providing the necessary life support measures, as per the American Heart Association Standards of Advanced Cardiac Life Support.

3.0 EQUIPMENT

3.1 code blue kit with all emergency medication and AED.

4.0 PROCEDURE

4.1 In every indicated "CODE BLUE" situation, (unconscious patient with no pulse or respiration), cardio-pulmonary resuscitation (CPR) will be initiated by any trained personnel in the vicinity.

4.2 The nurse on site shall raise code blue the specific hospital number to alert the "CODE BLUE" team. Message must include location, room number, unit & floor. Like, male medical ward, 5th floor

4.3 The nearest crash cart will be brought to the site immediately and positioned on the same side as the IV access. Area nurse will initiate the following as indicated till the code blue team arrives:

4.3.1 Pull bed away from the wall, if required.

4.3.2 Open airway.(Oral suction if required)

4.3.3 Rescue ventilation with airway, AMBU and mask.

4.3.4 Cardiac compression after placing the cardiac board.

4.3.5 IV access 18 or 16 G cannula in a larger vein.

4.3.6 Attach electrodes to defibrillator and start monitoring lead II.

4.3.7 Pull curtains to provide privacy.

4.3.8 Move unnecessary furniture out of the way.

4.3.9 Ensure the nursing station is manned at all times to respond to other patients need.

4.3.10 Shift in-charge should delegate all necessary instructions and ensure that above points are met with.

4.4 The Code Blue team will respond to the alert area in a rapid and organized manner. The members of the Code Blue team are as follows:

4.4.1 Anesthesia/Intensivist/resident from SICU/MICU,ICU nurse.

a) Anesthesia Coverage:

Anesthetist as per hospital standard.

4.4.2 Nursing supervisor will respond to all the codes.

4.4.3 Area consultant will assume medical responsibility for the Code Blue Team.

4.5 Team leader of code blue management will be the - the Code Captain.(this could change as per specific hospital protocol)

4.5.1 Orders medications.

4.5.2 Intubated if necessary.

4.5.3 Continuous assessment of patient.

4.5.4 Calls Code end/ Shifts the patient to ICU

4.6 Responsibilities - ICU Nurse

4.6.1 Defibrillation, ECG monitoring.

4.6.2 CPR

4.6.3 IV access

4.6.4 Draws up medications, label them and administers as per doctor's orders.

4.7 Responsibilities – Area Nurses

4.7.1 Keeps area uncluttered.

4.7.2 Notes all consumables, drugs used etc.

4.7.3 Helps ICU nurse in withdrawing / administering medications.

4.8 Responsibility – Nursing Incharge/ on duty

4.8.1 Notes the arrival time of team members.

4.8.2 Ensures proper documentation of all events and counter signs the reports.

4.8.3 Controls the crowd.

5.0 DOCUMENTATION

5.1 Resuscitation Flow Record/CPR Record will be completed by code blue team leader and the Code Blue Event Analysis form will be filled by the Team Nurse on duty or Supervisor.

5.2 The Code Blue Event Analysis form and a copy of the CPR record to be sent to the code blue committee for analysis.

6.0 COMMENTS

6.1 Crash cart is cleaned and restocked immediately within 30min to an hour after use by the Pharmacy/nurse assigned to crash cart the shift in-charge and ; checked and sealed by the Supervisor

6.2 Shift in charge/ Supervisor to counter check all contents with the checklist to ensure its completeness.

6.3 Ensures the defibrillator is put on charge mode.

6.4 The drawers from will be sealed after replenishment and not opened unless for a code.

6.5 The inventory of the crash cart is maintained in every shift for adequate stock as per checklist, functionality of defibrillator, laryngoscope, avoidance of over stock and cleanliness.

6.6 The checklist and contents of crash cart would be the same in all areas. If any additional items are to be kept it is done so with the permission of the code blue committee chairman and the items are included in the list as addendum.

6.7 Code blue protocol must be in accordance to the respective hospital protocol. This is a generic version.

DEFIBRILLATION

1.0 PURPOSE

1.1 To restore normal heart rhythm in cases of Ventricular Fibrillation or pulse less Ventricular Tachycardia by delivering an electrical shock through the chest wall, which depolarizes the cardiac cells and allows them to repolarize uniformly thus restoring organized contractions.

2.0 POLICY

2.1 Ordered by Medical Officer or Resident Doctor.

2.2 Performed by Medical Officer or Paramedic / Registered Nurse (who is privileged to perform Defibrillation) has completed ACLS and defibrillation Preceptor ship.

3.0 EQUIPMENT

3.1 Defibrillator

3.2 Electrode Gel or gel pad.

3.3 Crash Cart.

4.0 PROCEDURE

4.1 Establish patient is in shockable arrhythmia Ventricular Fibrillation or pulse less Ventricular Tachycardia by monitor (in 2 leads) **AND** absence of carotid pulse.

4.2 **CPR** until defibrillator is available.

4.3 Activate **CODE BLUE**

Ventricular Fibrillation results in immediate cessation of effective cardiac output. This condition is fatal if it persists. Since spontaneous reversion is rare, the definitive treatment is immediate defibrillation.

4.2 Apply electrode gel to cover surface of paddles. Rub paddles together to spread paste over entire surface of paddles, or place gel pads on chest where paddles are to be placed when AED is to be used

Note: Any uncovered area will result in a skin burn.

4.3 Place paddles firmly and evenly on the chest with one to the right of the sternum just below the clavicle and the other left of the left nipple in the anterior axillary line.

20 - 25 Ibs of pressure should be applied per paddle to administer the electrical charge properly. Do not lean on paddles - they may slip.

4.4 Turn defibrillator on and charge at 150 joules.

Make sure synchronize button is turned **OFF**, as the unit will not defibrillate if unable to recognize a clear R. wave on this setting. Charging of defibrillator should be done on the patient's chest to prevent accidental discharge and arcing when releasing paddles and moving them through the air to the patient.

4.5 After positioning the paddles rotate them to lubricate the skin outside the paddle diameter, if not using gel pads.

This helps prevent burns, if the electric current arcs off the sides of the paddles on the patients skin.

4.6 Re-check rhythm on monitor.

4.7 Clear the area and check that no personnel are touching the patient or bed or any metal objects. Say loudly "**STAND CLEAR**".

Electric current could pass through personnel if they are touching the patient or bed or any metal objects. Ensure personnel holding the paddles are not standing on wet floor due to IV fluid etc.

4.8 Press both paddle's discharge buttons simultaneously.

4.9 Remove paddles

4.10 Start CPR for 5 cycles

4.11 Re-check the rhythm and carotid pulse (after 5 cycles of CPR/2 min)

4.12 check the monitor for organized rhythm and check for presence of a pulse(Carotid).

4.10 If ventricular fibrillation/Pulse less ventricular Tachycardia persists immediately defibrillate again at 150 joules or as ordered re-check the rhythm and carotid pulse (after 5 cycles of CPR/2 min. Check the monitor for return of an organized rhythm and check for presence of a pulse (carotid).

5.0 DOCUMENTATION

5.1 Full documentation of events noted on **CODE BLUE** sheet/ CPR record.

6.0 COMMENTS

6.1 This policy / procedure apply to EXTERNAL DEFIBRILLATION ONLY.

Table of Contents

Protocol No	Topic	Page No
GNP 12	**Patient Rights Protocols**	
GNP 12.1.65	Protecting Patient Rights	
GNP 12.2.66	Consents	
GNP 12.3.67	Health Teaching	

PROTECTING PATIENT'S RIGHTS

1.0 Purpose

1.1 To acknowledge patient and family right and responsibilities and the hospitals' responsibility to respond to each patient with personal dignity and respect in a trouble free environment.

1.2 To formulate and adopt a hospital wide policy to ensure the respect for patient's individuality, safety, privacy and dignity; and also to support patients and family's right to know about his/her health and illness.

1.3 To participate in the care process regardless of the sex, race, religion, caste, economic, educational status and the source of payment of the patient, and treat him in the least restrictive setting possible.

2.0 Policy

2.1 The patient is responsible for following hospital policies and procedure applicable to patients. The patient has the rights to involve the family in care, treatment and services with permission from the patient or surrogate decision maker.

3.0 **Patient's Rights**

3.1 To receive quality health care in a safe environment without discrimination because of race, color, religion, nationality, disability, sex or age.

3.2 To be fully informed, before or during admission of services available at this hospital.

3.3 To be fully informed on the expected approximate cost of the treatment 8c financial implication with the charge of the category of services if any.

3.4 At the time of admission.

3.5 To be treated with dignity, respect and courtesy, in a non-judgmental and non-threatening manner.

3.6 To be respected for personal dignity and privacy during examination, procedures and treatment, and to be free from all forms of abuse, neglect and harassment.

3.7 To be fully inform. by a physician, of his/her medical condition in language that can by understood by the patient.

3.8 To ask questions to treating physician and nursing staff about any aspect of his/her medical care and to expect answers that are understandable to him/her.

3.9 To be informed of the risks and side effects of proposed treatment and alternatives to the proposed treatment.

3.10 To refuse diagnostic procedures and treatments after the consequences of refusal have been explained.

3.11 To request other medical opinions front doctors working within the hospital.

3.12 To participate in all aspects of his/her medical care and to have family members participate in care decisions as appropriate.

3.13 To expect that all communications and medical records pertaining to his or her treatment will be handled confidentially except for those required by Law.

3.14 To receive adequate instructions before discharge in all healthcare procedures to be continued after discharge.

3.15 To give inform. Consent before anaesthesia, blood and blood product transfusions and any invasive /high risk procedures/treatment /HIV test.

4.0 **Responsibility**

4.1 To provide correct and complete demographic information including full name, age, address and telephone number

4.2 To provide accurate, correct and complete details of present and past illnesses, hospitalizations, medications, family history where relevant, all records of previous investigations and treatment of and of allergic reactions especial.ly sensitivity to any drug.

4.3 To follow the treatment plan recommended by those responsible for their care.

4.4 To cooperate with the staff of the hospital in receiving prescribed treatment.

4.5 To treat the hospital staff, other patients and visitors with courtesy, respect and dignity,

4.6 To abide by the hospital rules and regulations.

4.7 To maintain hygiene and cleanliness.

4.8 To follow the No Smoking' and No spitting" rules within the hospital premises.

4.9 To avoid bringing valuables to the hospital.

4.10 To inform the hospital about the health insurance or coverage by the employers.

4.11 To not damage or deface hospital's property.

4.12 To keep to the appointment schedule and to inform the hospital 24 hours in advance of any change.

4.13 To avoid speaking or behaving in a manner that disturbs other patient(s).

4.14 To follow hospital visiting hours.

CONSENTS

1.0 PURPOSE

1.1 An informed consent provides a mechanism to protect a patient's right to self-determination regarding surgical intervention. It also serves: -

1.1.1 To protect patient from unwanted procedure.

1.1.2 To protect the surgeon and hospital or facility from claims of unauthorized operation or other invasive procedures.

2.0 POLICY

2.1 All patients who are to undergo any form of operative or invasive procedure as per the hospital policy, whether under no anaesthetic, local anaesthetic, regional block, general anaesthetic or intravenous sedation, must have written informed consent for the operation, signed prior to surgery. This consent must arrive with the patient in the pre- operative area if the procedure is to be done in OT. No elective surgery will be permitted without such consent. It is the responsibility of the respective consultant or his team to counsel and obtain the patient's / guardian's signature.

3.0 EQUIPMENT

3.1 Not applicable.

4.0 PROCEDURE FOR OBTAINING AND CHECKING CONSENT

4.1 All patients should have a consent form signed by the doctor. The surgeon discussed with patient at least the following: -

4.1.1 Nature of proposed procedure, including the necessity for it.

4.1.2 Benefits, risks, potential complications.

4.1.3 The possibility of other procedures being necessary at time of surgery.

4.1.4 Alternative treatment options.

4.2 The procedure need, risk involved & alternatives must be explained to the patient in his / her own language. An interpreter may be used when necessary.

4.5 All day surgery cases requiring Anesthesiology assistance will have a pre-anaesthetic checkup done in day care or ward before wheeling the patient to OT.

4.6 On admission, ward staff will check and / ensure consent that the completed form is in patient's chart.

4.7 Consent must be attached to the front of the patient's notes.

4.8 Consent will again be checked on: -

4.8.1 Admission to O.T. suite.

4.8.2 On receiving patient in O.R. by the anesthetist and circulating nurse.

4.8.3 If the surgeon intends or wants to perform a procedure not specified on the consent form, the O.T. nurse responsible for the case has a responsibility to immediately inform the Operating Theatre Nurse-in-charge for further action.

5.0 DOCUMENTATION

5.1 Consent form(s).

5.2 Progress notes, if necessary.

6.0 COMMENTS

6.1 Responsibility for Consent

6.1.1 The ultimate responsibility for obtaining informed written consent is that of the attending surgeon / physician, who is to perform the procedure. If a nurse was not present during the surgeon - patient counseling session, then he / she should not sign.

6.1.2 A witness signs,that the patient signed without coercion after the surgeon explained the details of the procedure.

6.2 Validity of Consent / Criteria

6.2.1 Document must contain the patient's name in full, surgeon's name, specific procedure to be performed, witness, patients and surgeon's signature and be dated

6.2.2 Patient giving consent must be 18 years or above to be legally eligible for giving consent.

6.2.3 Patient must sign consent before premedication and before going to the O.T. suite, except in life-threatening emergency situations.

6.2.4 An illiterate, may sign with an " X " and thumb print of right hand for female & thumb print of left hand for male after which the witness signs and writes "patient's mark ".

6.2.5 With an unconscious or intoxicated patient, a responsible relative,

6.2.5 With an unconscious or intoxicated patient, a responsible relative, spouse or legal guardian must sign

6.2.6 With a mentally incompetent, the legal guardian responsible must sign. A court of competent jurisdiction may legalize the procedure in the absence of a legal guardian.

6.3 Witnessing a Consent

6.3.1 The patient's or guardian's, and surgeon's signatures must be witnessed by at

least one authorized witness who may be a physician, registered nurse or other established authorized hospital employee.

6.3.2 Witness signing a consent document attests to :

6.3.2.1 Identification of patient or legal substitute.

6.3.2.2 The signing was voluntary.

6.3.2.3 Mental competency of signatory i.e. patient not sedated or confused *" patient of sound mind " *

6.4 Consent in Emergency Situations

6.4.1 In a life-threatening emergency, consent is desired but not essential.

6.4.2 Permission for operation, particularly of a minor, may be accepted by a designated legal guardian or responsible relative by telephone.

6.4.3 If obtained by telephone, consent should be sought by attending surgeon and witnessed by another physician or Registered Nurse. Guardian or relative must sign the consent form on arrival at the hospital.

6.4.4 If by facsimile (fax, images, e-mail, printed material), the original written form must be forwarded to hospital immediately.

6.4.5 In lieu of these methods, a written consultation by two physicians, other than the surgeon who will perform the procedure, will suffice until a relative or legal guardian can sign the consent.

6.4.5.1 Consent should be dated and is valid for 2 months.

6.4.5.2 Should be done at time of booking procedure with X-ray request and blood test / ECG if required.

All results should be available to anesthetist at pre-op check-up.

7.0 PATIENT'S RIGHT TO REFUSE OPERATION

7.1 The patient has the right to decide what will or will not be done on him / her, despite informed medical advice.

7.2 Patient has the right to withdraw written consent before an operation.

7.3 The surgeon must be notified and the patient should not be taken to the O.T, incase consent is not signed. The O.T. Nurse-in-charge must be informed of this development.

7.4 The surgeon must explain to the patient the consequences of refusing surgery and if therapeutically valid, alternative methods of medical management will be offered.

7.5 The operation is postponed until the patient makes a final informed decision.

7.6 A written refusal from the patient must be obtained on the appropriate hospital documentation - to absolve him / her and the hospital from any liability to perform the surgery.

7.7 The surgeon will inform the appropriate hospital administration of patient's withdrawal and/or refusal of surgery.

HEALTH TEACHING

1.0 PURPOSE

1.1 To give comprehensive health teaching to all patients and their significant others.

1.2 To prepare patient and his significant others for discharge from the time of admission.

2.0 POLICY

2.1 All patients and their significant others will receive relevant health teaching on their diseases process, treatments, medications, discharge plans, preventive measures, diet, rehabilitation and any others topics which could contribute to their speedy recovery and maintenance of health.

3.0 EQUIPMENT

3.1 Visuals.

3.2 Patient hand out

4.0 PROCEDURE

4.1 The admitting nurse will initiate the health-teaching plan as per her assessment.

4.2 The admitting nurse states clearly the topics to be covered with their approximate dates.

4.3 The plan is reviewed and updated by the assigned nurse as and when necessary.

4.4 Teachings are given in an orderly and paced manner and evaluated and reinforced regularly.

4.5 Head Nurse/Shift in-charge will pay special attention to health teachings given by their staff and devise tools as per their needs.

4.6 All teachings, evaluation and actions must be documented

5.0 DOCUMENTATION

5.1 Patient & Family Education Form

6.0 COMMENTS

6.1 Health teaching should be given in the presence of the care providers

6.1 Wherever possible group teachings can be organized to save time.

Table of Contents

Protocol No	Topic	Page No
GNP 13	**Infection Control Protocols**	
GNP 13.1.68	Hand Hygiene	
GNP 13.2.69	Aseptic Technique	
GNP 13.3.70	Needle Stick Injury	

HAND HYGIENE

1.0 PURPOSE

1.1 To remove bacteria and other contaminants from the hands in order to prevent and control nosocomial Health care associated infections.

2.0 POLICY

2.1 All staff members in direct contact with patients are to wash their hands as outlined in this procedure and under the following circumstances:

- 2.1.1 before starting work
- 2.1.2 Before performing invasive procedures
- 2.1.3 Before handling or eating food
- 2.1.4 Before taking care of particularly susceptible patients, such as those who are severely immune-compromised
- 2.1.5 before and after touching wounds
- 2.1.5 After situations during which microbial contamination of hands is likely to occur, e.g. contact with mucous membranes, blood or body fluids etc.
- 2.1.7 When hands are visibly soiled or known to be contaminated.
- 2.1.8 Before and after attending each patient or handling linen.

6.0 EQUIPMENT

3.1 Cleansing agent and paper towel.

3.2 Tap with elbow control, if possible.

3.3 Alcohol Based Hand Rub

4.0 PROCEDURE

4.1 Ensure that nails are clean.

4.2 Wet hands and wrists under warm running water.

4.3 Apply cleansing agent according to directions.
Rub hands against each other, interlacing fingers (to cleanse all surfaces), rub back of hands, finger tips and then wrists. Work upwards to elbows systematically. Rub all

4.4 surfaces at least five (5) times each.
Rinse thoroughly. Maintain hands and wrists in an upright position. Turn off taps with

4.5 elbows.

4.6 Dry with disposable towel or forced air blower.

4.7 Place disposable towel in bin without contaminating hands.

4.8 Alcohol based hand rubs may be used in the absence of visible dirt.
3-5ml of 70% alcohol or chlorhexidine based hand rubs may be used following all 6

4.9 steps of hand washing.

5.0 DOCUMENTATION

5.1 Not applicable

6.0 COMMENTS

If taps with elbow controls are not available use paper towel in the hand to turn taps off.

6.1 This will prevent contamination

ASEPTIC TECHNIQUE

1.0 PURPOSE

1.1 To prevent contamination of wounds and other susceptible sites from potential pathogens

1.2 To prevent transfer of pathogens to other patients or staff

2.0 POLICY

2.1 Each staff member involved in the preparation or performing of any invasive procedure or wound care is responsible for providing a safe aseptic environment.

2.2 In critical care units and casualty, there should be adequate preparation and provision for asepsis, irrespective of the urgency with which some invasive procedures may be performed.

2.3 This policy is to be used in conjunction with policies for :

6.1.1 Hand washing and Hand Antisepsis

6.1.2 Skin preparation Solutions

6.1.3 Standard Precaution

7.0 EQUIPMENTS

7.1 According to procedure being performed.

8.0 PROCEDURE

8.1 Trolley top/ surface to be used must be clean and dry. Ensure that all the equipment and items required are prepared and readily available and there is clear field in which to carry out the procedure

8.2 Staff must wear appropriate PPE wherever appropriate

8.3 Wash hands prior to opening sterile pack and opening sterile contents onto sterile area.

8.4 Open sterile pack carefully, by edges of cover, careful to prevent contamination of contents

8.5 Sterile gloves must be worn for these procedures to prevent introducing pathogenic bacteria to the site, direct contact with body fluids and cross infection.

8.6 Ensure only sterile items come into contact wit susceptible site.

8.7 A non-touch technique using forceps or gloved hands should always be used.

8.8 On completion of procedure, ensure contaminated clinical waste is disposed of in appropriate biohazard bag, sharps straight into sharp container at the point

of generation. Remove plastic apron and gloves and dispose off in appropriate bag. Wash hands thoroughly.

9.0 DOCUMENTATION

9.1 Nurse's Notes, critical care flow sheets

10.0 COMMENTS

10.1 The period of time during which microbial contamination of the site or equipment/materials may occur, must be kept to a minimum

10.2 All the instruments, fluids and materials must be sterile for use within the sterile field. Items should be carefully checked to ensure there is no evidence of damage or moisture penetration, which will render pack unsterile.

10.3 Check the sterility expiry date on the external wrappers

10.4 Always face a sterile field or have it within easy vision and access. Do not turn your back to the sterile field

10.5 Opened sterile items should be kept above waist and table level

10.6 As the mask is generally not worn for aseptic procedure out of the Theatre setting, do not speak excessively while working over the sterile field. Cough and sneeze away from the sterile areas

10.7 Keep movements around or between the sterile areas of working to a minimum.

10.8 Never reach across a sterile field and do not allow others to reach across a prepared sterile field

10.9 When a sterile field has been placed, leave it as such, movements and repositioning of such a field may render it unsterile

10.10 When pouring liquids near or onto sterile field, care must be taken to avoid splashing of sterile field, rendering it wet and thus creating an unsterile area.

10.11 The area of up to one inch (1") from the edge of a confined small sterile field should be considered unsterile

10.12 Corrective action must be taken for any breaks in aseptic technique occurs

10.13 Should the person carrying out the aseptic procedure, at any stage need to interrupt the procedure , when returning the field hands must be re-washed or an alcohol hand rub used and fresh sterile gloves donned.

NEEDLE STICK INJURY

1.1 PURPOSE

1.1To provide guidelines for post exposure management so as to identify & manage Occupational health hazard

3.0 POLICY

An occupational exposure that may place a worker at risk of HIV,HBV and HCV infection through a percutaneous injury, contact of mucous membrane or contact of skin with blood, tissue or other body fluids to which standard precautions apply.

1.1 Body fluids to which standard precautions apply

I. Blood
II. Other body fluids containing visible blood
III. Semen
V. Cerebrospinal fluids(CSF)
VI. Synovial fluid
VII. Saliva
VIII. Amniotic fluid

PROCEDURE

2.0 ON EXPOSURE TO NEEDLE STICK INJURY/BLOOD AND BODY FLUIDS

2.1 PROMPT MEASURES BY THE HCW SUSTAINING INJURY

I. Do not panic
II. Do not suck the injured finger
III. Do not squeeze the injured site
IV. Wash wound/site under running water
V. Inform nursing in-charge and nursing supervisor
VI. Report to the ER physician immediately

2.2 MEASURES BY THE NURSE SUPERVISOR

I. Visit the health care worker in Emergency Room and reassure the staff.
II. Initiate an exposure form and help the health care worker to fill it
III. Liaise with the Doctors in Emergency room for the management of the exposure
IV. Generate a mail or inform over phone to the infection control nurse about the incident

V. Hand over the" Exposure incident form" to the infection control nurse within 24 hours of the incident.

2.3 DOCTOR IN EMERGENCY ROOM

I. Complete the exposure form as a part of initial risk assessment

II. Perform baseline blood investigation of the health care worker and the source patient if source is known

III. Write the prescription and ensure that the health care worker gets the necessary treatment.

IV. Explain the treatment and its side effects to the health care worker

a. Treatment after exposure to HIV shall begin as soon as possible; preferably within two hours up to maximum of 72 hours

2.4 INFECTION CONTROL NURSE

I. Follow up the case as per the Post Exposure management algorithm

II. Maintain the records of the source patient and exposed worker

III. Send monthly report to quality department.

IV. RCA to find out the reason for exposure

2.5 AREA INCHARGE

I. Counsel the health care worker./ suggest system changes as appropriate

Table of Contents

Protocol No	Topic	Page No
GNP 14	**Wound Care**	
GNP 14.1.71	Wound Dressing	
GNP 14.2.72	Incision line care	
GNP 14.3.73	Wound and sinus irrigation and probing	
GNP 14.4.74	Drain Measurement and Management	
GNP 14.5.75	Suture, Clip and Staple Removal	

WOUND DRESSING

1.1 PURPOSE

1.1 To dress a wound using a non-touch technique, in order to: -

1.1.1 Prevent infection

1.1.2 Prevent tissue damage

1.1.3 Promote healing.

1.1.4 Promote drainage.

1.1.5 Prevent skin excoriation.

2.1 POLICY

2.1 All dressings are performed using aseptic technique. Standard precautions to be observed.

2.2 All basic dressing set-ups must be completed immediately prior to performance of the procedure.

2.3 If the wound is clean, dry and not inflamed DO NOT SWAB THE SUTURE LINE - leave clean and dry.

2.4 For specific orders, review the patient's wound assessment form and Nursing Care Plan prior to attending a dressing.

3.1 EQUIPMENT

3.1.1 Basic dressing tray.

3.1.2 Dressing equipment as required.

3.1.3 Dressing towel (If required)

3.1.4 Cleaning solution.

3.1.5 Adhesive tape.

3.1.6 Facemask - for extensive dressing only.

3.1.7 Goggles for splash risk.

4.1 PROCEDURE

4.1 It is preferable to set up equipment in a treatment room otherwise at the patient's bedside.

4.2 Clean trolley with all - purpose cleaning spray and dry.

4.3 Explain procedure to patient. Ensure privacy.

4.4 Wash hands.

4.5 Open the basic dressing and position equipment with setting up forceps.

4.6 Open and add additional sterile equipment. Pour solution into appropriate area of dressing tray.

4.7 Removed the soiled dressing with forceps. Discard in biohazard bag. Remove forceps.

4.8 Change sterile gloves.

4.9 Attend dressing, maintaining asepsis.

4.10 Swab the wound, employing the following principles:

4.10.1 When swabbing discharging wounds, swab from the non-discharging area to the discharging area and discard swab.

4.10.2 Swab gently and in one direction only.

4.10.3 Use gauze squares only.

4.11 Apply the dressing and secure adhesive tape.

4.12 Dispose used equipment in accordance with hospital policy.

5.1 DOCUMENTATION

5.1 Wound care should be documented in Nurse's Notes

5.2 In case the wound is a pressure ulcer, note the assessment & care in the pressure ulcer prevention & monitoring record.

6.1 COMMENTS

6.1 Contact Infection Control Nurse if assistance is required.

INCISION LINE CARE

1.1 PURPOSE

To prevent incision line from getting infected

2.0 POLICY

Most clean and dry incisions do not require direct interventions.

3.0 EQUIPMENT

3.0 Sterile gloves.

3.1 Sterile cotton swabs/gauze as needed.

3.2 Saline

3.3 Sterile Dressing Tray

3.4 2% Betadine/povidone if required.

4.0 PROCEDURE

4.1 Explain procedure and provide privacy.

4.2 Wash hands put on clean gloves and remove the dressing.

4.3 Change gloves. Open dressing set.

4.4 Moisten cotton swabs or gauze with appropriate solution.

4.5 Using non-touch technique, swab incision line. Proceed from clean areas to less clean areas.

4.6 Continue until clean.

4.7 2% Betadine/Povidone is recommended.

4.8 Secure with sterile dressing.

4.9 Remove gloves and wash hands.

4.10 Dispose dressings according to infection control policy.

5.0 DOCUMENTATION

5.1 Patient cares I/V Flow Sheet, ICU Flow Sheet, Nurses Notes. Documentation should be done with date and time.

6.0 COMMENTS

6.1 Not available.

WOUND AND SINUS IRRIGATION AND PROBING

1.0 PURPOSE

1.1 To remove drainage and to facilitate granulation.

2.0 POLICY

2.1 Prescribed by the Medical Officer. Performed by a registered nurse.

2.2 Standard precautions to be observed.

IRRIGATION

3.0 EQUIPMENT

3.1 Basic dressing pack. Do not use cotton wool - gauze only.

3.2 Syringes (size depends on volume)

3.3 Kidney tray / bowl

3.4 Fine catheter / plastic I.V. cannula - size 16/18 gauge

3.5 Gauze swabs

3.6 Combine dressing

3.7 Solution as prescribed

3.8 Adhesive tape

3.9 Goggles and apron for splash risk.

3.10 Sterile gloves.

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Position patient comfortably.

4.3 Wash hands.

4.4 Prepare equipment. Warm solution.

4.3 Don sterile gloves.

4.6 Connect catheter to syringe.

4.7 Clean wound.

4.8 Position the catheter over the wound or into the sinus.

4.9 Irrigate until the return is clear, withdraw the catheter.

NURSING ALERT TRAUMA
RESULTS FROM :
TOO VIGOROUS IRRIGATION
INCORRECT SOLUTION

4.10 Dry wound with gauze and applies appropriate dressing.

4.11 Secure with adhesive tape.

5.0 DOCUMENTATION

5.1 Record the state of the wound, depth, existence of fistula and amount of drainage on patient's wound progress chart.

DRAIN MEASUREMENT AND MANAGEMENT

1.0 PURPOSE

1.1 To provide guidelines for the correct management of drains.

2.0 POLICY

2.1 Performed by a Registered Nurse.

2.2 Assessment of suction, content level and drainage character must occur:

2.2.1 Upon return to the Wards / ICU

2.2.2 With each post-operative observation

2.2.3 With each subsequent assessment of drainage level each shift for as long as the drain is in situ.

3.0 EQUIPMENT

3.1 Gloves

3.2 Measuring jug

3.3 Good lighting

3.4 Level surface.

3.5 Flow sheet for documentation. Nurses notes

4.0 PROCEDURE

4.1 Ensure there is a vacuum or suction as required if indicated.

4.2 Check tubing for patency.

4.3 Check the bellows or bulb for drainage and either empty and mark or measure and mark as required. This depends on the drain used.

4.4 For continuous drainage i.e. chest drainage, mark date and level of drainage on container.

4.5 Measure and document the volume in the drainage bag on the Fluid Balance Chart on return to Wards / ICU and then every12 hours at shift change and P.R.N.

4.6 If the bellows or bulb is more than half full, empty or change as required

5.0 DOCUMENTATION

5.1 Document the color, consistency, amount, whether or not the system is intact and functioning, in nurse's notes/flow sheet.

6.0 COMMENTS

10.14 None

SUTURE, CLIP AND STAPLE REMOVAL

1.0 PURPOSE

1.1 To remove suture, clips or staples with minimal tissue trauma.

2.0 POLICY

2.1 Prescribed by a Doctor. Performed by a Registered Nurse using aseptic technique. The technique used for remove sutures, clips and staples will depend on the: -

2.1.1 Type use.

2.1.2 Style of insertion.

2.2 Alternate sutures and clips are removed first. If the wound union is satisfactory the remainder is then removed as prescribed.

3.0 EQUIPMENT

3.1 Metal forceps

3.2 Stitch cutter OR

3.2.1 Auto clip remover

3.2.2 Staple remover

3.2.3 Fine suture removal set; and

3.3 Normal saline irrigation solution

4.0 PROCEDURE

4.1 Explain procedure to patient.

4.2 Prepare equipment. Glove should be worn.

4.2 Position patient comfortably.

4.3 Observe for wound infection, scar formation and wound dehiscence.

4.4 SUTURES:

4.4.1 Grasp the suture knot with forceps and raise away from the skin. Cut between the knot and the skin.

4.4.2 Remove the suture, pulling the unexposed materially only through the wound. This ensures the contaminated suture is not drawn through the suture tract.

4.5 CLIPS:

4.5.1 Ensure that the clip remover is securely fitted into both grooves of the clip.

4.5.2 Press down slightly and using firm steady pressure squeeze clip remover to fully open the clip.

4.5.3 Using a rocking movement gently free the teeth from one side of the incision line then the other and remove.

4.6 STAPLES:

4.6.1 Insert the bottom blade of the remover until the staple fits into the groove.

4.6.2 Gently squeeze blades together then lift the staple out.

4.6.3 Leave wound uncovered unless otherwise prescribed.

4.6.4 Clean with normal saline to remove crusted secretions.

5.0 DOCUMENTATION

5.1 Record state of the wound and patient's response to the procedure in the Clinical Record. Adjust the Nursing Care Plan.

6.0 COMMENTS

6.1 Suture, staple and clip removal should be timed to attain optimal cosmetic and functional results. If left too long there is increased risk of abscess, scar formation and subsequent deformity. Premature removal predisposes patient to wound disruption, delayed healing and scar formation.

6.2 If the wound union is unsatisfactory, notify the medical officer prior to removal of any sutures, clips or staples.

Table of Contents

Protocol No	Topic	Page No
GNP 15	**Other Procedures**	
GNP 15.1.76	Urinary Catheterization	
GNP 15.2.77	Urinary drain Management	
GNP 15.3.78	Naso-gastric Tube Insertion	
GNP 15.4.79	Nasogastric Tube removal	
GNP 15.5.80	Enteral feeding	
GNP 15.6.81	Non Retention Enema	
GNP 15.7.82	Rectal Suppository Insertion	
GNP 15.8.83	Colostomy Care	
GNP 15.9.84	Ear Syringing	
GNP 15.10.85	Airway Management	
GNP 15.11.86	Tracheostomy Dressing	
GNP 15.12.87	Tracheostomy Suction	
GNP 15.13.88	Oxygen Therapy	
GNP 15.14.89	Monitoring of Peripheral Oxygen Saturation	
GNP 15.15.90	Nebulization Therapy	
GNP 15.16.91	Pre-operative care	
GNP 15.17.92	Removal Of Implanted Devices	
GNP 15.18.93	Care of Dead	

URINARY CATHETERIZATION

1.0 PURPOSE

1.1 To establish safe and aseptic guidelines for the introduction of a urinary catheter.

2.0 POLICY

2.1 Performed by a Doctor/Registered Nurse using aseptic technique.

2.2 As far as possible, ensure that urinary catheterization is performed by a registered nurse of the same gender as the patient.

2.3 Male catheterization may be performed by a female registered nurse, competent in the procedure, if both the patient and registered nurse are comfortable with same.

2.4 No more than 600 ml is to be withdrawn from the bladder at any one time unless otherwise indicated by the Doctor as this may induce a syncopal episode.

2.5 If a catheter is to remain indwelling for an extended period, a balloon tipped catheter is to be used.

2.6 For non-dwelling catheterization, a catheter without a balloon is preferred.

2.7 Request a second nurse to assist during the procedure if necessary.

3.0 EQUIPMENT

Sterile	Clean
Catheterization Set	Solution - aqueous povidone-iodine
Dressing towel	
Catheters x 2, appropriate size and type	Torch
Measuring jug/urine pot	Underpad/ Disposible draw sheet
Gloves	Adhesive tape
Sterile water 10ml x 2	
Lignocaine Hydrochloride jelly 2% (single use)	
Specimen bottle if required	
Plastic apron	
Biohazard bag	

For an indwelling catheter, equipment as above, plus

- Drainage bag
- Syringe, 10 20 ml
- Sterile water 10ml x 2

3.1 For male, add

- Sterile introducer, if required (to be used by a Medical Officer only).

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Perform hand washing. Prepare equipment.

4.3 Position patient:

4.3.1 Female

4.3.1.1 Recumbent with knees drawn up, soles of feet together

4.3.2 Male

4.3.2.1 Supine with legs extended

4.4 Place an under pad beneath the buttocks. Drape the patient appropriately.

4.5 Perform hand washing. Don apron and sterile gloves on.

4.6 Open the catheter and place in the sterile set. Remove the protective cover from the TIP of the catheter. Lubricate the catheter using Lignocaine Hydrochloride jelly 2%, leaving the cover in place. Place the catheter in the dish.

4.7 Female

4.7.1 Using a clean swab each time, cleanse the labia majora using downward strokes.

4.7.2 Separate the labia with the free hand, using 2 wool swabs. Maintain the separation until the catheterization is complete.

4.7.3 Cleanse the labia minora. Cleanse the urinary meatus.

4.7.5 Place the dish containing the catheter between the patient's thighs.

4.7.6 Identify the urethra. Insert the catheter tip 4-5 cm (1½ - 2 inches) into the orifice using, holding the sterile catheter sleeve.

4.7.7 Remove the sterile catheter sleeve and drain urine into the dish.

4.8 Male

4.8.1 Drape the genital area around the penis.

4.8.2 Clean the shaft of the penis.

4.8.3 Hold the penis with the non-dominant hand. Retract the foreskin if present. Clean the glans penis.

4.8.4 Insert local anesthetic gel, if used, into the urinary meatus. Lubricate the catheter using Lignocaine Hydrochloride jelly 2%.

4.8.5 Wait three (3) minutes before continuing the procedure.

4.8.6 Position the dish containing the catheter between the patient's thighs.

4.8.7 Holding the penis perpendicular to the body, insert the catheter into the urethra. Advance for 15-20 cm (6-7 inches) or until urine flows.

NURSING ALERT

IF RESISTANCE IS FELT AT THE EXTERNAL SPHINCTER, SLIGHTLY INCREASE THE TRACTION ON THE PENIS AND APPLY STEADY, GENTLE PRESSURE ON THE CATHETER. ASK THE PATIENT TO ATTEMPT TO VOID IN ORDER TO RELAX THE SPHINCTER. IF FURTHER RESISTANCE IS FELT, STOP THE PROCEDURE AND CALL THE DOCTOR.

4.8.8 When the urine begins to flow, advance the catheter a further 2.5 cm (1 inch).

4.9 For both females and males

4.9.1 Collect the urine specimen, if required.

4.9.2 If the catheter is to be removed, apply gentle supra pubic pressure prior to removal then withdraw slowly and gently.

4.9.3 If the catheter is to be indwelling, inflate the balloon with the required amount of sterile water, 7ml to 10ml; remove the drape sheet and attach catheter to the drainage bag. Drain up to 600ml then clamp for one (1) hour.

4.9.4 Dry the genitalia. For males, reposition foreskin if required. *Note: Do not leave the foreskin retraced as this will cause severe swelling.*

4.9.5 Secure the catheter with tape to the patient's thigh. Allow sufficient space for movement. Ensure there are no kinks in the catheter. Ensure urine is able to drain down without backflow that can cause U.T.I.

4.9.6 Leave patient comfortable with call bell handy.

4.9.7 Discard equipment. Wash hands.

8.0 DOCUMENTATION

5.1 Record the procedure in the patient's progress notes/nursing care plan. Note the size and type of the catheter and the amount of fluid in the balloon, if indwelling. Indicate the patient's response to the procedure.

5.2 Record output on the patient's Intake Output Chart.

5.3 Indicate when the indwelling catheter, is due for replacement on the nursing care plan.

5.4 Paramedics can perform urinary catheterization if trained and experienced in this procedure. Privileging is required for the same.

URINARY DRAIN MANAGEMENT

1.0 PURPOSE

1.1 To change a urinary drainage bag in order to prevent infection.

2.0 POLICY

2.1 Open urinary drainage bag. *Note: Those with an exit valve or burette are changed using aseptic technique once a week or PRN if sediment or blood occurs in the urine.*

2.2 Closed urinary drainage bags are changed as required.

2.3 Do not allow urinary drainage bags to come into contact with the floor.

3.0 EQUIPMENT

3.1 Drainage bag.

3.2 Adhesive tape or catheter tab tape.

3.3 Clean gloves

3.4 Bed protecting sheet

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Wash hands. Perform hand washing Prepare equipment.

4.3 Don on gloves.

4.4 Ensure the outlet on the new bag is closed.

4.5 Remove the cap from the new tubing. Change catheter tubing using non-touch aseptic technique.

4.6 Ensure that catheter is taped secured appropriately to patient's body.

4.7 Anchor the drainage bag to the side of the bed.

4.8 Leave patient comfortable with call bell within reach.

4.9 Dispose of equipment. Wash hands. Perform hand washing

5.0 DOCUMENTATION

5.1 Record the date on the new bag and on the patient's Nursing Care Plan.

5.2 Record the amount and character of drainage on the patient's Intake Output Chart.

6.0 COMMENTS

6.1 Not applicable.

NASO-GASTRIC TUBE INSERTION

1.0 PURPOSE

1.1 To facilitate stomach decompression, gastric lavage, medication/nutrient administration, aspiration of gastric secretions for analysis and /or other diagnostic / therapeutic applications.

2.0 POLICY

2.1 A written physician's order which includes type and size of a naso - gastric tube.

2.2 Naso - gastric tube may be inserted by a registered nurse in non-intubated patients.

3.0 EQUIPMENT

3.1 Naso - gastric tube of appropriate size.

3.2 Water soluble lubricant.

3.3 10 ml and 50 ml syringe.

3.4 Glass of Water.

3.5 Stethoscope.

3.6 Kidney tray.

3.7 Hypo allergenic tape.

3.8 Sterile spigot.

3.9 Protective paper towel.

3.10 Tissues.

3.11 Disposable aprons.

3.12 Sterile gloves

4.0 PROCEDURE

4.1 Explain the procedure to the patient and obtain his consent.

4.2 Place the required equipment within easy reach.

4.3 If the patient's condition allows, help into a semi upright position, and support the head and back with pillows.

4.4 Wash and dry hands thoroughly and put on clean gloves.

4.5 Open the Nastro-gastric tube.

4.6 Approximate the required length of tube to be inserted by measuring the distance on the tube(proximal eye/opening of the tube, if there are multiple eyes/openings) from the patients ear lobe to the tip of the nose plus the distance from the tip of the nose to the bottom of the xiphisternum

4.7 Make a mental note of the distance.

4.8 Give the patient an opportunity to blow his/her nose with tissues.

Insert the lubricated tip end of the tube into the nostril gently pass the tube, taking into account the anatomy of the naso-pharynx, until the measured length of the tube has been passed. If any resistance to the passing of the tube is felt, withdraw it slightly redirect the tube and proceed. If resistance continues withdraw completely.

4.9 Recommence after giving the patient time to compose him/her. If the patient's condition allows he/she may swallow or sip water to help during the procedure.

4.10 The position of the tube in the stomach must be checked:-

Either, wearing gloves, gently aspirates a small volume of stomach contents and test for acidity status using Litmus paper.

OR

Place stethoscope over stomach, epigastrium and listen carefully as 5mls of air is instilled via the tube.

(A whooshing sound confirms the position.)

4.11 Spigot the end of the tube and secure tube to patient's nose using tape.

4.12 Perform hand washing.

5.0 DOCUMENTATION

5.1 Record type and size of tube inserted, amount of drainage aspirated in nurses record/notes.

6.0 COMMENTS

6.1 Do not inject administer any fluid through the nasogastric tube until confirmation of tube placement has been made.

6.2 Do not place any water in patient's mouth if patient is unconscious.

NASOGASTRIC TUBE REMOVAL

1.0 PURPOSE

1.1 To remove a nasogastric tube with minimal trauma.

2.0 POLICY

2.1 Ordered by Doctor, performed by a Registered Nurse.

3.0 EQUIPMENT

3.1 Disposable gloves

3.2 Gauze swabs or paper towel

3.3 Disposable Emesis bowl or basin

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Perform handwashing and apply don gloves

4.4 Remove adhesive tape from the patient's nose and cheek.

4.5 Instruct the patient to take and hold a deep breath.

4.6 Pinch tube and withdraw with a steady motion to prevent drainage from the tube in the oropharynx and potential aspiration.

4.6 Hold a gauze swab or paper towel around the tube just below the nostril. Withdraw the tube gently and steadily into the dish.

4.7 Attend nasal and oral hygiene, if required.

4.8 Discard equipment. Wash hands Perform handwashing.

5.0 DOCUMENTATION

5.1 Record removal of tube, state of nostril and patient's response to procedure in the patient's Daily Nurses Flow Sheet

5.2 Record time of removal and aspirate on the patient's Intake Output Chart

6.0 COMMENTS

6.1 Not applicable.

ENTERAL FEEDING

1.0 PURPOSE

1.1 To provide guidelines for the administration of enteral feeding.

2.0 POLICY

2.1 Prescribed by a Treating Doctor in consultation with a Dietician and administered by a Registered Nurse.

2.2 All enteral feeding is to be administered via the enteral feeding pump using gravity bag if continuous. This is not required if bolus feeding is prescribed.

2.3 Naso-gastric tube placement must be checked prior to commencement of any fluid.

2.4 Check naso-gastric position by aspiration - Litmus paper, stethoscope and / or x-ray.

2.5 Feeds must be administered at the prescribed flow rate.

2.6 If the patient is unable to tolerate a feed or develops complications please notify the Dietician or the Medical Officer immediately.

2.7 Adhere to aseptic principles (for hand washing, feed preparation, dispensing and connection) when dealing with enteral feeds ensures that the feeds are checked for expiry dates.

3.0 EQUIPMENT

3.1 Feeding formula as prescribed.

3.2 Syringe 50 ml or 20 ml for aspiration of small soft fine bore tube.

3.4 Enteral feeding administration set and bag (sterile).

3.5 Spigot.

3.6 Litmus paper.

3.7 Adhesive Tape.

3.8 Enteral feeding pumps if required.

3.9 Jug with pouring lip.

3.10 Stethoscope.

4.0 PROCEDURE

4.1 Explain procedure to patient.

4.2 Perform hand hygiene & assemble equipment.

If using pre-package feed: -

4.2.1 Shake can, open and dispense feed.

4.2.2 Dispense any remaining feed from can into plastic, disinfected container with sealable lid. Label with time, date and contents.

4.2.3 Label the enteral feeding bag with the patient's name, formula description, date and time.

4.3 When using enteral administration set and bag: -

4.3.1 At no time should any part of the feeding system that comes into contact with the feed be allowed to touch the hands, skin or clothes of either the person assembling equipment or the patient.

4.3.2 Ensure the enteral administration feeding tube is attached to the naso-gastric feeding tube.

4.3.3 Check the temperature of the feed by placing a drop over the dorsum of your forearm

4.3.4 Immediately after the formula has run through, flush the tube with 50 ml, 30 ml of water and clamp (or as directed by the Dietician / Medical Officer).

4.3.5 Ensure that the naso-gastric tube is secured adequately in place.

4.4 Position 30° head up during feeding and ½ hour afterwards.

4.5 Suggested regimen:

4.5.1 Use full strength. Most patients can tolerate the standard strength provided it is delivered initially at a slow rate.

4.5.2 Continuous gravity or pump assisted feeding.

Feeding period - 16 to 20 hours per day.

4.5.2.1 Commence feeding at 30 - 50-mls/ hour.

4.5.2.2 If tolerated, then increase on the following day by 10 ml/hour every 4 hours until the required rate and /or volume is achieved (generally 1500 - 2000 ml/day).

Most patients tolerate feeding rates at 125 ml/hour given for 16 hours with a total volume of 2000 ml (2000 kcal) with no problem.

4.5.3 Intermittent (Bolus) Feeding

Feeding period – 2/3 hourly, generally 6 feeds per day or as otherwise prescribed.

4.5.3.1 Commence feeding with 150/200 ml.

4.5.3.2 If tolerated, then increase the amount administered by 50 ml every feed until the required volume is achieved.

If patient experiences diarrhea or any other adverse reactions, then reduce feed rate to last rate tolerated and contact Dietician / Medical Officer. Generally, diluting the feed is unnecessary not recommended.

4.6 Aspiration of Stomach Contents: -

4.6.1 Aspirate the naso-gastric tube at least 8 hourly and PRN if required at the change of feed. If aspirate is greater than 250 ml. Discard aspirate and cease feeds. Review 4 hours later. If aspirate less than ½ the total of the feed given, return aspirate and continue feeding.

4.7 Hygiene

4.7.1 Dispense and/or prepare the feed carefully and accurately. Wash your hands first with antiseptic solution. Ensure all equipment is clean and has been disinfected.

4.7.2 Reconstituted feed or opened liquid feed may be stored (in a sealable plastic container) in refrigerator for up to 24 hours only. Discard if not used within this time. Label the container appropriately.

4.7.3 Please change and replace the set and reservoir with a new one every 24 hours. If a new set is not available due to supplies, please send to CSSD for cleaning and sterilizing.

4.7.4 Between feeds in the 24-hour period, flush the giving set and rinse the reservoir with sterile water between feeds.

4.8 Enteral feed

4.8.1 Feeds are supplied from the Pharmacy Department. These will ideally be canned, sterile, prepared using powder only as emergency alternative. Only administer prescribed enteral feed, water and medication via the feeding tube.

4.8.2 Do not give cold enteral feed. Allow refrigerated feed to gradually reach room temperature before administration

4.8.4 Do not heat feed.

4.8.5 The Dietician will monitor the enteral feed regularly and adapt the regimen as appropriate. Please consult the Dietician before making any changes to the feed regimen.

4.8.6 No additives, diluents or additional fluids are to be mixed with feeds unless prescribed by the Dietician or Treating Doctor.

4.9 Fluid

4.9.1 Flush the feed tube with at least 30 mls sterile/boiled and cooled water: -

4.9.1.1 After each feed.

4.9.1.2 Before and after giving medication.

4.9.1.3 Before and after giving yoghurt

4.10 Pump Maintenance

4.10.1 Only fill the drip chamber to half full.

4.10.2 Unplug the pump before cleaning to prevent electric shock. Clean the outside surface with a damp cloth or sponge. Wipe off any excess feed that may have spilt onto the pump.

5.0 DOCUMENTATION

5.1 Document the type and size of naso-gastric or gastrostomy feeding tube inserted. The due date to change the set should be documented in the patient's progress notes and nursing care plan.

5.2 The amount and type of feed should be prescribed on the patient's progress notes/Nutrition Progress Note by the Dietician / Medical Officer.

5.3 The amount and type of aspirate should be documented on the Intake output chart.

6.0 COMMENTS

6.1 The Dietician should work closely with the nursing staff and Doctor regarding nutritional requirements.

6.2 There are numerous portals of entry and possible areas for introduction of bacteria during the preparation, assembling, administration and storage of enteral feeds, which themselves provide the ideal nutrient and warm environment for bacteria to thrive. It is therefore imperative that all precautions are taken when dealing with these feeds, to prevent infections.

APPENDIX 1

Guidelines for Powdered Enteral Feeds

Reconstituting powdered formula increases risks of contamination and likely infection.

1. All equipment (e.g. mixing bowl / blender jug, spoons, funnels, measuring jugs, etc.) used for mixing powdered formula should have been heat disinfected or sterilized before use.
2. All feeds shall be reconstituted in a designated area using aseptic technique.
3. Staff shall perform hand hygiene.
4. Staff who have Upper/lower respiratory tract infection, septic sores etc. on hands should not prepare such feeds.
5. Sterile gloves shall be worn as an additional precaution when preparing feeds.
6. At no time should any part of the feed preparation or feeding systems come into contact with the feed be allowed to touch hands, skin or clothes of either the person assembling the system or the patient.
7. Feeding systems should be assembled on a clean, dry disinfected surface, not on the patient's bed.
8. Thorough cleaning of all equipment must take place before sterilizing / disinfecting.
9. ALL equipment that is used for feed preparation must be disinfected or sterilized where possible or at the very least chemically disinfected after use before next feed preparation (e.g. blender jugs, funnels, plastic jugs, spoons, etc.)
10. Bottle / can openers and scissors should be dedicated for enteral feed preparation and should also be disinfected between use.
11. Work surfaces must be cleaned and disinfected before feed preparation takes place.
13. Non-sterile, reconstituted feeds should not exceed beyond 4 hours.
14. Tins of powdered feeds must be labeled with the dates when the tins are opened.
16. A designated area in a clinically clean room must be used for this purpose. This must also be an area in which there are no patient procedures undertaken and in which there is no likelihood of splashing, spraying of blood and body fluids, e.g. nurseries, patient treatment rooms.

NON RETENTION ENEMA ADMINISTRATION

1.0 PURPOSE

1.1 To relieve constipation, flatulence, or when in labor.

1.2 To empty the lower bowel prior to

1.2.1 Surgical Procedures

1.2.2 Endoscopic Examination.

1.2.3 X – Ray examination. Radiological procedures

1.3 To aid in the expulsion of parasites.

2.0 POLICY

2.1 As prescribed.

3.0 EQUIPMENT

3.1 Bed Protection. Draw sheet

3.2 Tissue Paper.

3.3 Cotton (Wet and Dry)

3.4 Lubricating jelly.

3.5 Disposable enema pack.

3.6 Disposable gloves.

3.7 Immediate access to toilet facilities.

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Perform hand washing, and wear gloves.

4.3 Promote comfort by allowing the patient to prepare himself for the procedure (e.g. Empty bladder.)

4.4 Assist the patient to lie in left lateral position with the right knee flexed.

4.5 Ask the patient for history of hemorrhoids, bleeding or irritation and inspect the anal area for the presence of the same.

4.6 Inspect the anal area for the presence of hemorrhoids, bleeding or irritation.

4.7 Apply lubricating jelly to nozzle of enema or rectal tube.

4.8 Gently introduce the nozzle through the anal canal, approximately 7 - 10 cm (3-4 inches) into the rectum.

4.9 Slowly squeeze the contents of the enema pack into the rectum until all the fluid is expelled from the enema pack. Squeeze from apex of pack upwards.

4.10 Encourage the patient to attempt to hold the enema as long as possible or approximately 5 minutes.

4.11 If the patient complains of discomfort cease the flow of fluid for a few minutes then recommence.

4.12 Slowly withdraw the tube or nozzle.

4.13 Help the patient to dry perianal area and offer to remain with the patient if their condition demands require it or at their request.

4.14 Facilitate their use of toilet utilities.

4.15 Clean the perianal area with wet cotton first and then with dry cotton/tissue

4.16 Clean and dispose of used equipment in accordance with health and safety policies.

4.17 Wash and dry hands.

4.18 Observe the results of enema and record in the care plan / nurse's notes/Daily Nurses Flow Sheet.

4.19 Offer the patient hand washing facilities.

5.0 DOCUMENTATION

5.1 Document procedure and findings in the patient's notes.

5.2 Record on medication chart.

6.0 COMMENTS

6.1 Not applicable.

RECTAL SUPPOSITORY INSERTION

1.0 PURPOSE

1.1 To assist the evacuation of feaces from the rectum.

1.2 To administer medication for absorption across the rectal wall.

2.0 POLICY

2.2 As prescribed.

3.0 EQUIPMENT

3.1 Suppository as prescribed.

3.2 Lubricant

3.3 Disposable gloves

4.0 PROCEDURE

4.1 Identify the patient

4.2 Explain procedure to patient. Ensure privacy.

4.2 Perform hand washing and wear gloves.

4.3 Inspect the anal area for the presence of hemorrhoids, bleeding or irritation.

4.4 Gently insert the suppository along the wall of the rectum and encourage the patient to retain the suppository for at least 20 minutes.

4.5 If the suppository is administered for systemic medicinal effect instruct the patient of the need to retain, not expel, the suppository.

4.6 Discard equipment. Perform handwashing.

5.0 DOCUMENTATION

5.1 Record administration on the patient's medication chart.

5.2 If the suppository was administered for systemic medicinal effect, record patient's response in the patient's clinical record.

6.0 COMMENTS

3.1 Not applicable

COLOSTOMY CARE

1.0 PURPOSE

1.1 To assess condition of stoma.

1.2 To avoid risk for impaired skin integrity related to irritation from fecal drainage.

1.3 To start teaching / assisting patient with self-ostomy care.

2.0 POLICY

2.1 The nurse will ensure the correct pouching system on the basis of stoma, type, size, location and body contour. Ostomy appliance must adhere well and maintain well-protected peri-stomal skin.

3.0 EQUIPMENT

3.1 Prescribed ostomy appliance.

3.2 Paste / powder.

3.3 Cleansing material (tissues / sponges).

3.4 Clean gloves.

4.0 PROCEDURE

4.1 Identify the patient, explain procedure to patient and perform hand washing.

4.2 Provide privacy.

4.3 Gently remove pouch / bag attached to the body.

4.4 Inspect skin stoma and re measure stoma size as needed.

4.5 Remove all loose material from stoma and peri-stomal skin using dry tissues or dry gauge.

4.6 Gently clean and dry peri-stomal skin.

4.7 Apply powder or paste as indicated.

4.8 Place hand on skin above stoma and pull upwards to smooth skin out even out wrinkles and apply clean pouch with the other hand assuring adhesion surroundings stoma.

4.9 Apply cramp or drainage system.

4.10 Empty measure the pouch as needed and before ambulating patient.

4.11 Change bag every four days or more frequently if needed.

5.0 DOCUMENTATION

5.1 Record ostomy care on nurses' notes / flow sheet.

6.0 COMMENTS

6.1 Start teaching or assisting patient with self-ostomy care. Include family members if necessary.

EAR SYRINGING

1.0 PURPOSE

1.1 To remove wax or foreign bodies from the external auditory canal.

2.0 POLICY

2.1 Performed by Doctor or Registered Nurse trained in this procedure.

2.2 Irrigations contraindicated if tympanic membrane is not intact.

3.0 EQUIPMENT

3.1 Otoscope

3.2 Ear syringe and nozzle

3.3 Large kidney dish

3.4 Waterproof drape / towels

3.5 Gauze swabs

3.6 Luke warm tap water

4.0 PROCEDURE

4.1 Identify the patient.

4.2 Explain procedure to patient. Patient should be placed on stretcher to prevent injury if dizziness occurs.

4.2 Perform hand washing and assemble equipment.

4.3 Using the Otoscope examine the ear canal to be syringed.

4.4 Assist patient to sitting position with head tilted towards the affected ear.

4.5 Protect clothing with waterproof drape or towels.

4.6 Fill irrigating syringe with water, dispel air.

4.7 Direct the patient to hold the kidney dish directly under the ear against the neck.

4.8 Gently grasp the auricle and pull upward and outward.

4.9 Place the tip of the syringe at the meatus of the ear canal. Aim tip of the syringe towards the top or the side of the ear canal and gently inject the water. Assess for foreign body or wax as the fluid drains out into the kidney bowl.

4.10 Examine the canal with the Otoscope and repeat syringing.

4.11 No more than 3 attempts should be made at syringing without further reporting to the Medical Officer.

4.12 Dry outer ear canal and neck with gauze and towel.

4.13 Dispose of supplies appropriately and perform hand washing.

4.14 Allow patient to sit for a few minutes to ensure no complications arise and give thorough explanation of home care.

6.0 DOCUMENTATION

5.1 Record procedure and result in nurse's notes.

5.2 Report any pain or dizziness.

6.0 COMMENTS

6.1 Vertigo or nausea during / after procedure.

6.2 Injury to external canal or tympanic membrane.

AIRWAY MANAGEMENT

1.0 PURPOSE

1.1 To maintain a patient's airway by: -

1.1.1 Removing excess airway secretions.

1.1.2 Positioning the patient to maintain unobstructed breathing.

2.0 POLICY

2.1 Interventions include:

2.1.1 Positioning - Whenever possible position patient in lateral or prone supine position with head extended.

2.1.2 If the patient has a suspected neck injury, the head and neck should remain in a neutral position - do not hyperextend the neck. Open airway by using jaw thrust maneuver.

2.1.3 Suctioning - via nasal or oral.

Gloves to be worn during any intervention.

3.0 EQUIPMENT

3.1 Gloves.

3.2 Suction catheter

3.3 airway

3.4 Connection tube

4.0 PROCEDURE

4.1 Oropharyngeal airway- should only be used in unconscious patient. It may stimulate vomiting and laryngospasm in conscious or unconscious patient

4.1.1 Clear mouth and pharynx of secretions using a suction catheter.

4.1.2 Invert Oropharyngeal airway upwards as it enters the mouth.

4.1.3 As the airway passes the oral cavity and approaches the posterior wall of the pharynx the operator rotate the airway at 180º.

4.1.4 The airway is in position when clear breath sounds are heard on auscultation of the lung.

4.1.5 For infants and young children oral airway should be inserted by depressing tongue with tongue depressor. Insert airway right side up into the oropharynx.

4.3 Oro-Nasopharyngeal Suction - suctioning should not exceed 10 seconds.

4.3.1 The frequency of suctioning depends on the patient's condition. The common practice is to assess the airway second hourly and PRN per indication if suction is required.

4.3.2 Ask patient, if able, to open mouth.

4.3.3 Select catheter

4.3.4 Lubricate catheter with sterile water/normal saline and introduce gently.

4.3.5The catheter can be introduced through the airway lumen or passed alongside the airway. In the case of a nasopharyngeal airway the catheter is passed into the other nostril

4.4 Airway Cleaning.

4.4.1 Once removed, dispose off airway as per hospital policy.

5.0 DOCUMENTATION

5.1 Record procedure in the patient's clinical record. Make note of the volume, type, color and consistency of secretions and the patient's response to the procedure.

5.2 Adjust the nursing care plan.

6.0 COMMENTS

6.1 To look for cause and to see whether short term or long term care is needed and to plan for intubation or tracheostomy if not a short term problem.

TRACHEOSTOMY DRESSING

1.0 PURPOSE

1.1 To establish guidelines for the correct procedure for performing a tracheostomy dressing change.

2.0 POLICY

2.1 To be performed by a Registered Nurse.

2.2 Strict aseptic technique to be adhered to.

2.3 Adhere to Standard precautions.

3.0 EQUIPMENT

3.1 Sterile dressing pack.

3.2 Tracheostomy dressing or a keyhole dressing.

3.3 Sterile saline.

3.4 Tracheostomy foam holder or tracheostomy tapes.

3.5 Sterile gloves.

4.0 PROCEDURE

4.1 Identify patient and explain procedure to the patient and ensure patient privacy.

4.3 Perform hand washing with bactericidal wash or bactericidal hand rub.

4.4 Assemble all equipment required and prepare dressing trolley.

4.4 Don gloves and removes soiled dressing around the tube.

4.5 Don sterile gloves.

4.7 Gently clean around the tube and stoma with sterile saline

4.8 Replace with a tracheostomy dressing.

4.9 Renew the tracheostomy tapes holding the tracheostomy in place.

4.10 Observe patient's respiratory pattern and oxygenation following the procedure.

4.11 Clear away equipment.

4.12 Perform hand washing.

5.0 DOCUMENTATION

5.1 Documented the procedure in the patient's progress notes/daily nurses flow sheet.

6.0 COMMENTS

6.1 Please note that occasionally two nurses will be required to carry out the above procedure - particularly if the patient is restless agitated. One nurse to perform the dressing change and one nurse to hold the tracheostomy tube in place.

6.2 If a patient has a tracheostomy in place the following items need to be on hand: -

6.2.1 Tracheostomy tubes (one the same size as the one in place and one a size smaller)

6.2.2 Tracheostomy dilators.

TRACHEOSTOMY SUCTION

1.0 PURPOSE

1.1 To provide guidelines for the correct suctioning technique for tracheostomy patients.

1.2 To ensure suctioning of tracheostomy is carried out under aseptic technique in order to prevent infection.

2.0 POLICY

2.1 To be performed by a Registered Nurse / Doctor or Physiotherapist.

2.2 To be carried out under aseptic technique.

2.3 Standard precautions to be carried out at all times.

2.4 The frequency of suctioning will vary with individual patients, according to their needs.

3.0 EQUIPMENT

3.1 Suction equipment - wall mounted / portable and connecting tubing.

3.2 Assorted size of sterile suction catheter.

3.3 Sterile gloves.

3.4 Protective apron, protective goggles, facemask.

3.5 Bactericidal hand rub.

3.6 Sodium chloride 0.9%- 100ml / sterile water-5ml

3.7 Syringe-10cc

3.8 Sterile cup / bowl

3.9 AMBU bag / C-Circuit/Bain circuit/Oxygen delivery systems.

4.0 PROCEDURE

4.1 Identify patient, explain procedure to patient and ensure privacy.

4.3 Perform hand washing and assemble equipment.

4.4 Turns on the wall suction or portable suction machine and adjusts the pressure regulator according (typically 100 to 120 mm Hg for adults, 95 to 110 mm Hg for children, and 50 to 95 mm Hg for infants).

4.4 Check that suction equipment is working and is Set suction apparatus to the desired pressure.

4.5 Perform oral suctioning before Tracheostomy suctioning.

4.6 Connect the open end of the suction catheter to the suction tubing taking care to keep the catheter in the sterile pack.

4.7 Places a towel on the patient's chest.

4.8 Perform hand washing

4.9 Don PPE.

4.10 Hyper oxygenate the patient with AMBU bag, C-Circuit /Bain circuit patient by compressing the resuscitation bag 3 to 5 times for patient not requiring Mechanical ventilation. For patient requiring Mechanical Ventilation Press the 100% O2 button on the ventilator.(By the second nurse)

4.11 With sterile hand pick up the. Consider the dominant hand sterile and the non-dominant hand non-sterile.

4.12 Pours sterile saline into the sterile container, using the non-dominant hand.

4.13 With the dominant hand pick the suction catheter while holding the cover of the catheter with non-dominant hand. Test for proper functioning prior to suctioning patient.

4.11 Pass the suction catheter to predetermined length/till a resistance is felt and then withdraw 1cm. Applying negative pressure, gently rotate suction catheter as it is being withdrawn from the ETT. Gently introduce catheter to about 1/3 its length and apply suction with thumb over suction port control.

4.12 Repeat suctioning as needed, allowing at least 30- second intervals between suctioning.

4.13 Hyper oxygenate patient between each pass and at the end of the procedure

4.12 Monitor patient's ECG tracing and HR with each pass if monitored.

4.13 Wrap catheter around gloved hand then pull back glove over soiled catheter, thus containing catheter in glove and then discard.

4.14 Coil the suction catheter in the dominant hand (alternatively, wrap it around the dominant hand). Pull the sterile glove off over the coiled catheter and discard the equipment.

4.14 If the patient requires further suction, repeat the above procedure using new sterile gloves and a new sterile catheter.

4.16 Following the procedure discard equipment and perform hand washing.

4.17 Observe patient for adequate ventilation and oxygenation following procedure.

5.0 DOCUMENTATION

5.1 Record the procedure in the patient's progress notes describing the nature and amount of secretions aspirated and the patient's response to the procedure.

6.0 COMMENTS

6.1 The gloved dominant hand is considered sterile and may touch only the patient end of the suction catheter and the sterile equipment.

6.2 The suction procedure must not exceed 15 seconds and must be gentle (to avoid trauma of the bronchial tree. Never use force in case of resistance)

6.3 If resistance is met during early advancement, this may be due to very thick and tenacious secretions and 1-2 ml sterile sodium chloride/sterile water may be instilled into the tracheostomy tube and then suction applied.

6.4 Do not apply suction during the introduction of the suction catheter. The application of suction at this stage may cause tissue trauma and a decrease in oxygenation.

OXYGEN THERAPY

1.0 PURPOSE

1.1 To administer oxygen in order to improve oxygen delivery to the body tissue and prevent or relive tissue hypoxia.

2.0 POLICY

2.1 Oxygen is prescribed by a Doctor stating the required type of mask oxygen delivery system and oxygen concentration.

2.2 As oxygen supports combustion, all naked flames must be extinguished when oxygen is in use. "No Smoking" signs must be prominently displayed.

2.3 Do not allow grease, oil or fatty substances to come in contact with oxygen fittings.

2.4 The amount of oxygen delivered to the patient from any mask or cannula will depend on the:

- 2.4.1 Condition of the equipment patient
- 2.4.2 Technique of application – fit
- 2.4.3 Co-operation of the patient
- 2.4.4 Ventilation Respiratory pattern of the patient
- 2.4.5 Pathology of Disease condition
- 2.4.6 Prescribed dosage

2.5 Arterial blood gas analysis is the most accurate means of evaluating the effectiveness of oxygen therapy and guides treatment changes.

2.6 Oxygen administered via low-flow delivery systems e.g. nasal cannula or mask, may require humidification. Consult the Medical Officer.

2.7 Oxygen masks and cannula are for single patient use only. They are discarded after the patient is discharged. Oxygen tubing is left attached to the wall outlet or if visibly soiled is discarded.

3.0 EQUIPMENT

3.1 Oxygen delivery system e.g. nasal cannula/ oxygen mask/venture mask/ rebreathing mask/non-rebreathing mask.

3.2 Oxygen tubing

3.3 Humidifier and sterile water, if prescribed

3.4 Oxygen source with flow meter

3.5 Nipple adapter, if required

4.0 PROCEDURE

4.1 Verify the prescription for the method of delivery, flow rate and oxygen concentration.

4.2 Explain procedure to patient.

4.3 Prepare appropriate equipment.

4.4 If humidification is required, fill humidifier with water to mark level.

4.5 Apply oxygen delivery system.

4.6 Mask/Variable Concentration Mask

4.6.1 For variable concentration mask, attach corrugated tube to mask. For plain mask attach oxygen tubing.

4.6.2 Adjust the oxygen to the required flow rate (maximum 6L)

4.6.3 Place mask over the patient's nose and under the chin

4.6.4 Mould the mask to fit securely

4.6.5 Adjust the elastic strap around the patient's head to fit comfortably

4.7 Nasal Cannula

4.7.1 Ensure foam is securely attached to the prongs

4.7.2 Adjust the oxygen to desired flow rate (maximum 4L)

4.7.3Apply nasal cannula

4.7.4 Apply a nasal cannula by placing the nasal prongs gently into the patient's nostrils, draping the tubing over the patient's ears, and sliding the fit connector up under the chin to hold the tubing securely in place.

4.7.5 Two small pieces of clear plastic tape can be used to hold the cannula against the patient's cheeks to secure the cannula in place if necessary. Secure the oxygen tubing to the patient's clothing with a rubber-band and safety pin if required

4.8 Assess the Following Frequently:

4.8.1 The position of the cannula or mask

4.8.2 The oxygen flow rate

4.8.3 The condition of the nasal mucosa, skin and nose

4.8.4 Respiration's, pulse, blood pressure and temperature

4.9 Attend nasal and oral hygiene four (4) hourly and PRN.

4.10 Change mask if dirty or wash with soap and water PRN.
Notify the Medical Officer if any alterations or if signs of hypoxia are apparent.

5.0 DOCUMENTATION

5.1 Record details in the patient's Clinical Record:

5.1.1 Date and time commenced

5.1.2 The patient's response to therapy

5.1.3 Flow rate mode

5.1.4 Observations

5.2 Adjust the Nursing Care Plan. Document in the Nursing care pan/ Daily Nurses Flow Sheet

MONITORING OF PERIPHERAL OXYGEN SATURATION

1.0 PURPOSE

1.1 To quickly and non-invasively. To monitor oxygen saturation (SaO2) in patients who are at risk for hypoxemia.

1.2 Provide a mechanism for early detection of changes in SaO2 that may progress to a critical event. Indications include

1.2.1 Cardiac compromise

1.2.2 Pulmonary compromise

1.2.3 Drug overdose

1.2.4 Hemorrhage / shock

1.2.5 Ongoing assessment during minor surgical procedures, post operatively patient transfers.

1.3 Evaluate the patient's response to activities that may positively or negatively affect oxygenation i.e. suctioning, repositioning, changes in PEEP, any changes in FiO2.

2.0 POLICY

2.1 It is the nurse's responsibility to monitor The assigned Nurse monitors the oxygen saturation and report any changes to the doctor. This is a non-invasive monitoring technique used to measure oxygen saturation of functional hemoglobin.

3.0 EQUIPMENT/ARTICLES REQUIRED

3.1 Pulse oxymeter

3.2 Sensor Probe

3.3 Finger clip

3.4 Alcohol swab

4.0 PROCEDURE

4.1 Identify patient who will benefit from pulse oxymetry.

4.2 Obtain equipment and place at bedside and explain purpose of procedure to patient and /his family.

4.3 Select appropriate area on patient to apply sensor based on peripheral circulation.

4.4 Prepare selected site

4.4.1 Remove nail polish.

4.4.2 Remove artificial nails.

4.4.3 Remove earrings

4.4.4 Wash selected site/ wipe with alcohol and air dry.

4.5 Attach sensor probe to finger, bridge of nose, ear lobe or toe.

4.6 Instruct patient to breath normally.

4.7 Attach sensor to pulse oxymeter.

4.8 Set alarm limits for oxygen saturation and pulse.

4.9 Read saturation while performing nursing interventions like suctioning.

4.10 Change finger sensor every four hours and check the skin condition.

4.11 Correlate oxygen saturation value with ABG measurements.

4.12 Record in nurse's notes/Daily Nurses Flow Sheet.

5.0 DOCUMENTATION

5.1 Nurse's Progress Notes/ Daily Nurses Flow Sheet..

6.0 COMMENTS

Not applicable

NEBULIZATION THERAPY

1.0 PURPOSE

1.1 To administer medications.

1.2 To assist in the removal of accumulated bronchial secretions.

1.3 To liquefy bronchial secretions.

1.4 To relieve dyspnea.

2.0 POLICY

2.1 Prescribed by a Doctor. Administered by a Registered Nurse.

2.2 Mini nebulizers are for single patient use only.

3.0 EQUIPMENT

3.1 Sterile syringe-2 ml or 5 ml.

3.2 Needle-19G

3.3 Medication as prescribed

3.4 Ampoule sodium chloride 0.9% or sterile water x 1

3.5 Nebulizer (mask, mouth piece and tubing)

3.6 Oxygen tubing, if required.

3.7 Nebulization machine or oxygen outlet.

3.8 Nipple adapter, if required.

3.9 Tray for carrying required things to the patient.

4.0 PROCEDURE

4.1 Explain procedure to patient. Ensure privacy.

4.2 Assemble equipment and perform hand washing

4.3 Assist the patient to a sitting or semi-recumbent position. Perform handwashing.

4.4 Attend pre-procedure peak flow measurement if ordered.

4.5 Draw up the prescribed medication. Add sodium chloride 0.9% or sterile water to make up the required dose.

4.6 Attach the oxygen tubing to the nebulizer then to the air or oxygen outlet.

4.7 Unscrew the nebulizer cup, insert instill the solution and reconnect the nebulizer.

4.8 For an oxygen outlet adjust the flow rate to achieve a fine mist e.g. 6 L/min.

4.9 Instruct the patient to breathe deeply and slowly.

4.10 If using a nebulizer with a mouth piece, instruct the patient to close the lips firmly around the mouth piece and to inhale through the mouth and exhale through the nose.

4.11 Supervise the patient during Nebulization. Observe for any adverse reactions to Therapy.

4.12 Wash the nebulizer with tap water and dry with a paper towel. Store in the patient's locker.

4.13 If prescribed, attend post procedure peak flow measurement 15-30 minutes after inhalation.

5.0 DOCUMENTATION

5.1 Record administration on the patient's Medication Chart.

5.2 Document in the patient's progress notes/ Daily Nurses Flow Sheet.

6.0 COMMENTS

6.1 Not applicable.

PRE OPERATIVE CARE

1.0 PURPOSE

1.1 To teach patient before surgery and enable him to communicate and reduce anxiety.

1.2 To obtain thorough health assessment of patient before surgery.

1.3 To protect the patient from wrongful treatment.

1.4 To comply with legal requirements.

2.0 POLICY

2.1 Sufficient information in patient's language for them to consent.

2.2 Have a relative next of kin /friend /Nurse present during discussion with the Doctor as a witness.

3.0 EQUIPMENT

3.1 B.P. Apparatus, Thermometer, Ht. / Wt. Scale.

3.2 Pre op Checklist. And property check list

3.3 All investigation reports.

3.4 Pre-medications if ordered.

4.0 PROCEDURE

4.1 Identify the patient. Check I D band and patients file to protect from wrong treatment.

4.2 Assess patient's knowledge of the proposed operation and plan of care and educate patient as required,

4.3 Check that all jewelry, cosmetics, nail paint, contact lens, clothing etc. have been removed and a property check list is filled.

4.4 Any prosthesis, dentures, and contact lens should be removed , documented in the nurses notes and handed over to the patient' relatives.

4.5 Hearing aids will be retained in theatre if required.

4.6 Record patient's TPR, B/P, weight and height

4.7 Ensure hair removal has been completed the previous day as required, using soap and water for shaving.

4.8 Check for betadine allergy and instruct patient on having betadine bath on the previous night. Paint the prepared part with betadine on the day of surgery.

4.9 In case of betadine allergy use chlorhexidine.

4.10 Assist patient to change into theater gown as per the hospital policy.

4.11 Ensure that patient was on NPO has starved for 4 to 6 hrs. or as prescribed.

4.12 Complete the pre-op. checklist.

4.13 Check that the consent form is correctly completed, signed and dated.

4.14 Ensure that the blood is arranged if required

4.15 Collect the clearance slip and attach it in the patient file

4.16 Check that the operation site is correctly marked and painted with betadine.

4.17 Check whether the patient wishes to go to the toilet. Empty the bladder before sending to OT.

4.18 Give pre-medication if prescribed.

4.19 Advice the patient to stay in bed once the pre-medication has been given. Raise side rails.

4.20 Ensure that all relevant information i.e. notes, x-rays, blood results go with the patient to the operating theatre.

4.21 Accompany the patient to theatre and give a full handover report to the theatre reception nurse/pre-op nurse.

4.22 The patient may also be accompanied to theatre by a relative or friend.

5.0 DOCUMENTATION

5.1 Pre-op checklist

5.2 Nurse's notes/Daily Nurses flow sheet.

1.0 COMMENTS

Additional pre-operative questions identify the patient's allergy, past surgeries and infections etc.

REMOVAL OF IMPLANTED DEVICES

1.0 POLICY

1.1 All implanted devices like permanent pacemakers; AICDS will be removed as per set protocol when a patient is declared dead in hospital.

1.2 Implanted devices may be removed from patients due to medical reasons.

2.0 PROCEDURE

2.1 The family will be explained /counseled by doctor on duty on the reason as to why the device needs to be removed.

2.2 The family will be asked to sign the consent form, agreeing for removal of the implanted device by the doctor on duty.

2.3 Once the consent is signed, the device will be removed by the doctor on duty and shown to relatives.

2.4 After preliminary cleaning the device will be sent to CSSD for ETO sterilization by the nurse in-charge, with the correct name, age, sex, IPD & the unit's name.

2.5 CSSD will ETO sterilize the device in a double wrap ensuring that a slip with patient details is inside the packet and is readable from outside.

2.6 When the ETO sterilized device is received by the nurse in-charge, she/he will hand it over to the Medical coordinator of Cardiology/Unit in-charge.

2.7 The medical coordinator will ensure that it is sent by registered post or handed over directly to the relatives, with a duly signed receipt.

2.8 In case the patient does not want the device, the same is to be handed over to the stores dept.

2.9 For subsequent free use of the device on a poor patient another patient, the Director Cath. Lab may have the same issued from the stores after furnishing the details of the patient on whom the same is to be implanted.

CARE OF DEAD

1.0 POLICY

1.1 Death should be declared and certified by a registered medical practitioner.

2.0 PURPOSE

2.1 To ensure that the deceased person is handled with dignity and care and the billing is done with minimum delay (within 30 minutes).

3.0 PROCEDURE

3.1 Whenever possible, the patient's attendants must be informed about the patient's Critical condition and a regular update given by the doctor on duty. The assigned Nurse will facilitate this.

3.2 The doctor informs death of the patient to his/her kith or kin.

3.3 The nurse must give/offer the attendant the opportunity to see the dead.

3.4 Inform the following departments of the death.

- 3.4.1 Nursing Supervisor
- 3.4.2 Security Officer
- 3.4.3 Billing department
- 3.4.4 Dietician
- 3.4.5 Housekeeping

3.5 Once the relatives have seen the dead, explain to them in detail the further formalities of clearance and release of the body. Inform them that it will take at least one hour 30 min for the bill to be ready. Listen to them, giving preference to their religious beliefs.

3.6 Do not hurt/refuse their requests; also bear in mind that dignity of the diseased is Important.

3.7 Unit/Shift in charge will check and send the file within 30 minutes after ensuring all correct entries, returns and indents.

3.8 Nursing supervisor/ANS will oversee that the patients file is sent within the stipulated time and the body is cleaned, packed and sent to mortuary within 30 minutes/ as far as possible.

3.9 Assigned nurses will: Lay the patient on his/her back, make sure that the patient is

not wearing any jewelry, if so request relatives to remove and hand over as per policy.

3.9.1 Remove pillow.

3.9.2 Provide general hygiene and plug oral, nasal cavities and rectal and vaginal orifices; and other oozing cavities.

3.9.3 Remove all cannula, electrodes; drain the bladder by pressing on the lower abdomen. If permanent pacemaker or any other device is in situ, follow Protocol Implanted Devices

3.9.4 Aspirate before removing the Ryle's tube.

3.9.5 Suction orally and nasally before removing the E.T. tube and other drains.

3.9.6 Sponge the patient using soap and water.

3.9.7 Redress any wound and secure dressing with tape to prevent oozing/staining of clothes and linen.

3.9.8 Dress the patient with clothes provided by hospital. If family wants their clothes to be put on due respect their wishes.

3.9.9 Shave Trim male patient (beard) if requested by the relatives.

3.9.10 Remove dentures.

3.9.11 put a label on the chest of the body with the following information. Name-Age-Sex-Date of death and time-Ward-ICU-ICCU-Emergency-etc.

3.9.12 secure the great toes and thumb together with bandage.

3.9.13 Wrap the body with hospital sheets, bearing in mind that the face needs to be shown to family if requested without un-wrapping the whole sheet.

3.9.14 Make sure that the feet are covered and all limbs held securely in position.

3.9.15 Secure sheet with minimum use of tape.

3.9.16 If necessary, place the body in a plastic bag (infected cases)

3.9.17 Secure a copy of the death certificate and one more label written in bold to the outside of the patient secured with tape.

3.9.18 Before handing over the original death certificate and body to the security officer check if nursing record and patient chart is complete.

3.9.19 Call the mortuary/Security supervisor and inform that the body of the deceased is to be brought down.

3.9.20 Arrange for the lift to be kept open for transport to mortuary. Clear the corridor of patients and relatives/close curtains while transporting the dead.

3.9.21 Transfer body to stretcher-to mortuary and instruct transporting staff to preserve and maintain sanctity of the situation. One staff nurse and a Hospital assistant /HK will accompany the body.

3.9.22 The body will be handed over to Security with two carbon copies of Death Notification forms.

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

Health camps for
Patient care.docx

MGM INSTITUTE OF HEALTH SCIENCES
(Deemed University u/s 3 of UGC Act, 1956)
Grade 'A' Accredited by NAAC
MGM SCHOOL OF PHYSIOTHERAPY
Sector-1, Kamothe, Navi Mumbai – 410209

	
Students Spreading awareness of the camp in village	Consultation of the patients
	
Assessment of the Patient	Assessment of the patient

	
Treatment of the patient	Treatment of the patient
	
Home Programme for the patient	Home programme for the Patient

Physiotherapy Team for the Camp

Jeete Village Camp: 20th June 2018

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

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AMENDMENT SHEET

Sr.No.	Section no & Page no	Details of Amendment	Reasons	Signature of the Preparatory Authority

1. AIM &OBJECTIVES:

To guide medical staff working in patient care areas for effective communication with patients and families in identified special situations.

Follow good practices in health care Communication with the aim to achieve patient satisfaction

2 SCOPE

Hospital wide

3 RESPONSIBILITY

Doctors, Nurses, Housekeeping ,Billing staff

4 POLICY

4.1 Communication by the hospital staff is to be carried out with dignity and respect. At no time a patient or relatives respect or self-esteem is compromised. This instils trust in the organization.

4.2 Communication has to be done ensuring confidentiality of patients/ families and visitors disease condition and demographics.

4.3 Language and other barriers in communication will be overcome by help of interpreters.Religious and cultural sentiments of patients will be considered while communicating with patients and families

4.4 All staff will be trained in communication skills for patients satisfaction and safety

5 PROCEDURES

5.1Standards of communication

The manner in which its employees communicate internally and externally directly impacts the Hospital & Healthcare Centers' ability to create and foster that trust. As a result, all employees should communicate, both in their words and actions.

5.3 General Communication

- Thank patients for choosing our hospital. Communicate positively and builds trust and confidence in the organization.
- Offer a sincere apology for problems and inconveniences without blaming others.

- Use "please" & "thank you" often in conversations. Introduce self to patients stating name, department, explain length of procedure/process and what to expect, and thank the patient.
- Reinforce information provided to patients by physicians and other healthcare professionals.
- Explain processes in simple words
- Listen carefully when engaged in conversations with others.
- Promptly respond to patients' requests or seek assistance from others or explain to the patient that there will be a delay.
- Address patients by their preferred name.

Components of effective doctor-- patient communication is attached as ANNEXURE A

5.4 Etiquette/Common Courtesy

Departments will be dedicated to providing an environment that is pleasant, welcoming, supportive and reassuring. As a result, employees are expected to exercise the highest standard of courtesy when dealing with each other and customers,Smile at and greet patients, clients and colleagues as they meet. And follow service standards foretiquette

5.5 Patient privacy and confidentiality

Ensure patients privacy while examination and while communicating with patient , follow patient privacy and safety protocols as given in service standards Patient Privacy:

5.6 Enhanced communication in special situations

Special situations in which enhanced communication and counseling is required include the following

a) Breaking bad news
b) Handling an adverse event
c) Talking to family of patient who has just expired
d) Urgent intervention required
e) Patient condition deteriorating/ new complications
f) High risk consent for complicated interventions
g) Handling aggressive patient / family
h) Counseling of family of critically ill patients

5.2 Approach for Effective communication

For effectiveenhanced communication, all potential barriers will be identified and eliminated for better treatment and advice compliance. Language barriers should be overcome by the help of interpreters

It is important to be fully informed of the patients illness, treatment interventions, and progress for effective communication. Good counseling practices will help patients and clients satisfaction and prevent malpractice suitsfor negligence in health care needs.

- Do the counseling in a separate quiet area in confidence and privacy
- Have a better understanding of major concerns & expectations of patients.
- The patients should feel involved in decision making.
- Polite and respectful exchange of information by interaction.
- Use trained counselors and interpreters as required

5.3 Unacceptable communication

Any communication which is disrespectful or hurts the cultural or religious sentiments of a patient will be unacceptable, including use of abusive language, loud and harsh words used. Making loose comments about physicallyor mentally challenged patients or making fun of their disabilities is not acceptable.

Anyother negative comments concerning their religious, social economic, political affiliations andpersonal matters will not be discussed during communications with patient. The unauthorized disclosure of confidential information of the patientis also not acceptable and shouldbe limited to patient care needs only

5.4 Monitoring of Effective communication

Feedback from IPD and OPD patients including their complaints, compliments and suggestions are analyzed by the Quality department to review the implementation of effective communication

5.5 Training of the staff

All staff will be trained in good practices in healthcare communication. The training needs for communication skills will be identified by analyzing patient complaints, incident reports and also by appraisals and employee feedbacks. The staff will also be trained for handling challenging situations which require good communication skills. Doctor patient communication is included in induction training for all hospital staff involved in patient care.

DOCTOR-PATIENT COMMUNICATION

1 TYPES OF COMMUNICATION

Verbal and non verbal communication

A NON VERBAL COMMUNICATION

- Body Language smile
- Facial Expression
- Eye contact.
- Tone of voice.
- Rate of speech.
- Touch
- Leaning towards patient.

B. VERBAL COMMUNICATION.

- With Confidence and Clarity.
- Understanding.
- Imparting information
    - Listening
    - Talking
    - Interactive questions
- End of interview – Summaries Treatment plan
- Time for consultation – 2 to 10 min.
- Be polite, tactful.
- Gain his confidence with positive attitude.
- Empathize.
- Be sensitive to individual needs.
- In emergency Doctors should dominate.

2 POOR COMMUNICATION

- Insensitivity to patients needs.
- Failure to respect patients preferences.
- Failure to provide explanation.
- Failure to listen.
- Bad body language.
- Failure to involve family/friends when required.

3. UNACCEPTABLE COMMUNICATION

- Discussions in patients presence.
- Scold or blame the patient.
- Talk of negative out come.
- Aggressive behaviour towards patient/relatives by staff.
- Indulge in loose talk.

4 REQUIREMENTS FOR COMMUNICATION

- Proper environment clean neat and tidy quiet room .
- Proper grooming of staff.
- Privacy.
- Empathetic attitude.
- Pleasant Voice tone,
- Positive Body language, Smile
- Punctuality.

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

QUALITY ASSURANCE MANUAL

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

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Amendment Record Sheet

Sr. No.	Page No.	Clause No.	Date of Amendment	Amendment Made	Reasons Of Amendment	Sign. of M.-Q.S.
1.						
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POLICY

1. To provide a framework to sustain existing quality of clinical care and safety of patients at par with globally accepted norms with focus on strong organisational culture committed to perpetually improve through constant dynamic monitoring.

PURPOSE

2. To integrate nationally and globally accepted standards of clinical care and patient safety in routine hospital functions to evolve as national benchmark in quality of clinical care; introducing innovative methods to improve affordability, clinical outcomes and patient satisfaction.

DEFINITIONS

3. (a) Quality. Degree to which a set of inherent characteristics fulfill client expectations or degree of adherence to pre-established values and criteria developed as standards by recognised external agencies.

(Characteristics are distinguishing features of product or service which are of value to the client. Expectations are stated, implied and/or obligatory needs of person/society).

(b) Quality Assurance. A process-centered approach to ensure that organization is providing the best possible products or services. It focuses on enhancing and improving the processes used to achieve the end results. It inculcates confidence in the clients that quality needs will be fulfilled.

(It demands a degree of detail at every step. Planning includes determining specific levels of quality or measurable results that the organization wants to achieve. Checking involves testing and other objective measurements to determine whether the goals were met).

(c) Quality Improvement. Revision of a measurable and accountable process to improve efficiency or accuracy with the goal to exceed customer expectations and satisfaction

ABBREVIATION

The Abbreviation are as follows-

4.

(a)	QCI	Quality Council of India
(b)	HsOD	Heads of Department
(c)	CQI	Continual Quality improvement
(d)	QA	Quality Assurance
(e)	QI	Quality Indicator
(f)	OPE	Outpatient evaluation
(g)	SHH	Seven Hills Hospital
(h)	QMS	Quality Management System
(i)	CEO	Chief Executive Officer
(j)	VP	Vice President
(k)	NABH	National Accreditation Board for Hospitals and Health Care providers

(l) SOP Standard Operating Procedure
(m) QAC Quality Assurance Committee

SCOPE

5. All hospital employees, patients and visitors coming to the hospital.

RESPONSIBILITY

6.

DISTRIBUTION

7. Quality manager, HsOD of respective departments, hospital employees

PROCEDURE

8. Continuous Quality Improvement (CQI). Quality improvement shall endeavour to further improve services at Seven Hills Hospital, Mumbai. It shall focus on accessibility, efficiency, effectiveness, appropriateness and acceptability of service, and safety of consumers (patients, visitors and staffs). Salient aspects of CQI are as follows:-

(a) Continuous quality improvement shall be implemented through the following:-

(i) Monitor patient and staff satisfaction
(ii) Monitor indicators of quality
(iii) Monitor Adverse Drug reactions and medication errors
(iv) Monitor results of medical audit
(v) Ensure fire safety mock drill twice in a year
(vi) Ensure Facility Safety Round twice a year in patient care areas and once a year in non- patient care areas.

(b) Aim of Continuous Quality Improvement.

(i) Patient satisfaction.
(ii) Improved Clinical Outcome.
(iii) Reduction in Mortality and hospital induced Morbidity.
(iv) Improve efficiency & effectiveness of hospital processes.
(aa) Optimise resources utilization.
(ab) Employee growth and Job Satisfaction.
(ac) Facilitate and monitor implementation of chosen strategies for Quality Assurance and Quality Improvement (QA/QI) in the organization in line with the quality policy of the hospital.
(ad) To develop Annual plan for QA/QI. Quality improvement programme shall be reviewed at least once in a year.

(ae) To monitor improvement through revision/modification of processes based on recommendations of external accreditation agencies and required for accreditation/certification by such agencies.

(c) Goals of Continuous Quality Improvement

(i) To develop an interdisciplinary hospital-wide team to improve Quality.
(ii) To prioritise Quality improvement activities.
(iii) To introduce standard format to document and report on all hospital-wide indicators of Quality.
(iv) To develop Departmental Quality Improvement Teams responsible to evaluate key departmental processes (reviewing policies and procedures relating to that process) and to suggest necessary revisions to improve outcomes.
(v) To involve everyone, clinicians in particular, to improve patient care relating to various procedures.
(vi) To develop a formal tool to prioritise Quality improvement activities.
(vii) To strive to raise Benchmark in all aspect of service delivery and meet the quality standard expected for the same

VISION

9. To evolve as benchmark in quality healthcare available to one and all.

MISSION

10. (a) To ensure accessible and affordable quality healthcare by compassionate medical professionals to all.
(b) To be the centre of excellence for medical research and academics.
(c) To cultivate an environment of trust, honesty, mutual respect, equality and ethics.

QUALITY POLICY

11. To provide value added innovative, consistent and continuously improving health and medical care to sustain and further improve clinical outcomes, patient safety and patient satisfaction.

QUALITY PLAN

12. All departments in the hospital shall follow Quality Plan to improve targeted areas of concern.

(a) QMS documents have been prepared based upon the complexity of processes and the competencies of personnel performing the tasks; the parameters contained therein shall be implemented and maintained to meet the quality standards of National and International standards. QMS document consists of Quality Policy, Quality Objectives, Quality Manual, Procedure Manual and Instruction Manual. Records shall be maintained to demonstrate that the Medical Care conforms to specific customer requirement.

(Technical & Operators' manuals have been referred to develop QMS)

(b) Quality Manual is the apex document that broadly describes the QMS of Seven Hills Hospital; Mumbai. It lays down standard operating procedures of the hospital.

(c) Forms and Formats have been standardised to effectively control operations. Some of these formats, convert into quality records as evidence of compliance to the QMS. These records are controlled as control of quality records procedures.

QUALITY OBJECTIVES

13. (a) To focus on Quality of patient care.
(b) To improve the performance of all professionals.
(c) To monitor, measure, assess and improve performance and to enhance patient satisfaction.
(d) To guard, measure and improve patient safety.
(e) To inculcate an excellent hygienic treatment process.
(f) To involve all employees to participate in improving Quality.
(g) To search for pattern of non-compliance with goals, objectives & standards through:-
(h) Problem identification
(j) Problem assessment
(k) Finding the root cause
(l) Solution Generation
(m) Plan for the solution implementation
(n) Implementation of corrective action
(o) Monitoring

STRUCTURE FOR QUALITY ASSURANCE

14 Hospital has developed a structure for carrying out processes related to Quality Assurance in the hospital. This is as follows:

(a) Quality Assurance Committee/Department. Quality assurance related activities is planned, undertaken, and controlled by Quality Assurance Committee/department which is a multidisciplinary committee having representation from various clinical, non-clinical, and administrative departments. Details of committee, its scope of work, frequency of meeting and mode of operations are detailed Quality Assurance Committee's file.

(b) Scope of Work. To formulate and document quality policies, define scope of services, and deal with all matters concerning quality management and quality improvement. It shall be apex committee to monitor performance indicators/ parameters of QMS and quality of medical care, adequacy of patient care and monitor staff for compliance with the policies.

(i) Frequency of Meeting: Quarterly or as required for quality improvement.

(ii) Members of the Committee.

(aa) CEO, Chairperson (in the absence of CEO; VP Operations will officiate as Chair person)

(ab) All VPs (Members)

(ac) Med Supdt (Secretary)
(ad) Head of Nursing

(c) Accreditation Coordinator. The hospital has designated an Accreditation coordinator, who has overall responsibility to coordinate the work of NABH and JCI accreditation. His/her responsibility will include:-

(i) To issue various documents to departments from time to time.
(ii) To keep a record of all the documentation of the hospital, in relation to accreditation.
(iii) To delegate the activities in departments and ensure its timely completion.
(iv) To regularly receive feedbacks from departments regarding status of their work related to accreditation preparation.
(v) To plan and execute regular assessment of the hospital in accordance with accreditation standards.
(vi) To coordinate all such activities required for quality assurance and continuous monitoring of the hospital

(d) Departmental coordination. HOD will coordinate all activities relating to quality in their respective depts. The responsibilities are as follows:-

(i) To receive and retain all the documents and official correspondence related to accreditation from time to time.
(ii) To inform and orient the staff of their department on policies and procedures developed for their department.
(iii) To ensure the completion of all the work assigned to their department for NABH accreditation preparation.
(iv) To organize regular training programmes for staff of their department.

(e) Departmental pioneers. Each department has identified a pioneer for developing and improving the quality of service provided by the department. These pioneers continuously strive to improve quality standards of the department and train the staff on best practices.

(f) Service standards. As laid down by National and International accreditation agencies.

SERVICES AVAILABLE AT SEVEN HILLS HOSPITAL, MUMBAI

15. Services Available at Sevenhills Hospital. The following services provided at Seven Hills Hospital, Mumbai are displayed and the staffs are trained and oriented to services available.

CLINICAL SERVICES	
General Medicine	General Surgery
Paediatrics	Minimal access surgery
Emergency Medicine	Obstetrics and Gynaecology
Critical Care Medicine	Orthopaedics
Chest Medicine	Ottorhinolaryngology (ENT)
Nuclear Medicine	Cochlear Implants
Cardiology (including Invasive Cardiology)	Cardio Thoracic Surgery
Neurology	Neurosurgery

Nephrology	Urology
Oncology	Bariatric Surgery

CLINICAL SERVICES (contd)	
Dermatology	Ophthalmology
Cosmetology	Cosmetic Surgery
Radiotherapy (IGRT, Brachytherapy)	Joint Replacement
Day Care (Chemotherapy)	Assisted Reproductive Techniques
Physical & Rehabilitative Medicine	Dental & Oro-Maxillo-Facial Surgery
Wellness Clinic (Preventive Medical Assessment)	Pain Management
DIAGNOSTIC SERVICES	
IMAGING DEPARTMENT	HOSPITAL LABORATORY
Digital X-Ray	Biochemistry
Ultrasonography	Microbiology
Computed Tomography	Haematology
Spiral - CT	Histopathology
Positron Emission Tomography	Immunology
Magnetic Resonance Imaging (3 – Tesla Magnetom)	Serology
Mammography	Clinical Pathology
SUPPORT SERVICES	
Pharmacy	Bio Medical Engineering
Blood Bank	Electrical, Mechanical and Civil Engineering
Central Sterile Supply	Public Health Engineering
Laundry	House Keeping
Food & Beverages	Ambulance (Out Sourced)
24 HOURS SERVICES	
Emergency (Casualty)	Blood Bank
Hospital Laboratory	Operation Theatres & Cath Lab
Imaging (less PET scan)	Ambulance (Out Sourced)
OTHER FACILITIES	
300 Seats Auditorium	100 Seats Seminar Hall
Car Park (1500 Vehicles)	Temple (Mandir)
Bank	Prayer Hall
02 x ATMs	Mortuary

ASSURING QUALITY OF SERVICES

16. (a) Standards of service and adequate patient care. Ratio between doctor to patient, nurse to patient and beds to patients are maintained, as also the extent of availability of resources and facilities. The hospital efforts are directed to provide standard services for adequate patient care.
(b) Ensure easy access and competent professional medical care to all patients who visit the hospital.
(c) Lay down maximum waiting time for qualified doctors/specialists to attend outpatients. The hospital continuously strives to improve upon it.

(d) Hospital ensures all equipments are maintained efficiently in proper working order.
(e) Hospital ensures availability of beds and operation theatre facilities as freely as possible.
(f) Hospital ensures prompt treatment of emergency cases with utmost care and attention.
(g) Hospital respects patients' and families' rights in consonance with accreditation standards.
(h) Hospital ensures; patients and visitors will receive courteous and prompt attention from its staff and officials to use its various services.
(i) Hospital ensures reliable and prompt delivery of diagnostic investigation results and whenever possible hard copies of such reports will be made available.
(j) Hospital ensures Operation theatres are maintained and are serviceable all the time.
(k) Hospital keeps its premises and its surroundings, clean, infection-free and hygienic.
(l) Hospital has evolved regular system to get daily feedback from its clientele through exit interviews and written feedback on structured format. The inputs are analysed to improve service standards.
(m) Hospital has necessary equipments required to provide services mentioned in 'scope of services'. It has a system to ensure proper maintenance and working of these equipments.
(n) If any major equipment is out of order, information regarding it shall be displayed suitably, indicating the alternate arrangements, if any, and likely date of repair of the equipment after repairs/replacement.
(o) Appropriate action is taken on system failure and those responsible for it. Remedial measures are initiated to rectify deficiencies. Complainants will also be informed of the action taken, if requested.
(p) In case of likely persistence of deficiency, the reasons for the delay to rectify the deficiency and the time taken for the same will be displayed prominently for the information of the public.
(q) Special training is imparted to the non-medical staff to deal with the patients and public courteously. Any breach in this regard when brought to the notice of the hospital authorities shall be dealt with appropriately.
(r) Hospital encourages the patients and the public to inform the authorities of their perceived deficiency of service. Complaint/Complement boxes are provided at the reception of Front Office and OPD.
(s) Hospital follows all policies, processes, programmes, committee meetings; regulatory guidelines, which have been prepared to meet the standards of accreditation, enumerated by accreditation agencies.

AUTHORITY AND ACCOUNTABILITY.

17. (a) The quality improvement Programme is supported by the hospital management. The management provides adequate resources (men, materials and machines) required for quality improvement Programme.
(b) The Management of the hospital has earmarked adequate funds from its annual budget to support the Continuous Quality Improvement Programme.
(c) The management defines organizational and departmental quality objectives, lays down targets, monitors them with their analysed reports and takes required remedial actions. Organisation to implement is QCI is as per Annexure – "A".

(d) Quality objectives are discussed in various committee meetings periodically and comparative analysis report is discussed at least once in 4 months. Control charts are prepared for the comparative analysis of various quality objectives.

CEO.

18. The HOD are responsible for the following:-

(a) CEO is responsible to support, implement and operate hospital wide Quality improvement activities.

(b) The CEO supports opportunities to improve care or services and directs to resolve problems, if any.

(c) In the absence of CEO, the matters/issues shall be referred to management committee.

HOD

19. The HOD are responsible for the following:-

(a) Develop and implement mechanisms designed to ensure uniform quality of patient care processes within their department.

(b) Develop and implement process to effectively and continuously measure, assess, and improve Quality.

(c) Continuously assess and improve Quality of care and services provided.

(d) Plan, prioritise, systematically organise, implement and assess Quality improvement activities and maintaining achieved improvements.

(e) Participate in intra & interdepartmental activities to appropriately improve hospital Quality.

(f) Communicating information relevant to cross-organizational Quality improvement activities to appropriate functionaries.

(g) Allocate adequate resources to improve managerial, clinical, and support processes as needed to participate in Quality improvement activities:-

(h) Assign personnel.

(i) Provide adequate time to participate in Quality improvement activities.

(j) Create and maintaining information systems.

(k) Support collection, collation and analysis of data to facilitate Quality improvement.

(l) Provide training to staff in Quality improvement methods.

(m)Analyse and assess effectiveness of their contributions to improve Quality.

DOCUMENTATION.

20. Hospital has documented policies, procedures, and guidelines developed by various committees of the hospital, reviewed by heads of the departments and approved by Hospital Management. These documents are available as soft copies as well as hard copies. Soft copies pertaining to departments are available to respective HOD.

(a) Document Control. Documents such as regulations, standards, and other normative documents as well as drawings, software, and specifications, instructions and manuals form part of the Hospital Management System. A copy of each of these controlled documents shall be archived for future reference and the

documents shall be retained in their respective department. The procedures and equipment details are retained in respective department as long as the machine is being used or until condemned. The documents are maintained in paper or electronic media as appropriately required.

(b) Classification of Documents. Three types of Documents are identified. Each document has a title and name of the document.

(i) Quality manual.
(ii) SOP/ instruction manuals.
(iii) Records

(c) Label for Document Identification. The documents are uniquely labelled for easy identification as follows:-

(i) Date of issue.
(ii) Identification of revision status.
(iii) Page numbering with the total number of pages.
(iv) Identification of the end of the document.
(v) Issuing authority

(d) Review of Documents. The HOD shall review all documents of respective departments annually and shall approve it for use. The CEO shall issue the final document for implementation.

QUALITY ASSURANCE OFFICER.

21. The Quality Assurance Officer ensures that:-

(a) Authorized editions of appropriate documents are available at all locations where operations essential to the effective functioning of the hospital are performed.

(b) Documents are periodically reviewed and revised where necessary to ensure suitability and compliance with applicable requirements.

(c) Invalid or obsolete documents are promptly removed from all locations of issue or use, or otherwise assured against unintended use.

(d) Obsolete documents are retained for either legal and/or knowledge purposes. Preserved documents are suitably marked.

(e) Documents or the record, which are destroyed; the record of their destruction is maintained in a separate register.

REVISION, AMENDMENTS AND CHANGES IN DOCUMENTS.

22. (a) The original author usually undertakes review and revision of management systems documents annually or as and when required. In the absence of original author, when alternate persons are detailed for review, they shall first familiarise themselves with pertinent background information on which the original document was based and then they will undertake review and revision of the original document.

(b) Any alteration in the text is either documented on the existing original document in track change mode or a copy of the obsolete document is kept along with the new revised document.

(c) Document control system does not allow amendments by hand, except under rare exceptional circumstances. The amendments shall be written, signed and dated only by the HOD. The amendment shall be forwarded to CEO for ratification by hospital management. The ratified amendment shall be incorporated in the document under intimation to Quality Assurance Officer. The ratified amendment shall be notified to the environment within 7 working days to take effect.

(d) SHH currently maintains documents on computers. The computer system has established adequate control and security procedures and protocols to maintain the documents and to allow changes, amendments and revisions in the documents maintained by it.

CONTINUOUS QUALITY IMPROVEMENT PROGRAMME

23. CQI Programme. The comprehensive CQI programme covers quality assurance of inputs, processes and outcomes and their continuous monitoring. The programme has been developed by Quality Assurance Committee in collaboration with various HsOD and implemented by various committees and HsOD for following hospital facilities:-

(a) Hospital wide (Table 1)
(b) Hospital laboratory (Table 2)
(c) Hospital Radiology & Imaging Dept (Table 3)
(d) Intensive Care Unit (Table 4)
(e) Hospital Surgical Services (Table 5)
(f) Hospital Infection Control (Table 6)

24. Procedure to Implement CQI Programme. The CQI programme shall be implemented as follows:-

(a) Quality Assurance Committee and Hospital Infection Control Committee shall implement, monitor and improve hospital wide and infection control programme respectively.

(b) The indicators mentioned at paragraph 54 below are incorporated in the reports. The report shall include the values for all indicators. The report shall review deviations from standard values. QAC and ICC shall recommend remedial measures based on analysis of the report.

(c) The programme applicable for Laboratory, Radiology, Intensive Care area and Surgical services shall be implemented through respective HsOD. QAC shall monitor the implementation of CQI programme.

(d) Each of the departments mentioned above shall maintain a quality assurance register with the key characteristics of their department mentioned therein. The key characteristics shall be identified from accepted norms/criteria. Compliance to accepted norms and criteria shall be recorded.

(e)The record shall be endorsed in the register as 'C/PC/NC' (C for Compliance, PC for partial compliance and NC for non-compliance). The record shall be reviewed periodically as laid down in the concerned table.

APPROACH TO DESIGN, MEASURE, ASSESS AND IMPROVE QUALITY

25. The hospital is committed to improve quality as follows:-

(a) Hospital has identified processes needed for the QMS and their application throughout the hospital.

(b) Hospital has determined the sequence and interaction of these processes.

(c) Hospital has determined criteria and methods needed to ensure that application and control of these processes are effective.

(d) Hospital ensures availability of resources and information necessary to support the working and monitoring of these processes.

(e) Hospital periodically monitors, measures and analyses these processes.

(f) Hospital implements revisions and amendments necessary to achieve planned results and remains committed to continuous improvement of these processes.

26. Planning. Planning for the improvement of patient care and health outcomes includes a hospital wide approach.

(a) The hospital maintains a plan that describes the hospital's approach, processes, and mechanisms that comprise the hospital's Quality improvement activities.

(b) The Team approach serves as a means of coordination between departments and disciplines in planning and provides systematic hospital wide improvements.

27. Designing Services, Functions & Processes. Processes, functions or services are designed based on the following:-

(a) Mission and vision of Seven Hills Hospital, Mumbai and the needs and expectations of patients, staffs, and local environment guide the design of the services.

(b) Needs and expectations are functionally grouped. Based on the availability of resources services which can be offered are identified.

(c) The extent to which any particular service can be offered (functions) is also decided based on available resources.

(d) The modality (process) as to how a particular service will be delivered is developed as per policy of the hospital.

(e) Stepwise procedures are put in place as standard Operating Procedure (SOP). and Benchmarks are developed for performance assessment on each parameter.

28. Measurement & Benchmarking. Various services offered by the hospital are evaluated as follows:-

(a) Appropriate quantifiable parameters are identified for each service provided by the hospital.

(b) The parameters may belong to functions, processes or outcomes.

(c) Data is collected for all identified parameters of the service over a period of time.

(d) Baseline is established for the parameters on the basis of the above data.

(e) Consistency of baseline data on any particular parameter indicates its stability.

(f) The stable parameters which are valued by the patients are identified. These parameters describe the quality of the service offered by the hospital.

(g) Internal comparisons of processes and outcomes are made over a period of time.

(h) The assessment process includes the use of statistical process control techniques/ tools as appropriate.

(i) The measured value of the quantifiable quality parameter of a service is compared with the values from other establishments offering similar service and available databases.

(j) Based on national and international comparison, benchmark of quality for each parameter of a service is developed.

(k) The benchmark is then notified. All efforts are made by the concerned department with assistance from the management to achieve and maintain the quality standard as per established benchmark.

29. Services Included for Quality Assessment. Data will be routinely and continuously collected/ captured to measure the following processes or outcomes, however any priority issue can be included:-

(a) Clinical assessment of the patient.

(b) Operative and other invasive and non-invasive procedures that place patients at risk.

(c) Laboratory safety & quality.

(d) Diagnostic Radiology safety & quality.

(e) Processes related to safe use of medication.

(f) Processes related to safety of anaesthesia administration.

(g) Processes related to the safe use of blood and blood components.

(h) Processes related to medical records content, availability and its use.

(i) Processes related to timely procurement of supplies.

(j) Submission of statutory reports. *(as required by law)*

(k) risk management activities

(l) Assessment of Needs, expectations, and satisfaction of patients

(m) Assessment of Staff expectations and satisfaction

(n) Assessment of processes related to patient and staff safety

(o) Assessment of Surveillance for Hospital Acquired Infection

(p) Assessment of Utilization of facility.

30. Objectives of Quality Assessment. The objectives of quality assessment are as follows:-

(a) The assessment process allows concerned departments to draw conclusions on the need for more stringent measurement.

(b) It allows departments to determine whether specifications for newly designed processes were appropriately measured for desired level of Quality.

(c) It indicates stability of important existing processes and prioritises existing processes for possible improvement.

(d) It indicates whether earlier changes, if any, in the processes resulted in improvement, and if not, whether further improvement of the existing process is required/feasible with available resources.

(e) Benchmark established for each Quality measure assists in the analysis of collected data. It triggers a more in-depth review.

(f) When assessment of data indicates, a variation in Quality, more intensive measurement and analysis will be conducted. Intensive assessment is initiated when statistical analysis shows the following:-

(i) Unexpected significant variations in Important events, Quality indicators, and patterns/trends.

(ii) Significant variance of Quality from other hospitals.

(iii) Significant variance of Quality from recognised standards.

(iv) Major discrepancies between preoperative and postoperative diagnoses in pathology reports.

(v) Confirmed major transfusion reactions.

(vi) Significant adverse drug reactions.

(vii) Adverse events or patterns of adverse events during anaesthesia use.

(viii) Unexpected patient death.

(ix) Wrong site/side/patient surgery.

31. Medical Audit Committee evaluates medical record keeping, quality, content, formats, accuracy, pertinence, staff compliance with documentation, policies, review, and evaluates fatal cases/ death in hospital. Similarly Nursing Audit Committee audits nursing care, medication errors, assessment of pain, vulnerability and risk to fall, record keeping, compliance to policies and documentation.

SHARING INFORMATION ON QUALITY.

32. Collected data is assessed periodically and findings are documented and are forwarded through proper channels to concerned departments for appropriate action.

33. The assessment process includes the use of statistical process control techniques/tools as appropriate. Training for use of statistical process control is provided to the hospital leaders where needed; team members/staff are educated regarding statistical process control techniques on an 'as needed' basis.

34. When findings of the assessment process are relevant to an individual's Quality, the pertinent information will be provided to the CEO for determining their use in peer review and/or periodic evaluations of a licensed independent practitioner's competence at reappointment

35. When a Quality measurement does not reach the predetermined acceptable level of Quality, or if it is reached, but evaluation indicates the Quality is not acceptable, the Quality improvement process should continue. If the level of Quality shows no improvement for the time frame established by the department/service team, an intensive evaluation is conducted with input from the Quality Steering Committee regarding the need for continued measurement or reprioritisation.

36. The quality assurance programme is reviewed & opportunities for improvements are identified and updated.

INTERNAL COMMUNICATIONS

37. The top management has defined and implemented an effective and efficient process for communicating Quality Policy, Quality Objectives, QMS requirements and accomplishments. This helps the hospital to improve the performance and directly involves its people in the achievement of the Quality Objectives. The Management actively encourages feedback and communication from people in the hospital as a means of involving them through the following modes:-

(a) Periodic meets

(b) Management Review Meetings

(c) Team briefings and other meetings.

(d) Emails & Notice Board, where available.

KEY PROCESSES

38. The identified key processes are Service Delivery, Resource Management, Management Responsibility and Continual Improvement of Quality

(a) Service Delivery. Planning and development of processes required for the service delivery has been developed and documented in process map in accordance with the other requirements of QMS. While planning for any new service, hospital shall determine the following:-

(i) Quality Objectives and requirements for the services. The need to establish processes, documents and provide resources specific to the service is established. Required verification, validation, monitoring, inspection and test activities, specific to the service and the criteria for service acceptance are carried out. Record must provide evidence that the service delivery process meets the requirement.

(ii) Patient(s) Related Process. Determination of requirements related to the Services. Patients/their relatives' stated and implied requirements (including if any additional requirements determined by the hospital, legal & regulatory requirements) are identified before delivery of the service, initiating action to provide necessary treatment to the patient which are as per the documented procedures.

(iii) Review of requirements related to the service. The type of treatment (OPD or indoor) is reviewed for its adequacy based on the information available for the concerned patient or accompanying relative along with the records of vital parameters and investigation results. Any changes required subsequently, its communication to the concerned patient/ relative and to the relevant department is done as per the documented procedures.

(iii) Documents. Records of type of treatment identified/provided are maintained as per the documented procedures.

(iv) General Consent. Where the patient is unable to provide enough details the statement of requirements as captured by the concerned doctors are taken as base for providing necessary service and same is conveyed to the patient and/or the relatives for acceptance before providing the treatment.

(v) Specific Consent. During the course of the treatment or at the end of one set of treatment the consent of the patient/relative is taken for subsequent treatment, subject to the willingness of the patient and in case of their unwillingness they may be discharged or referred to other hospital as the case may be.

(vi) Information on Cost of Treatment. Communication on enquiries and service related information, approximate charges are intimated at the time of registration or at the time of admission or prior to initiation of treatment by the billing (estimates) dept as per existing tariffs.

(vi) Patient Grievance. Patient feedbacks including complaints are handled as per procedures for handling of patient grievances.

(vii) Design and Development of Clinical Management. The hospital is not directly involved in design and development of devices, equipment or drugs. Clinical use of established treatment modalities is adopted designed individually for each patient. As each patient is unique the outcomes are documented and monitored individually and modifications carried out in the treatment plan. Deviations from expected outcome are documented in the patient record and discussed by the concerned department. The frequency of such a review depends upon critically of the disease

(viii) Quality Objectives and requirements for the services The need to establish processes, documents and provide resources specific to the service is known. Required verification, validation, monitoring, inspection and test activities specific to the service and the criteria for service acceptance are laid down. Record needs to provide evidence that the service delivery process met the requirements.

(b) Resource Management

(i) Training

(aa) Competence, Awareness and Training. Competence of the personnel is assessed on the basis of the education, experience, skill and training before they are assigned the responsibilities in the QMS.

(ab) Training needs of all the personnel are identified, established and reviewed to ensure competence for the responsibility to be assigned. The responsibility for these lies with the department heads while the facility manager does the overall coordination.

(ac) Training needs of the new recruits and personnel transferred to new assignments are identified and established as per the requirements. The responsibility of general training program is with the HR department, while specific job related training is the responsibility of the department head.

(ad) HOD along with the facility manager is responsible to ensure the training on identified needs is provided to the employees. In Charge facility manager evaluates the effectiveness of training conducted. A consolidated database of training records of all the employees is maintained.

(ae) Records of personnel qualified for performing specific assigned tasks and activities is also maintained by the HR department & HOD of the individual.

(ii) Infrastructure. Infrastructure required by all personnel to achieve the conformity of the service requirements are identified and provided before the commencement of the work/ activity and are maintained and improved regularly as per the documented procedure.

(iii) Work Environment. Work environment needed by all personnel to achieve the conformity of the service requirements are identified and provided before the commencement of the work/activity and are maintained and improved regularly.

(c) Responsibility of Management. Top Management of the hospital is committed to development and implementation of an effective and efficient QMS for continual improvement of service quality.

(i) Top management has established vision, mission, policy and strategic objectives consistent with the purpose of the hospital, which leads to the achievement of patient satisfaction.

(ii) Top Management provides its full support by participating in improvement projects, searching for new methods & Solution. Top management also ensures the availability of the resources that are necessary to support the Hospital's strategic plan.

(iii) Patient needs and expectations are determined and converted into requirements and fulfilled as documented in process map & procedure for service delivery process and Management Responsibility.

(iv) Obligations related to the statutory and regulatory requirements are taken care as appropriate.

(v) Top management takes initiatives in communicating the Hospital's values, vision, mission, policies and objectives and targets. Some examples are as follows:

(aa) The CEO has released the vision, values and policies to all the employees.

(ab) The VPs/Accreditation coordinator communicates the Quality Policy and Objectives of the hospital to all the employees.

(ac) CEO presides over the management review meeting as per the agenda and reviews the progress of the implementation of the quality system periodically.

(ad) CEO addresses all the employees through inter officer Memo whenever new initiatives are taken towards improvement.

(vi) The top management of the hospital is committed to process - oriented approach. Accordingly all the processes are documented and implemented. Internal audits and management review meetings are used as effective tools to ensure the implementation of the laid down processes and also verifying their continuing suitability, effectiveness and adequacy of the system.

(vii) Various committees have been incorporated into the managements system of the hospital for effective implementation of the QMS.

(d) Quality Management System (QMS). Quality Management System of hospital is established, documented, implemented and maintained for continuous improvement in accordance with requirements of Quality Objectives. The hospital has established, implemented and maintains a Quality Management System appropriate to the scope of services. The hospital has documented its policies, processes, programmes, procedures, and instructions and has communicated this to all relevant personnel. It has ensured that these documents are understood and implemented. The respective Department Heads/in Charges ensure that all the personnel working under their control in the Hospital have understood the Quality Policy, Quality Assurance system and the objective for adopting the Quality Assurance System. The hospital outlines its Quality Assurance System through three-tier documentation structure as below:-

(i) Quality Manual. An outline of Hospital and functioning of its management system.

(ii) Quality System Procedures. The system's functioning is detailed in separate documents that are maintained by the quality assurance officer as controlled documents. The quality manual makes continuous references to system procedures in the relevant sections.

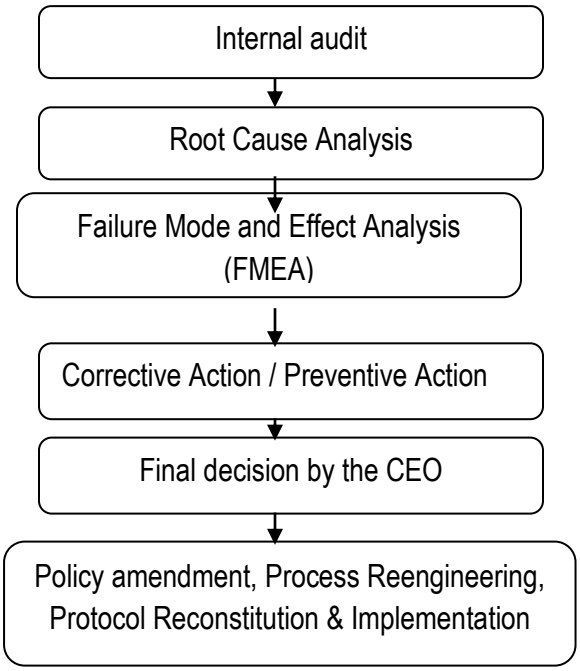
(iii) Work instructions/Standard-operating procedure. Detailed document outlining various protocols, procedures, activities and standards to be maintained. This document is also maintained with the quality assurance officer as controlled document.

(e) Quality Assurance Officer has the overall authority, responsibility and commitment to communicate, implement, control and supervise the compliance of quality management system with standards. The roles and responsibility of the Quality Assurance Officer include:-

(i) Establish and maintain quality management system
(ii) Documentation of all activities of quality management system
(iii) Document control
(iv) To ensure that quality manual is up to date
(v) Schedule and conduct internal audits
(vi) Schedule and conduct of management review meetings
(vii) Ensure implementation of approved corrective and preventive action

PROVISION OF AUDITS

39. Significant variances from the procedures and processes, trends from the incidents reports and become apparent through audits. Appropriate remedial measures can be suggested and, if approved, implemented. The Flow Chart is as follows:-



PREVENTIVE ACTIONS

40. The CEO is perpetually vigilant and identifies potential sources of non-compliance and areas that need improvement. These may include trend analysis of specific markers such as turnaround time, risk analysis

and introduce proficiency tests for self-assessment. Where preventive action is required, a prevention plan is prepared and implemented. The impact evaluation of prevention plan must monitor efficacy to reduce any occurrence of non-compliance or produce opportunities for improvement.

CORRECTIVE ACTION

41. The CEO of the hospital takes all necessary corrective actions when any deviation is detected in Quality Management System.

(a) Cause Analysis. Deviations are detected through the following:-

(i) Patient complaints/feedbacks.
(ii) Non receipt of items/samples.
(iii) Non-compliance at Internal/external Quality Audit.
(iv) Management Reviews.
(v) CEO conducts detailed analysis of the nature of the root cause of non-compliance with responsible persons from the respective depts/sections.

(b) Selection and Implementation of Corrective Actions. Potential corrective actions are identified and the one that is most likely to eliminate the problem is chosen for implementation. Corrective action considers the magnitude and the impact of the problem. Policy amendments, if any required, to regularise corrective actions, are documented and implemented.
(c) Monitoring Of Corrective Actions. CEO shall monitor the outcome parameters to ensure corrective actions taken have been effective in eliminating the problem.
(d) Additional Audits. When departmental performance in compliance to documented procedures becomes questionable due to magnitude of non-compliance cases additional audits are conducted.

NURSING AUDIT

INTRODUCTION

42. (a) Nursing audit is a review of the patient record designed to identify, examine, or verify the performance of certain specified aspects of nursing care by using established criteria.
(b) Nursing audit is the process of collecting information from nursing reports and other documented evidence about patient care and assessing the quality of care by the use of quality assurance programmes.
(c) Nursing audit is a detailed review and evaluation of selected clinical records by qualified professional personnel for evaluating quality of nursing care.
(d) A concurrent nursing audit is performed during ongoing nursing care.
(e) A retrospective nursing audit is performed after discharge from the care facility, using the patient's record.

MEANING

43. (a) Audit is a systematic and critical examination conducted to verify compliance to policies, protocols, procedures, guidelines and instructions of the hospital by various departments.
(b) Nursing audit is the assessment of the quality of nursing care using patient record as an aid in evaluating the quality of patient care.
(c) Medical audit - the systematic, critical analysis of the quality of medical care, including the procedures for diagnosis and treatment, the use of resources, and the resulting outcome and quality of life for the patient.

DEFINITIONS

44. (a) According to Elison "Nursing audit refers to assessment of the quality of clinical nursing".
(b) According to Goster Walfer Nursing Audit is an exercise to find out whether good nursing practices are followed. The audit is a means by which nurses can define standards themselves from their point of view and describe the actual practice of nursing.
(c) Nursing audit is defined as a part of the cycle of quality assurance. It incorporates the systematic and critical analysis by nurses, midwives and health visitors, in conjunction with other staff, of the planning, delivery and evaluation of nursing and midwifery care, in terms of their use of resources and the outcomes for patients/clients, and introduces appropriate change in response to the results of critical analysis.

PURPOSES OF NURSING AUDIT

45. (a) Evaluation of nursing care delivered to the patient.
(b) Identifies gap between deserved and feasible quality of nursing care.
(c) Improves record keeping of nursing care.
(d) Focuses on care provided and not on care provider.
(e) Contributes to research on nursing care.

METHODS OF NURSING AUDIT

46. The two methods for Nursing Audit are as follows:-

(a) Retrospective Review**.** Retrospective audit is a method for an in-depth assessment and evaluation of the quality of nursing care by examining the patient care records for discharged patients. Specific quantitative and qualitative documented parameters of nursing care are identified and each patient record is evaluated on these parameters. Examples of parameters in the patient's records are as follows:-

(i) Was nursing evaluation conducted within 1 (One) hours of admission?

(ii) Whether patient data collected in a systematic manner?
(iii) Had the patient been evaluated for vulnerability and fall risk?
(iv) Was a description of patient's pre-hospital routines included?
(v) Were cultural, religious, recreational and astrological needs assessed?

(vi) Did the nurse perform physical assessment?
(vii) How was information on physical assessment used?
(viii) Were various clinical charts prepared and periodically maintained daily?
(i) Did nurse comply with clinicians' orders?
(ii) Did nurse comply with 7 steps to administer medication correctly?
(iii) Did nurse write nursing orders?
(iv) Did the nurse collect and dispatch samples for lab investigations within 2 hours?
(v) Did the nurse comply with instructions on preoperative preparation of the patient?
(vi) Did the nurse report medication errors?
(vii) Did the nurse report adverse drug reaction?
(viii) Did the nurse comply with post operative instructions?
(ix) Did the nurse report adverse incidents in the ward correctly?
(x) Does the nurse know High Alert and Look Alike Sound Alike medicines?
(xi) Does the nurse know and practice hand hygiene technique?
(xii) Did the nurse adopt problem solving approach in nursing care plan?

(b) Concurrent Review. Nursing care evaluation is conducted while patients are still admitted and undergoing clinical management. It includes assessment of pre-determined criteria, review of patients' records and care plans, identification of deficiencies and simultaneous initiation of remedial measures to immediately rectify observed deficiencies.

METHOD TO DEVELOP NURSING AUDIT CRITERIA

47. (a) Define patient population.
(b) Identify commonly recurring nursing problems in the defined patient population.
(c) Define quantitative and qualitative parameters and identify tools to measure them.
(d) Identify reliable sources to collect relevant data on defined parameters.
(e) Benchmark outcomes of quantitative and qualitative parameters.
(f) Train staff on collecting, collating and methods to analyse data.
(g) Define acceptance quality limit for each parameter.

AUDIT COMMITTEE

48. Before carrying out an audit, an audit committee shall be formed. It shall consist of minimum five members, who are interested in quality assurance, are clinically competent and able to work together in a group. It is recommended that each member should review not more than 10 patients each month and that the auditor should have the ability to carry out an audit in about 15 minutes. If there are less than 50 discharges per month, then all the records may be audited, if there are large number of records to be audited, then an auditor may select 10 per cent of discharges.

TRAINING AUDITORS

49. Auditors will be briefed on the parameters to be assessed and how the data is collected for each parameter. Numerical rating to each parameter may be assigned based on the relative importance and approved by the management. A dummy assessment may be conducted to practically demonstrate the

process of audit followed by every individual auditor doing a sample audit. All auditors then meet to compare and discuss their findings and arrive at consensus on evaluation of each parameter.

PROBLEM SOLVING APPROACH PROCESS IN NURSING CARE PLAN : AN OVERVIEW

50. (a) Collects patient data in a systematic manner

(i) Information on patient's pre-hospital routines.
(ii) Information about the severity of illness.
(iii) Information regarding lab tests.
(iv) Information regarding vital signs.
(v) Information from physical assessment.

(b) States nurses diagnosis.
(c) Writes nursing orders.
(d) Suggests immediate and long term goals.
(e) Implements the nursing care plan.
(f) Plans health education of patient.
(g) Evaluates the plan of care.

AUDIT AS A TOOL FOR QUALITY CONTROL

51. An audit is a systematic and official examination of a record, process or account to evaluate performance. Auditing in health care organization provide managers with a means of applying control process to determine the quality of service rendered. Nursing audit is the process of analyzing data about the nursing process of patient outcomes to evaluate the effectiveness of nursing interventions. The audits most frequently used in quality control include outcome, process and structure audits.

(a) Outcome audit. Outcomes are the end results of care; the changes in the patients' health status, which can be attributed to delivery of health care. Outcome audit determines results of specific nursing intervention on patients. The audit reflects the outcome accurately and demonstrates the quality of care provided. Examples of outcomes traditionally used to measure quality of hospital care include mortality, hospital induced morbidity, and length of hospital stay.

(b)Process audit. Process audit measures the process of care or how the care was administered. It is task oriented and focuses on whether or not practice standards are being fulfilled. These audits assumed that a relationship exists between the quality of the nurse and quality of care provided. Examples are time taken for nursing evaluation, to send samples for lab investigations and to initiate treatment after admission, documenting adverse drug reaction, evaluation of vulnerability and risk fall assessment.

(c) Structure audit. Structure audit monitors the physical structure in which patient is cared for, such as nursing service, medical records and environment.

CONCLUSION

52.Concern for quality of service constitutes the core responsibility of the hospital to the public. Audit helps to ensure that the gap in the quality of nursing care ideally desired and practically feasible is narrowed optimally. This concept is often referred to as quality assurance.

QUALITY ASSURANCE & CONTINUOUS QUALITY IMPROVEMENT : PLAN AND RESPONSIBILITY

53.QA & CQI Plan. Refer para 23 (a) to (f) above.

Table – 1. Quality Assurance & Improvement : Hospital wide

PURPOSE	METHODOLOGY	RESPONSIBILITY	REMARK
Setting goals and objectives	Setting of mission, vision, objectives, quality policy and service standards through committee discussion and approval of Medical Superintendent	QAC	Refer S. No. 4 to 8 of this document
Infrastructure	Identifying infrastructural requirement including Physical facility • Manpower • Equipments This is determined on the basis of workload and change in scope of service	Hospital Administration and State government	Reference is taken from IS standards and IPHS standards.
Policies, procedures and other documentation requirement	This documentation is done to develop systems and processes that are necessary to provide uniform service of desired level of quality and communicate it to relevant personnel.	Various committees, accreditation coordinator and Medical Superintendent	Refer document: (control of documents)
Compliance monitoring	Compliance is monitored and non-conformity is tracked for taking corrective and preventive actions. This is done through compliance monitoring registers kept in various departments	All the staff of the hospital and Quality Assurance Committee	Refer document: Employee Handbook Manual (compliance monitoring system)
Walk through monitoring	Walk through monitoring or physical monitoring is done by designated member of QAC, Hospital infection control committee, hospital safety committee, Accreditation coordinator, RMO and MS.	QAC, Hospital infection control committee, hospital safety committee, Accreditation coordinator, RMO and MS	Following aspects are specially looked for • Infection control • Hospital safety • Record maintenance • Policy compliance
Indicator monitoring	A list of indicators has been developed to monitor the key features necessary for quality	QAC	Table No.11

PURPOSE	METHODOLOGY	RESPONSIBILITY	REMARK
	assurance. These are developed for structure, process, clinical and managerial activities. A monthly report is generated with all these indicators which is reviewed for necessary action by Quality Assurance committee		
Training and orientation	Necessary instructions to the staff for quality assurance are communicated through their departmental incharges. Quality Assurance is also included as one of the training needs, on which training is organized at regular intervals	QAC and hospital administration	
Continuous process	The contents of this programme is reviewed every year by Quality Assurance Committee for adequacy.	QAC	Following aspects is reviewed every year • Objective and service standards • Adequacy of documentation • Monitoring systems • Various Indicators and their standards • Structure for implementation of quality assurance programme • Any other system required for quality improvement

Table – 2. Quality Assurance & Improvement : Laboratory

S NO	KEY CHARACTERISTICS	ACCEPTANCE NORMS/ CRITERIA	RESPONSIBILITY & CONFORMANCE VERIFICATION.	FREQUENCY
1.	Surveillance of test results	Weekly surveillance of a sample of test results	HOD / Laboratory In-charge	Weekly
2.	Check of calibration and maintenance of equipments according to standard.	As per the manufacturer's instruction. (at every reconstitution)	Technician	Weekly

S NO	KEY CHARACTERISTICS	ACCEPTANCE NORMS/ CRITERIA	RESPONSIBILITY & CONFORMANCE VERIFICATION.	FREQUENCY
3	Compliance monitoring	Compliance as per standards, SOP and policies	Laboratory staff	Continuous
4	Timely intimation of critical results	Within ½ hour	Technician	Daily
		BIOCHEMISTRY		
S NO	KEY CHARACTERISTICS	ACCEPTANCE NORMS/ CRITERIA	RESPONSIBILITY & CONFORMANCE VERIFICATION.	FREQUENCY
1	Daily washing of equipments with methanol and distilled water.	Clean glassware	Technician	Weekly
2.	Washing of equipments with FLOW -WELL (reagent)	As per the manufacturer's instruction.	Technician	Fortnightly
3	Calibration through control (Biochemistry Kit)	As per the manufacturer's instruction.	Technician	Quarterly
		HAEMATOLOGY		
S NO	KEY CHARACTERISTICS	ACCEPTANCE NORMS/ CRITERIA	RESPONSIBILITY AND CONFORMANCE VERIFICATION	FREQUENCY
1	Maintenance of equipment	As per the instruction in operation manual.	Technician	Daily
2	Calibration through control. (Heamatology kit)	As per the manufacturer's instruction.	Service Engineer of the company.	Once in three months
		PATHOLOGY		
S NO	KEY CHARACTERISTICS	ACCEPTANCE NORMS/ CRITERIA	RESPONSIBILITY AND CONFORMANCE VERIFICATION	FREQUENCY
1	Tests to be done on fresh specimens received in containers with lids.	Proper covering of sample with lid	Technician	Daily
		MICROBIOLOGY		
S NO	KEY CHARACTERISTICS	ACCEPTANCE NORMS / CRITERIA	RESPONSIBILITY AND	FREQUENCY

S NO	KEY CHARACTERISTICS	ACCEPTANCE NORMS/ CRITERIA	RESPONSIBILITY & CONFORMANCE VERIFICATION.	FREQUENCY
			CONFORMANCE VERIFICATION	
1	Preparation of media under strict aseptic precautions	Sterility	Technician	Weekly
2	Checking of gas cylinder for any leakage	Offensive smell		Daily

Table – 3. Quality Assurance & Improvement : Radiology

S NO	KEY CHARACTERISTICS	ACCEPTANCE NORMS / CRITERIA	RESPONSIBILITY AND CONFORMANCE VERIFICATION	FREQUENCY
1.	Surveillance of test results	Weekly surveillance of a sample of test results	HOD / Laboratory In-charge	Weekly
2.	Compliance monitoring	Compliance as per standards, SOP and policies	Laboratory staff	Continuous
3.	Timely intimation of critical results	Within ½ hour	Technician	Daily
4.	Waiting time for investigation.	• X ray : 30 min or less (90% cases) • Ultrasound : 40 min after preparation (90% cases) • CT Scan : 30 min after preparation (90% cases)	Technician / Radiologist	Weekly
5.	Report delivery time	90% x-ray and ultrasound reports delivery on time as per policy CT reports by 10:30 AM next day	Technician / radiologist	Weekly
6.	Wastage of film because of repeat process	5% - 7%	Supervisor/ Technician / Radiologist	Monthly
7.	Uptime of equipment	95 % - 98 %	Supervisor/ Technician / Radiologist	Monthly

Table – 4. Quality Assurance & Improvement : Intensive Care Unit

S NO	KEY CHARACTERISTICS	ACCEPTANCE NORMS / CRITERIA	RESPONSIBILITY & CONFORMANCE VERIFICATION	FREQUENCY
1.	Infection control and sterility of ICU	• Carbonization • Weekly Air Culture • Weekly swab culture	ICU in charge / staff	Once in a week
2.	Sterility of Ventilator	Sterilization after each utilization followed by culture.	ICU in charge / staff	Once in a week
3.	Monitoring and measurement of life saving equipment and other equipments	• Functional status check. • Calibration – Yearly/as and when required • AMC/Preventive Maintenance – Yearly/as and when required	ICU in charge / staff	Monthly

Table – 5. Quality Assurance & Improvement : Surgical Services

S. NO.	KEY CHARACTERISTICS	ACCEPTANCE NORMS / CRITERIA	RESPONSIBILITY & CONFORMANCE VERIFICATION	FREQUENCY
1.	Punctuality of O. T staff	• Start functioning at time	OT in charge	Once in a week
2.	Complete pre operative preparation before patient is shifted to O. T	• Part preparation • Nail polish removing. • Removal of all ornaments. • Consent for procedure • Change of clothes.	O.T. Staff Anesthesiologist	Daily Once in a week
3.	Anesthesia induced after 17.00 hrs.	Acceptable only during emergency	Anaesthesiologist	Once in a week
4.	Cases continuing beyond 19.00 hrs.	Acceptable only when necessary	Anaesthesiologist	Once in a week
5.	Infection Control and sterility of O. T	• Daily carbolization • Weekly air culture • Weekly fumigation • Hypochlorite treatment of infected linen / instruments for 3 – 4 hrs before autoclaving. • Restricted entry of visitors into O.T. complex	OT incharge / O.T. Staff / Anaesthesiologist	Once in a week
6.	O.T turnaround time between two	Not more than 30 mins.	HOD	Once in a week

S. NO.	KEY CHARACTERISTICS	ACCEPTANCE NORMS / CRITERIA	RESPONSIBILITY & CONFORMANCE VERIFICATION	FREQUENCY
	operations			

Table – 6. Quality Assurance & Improvement : Hospital Infection Control

S. NO	PURPOSE	METHODOLOGY	RESPONSIBILITY	REMARK
1.	Surveillance and collection of data related to hospital acquired infections	Infection control nurse shall do daily surveillance of the hospital and record the patients infections in the hospital	Infection control nurse	This data shall be presented to Hospital infection control committee for analysis
2.	Adherence to standard precautions	Non-adherence to standard precautions shall be recorded in compliance monitoring register by observing staff	All staff of the hospital	Hospital infection control committee shall keep a check on these registers and shall also do physical monitoring to identify non-conformity
3.	Urinary tract infections	Urine of all symptomatic catheterized patient shall be sent for culture	Treating physician	Infection control nurse and hospital Infection control committee shall be vigilant about this
4.	Respiratory tract infections	All patients on the ventilator having clinical feature suggestive of infection shall have their sputum or ET/tracheostomy secretions (obtained using a suction catheter) or ET/tracheostomy tip or protected specimen brusing (PSB) or mini bronchoalveolar lavage(BAL) for culture.	Treating physician	Infection control nurse and hospital Infection control committee shall be vigilant about this
5.	Intra-vascular device infections	For patients with symptoms suggestive of intra-vascular device infection and having central line the same shall be done by sending the tip for culture. For all	Treating physicians	Infection control nurse and hospital Infection control committee shall be vigilant about

S. NO	PURPOSE	METHODOLOGY	RESPONSIBILITY	REMARK
		peripheral lines clinical evidence of thrombophlebitis would suffice.		this
6.	Surgical site infections.	Pus / swab of such patients shall be sent for culture.	Treating physician	Infection control nurse and hospital Infection control committee shall be vigilant about this

QUALITY ASSURANCE AND CONTINUOUS QUALITY IMPROVEMENT : INDICATORS

54. Following indicators shall be measured and monitored by quality assurance committee to assure quality and continuously improvement it.

S No	INDICATOR	CALCULATION FORMULA	REMARKS
BLOOD BANK			
1.	Percentage of transfusion reactions	Number of transfusion reactions ---------- x 100 Number of transfusions	Includes blood & its components.
2.	Percentage of blood & blood products wastage	Number of blood and blood products used ---------- x 100 Number of Blood and Blood products issued from Blood Bank	a) Includes blood & products found unfit for use. b) Include blood & its products. Number of transfusions not included.
3.	Percentage of blood component usage	Number of components used ---------- x 100 Number of blood & Blood products used	
4.	Turnaround time for issue of blood and blood components	Sum of total time taken ---------- x 100 Total number of blood & components issued	Time order is raised to time it reaches clinical unit.
BIO MEDICAL ENGINEERING			
5.	Critical Equipment Down Time (Period Equipment fails to perform its function)	Sum of down time for all critical equipments	Critical equipment a) Life saving equipment

			b) Standby NA c) Spares/Repairs take long period of time d) Cost > 3 Lacs.
DIAGNOSTICS (Hospital Lab & Radiology)			
6.	Number of reporting errors per 1000 investigations	Number of Reporting Errors ---------- x 1000 Number of Tests performed	Reported every month Includes errors picked up before & after dispatch of report & transcription errors.
S No	INDICATOR	CALCULATION FORMULA	REMARKS
7.	Percentage of Re-Dos (includes repeats prior to release of report to confirm finding).	Number of Re-Dos ---------- x 100 Number of tests performed	
8.	Percentage of reports co-relating with clinical diagnosis.	Number of reports correlating with clinical diagnosis ---------- ----- x 100 Number of tests performed	Includes both clinical diagnosis & differential diagnosis
9.	Percentage of adherence to safety precautions by employees working in diagnostics	Number of employees adhering to safety norms ---------- - x 100 No of employees sampled	Even a single non compliance will be considered as non-adherence
10.	Waiting time for diagnostic tests(time requisition presented at diagnostic counter to initiation of test procedure).	Sum of every patient time at diagnostic counter ---------- Total number of patients reported at diagnostic	
DIETETICS			
11.	Percentage of cases (in-patients) screened for nutritional needs.	Number of In-Oatient records with Nutrition assessment ---------- --------- x 100 Total number of patients (Sample Size)	Sample consists of patients who are still in the hospital.
EMERGENCY (CASUALTY)			
12.	Return to emergency dept. within 72 hrs with similar presenting complaints	Number of return to emergency within 72hrs with similar presenting complaints ---------- x 100 Number of patients who came to emergency.	
HUMAN RESOURCE DEPT			

13.	Percentage of employees provided pre-exposure prophylaxis	Number of Employees provided pre exposure prophylaxis ---------- ---------- x 100 Number of employees due for pre exposure Prophylaxis	a) Will include all new and old employees. b) Will include at least Hepatitis-'B' vaccine.
14.	Employee satisfaction index	Score achieved on Measuring Instrument ---------- x 100 Maximum possible score	a) Every 6 months. b) Will include all staff categories.
15.	Employee attrition rate	Number of Employees who left ---------- x 100 No of employees at the beginning of month & new joiners	Every month end
16.	Employee absenteeism rate.	Number of employees on unauthorized absence ---------- x 100 Total number of Employees	
17.	Percentage of employees who are aware of employee right, responsibilities & welfare schemes	Number of Employees aware of rights, responsibility & welfare schemes. ---------- --- x 100 Number of employees interviewed	
INFECTION CONTROL			
18.	Bloodstream infection rate	Number of central line associated blood stream infections ---------- ---------- x 1000 Number of central line days in the month	Every month

S No	INDICATOR	CALCULATION FORMULA	REMARKS
19.	Incidence of blood/body fluid exposure	Number of blood & body fluid exposure ---------- x 100 Number of In Patient days	Contact of staff's eye, mucosa, abraided skin or mouth.
20.	Incidence of needle stick injuries.	Number of par-enteral exposures ---------- x 100 Number of In Patient days	Includes injuries due to any sharps.
21.	Pneumonia Rate	Number of ventilator associated Pneumonias ---------- x 100 Number of ventilator days in the month	Every month
22.	Surgical site Infection Rate	Number of surgical site Infections ---------- x 100 Number of surgeries performed in the month	Every month

23.	Urinary tract Infection rate	Number of urinary catheter associated UTIs ---------- x 100 Number of urinary catheter days in the month	Every month
IN PATIENTS (IPD)			
24.	Time for Initial assessment (indoor & emergency patients)	Sum of time taken for initial assessment ---------- = Average time Total number of patients (sample size)	±20% will be outliers
25.	Percentage of cases (in-patients) wherein care plan with desired outcomes is documented and counter signed by the clinician	Number of inpatient records with documented desired outcomes ---------- x 100 Total number of Inpatients	Sample will include inpatients undergoing treatment.
26.	Bed occupancy rate. (Available bed days is number of official beds x number of days in the month)	Number of inpatient days in the month ---------- x 100 Number of available bed days in the month	Patient formally admitted & discharged or death after any unit of time is counted as one bed day.
27.	Average Length of Stay.	Number of inpatient days in the month ---------- = Average days Number of discharges & deaths in the month	

S No	INDICATOR	CALCULATION FORMULA	REMARKS
28.	Time taken for discharge.(starts when consultant approves discharge and ends when process is completed)	Sum of time taken for every discharge ---------- = Average time Number of patients discharged	Patient's request for additional time is not counted.
INTENSIVE CARE UNIT (ICU)			
29.	Return to ICU within 48 hours.	Number of returns to ICU within 48 hours ---------- x 100 Number of discharges/transfers/deaths in ICU	Every month
30.	Re-intubation Rate	Number of Re–intubations within 48 hours of extubation ---------- --------- x 100 Number of Intubations	Every month

31.	ICU Equipment Utilisation (equipment days = number of equipments x number of days in the month)	Number of equipment utilised days ---------- x 100 Number of equipment days available	
32.	ICU Beds Utilisation (available bed days = number of beds in ICU x number of days in the month)	Number of days ICU beds utilised ---------- x 100 Number of ICU bed days available	
MEDICAL RECORDS DEPT (MRD)			
33.	Mortality Rate	Number of Deaths ---------- x 100 Number of discharges & deaths	
34.	Percentage of medical records not having discharge summery	Medical records without discharge summary ---------- x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.
35.	Percentage of medical records not having codification as per International Classification of Diseases (ICD)	Number of medical records not codified as per ICD ---------- ------ x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.

S No	INDICATOR	CALCULATION FORMULA	REMARKS
36.	Percentage of medical records with incomplete or improper consent	Percentage of medical records with incomplete or improper consent ---------- -- x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.
37.	Percentage of medication charts with error prone abbreviations	Percentage of medication charts with error prone abbreviations ---------- - x 100 Number of medication charts reviewed	Monitoring can be concurrent or for past 3 months admissions.
38.	Percentage of missing medical records	No of missing medical records ---------- x 100 Total number of records	
NURSING CARE			
39.	Percentage of Cases wherein nursing care plan is documented	Number of Inpatient records with documented nursing assessment (Nursing care plan) ---------- x 100 Total number of patients (sample size)	Sample will include patients admitted in past 24 hours.

40.	Incidence of medication errors (includes errors in prescribing, transcribing, dispensing, administering. Also wrong patient, drug, strength & dose and so on)	Total number of medication errors ---------- x 100 Number of patient days (as per sample size)	Monitoring can be concurrent or for past 3 months admissions.
41.	Percentage of admissions with adverse drug reaction(s)	Number of adverse drug reactions ---------- x 100 Number of discharges & deaths	
42.	Percentage of patients on high risk medication developing adverse drug reaction	Number of patients on high risk medication who developed adverse drug reaction ---------- x 100 Total number of patients on high risk medication	
43.	Incidences of bedsores after admission	Number of patients who develop bed sore/bed sores deteriorate ---------- x 100 Number of discharges & deaths	Use National Pressure Ulcer Advisory Panel staging system for deteriorating ulcer.
44.	Incidence of falls (includes falls from bed, chair, staircase, slip, trippin, stumble, shove, push, collision, into an open hole, ditch and so on)	Number of falls ---------- x 100 Number of discharges & deaths	
45.	Nurse-patients ratio for ICUs and wards (in ICU calculate separately for Ventilated & Non ventilated patients)	Total number of Nurses for the facility ÷ Number of Shifts ---------- Total number of beds in the facility	Exclude nurse incharge/ supervisor from the count of nurses.

S No	INDICATOR	CALCULATION FORMULA	REMARKS
OPERATION THEATRE (OT)			
ANAESTHESIA			
46.	Percentage of modification of anesthesia plan. (Deviation from plan after pre anaesthesia assessment)	Number of patients in whom planned anaesthesia was changed ---------- x 100 Number of patients who underwent anaesthesia	Data captured prior to shifting patient from OT.
47.	Percentage of unplanned ventilation following anesthesia. (Post anaesthesia ventilation will be mentioned in anaesthesia plan)	Number of patients put on unplanned ventilator after anaesthesia ---------- -- x 100 Number of patients who underwent anaesthesia	
48.	Percentage of adverse anesthesia events. (untoward medical event due to anaesthetic agent without any causal	Number of patients with adverse anaesthesia event ---------- x	

	relation to treatment)	100 Number of patients who underwent anaesthesia	
49.	Anesthesia related mortality rate.	Number of deaths due to anaesthesia ---------- x 100 Number of patients who underwent anaesthesia	
SURGERY			
50.	Percentage of Unplanned return to OT	Number of unplanned return to OT ---------- x 100 Number of patients operated	
51.	Percentage of rescheduling of surgeries	Number of cases rescheduled ---------- x 100 Number of surgeries performed	
52.	Percentage of cases where hospital's safety procedures have been adhered. (to correctly identify patient, site and surgery)	Number of cases where procedure was followed ---------- x 100 Number of surgeries performed	To be checked in recovery room.
53.	Percentage of cases who received appropriate prophylactic antibiotics within the specified time frame.	Number of patients who received prophylactic antibiotics ---------- x 100 Number of surgeries performed	Antibiotic administered within 2 hours prior to surgical incision.

S No	INDICATOR	CALCULATION FORMULA	REMARKS
54.	OT Utilisation Rate	OT utilisation time (in hours) ---------- x 100 Resource hours	Resource hours = (Number of OTs x Number of hours every OT is available for surgery).
PATIENT SATISFACTION (PATIENT SERVICES)			
55.	Out Patient Satisfaction Index.	Score achieved on measuring instrument ---------- x 100 Maximum score on measuring instrument	Sample will be randomly taken from repeat patients.
56.	In Patient Satisfaction Index.	Score achieved on measuring instrument ---------- x 100 Maximum score on measuring instrument	
57.	Out Patient Waiting time. (Time (T1) patient arrives at the consultants' clinic to time (T2) consultation begins = (T2 – T1)	Sum of total patient waiting time ---------- = Average time	May be worked out for entire OPD & for

		Total number of patients in OPD	individual consultants.
PHARMACY			
58.	Percentage of drug and consumables procured by local purchase.	Number of items purchased by local purchase ---------- x 100 Number of drugs in hospital formulary and consumables list	Includes drugs patient was taking prior to admission & needs to continue.
59.	Percentage stock outs including emergency drugs.	Number of Stock outs ---------- x 100 Number of drugs in hospital formulary and consumables list	
60.	Percentage of drug and consumables rejected before preparation of Goods Receipts Note (GRN)	Total quantity rejected ---------- x 100 Total quantity received before GRN	It means quantity of every item. Does not mean number of items.
61.	Percentage of variations from the procurement process. (Variation from SOP to procure from authorised licensed vendors)	Number of variations from usual procurement process ---------- --- x 100 Total number of items procured	
S No	INDICATOR	CALCULATION FORMULA	REMARKS
62.	Percentage of near misses.	Number of near misses reported ---------- x 100 Number of Incidents reported	
63.	Number of sentinel events reported, collected & analyzed within the defined timeframe.	Number of sentinel events reported, collected & analyzed within the defined timeframe ---------- --- x 100 Number of sentinel events reported, collected & analyzed	
64.	Number of variation observed in mock drill.	Total number of variation in mock drill. (Absolute Number)	
RESEARCH			
65.	Percentage of research activities approved by ethics committee.	Number of research projects approved by ethics committee ---------- --- x 100 Number of research protocols submitted to ethics	Quarterly

		committee	
66.	Percentage of patients withdrawing from the study.	Number of patients withdrew from all ongoing projects ---------- - x 100 Number of patients in all ongoing projects	Quarterly
67.	Percentage of protocol violations/ deviations reported.	Number of protocol violations/ deviations reported ---------- x 100 Number of protocol violations/deviations occurred	Quarterly
68.	Percentage of serious adverse events reported to ethics committee within defined time frame.	Percentage of serious adverse events reported within defined time frame. ---------- x 100 Total number of serious adverse events reported	Quarterly

REFERENCES

55. 'Hospital Committees'

RECORDS AND FORMATS

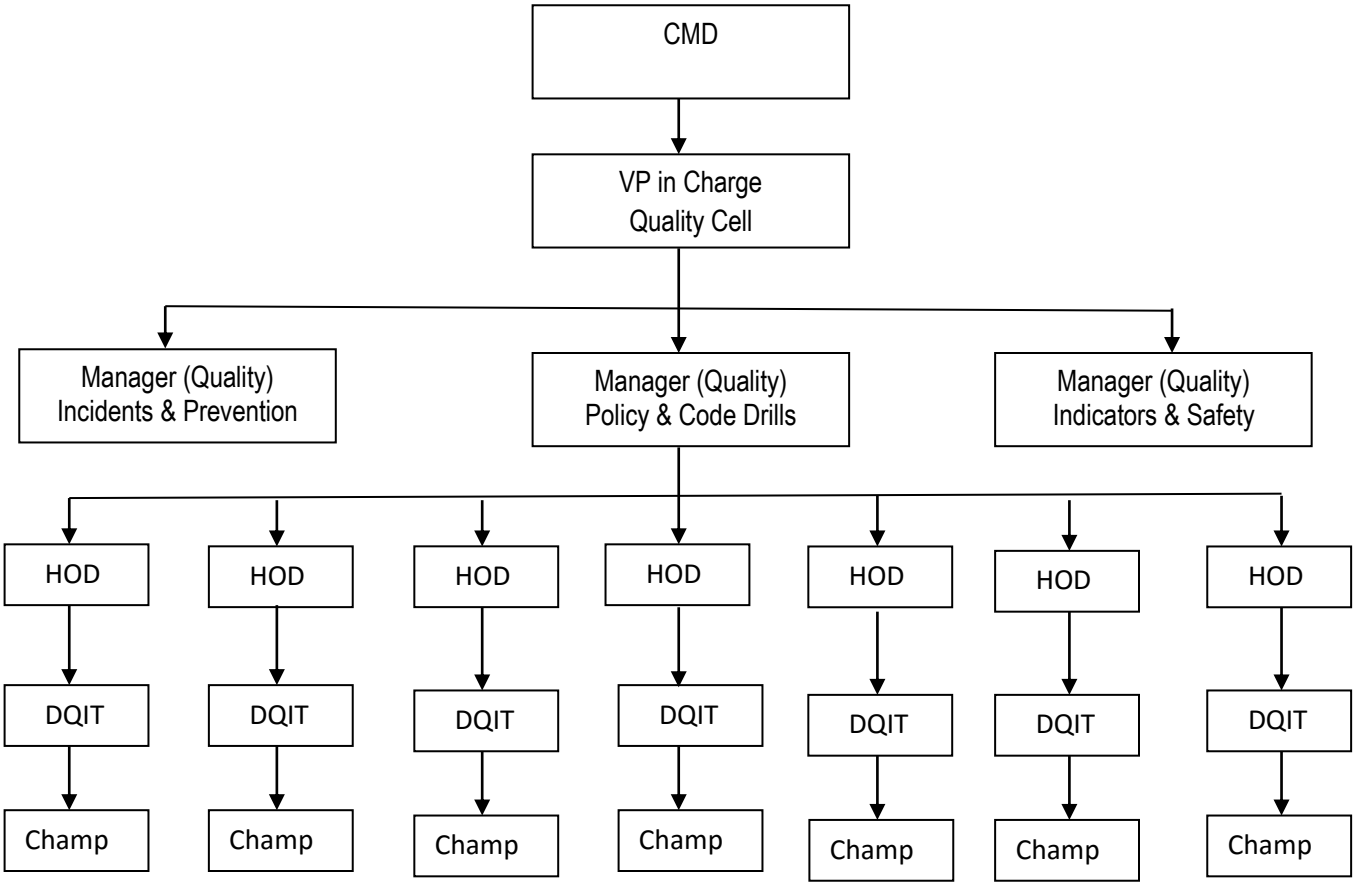
56. Minutes of meetings, Record of Quality Indicators with their Analysis, Internal audit reports

SUPERSESSION DETAILS

57. (a) In case of new document this heading will be excluded.
(b) This document supersedes the earlier version <Doc No… Revision dated…> w.e.f.

ANNEXURE – "A"
(Refers to para17 (c) above)

ORGANISATION STRUCTURE: CQI



ABBREVIATIONS

Champ – Champion, CMD – Chairman & Managing Director,
DQIT – Department Quality Improvement Team,
HOD – Head of Department, VP – Vice President

NOTE

Normally facility manager (operations) shall be leader of DQIT. However, in facility blocks the Executive or the GREs (operations dept) shall be the Champions of their facility.

Prepared by :	Designation : Chief Of Quality Name: Dr. Gauri Shivani
Approved By :	Designation : Medical Superintendent Name: Dr. K R Salgotra
Reviewed by & Responsibility of Updating	Designation : Chief Of Quality Name: Dr. Gauri Shivani

CONTROL COPY HOLDERS	
Chief Of Quality	Dr. Gauri Shivani

CONTENTS

S.No	Standards
COP 1	Uniform care to patients is provided in all settings of the organization and is guided by the applicable laws, regulations and guidelines
COP 2	Emergency services are guided by documented policies , policies and applicable laws and regulations
COP 3	The ambulance services are commensurate with the scope of the services provided by the organization
COP 4	The organization plans for handling community emergencies, epidemics and other disasters
COP 5	Documented policies and procedures guide the care of patients requiring cardio pulmonary resuscitation
COP 6	Documented policies and procedures guide Nursing care
COP 7	Documented procedures guide the performance of various procedure
COP 8	Documented policies and procedures define rartional use of blood and blood products
COP 9	Documented policies and procedures guide the care of patients in the intensive care and high dependency units
COP 10	Documented policies and Procedures guide the care of vulnerable patients
COP 11	Documented policies and procedures guide obstetric Care
COP 12	Documented policies and procedures guide Paediatric services
COP 13	Documented policies and procedures guide the care of patients undergoing moderate sedation
COP 14	Documented policies and procedures guide the administration of an aesthesia
COP 15	Documented policies and procedures guide care of patients undergoing surgical procedures
COP 16	Documented policies and procedures guide organ transplant programmme in the organization
COP 17	Documented policies and procedures guide the care of patients under restraints(Physical & / or chemical restrain)
COP 18	Documented policies and procedures guide appropriate Pain management
COP 19	Documented policies and procedures guide appropriate rehabilitative services
COP 20	Documented policies and procedures guide all research activities
COP 21	Documented policies and procedures guide nutrition therapy
COP 22	Documented policies and procedures guide the end of life care

COP 01-UNIFORM CARE TO PATIENTS IS PROVIDED IN ALL SETTINGS OF THE ORGANIZATION AND IS GUIDED BY THE APPLICABLE LAWS, REGULATIONS AND GUIDELINES.

I. PURPOSE:

To provide uniform quality patient care reflecting the applicable laws, regulations and guidelines.

II. SCOPE:

Hospital wide

III. RESPONSIBILITIES:

Doctors and Nurses

IV. POLICY :

1) All patients visiting the hospital will receive care appropriate to their healthcare need and scope of services provided by the hospital.
2) Quality of medical care will be same in all care settings (IPD, OPD, Ward, OT, Critical care areas, Laboratory, ambulance Service) of the hospital and no discrepancy will be followed in the provision of medical care.
3) Treatment orders would be signed, dated and timed by the concerned clinician.
4) Patients response to treatment ,his /her health status , further treatment plan etc will be discussed among the clinical and nursing staff involved in provision of care to the patient
5) Patient care is guided by applicable laws, regulations and guidelines at each aspect of care. Eg. PCPNDT, HOTA etc.

V. PROCEDURE:

Refer NABH/MGMH/KAM/AAC/01-12

SOP - Registration and Admission, Transfer in & out , referral of Patients, Patient assessment & Reassessment , Laboratory & imaging Services, Continuous patient care , Patient discharge.

COPS 2- EMERGENCY SERVICES ARE GUIDED BY DOCUMENTED POLICIES, PROCEDURES, APPLICABLE LAWS AND REGULATIONS.

I. PURPOSE:

To provide highest standard of quality of patient care in the delivery of immediate assessment and treatment of patients who are brought to the Emergency Department

II. SCOPE:

Casualty & Emergency department

III. RESPONSIBILITY:

Doctor& Nurses at Casualty & Emergency department, Reception, Diagnostic Services & ambulance Services.

IV. POLICY:

1) Standardized clinical protocols for clinical care in the ER department is been followed as per the **departmental SOP**.

2) All the medico legal case as defined are notified to the concerned authorities and the formalities are followed as per the recommended protocols.

3) All patients reporting to the ER department receive care in consonance with the ER department protocols and triaged according to the severity of the condition

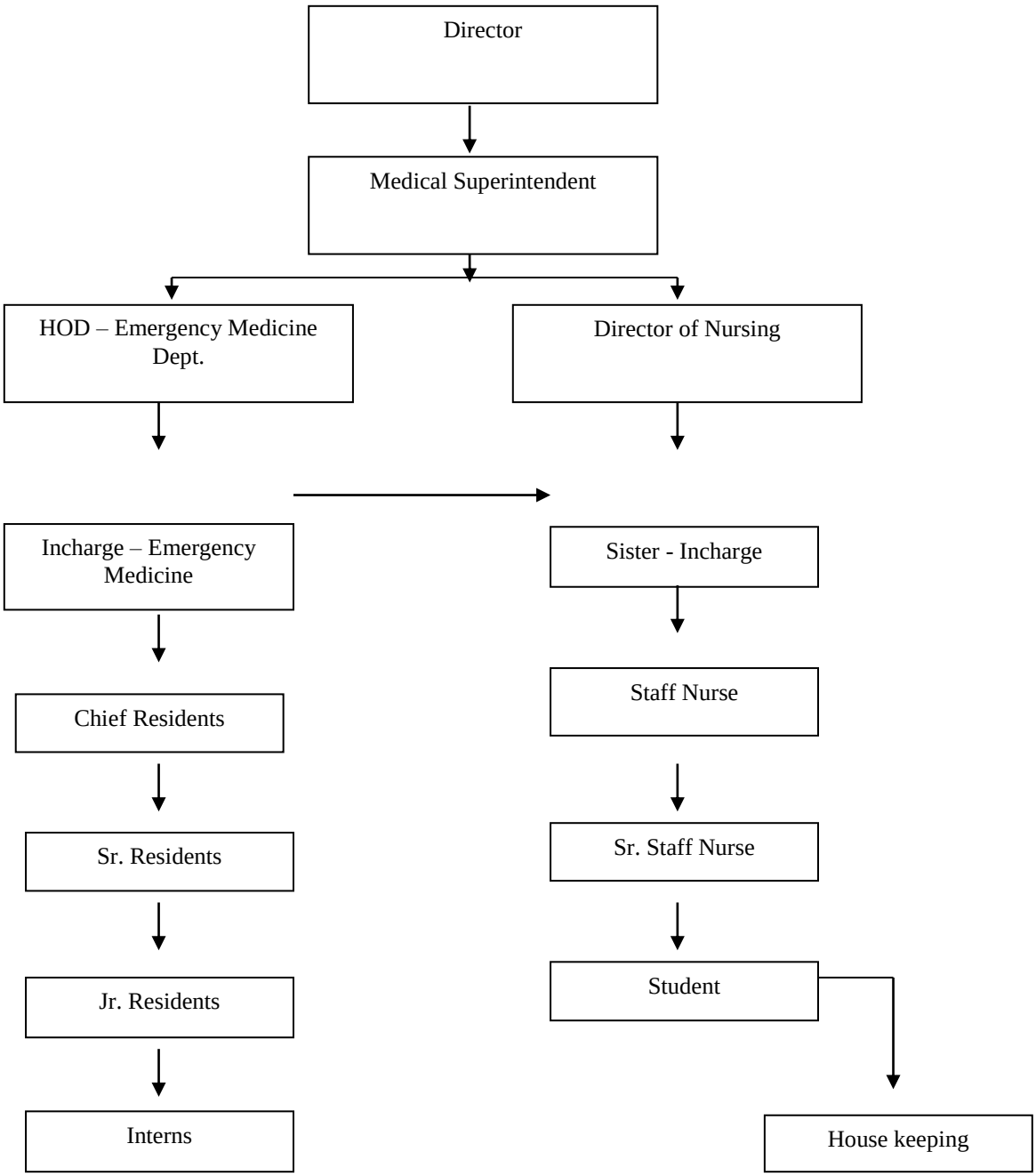
4) All staffs working with the ER department are trained accordingly on protocols and procedures required for emergency patient care.

5) Emergency assessment case records are maintained for all patients seen in the ER and getting admitted as an In-patient. These assessment sheets include all the details on admission and initial care given to the patient.

6) While transferring the patient to the wards / ICU or during discharge a proper note on management of the case in ER are given.

V. PROCEDURE:

ORGANIZATIONAL CHART (Causality)



1. HUMAN RESOURCES

WORKING HOURS: The Emergency department is a critical care area that renders both acute and tertiary care. It will be operational 24 x 7.

The following category of staff will be on duty

- Medical Officer
- Sister In-charge
- Residents
- Senior Staff Nurse
- Staff Nurse
- House Keeping
- Ambulance Drivers

2. SHIFTS:

a) Incharge of Emergency Medicine will be on duty from 08:30 to 15:30.
b) Residents will be on 8 hours shift. RMO shall hand over and take over in each shift.
c) Staff Nurses will be on 3 shifts. The unit is manned 24 x 7
d) The Sister In charge will be on duty on general shift
e) She will meet the night duty Nurses every day.
f) The duty roster, scheduling of weekly offs, public holidays and paid leave will be done by the Sister In charge
g) The above will be intimated to the Nursing Superintendent the beginning of the week.
h) The Sister In charge will plan her own duties, offs, holidays, etc. in consultation with the Director of Nursing.

3. JOB RESPONSIBILITY / AUTHORITY

1) INCHARGE – EMERGENCY DEPARTMENT:

a) Ensure the smooth running of the Emergency department.
b) To ensure the department is fully operational and ready to meet any emergencies.
c) Ensure that all equipment is operational and the staff is well versed in operation of the same.
d) Train Residents / Staff Nurses in BLS / ACLS and carry out drills.
e) Make Residents' duty schedule.
f) Supervise the Residents and Staff Nurses in all aspects and advise wherever necessary.
g) Ensure regular update and maintenance of medical records.
h) Advice the Residents in medico legal cases/cases where patient brought dead /declared dead.
i) Handle complaints from patients / Residents. And close the complaint.
j) Report untoward incidents to Medical superintendent.

2) NURSING INCHARGE – EMERGENCY DEPARTMENT

a) Follow the principle of confidentiality of patient records and status and not discuss anything related to patient condition with attendants
b) Plan and organize Human Resources in the Emergency department to provide quality care to the patients
c) Co-ordinate patient care activities with Residents / HODs / other Departments / relatives of patients.
d) Ensure Emergency department is fully operational and ready to meet any emergency

e) In case of emergencies, delegate work according to priority, responsibility and competency of Staff Ensure that all equipment is operational and, if necessary, kept on charging mode.
f) Ensure all emergency medications are available and in correct location.
g) Ensure regular update and maintenance of medical records.
h) Ensure highest level of emergency care without delay.
i) Ensure that all patients are attended to in a reasonable amount of time.
j) Ensure that all formalities in medico legal cases have been fulfilled.
k) Inform the Emergency department HOD and/or nursing supervisor in case of any death or untoward incidents
l) Supervise Nursing Staff in the Emergency department, to continuously improve quality of service provided, in the following areas :

- Medico legal cases
- Dangerous drugs Cupboard,
- Key handling,
- Daily inventory,
- Nurses records,
- Infection control & Waste disposal,
- Mortuary
- Indenting medicines
- Dispatch of Day Care files to MRD

m) Maintain Ward discipline / Ward facilities and patient environment - equipment, hygiene, stocks (drugs, linen) etc.
n) Supervise support staff in terms of Housekeeping, repair and maintenance and ensuring environmental safety for patients.
o) Receive complaints of patients, Nurses.
p) Make leave and Duty Roster of Staff Nurses.
q) Train junior Staff Nurses and Housekeeping
r) Report untoward incidents to Director of Nursing.

3) RESIDENTS

a) Have thorough understanding of SOP to ensure smooth flow/ movement of procedures, to ensure patient comfort.
b) Hand over in detail all patients, admissions, deaths or any other events in the Emergency department to the next RESIDENT on duty
c) Ensure highest level of emergency care without delay.
d) In case of emergencies, delegate work according to priority, responsibility and competency of Staff
e) Ensure that all patients are attended to as per triage priority and show cases to lecturer on call without delay wherever required.
f) Ensure that all formalities in medico legal cases have been fulfilled.
g) Ensure that respective consultants have been informed of their day care admissions and the required treatment is started.
h) In case of complications inform the Consultant and institute emergency treatment
i) Report untoward incidents to HOD
j) Report any dereliction of duty to the Emergency department in charge/nursing superintendent/medical superintendent for necessary action
k) Inform the Emergency department HOD in case of any death or untoward incidents

l) Handle cases, e.g., CLW suturing, nail removal, strapping, I & D of abscesses, etc.
m) Fill Discharge Cards of day care patients

4) SENIOR STAFF NURSE

a) Follow the principle of confidentiality of patient records and status and not discuss anything related to patient condition with attendants
b) Have thorough understanding of SOP to ensure smooth flow/ movement of procedures, to ensure patient comfort.
c) Delegate work according to priority, responsibility and competency of Nursing Staff
d) Ensure the Emergency department is fully operational for meeting any emergencies.
e) Supervise Junior Nursing Staff to continuously improve quality of service provided.
f) Maintain Ward discipline, Ward facilities and patient environment - equipment, hygiene, stock (drugs, linen) etc.
g) Supervise support staff in terms of Housekeeping, repair, and maintenance and ensuring environmental safety for patients.
h) Report complaints/untoward incidents to Sister In charge
i) Handle medico legal cases and ensure that accurate and proper records are maintained.
j) Dispatch day care files to MRD.
k) Maintain Drug Inventory and Register for Narcotics.

5) STAFF NURSE

a) Follow the principle of confidentiality of patient records and status and not discuss anything related to patient condition with attendants
b) Ensure material (adequate equipment, drugs, medicines, linen, etc.) and mental readiness to meet any emergency in the Emergency department.
c) Have thorough understanding of SOP to ensure smooth flow/ movement of procedures, to ensure patient comfort.
d) Maintain accurate and proper records of admission, MLC, deaths, and other relevant information.
e) Ensure all required data is updated into the Hospital information system
f) Report important/untoward incidents to the HOD – Causality and Sister In charge
g) Check all important items/articles/drugs, equipment and take over from the previous Nurse on duty
h) Ensure that the linen is changed on a regular basis.
i) Maintain an optimum inventory level of all the stationery in the department
j) When the patient arrives, receive the patient; directs the stretcher/wheel chair to the bed
k) Assist/transfer the patient to the bed along with other Nurses or House keeping
l) Inform Resident, Monitor the patient–check vitals, institute resuscitative measures if needed
m) Assist the Resident*s* in examining the patient, carry out instructions
n) Reassure the patient's relatives
o) Instruct the patient regarding treatment/follow up
p) Direct patient /patient's relatives to Reception for billing
q) Fill up requisite forms as required, and follow admission protocol of the patient is for admission
r) In MLC cases ensure all necessary forms are filled accurately
s) Hand over in detail all patients, admissions, deaths or any other events in the casualty to the next Nurse on duty

6) HOUSE KEEPING STAFF

a) Follow the principle of confidentiality of patient records and status and not discuss anything related to patient condition with attendants
b) Assist the nursing personnel in procedures
c) Give bedpan and/urinal to the patients as required
d) Be available at nursing station if allocated work is completed
e) Carry the samples from the Emergency department to the diagnostic department
f) Retrieve the reports of the diagnostic tests to the Emergency department
g) In case of emergencies, shift patient on wheel chair or stretcher from the Reception to the Emergency department.
h) Accompany and help maneuver any patient being transferred from Casualty to OPD/Ward/OT/ICU/Radiology/Ambulance on the instruction of the staff Nurse
i) In case of death, shift the body to the mortuary, on the instruction of the Staff Nurse
j) Change bed linen as pre-determined
k) Take indent from Casualty to store / pharmacy for any requirement, on the instruction of the Staff Nurse
l) Replace Oxygen cylinders if empty on instructions of staff nurse
m) If posted on Ambulance duty, accompany and assist the Staff Nurse
n) Maintain the Emergency department cleanliness as per pre determined schedule
o) Ensure that the toilets and wait areas are cleaned at regular intervals as prescribed by the hospital administration
p) Clean the bedpan /urine pot used by the patient
q) To collect garbage as per pre-determined methods and dispose at pre-determined site
r) Any other task as deemed appropriate by the Management

4. GENERAL INSTRUCTIONS FOR EMERGENCY DEPARTMENT

1) The Emergency department / Emergency Department will be fully equipped at all times to meet any life threatening situation.
2) The Casualty Medical Officer and Staff Nurse will not leave the Station unattended.
3) In case RESIDENT has gone for lunch / dinner, the RESIDENT on call will be made available.
4) Life saving equipment like, monitors, ECG machines, Defibrillators, and Ventilators will be maintained in good working condition. Equipment requiring charging will be kept for charging immediately after use.
5) The Staff Nurse shall check for all medicines and consumables required to manage an emergency condition in each shift.
6) Stretchers and wheel chairs will be kept near the Emergency department entrance.
7) The Death Certificate Book will be available in Emergency department.
8) The Nursing Station will have the telephone numbers of the following placed at prominent place.
9) Names and telephone numbers of Doctors / Consultants on call
10) Names and Telephone Numbers of Managerial Staff, e.g. Medical superintendent, Director of Nursing , HOD- Causality , HOD – Critical care, , Nursing supervisor
11) Names and Telephone Numbers of Laboratory and X-Ray technicians.
12) Telephone numbers of Emergency Services
13) Fire Brigade

14) Police Station
15) Emergency ambulance
16) Eye Donation Center
17) FRU / NMMC ER department
18) FRU / NMMC RESIDENT

5. PATIENT PROCESS

1) On arrival at the Emergency department/Emergency Department
2) The Staff Nurse with the help of HOUSEKEEPING shall receive the patient on a wheel chair or a stretcher. The relative shall be asked to sit in the waiting area. The front office assistant shall make the registration.
3) The staff Nurse shall take history, check vital signs and physical assessment of the patient. The Staff Nurse will inform the RESIDENT about the patient.
4) If the patient arrives in an Ambulance,
5) The Staff Nurse and HOUSEKEEPING will receive the patient and transfer the patient to the Emergency department bed
6) C.M.O. and Staff Nurse will assess the patient's condition and institute life saving measures, if necessary.
7) The HOUSEKEEPING shall move the trolley back to its place near the Emergency department entrance
8) In case of mass casualties, the Triage Nurse /RESIDENT will decide on the order of priority in which the RESIDENT will see the patient. She will direct the patient to the Emergency department, procedure room, etc. The Nurse in charge shall inform the nursing supervisor and can get additional staff.
9) In case the patient has to wait in the waiting area, the Staff Nurse will check the patient's vital parameters, take the history and ensure that the patient is attended to and made comfortable.
10) After the RESIDENT has seen the patient.
11) The relatives shall be explained the condition of patient and further management
12) The Staff Nurse shall direct the patient's relatives towards the Front Office for admission/billing/financial counselor
13) After admission registration is over, the Front Office assistant will direct the patient's relatives, with the admission file, to the Emergency department.
14) The Staff Nurse will write the details of the patient in the Emergency department Register according to OPD / IPD basis.

6. EMERGENCY DEPARTMENT CATEGORIES

1) NEED TO BE SEEN IMMEDIATELY

- Patients with airway problems
- Blood pressure < 90 or > 200
- Poisoning case
- Respiratory rate < 10 or > 30
- GCS < 11
- Snake bite / scorpion sting/animal bite
- Burns > 10%
- Collapse with altered physiology

- CVA
- Status asthmatics - with difficulty in speaking
- Chest pain – severe/cardiac type
- Severe headache – photophobia / altered consciousness
- Convulsions
- Hyperpyrexia in children
- All R T A/ Head injuries

2) TO BE SEEN WITHIN 5 MINUTES

- Abdominal pain - with pyrexia / heamaturia
- Tachycardia or palpitations
- Moderate external bleeding
- Haematemesis / malaena
- Hypothermia
- Collapse with normal physiology

3) TO BE SEEN WITHIN 10 MINUTES

- Labour, bleeding P/V, leaking P/V
- Chest / abdominal pain - mild > 48 hours
- Mild breathlessness
- Headache without photophobia or altered consciousness

4) TO BE SEEN ON A NON-EMERGENCY BASIS

- Minor soft tissue injury
- Injury > 24 hours old, without disability

7. MANAGEMENT OF PATIENTS IN THE EMERGENCY ROOM (Applicable For All Emergencies)

1) No attendant/relative of the patient will be permitted in the Emergency department unless the patient is a child.

2) On receiving the patient the patients valuables and belongings are handed over to the relatives

3) The signature of the relatives are taken in the valuables handing over form and place in patients' file

4) If the patient is alone then the belongings are handed over to the security shift in charge after filling in the valuable hand over form

5) The valuables will be then handed over to the security shift in charge who will keep it in the IP billing safe after informing IP billing staff on duty

6) The resident will examine the patient, assess his/her condition and decide on the treatment.

7) The resident will stabilize the patient and, if necessary, call for additional help.

8) The resident will inform the Consultant, if necessary, and document their instructions and start treatment.

9) Only the HOD/Intensivist/senior resident will decide if the patient has to be admitted to ICU/Ward/taken up for an emergency procedure after examining the patient, except in dire emergencies requiring ICU admission.

10) The Staff Nurse will ensure that the samples are collected, correctly labelled and then sent to the laboratory for investigation.

11) The resident/Staff Nurse will check on the status of beds in the ICU/Wards through Hospital information system, and will coordinate with the bed manager for the bed booking
12) The staff Nurse will inform the respective department.
13) The Staff Nurse will direct the patient's relatives to the Front Office Counter to complete all registration/admission formalities as well financial counselor for counseling
14) The Staff Nurse will ensure that the relative's pass is issued to the patient from front office
15) The Staff Nurse will transfer the patients to the respective Wards on a stretcher with the help of housekeeping. In case of ICU/OT transfer the patient is also accompanied by the resident.
16) Before shifting the patient, the Staff Nurse should hand over all valuables to the patient's relatives and get the signature and valuable handing over form.

8. PATIENTS WITH SURGICAL EMERGENCY

1) Resident will examine and document on the preformat designed for this purpose
2) The case will be shown to the lecturer and decision will be made to operate or otherwise.
3) The Staff Nurse will inform the O.T. Staff Nurse with regard to Emergency patients who are in need surgical procedures.
4) The Staff Nurse will inform details about the procedure, i.e., time, name of the Surgeon who will be doing the procedure, etc
5) Patient will be prepared by the Emergency department staff for the surgical procedure
6) Patient is shifted to the OT by the housekeeping and the staff Nurse
7) The resident / Surgeon will explain the risks, inconveniences, method and the purpose of the procedure. In case the surgical procedure may result in sterility, it should be explained to both husband and wife and consent taken.
8) The Staff Nurse will ensure that all pre-operative preparation is done e.g.

- Physical preparation
- Written consent of patient, husband / wife / relatives, parent / guardian in case of minors. (Checklist of OT)
- Samples for urgent / mandatory investigations to be sent to the Laboratory

9) The Staff Nurse will inform the respective Ward of the admission of the patient post operatively

9. MEDICAL EMERGENCY

1) GENERAL EXAMINATION

a) The resident will examine the patient and assess the patient's condition.
b) He will inform the ICU Doctor on call.
c) The resident will keep the patient in the Emergency department till the Consultant examines the patient and decides on treatment/investigations/transfer to ICU/ Ward.
d) The Staff Nurse will direct the relatives to the reception to complete admission and counseling formalities.
e) The Staff Nurse informs the respective department about the admission and the condition of the patient.
f) The Staff Nurse will ensure that samples are collected, correctly labeled and sent to the laboratory for investigations. She will enter the same in the Pathology Register.
g) The Staff Nurse will do all the postings e.g. Consumables, consultant visits etc.
h) The Staff Nurse / Housekeeping will transfer the patient on the trolley / bed.
i) The Staff Nurse and Housekeeping will accompany the patient to the ICU/ Ward.

j) If patient is to be transferred to critical areas, the resident will also accompany the staff Nurse during the transfer

k) The Staff Nurse will hand over in detail about the patient – treatment given, investigations done/samples sent, if payments have been made, and the list of consumables/injections used, etc., and posting done.

2) IF THE PATIENT NEEDS ADMISSION TO ICU

a) The resident / Staff Nurse shall monitor vitals and initiate the resuscitative measures, to stabilize the patient.

b) The resident /Staff Nurse will confirm the availability of vacant bed in the ICU.

c) The resident /Consultant will notify the relatives of the need to admit the patient to the ICU.

d) If the relatives are willing for admission, the staff Nurse/ resident shall inform ICU regarding admission and condition of the patient.

e) The Staff Nurse will direct the relatives to the reception to complete the Admission / Registration procedures.

f) The Staff Nurse will do all the postings through Indent /Hospital information system.

g) After completion of the admission procedures, the patient will be transferred to the respective ICU.

h) The Staff Nurse will ensure that the patient is on life support system, if required.

i) The resident and Staff Nurse will accompany the patient to the ICU.

j) The resident and Staff Nurse will hand over to the Intensives/ resident / Staff Nurse in detail regarding the patient's condition - arrival, observation, assessment, attending Consultant, treatment, procedures and investigations prescribed and completed, etc.

k) If the patients relatives are not willing for an admission then the LAMA protocol is to be followed

10. PAEDATRIC EMERGENCY

1) The resident will assess the patient and begin life saving measures. The Resident will simultaneously call the paediatric residents.

2) The Staff Nurse/ resident will direct the relatives to the reception for completion of Admission / Registration procedures.

3) The resident /Pediatric Residents will inform the Paediatric Consultant.

4) The Consultant will visit the patient and determine the line of treatment.

5) The staff Nurse/ resident shall inform the respective department regarding admission.

6) The patient will then be transferred out to the Ward/ ICU

11. GYNAECOLOGY & OBSTETRIC EMERGENCY

1) The patients in this category may come with the following symptoms:

- Vaginal bleeding or discharge
- Abdominal pain or back pain
- Labor pains.
- Headache often with visual disturbance

2) The resident will take the history :

- Gravida, no. of deliveries
- Gestation
- History during pregnancy

- Onset of symptoms
- Vital parameters
- Signs of labour / delivery
- He will call the Gynaec. Resident

3) Gynecology Resident will assess the patient and initiate stabilizing measures, if required.
4) The Gynecology Resident will inform the Sr. Doctor about the patient.
5) The Sr. Doctor will visit the patient, examine and determine the treatment.
6) The Sr. Doctor will decide on transfer to Ward / Maternity Section (MGM Hospital, Kalamboli).
7) The Staff Nurse / Resident will direct the relatives to the reception for completion of Admission / Registration procedures
8) The Staff Nurse / Resident will inform the Maternity Section (MGM Hospital, Kalamboli) / Ward of the Admission / transfer of the patient.
9) The Staff Nurse will escort the patient to the Ward / Maternity Section (MGM Hospital, Kalamboli).

12. MEDICO-LEGAL CASES

1) CASES THAT FALL UNDER MLC

- Road Traffic accidents including cases of head injury.
- Poisoning, chemical poisoning, etc.
- All cases of assault and battery
- Sexual offences
- Criminal abortions
- Firearm injuries
- Drug overdose and drug abuse
- All suspected cases of Homicide or attempted suicide.
- Drowning victims.
- Burns – fire, electrical burns, chemical burns, etc.
- All patients brought dead.
- Patients who expire within 24 hours of admission with unconfirmed Diagnosis.
- Patients who die on OT table during surgery i.e. unexplained deaths except high risk cases
- Anaphylaxis related deaths
- Patients who die within 24 hours of surgery.
- Snake bite/scorpion sting/animal bites.

2) PROCEDURE FOR MEDICO LEGAL CASES

- The Staff Nurse/resident will examine and assess the condition of the patient.
- The Staff Nurse/resident will give emergency first aid / take resuscitative measures to stabilize the patient.
- The Staff Nurse/resident will take a detailed history of the accident / incident from the patient/relatives/witnesses and document it.
- The resident will inform the Consultant who will visit the patient.
- The Consultant will decide if the patient needs admission to ICU/Ward or can be treated in Emergency department
- The resident has to fill the MLC form and MLC Report
- The staff Nurse has to enter the case in MLC register

- The Staff Nurse/resident will inform the Nursing supervisor/Medical superintendent respectively.
- The Staff Nurse will write on the patient's file in bold letters "MEDICO LEGAL CASE".
- The Staff Nurse/resident will explain to the relatives the need to inform the Police of the accident/incident.
- The resident will inform the Police of the Respective Police Station.
- The resident will take down the intimation number and the name, designation & buckle number of the Police Officer and note it down on the case sheet.
- The staff Nurse will request the relatives to wait in the lounge until the Police arrive.
- The resident will provide information to the Police, if asked.
- The Police will sign on the M.L.C Form after the information has been collected.
- The Staff Nurse/resident will cooperate with the Police while they visit the patient.
- If the patient has been brought in by witnesses, the Staff Nurse/resident will note down the identity of the person/s, date and when the patient has been brought in, if they are willing and make every effort to the contact the next of kin of the patient.
- The relatives will be directed to make the payment at the reception for the bill generated on the patient's name
- In case the relatives are not in a position to pay the bills, the Staff Nurse/resident will contact Director of Nursing/medical superintendent/ director for advice.

13. OBTAINING BLOOD FOR TRANSFUSION

1) In case the patient needs blood transfusion, the Staff Nurse / Residents will collect the sample for grouping and cross matching.

2) The resident /Staff Nurse will send the requisition form duly filled in to the blood bank through manual/ hospital information system.

3) The resident /Staff Nurse will explain to the relative to go to the Blood Bank for further instructions. s

4) If the blood is not available in the Hospital blood bank, the technician will inform the resident and the technician will try to arrange for the blood from the blood bank.

5) On arrival of the blood, the resident/Staff Nurse will check the blood for blood group, whether cross matching has been done, Rh compatibility, expiry date, etc.

14. PATIENT'S / RELATIVE'S REFUSAL FOR ADMISSION / LEAVE AGAINST MEDICAL ADVICE (LAMA)

1) After examining the patient, if the resident determines the necessity of admitting the patient, he will make the same known to the relatives.

2) If the patient / relative insist on not being admitted, the resident will again inform them of the gravity of the patient's condition, and take the Patient's/relative's signature on the LAMA form and will write -"Leave against medical advice".

3) The Treatment Summary is given to the patient.

In case of MLC patients, the reports are to be retained within the hospital and have to be informed to the relatives of the patient.

4) If the patient / relatives of MLC cases insist for report, then they have to be explained that they will have to pay extra amount for the duplicate reports (e.g. CT, MRI or X-Ray plates).

15. DEPOSITION FORM

1) In case of death of the patient while giving emergency treatment, the death will be declared by the resident but he will not be issued a death certificate.
2) The resident will inform the on call consultant and take his advice.
3) If the patient has been brought dead on arrival to the Emergency department, the resident will explain to the relatives that the hospital will not issue the death certificate.
4) The resident will inform the Police Station about the death.
5) The resident will note all particulars about the case in writing.
6) In case the police are delayed for more than 2 hours, the body may be shifted to the mortuary
7) The Staff Nurse/ resident will ensure that all the patient's belongings are kept safely and not handed over to the relatives/attendants until the Police arrive.
8) The Staff Nurse will explain to the relatives that the Hospital will issue the deposition form

16. ISSUE OF DEATH REPORT

1) The resident will issue the Death report in case the patient has been treated in the Emergency department and the cause of death has been diagnosed and the Consultant has been informed regarding the patient.
2) The consultant will also sign on the death report
3) The death report must be filled in carefully and signed by the resident and consultant. The hospital Seal/Stamp must be placed below the signature.

17. DISCHARGE OF MLC PATIENT

1) The resident informs the police about the discharge of the patient.
2) The resident writes on the case paper "Patient Is Discharged" with the signature of the resident /HOD.
3) The Staff Nurse ensures that the patient waits until the Police see the patient.
4) She ensures that the Police signs on the case file before the patient leaves the Hospital.
5) The relatives will wait till the Police arrive and collects the FIR

18. DAY CARE PATIENTS

1) The following patients will be admitted to Day Care:

- Patients who come to the Emergency department and are advised observation to their condition for a few hours.
- Patients for Day Care surgeries.
- Patients may be kept in the Emergency department in case of unavailability of beds in the ICU / ICCU.
- Patients for Endoscopy
- Patient for chemotherapy

2) The Staff Nurse will direct the patient/relatives to the reception to make the payment.
3) The staff Nurse will indent the needed medicine and consumables through Manual Patients relative /Hospital information system.
4) She will explain the treatment/medicines/investigations to be done, follow up/ OPD consultation, etc. to the patient
5) Discharge cards will be filled by the department resident after completion of appropriate treatment.

6) Clearance will be given and patient exit after clearing bills

7) Patient is to be admitted as day care patient in twin sharing room if day care beds are not available

19. INDENTING MEDICINES / SURGICAL / GENERAL ITEMS IN CASUALTY

1) INDENTING MEDICINES FOR PATIENTS

a) The Nursing Staff in Emergency department will use medicines from the stock, which shall be billed into to the patient's final bill.

b) For emergency medicines (which are not available in ER) staff Nurse shall call the pharmacy and confirm the availability of drug and raise the indent through patient relative /Hospital information system.

c) For day care cases, the Staff Nurse will fill in the medicine requisitions on line through patient relative.

d) The Staff Nurse will ensure acknowledgement of indent from the relevant Store.

e) Staff Nurse will bring the indent from the pharmacy.

f) The Staff Nurse, on receiving the indent, will check every item along with the requisition, for quantity, strength and expiry date of the item.

g) On receiving the item the staff Nurse shall accept it through hospital information system.

2) CREDITING MEDICINES AND OTHER ITEMS

a) The Staff Nurse will return the unused items to the Hospital Store before the patient's final bill is prepared.

b) She will check the patient's stock to ensure sufficient supply and avoid excess as well.

c) The Staff Nurse, while crediting, will enter into the system "crediting".

3) INDENTING CASUALTY STOCKS

a) Casualty Department will maintain the following stock:

- Drugs
- IV fluids
- Surgical items/consumables.

b) The Sister In charge or Senior Staff Nurse will indent the stock for the Casualty on pre determined day

c) She will check the stock against the stock items in the sub store.

d) She will indent for items used and update the stock as required

e) The Staff Nurse will monitor the drugs in her Ward-stock for expiry.

f) Any non-moving drug (idle for past 8 weeks and nearing expiry 2 months) will be returned to the Pharmacy

g) The Sister Incharge will first prepare a list of indent required.

h) She will recheck the list.

i) The Sister In charge will take the signature of MS after verifying from Director of Nursing.

j) On receiving the requisition, the Pharmacist will check and acknowledge the same.

k) On receiving the indent, the Sister In charge will check the items against the requisition sent.

l) She will acknowledge the same by entering her full name and employment ID

m) The Sister Incharge will then replace the items in the stock.

n) She will also update her stock in the Ward.

20. REQUISITIONS FOR DIAGNOSTIC TESTS

1) REQUISITION FOR EMERGENCY ORDERS – LAB TESTS

a) The resident/HOD will write the order for emergency investigations
b) The resident will fill in the requisition with the patient's name, the test and relevant clinical notes.
c) Medical notes will be completed by the resident and checked by the Lecturer.
d) The Staff Nurse will draw the samples and label them correctly as per the filled Requisition Form.
e) Staff Nurse send sample to lab with Housekeeping
f) Resident / staff Nurse will check the report.
g) The resident will inform the HOD.

2) REQUISITION FOR ROUTINE INVESTIGATIONS – LAB TESTS

a) The Staff Nurse will ensure that the order is written for the Investigations /Laboratory tests during HOD's/ resident's rounds.
b) She will check patient files to identify the tests required to be done.
c) The Staff Nurse will draw the samples and label them correctly as per the filled Requisition form.
d) The Staff Nurse will enter the requisition for Lab. tests as indicated by the HOD's/ resident's order.
e) The Staff Nurse will check the acknowledgement of the requisition on line.
f) Resident /staff Nurse will access the report as per the instructions from the Laboratory.
g) Resident will inform the HOD regarding the report.

3) REQUISITION FOR X-RAYS / USG ETC.

a) The resident will enter the prescribed investigation in the case sheet, fill in the Requisition form, and label it "STAT".
b) The Staff Nurse will inform the Radiology Department about the investigation.
c) The staff Nurse will take appointment.
d) The patient will be transferred on trolley/wheelchair by the Housekeeping and the Intern / Staff Nurse according to the patients condition
e) After the investigation, the patient will be brought back until the Consultant determines the transfer to the Ward / ICU.

21. INDENTING PROCEDURE FROM CSSD

1) The Emergency department will have a predetermined number of sets/packs of instruments and linen.
2) The Staff Nurse will send the used items to the CSSD as per the time schedule.
3) The Staff Nurse will make the Requisition through register/System for sending the used articles
4) She will check that the requisition is acknowledged by the CSSD.
5) She will check the items against the Requisition when sterile articles are received from CSSD.
6) She will acknowledge the same in register by entering her full name.

22. INDENTING LAUNDRY

1) Ward should have 3 sets of clothes in the stock
2) Soiled linen shall be collected by laundry housekeeping on scheduled time
3) Washed cloth shall be delivered by laundry housekeeping as per schedule
4) Emergency requirement shall be made by the staff nurse with reason to laundry manager.

23. GUIDELINES FOR INFECTION CONTROL

Refer HIC manual

24. GUIDELINES FOR MAINTENANCE OF EQUIPMENT

1) All equipment will be kept in their respective places when not in use.
2) While in use, equipment will be handled with care and in accordance with necessary precautions.
3) After use, all equipment will be carefully cleaned with detergent/spirit/cleaner as specified and stored safely after drying.
4) Probes like Oximeter and Doppler are very delicate. Handle with care and ensure that the cables are not entangled when in use.
5) All battery operated instruments will be put for charging after use and as and when required. All equipment shall be periodically checked to see its working condition.
6) Ensure Biomedical Department adheres to Maintenance/Servicing of equipments as per equipment requirements and pre determined schedule

25. GUIDELINES FOR BILLING

1) Billing will be done by the reception Staff.
2) The Staff Nurse will keep a record of all consumables and drugs used; surgical procedures and diagnostics done and record them on the patient's chart
3) When the patient is to be discharged, the Staff Nurse will check for all posting and complete any remaining.
4) If the items indented for the patient are unused/left over, the Staff Nurse will return the items
5) The medicines returned must reach the Pharmacy/Medical Store before the final bill is made.
6) The Staff Nurse will direct the relatives to the Cash Counter at the reception to pay the bill.
7) She will ensure that the patient or the relatives have paid the bill before allowing the patient to go home

RECORDS AND REGISTERS MAINTAINED IN THE DEPARTMENT

Sr. No	Form/Format Title	Custodian	Retention period	Mode of Disposal
1	Casualty Register / admission & discharge register	Sister In charge	Till the pages of the Register are over, and further 1 year	Sent to MRD for archiving
2	Dangerous Drug Register	Sister In charge	Till the pages of the Register are over, and further 1 year	Sent to MRD for archiving
3	Laboratory Specimen	Sister In	Till the pages of the Register are	Shredding

	Dispatch Register	charge	over, and further 1 year	
4	Daily Inventory Register	Sister In charge	Till the pages of the Register are over, and further 1 year	Shredding
5	Ambulance Register	Sister In charge	Till the pages of the Register are over, and further 1 year	Shredding
6	Repair & Maintenance register	Sister In charge	Till the pages of the Register are over, and further 1 year	Shredding
7	Assignment Register	Sister In charge	Till the pages of the Register are over, and further 1 year	Shredding
8	Communication Register	Sister In charge	Till the pages of the Register are over, and further 1 year	Shredding
9	Medical Record Dispatch Register	Sister In charge	Till the pages of the Register are over, and further 1 year	Shredding
10	Mortuary Register	Sister In charge	1 year	Sent to MRD for archiving
11	CSSD Book	Sister In charge	Till the pages of the book are over, and further 1 year	Shredding
12	MLC Register	Sister In charge	Till the ages are over, and further 1 year	Sent to MRD for archiving
13	Death Certificate	Sister In charge	Till the pages of the Register are over, and further 1 year	Sent to MRD for archiving

Annexure:

1) Tetanus Prophylaxis Protocol
2) Rabies Post Exposure Prophylaxis Protocol
3) Protocol for management of Fever >101 degree F with cough
4) Protocol for management of patient with Hypotension
5) Protocol for management of patient with Hypertension
6) Protocol for management of patient with DKA
7) Protocol for management of patient with STEMI
8) Protocol for management of patient with NSTEMI
9) Protocol for management of patient with Bronchial Asthma
10) Protocol for management of patient with Snake Bite
11) Protocol for management of patient with Multiple Injuries
12) Protocol for Management of Patient with Hypoglycemia
13) Protocol for Management of Patient with poisoning
14) Protocol for Management of Patient with Food Poisoning
15) Protocol for Management of Patient with Anaphylactic Shock

COP 3: THE AMBULANCE SERVICES ARE COMMENSURATE WITH THE SCOPE OF THE SERVICES PROVIDED BY THE ORGANIZATION.

I. PURPOSE:

To ensure the provision of efficient & timely medical services to the requested locations

II. SCOPE :

Casualty & emergency Department

III. RESPONSIBILITY:

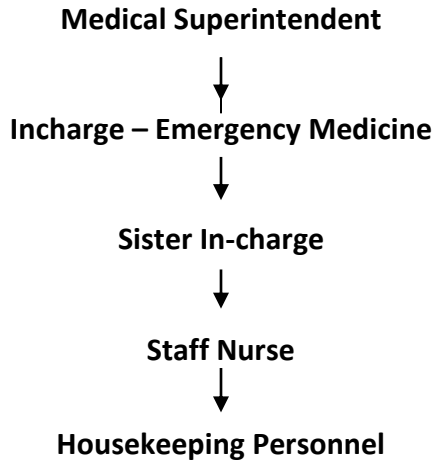
Casualty Medical Officer, Casualty Nurse Incharge.

IV. POLICY :

1) The hospital shall provide a well equipped ambulance to facilitate transportation of patient to and from the hospital under the care of trained Medical Professionals.
2) All equipments and Medications shall be checked on a daily basis using a check list.
3) All Personnel in the ambulance are trained in Basic Cardio-Pulmonary Resuscitation

V. PROCEDURE :

1. ORGANOGRAM



2. PROCESS FLOW

a) The Causality will receive telephonic information regarding the need for an ambulance to be sent.
b) The staff at the Causality receiving the call will ask relevant details.(See annexure)
c) The details of the person who made the call and the relationship to the patient is also taken
d) The staff member handling the call will call back the number provided by the caller & confirm the need of the ambulance.

e) The Causality staff will call for the Causality doctor &give the details to him/her

f) If the ambulance is on a call already then the Causality staff will call other ambulance and give the details. An ambulance will be sent by them to the requested location

g) In case of outstation calls the Kitchen supervisor in informed & packed meals are provided to the ambulance staff

h) In case the patient is being shifted to the hospital, the ambulance driver and attendant will assist the doctor in loading the patient into the ambulance.

i) The ambulance driver will confirm with the doctor that the patient is well strapped in and only then will start the ambulance.

j) On arrival at the Causality, the ambulance driver and attendant shall help disembark the patient from the ambulance, and will promptly shift the patient to the triage area.

k) Once the patient is taken to the triage the reception is informed of the same by the Causality senior nurse & they register the patient. The ambulance doctor will give a detailed endorsement to the CMO who will initiate treatment for the patient.

l) If the patient is accompanied by a relative then the CMO counsels the relative on the status of the patient & the relative is sent to the front office for further formalities

m) If the patient is alone then every effort will be made to contact the relatives

n) An MLC is made depending on the requirement & the police are informed of the same

o) Once the patient is transferred to the Causality, the doctor & attendant will hand over the list of equipments, consumables & medications used for the patient to the Causality senior staff.

p) The equipment & medications used for the patient will be entered in the system & charged to the patient. The ambulance charges are also entered into the system

q) The equipments used for the patients are connected for recharging immediately after reaching the hospital.

r) The ambulance usage details are recorded by the Causality senior staff in the ambulance register

s) All the medications used for the patient are restocked in the ambulance by the Causality Senior nurse

t) The vehicle will be parked near the Causality entrance, thereafter till further calls.

3. <u>TRANSFER OUT WITH HOSPITAL AMBULANCE</u>

a) If any patient is to be transported via ambulance, the concerned department staff will book the ambulance in advance.

b) The time of transfer & exact address of location is to be mentioned by the concerned department staff

c) The Causality staff nurse will inform the ambulance staff of the same

d) The Causality staff nurse will confirm details regarding the patient i.e. ventilator assistance etc

e) If the patient requires additional staff for the transfer e.g. nurses for ventilator assisted patients the nursing supervisor is informed

f) Decision of RMO's to accompany the patient is to be taken by the medical Superintendent.

g) The nurse to accompany the patient will be decided by the nursing supervisor

h) The ambulance booking are informed to the IPD reception so the charges are entered into the system

i) The ambulance doctor & attendant will check all the equipment prior to transportation

j) In case of transfer to other units, the ambulance doctor is briefed on the complete patient details.

4. EQUIPMENT

a) The cardiac ambulance is fully equipped to meet any medical /surgical emergency

b) The ambulance attendant & doctor will be responsible for checking and maintenance of equipment.

c) The Causality nurse will also be involved in seeing that the equipment in the ambulance is fully charged & medications & consumables stocked. The Causality senior nurse on duty checks the equipment, medications & consumables(check list in annexure 1)

d) In case of breakdown in the ambulance or equipment, maintenance department will be informed & they will provide a replacement ambulance/equipment until the time that the original ambulance/equipment is fixed.

e) The ambulance driver will ensure that all the checks have been performed before driving the vehicle as per the requirement of the transport department.

f) The ambulance driver will ensure that there is enough fuel before embarking on any journey, and will regularly refuel as required.

5. RECORDS AND REGISTERS MAINTAINED IN THEAMBULANCE

Sr. No.	Form/Format Title	Custodian	Retention period	Mode of Disposal
1	Ambulance Log book	Ambulance Driver	Till the pages of the book are over,and further 1 year	Shredding
2	Ambulance Checklist (Annexure 1)	Causality Nurse	Till the pages of the book are over,and further 1 year	Shredding
3	Ambulance Register	Causality nurse	Till the pages of the book are over,and further 1 year	Shredding

Annexure:

- List of equipments provided on the Cardiac Ambulance.
- Ambulance Call-Handling Format

COP.4: THE ORGANISATION PLANS FOR HANDLING COMMUNITY EMERGENCIES, EPIDEMICS AND OTHER DISASTERS.

I. PURPOSE:

To provide a standard Response Pattern in emergencies, epidemics and disasters and execute optimal effort to save patient's, visitors and employees life and property of the Hospital.

II. SCOPE:

Hospital Wide

III. RESPONSIBILITY:

Casualty, Emergency Department. Doctors and Nurses

IV. POLICY:

1) Develop standards/ protocols/ guidelines for all aspects of hospital disaster preparedness and Response.
2) Allocate adequate resources for smooth execution of hospital disaster management plan
3) Regularly conduct trainings for the hospital staff involved in hospital disaster preparedness and Response.
4) Conduct disaster Drills / exercises to improve disaster preparedness and the Response capability of the hospital
5) Regularly update and Revise the Hospital Disaster management plan to meet the changing and emerging scenarios.

V. PROCEDURE:

1) CODE GREY INTERNAL DISASTER
   Refer SOP – Policy & Procedure for Code Grey – Internal Disaster
2) CODE PINK – CHILD ABDUCTION
   Refer SOP – Policy & Procedure for Code Pink
3) CODE ORANGE –EXTERNLA DISASTER
   Refer SOP – Policy & Procedure for Code orange
4) CODE PURPLE- PHYSICAL FIGHT
   Refer SOP – Policy & Procedure for Code purple
5) CODE RED - FIRE EMERGENCY
   Refer SOP – Policy & Procedure for Code Red

ANNEXURE:

Mock Drill Analysis Format

COP.5: DOCUMENTED POLICIES AND PROCEDURES GUIDE THE CARE OF PATIENTS REQUIRING CARDIO-PULMONARY RESUSCITATION.

POLICY ON CARDIOPULMONARY RESUSCITATION
Cardio-pulmonary Resuscitation

I. PURPOSE

To ensure that

- there is uniformity in performing of Cardio-pulmonary Resuscitation throughout the organization
- all staff providing CPR are trained and periodically updated in CPR; and events during CPR are recorded
- a post event analysis is done and corrective and preventive actions are taken.

II. SCOPE

All the areas in the hospital where patient care is provided.

III. RESPONSIBILITY

All members of medical, nursing, technical, paramedical staff

MEMBERS OF CODE BLUE COMMITTEE

Chair person: Dr. Jayshree Ghanekar

Member Secretary: Dr. Suhasini Sonavdekar

Nursing Superintendent: Mrs. Padmaja Dhawale

Sister In Charge ICU: Mrs. Ratna Gadhve

IV. ROLE & RESPONSIBILITIES OF COMMITTEE

1. **Chair person:**

- Directly responsible for implementation of the policy uniformly throughout the hospital
- Is responsible for procuring, equipping, maintaining, monitoring and improving Crash Carts across the hospital in all areas for effective & timely CPR.
- After post –event analysis of all cardiac arrests suggesting and implementing plan of actions for future improvements in CPR.
- Corrective and preventive measures are taken for CPR procedures and provisioning of resources based on the post-event analysis.

2. **Secretary:**

- Correcting and checking documentation of Code
- Post-event analysis of all cardiac arrests and documents its findings and after identifying gaps.
- Conducting staff skills and alertness levels by checking periodically by mock drills and actual resuscitation opportunities.
- Periodic training is provided to all such staff for updating and improving their response times and skills.

3. **Hospital Biomedical Department:**

Hospital Biomedical equipment maintenance department is responsible for the preventive and breakdown maintenance / repairs of all crash carts equipments and AED.

4. **Pharmacist in-charge**

- Responsible for provisioning and monitoring as well as other logistics for resuscitation equipment and consumables and their replacements on regular basis.
- They are also responsible for keeping the CPR related equipments in good functioning order across the organization.
- Shall immediately replenish the used items in the Crash Cart and place the **"ready to use"** label.

5. **I/C Skills Lab**

- Is responsible for training, educating and orienting all the hospital staff in correct and ethical methods of conducting CPR in a uniform way across the organization.
- Maintaining records of manpower training imparted for CPR activities.

6. **Nursing Superintendent:**

- Responsible for provisioning and monitoring as well as other logistics for resuscitation equipment and consumables and their replacements on regular basis.
- They are also responsible for keeping the CPR related equipments in good functioning order across the organization.

7. **Sister In Charge ICU:**

- Responsible for provision and monitoring of all resuscitation equipment and consumables and their replacements on regular basis.
- Responsible for keeping the CPR related equipments in good functioning order.
- Responsible for stocking the Crash Carts with drugs and other equipment
- collaborating with the Pharmacy
- Responsible for ensuring that the drugs kept on the Crash Carts are within theexpiry dates and shall maintain a log of when a Crash cart is to be reviewed for removal of expired drugs etc.
- Fills out Incident Form for any violation of Code Protocols and also for non-arrival of a Team Member

V. PROCEDURE FOR CODE BLUE

1. **RECOGNIZING THE CARDIAC ARREST**

- Unresponsive
- No breathing or only gasping or agonal gasps

- No definite pulse felt within 10 seconds
- Breathing and pulse check to be performed simultaneously in less than 10 seconds

2. ACTIVATION OF CODE BLUE

If any of the above present, then **Staff Nurse, Resident or any person who has witnessed**the above must / can activate **CODE BLUE TEAM at 7015 OR 7016.**

Information should be given in the following format:

- Activating CODE BLUE for
- Ward no
- On floor
- For bed no
- Patient's name must not be disclosed.

The Staff Nurse should direct the Code Blue team towards the patient.
The Staff Nurse should also pull the Crash Cart from the floor towards the location of the victim.

3. CODE BLUE TEAM

Is responsible to carry out CPR in any area of the hospital EXCEPT EMS.
In EMS CODE BLUE team will carry out CPR in case of disaster or mass casualty

4. MEMBERS OF CODE BLUE TEAM

1) Anaesthesia Resident
2) Medicine resident
3) Intern from ICU / Ward
4) Staff Nurse
5) All the above members will be from ICU
6) The above team will carry **CODE BLUE Resuscitation Kit** along with **AED** in case the Crash Cart near to the location is not moved to the victim.

5. ON ARRIVAL ON THE SCENE

1) Ward Staff Nurse will lead path towards the patient.
2) Ward Doctor or Doctor the concerned Unit will assist in CPR.
3) The person who has witnessed the arrest or is AHA trained in BLS, ACLS is the first responder and can take up as TEAM LEADER.
4) In case the first responder is untrained or cannot perform CPR, then Anaesthesia Resident from SICU will be TEAM LEADER.
5) Anaesthesia Resident – Team leader
6) Medicine Resident – Airway personnel
7) Ward Doctor - AED personnel
8) Intern - Compressor
9) Compressor and AED member will switch roles after 5 cycles or every 2 minutes or when tired
10) ICU Staff Nurse- administer medications
11) Ward Staff Nurse – Time Recorder
12) The Team leader will allocate and designate the roles and responsibilities.
13) Each member should be aware of the designated roles.

14) In case any member is not able to carry out the designated role, the member should inform the team leader.
The team leader will designate a role which is within the personnel's limitations
Additional members:

- Security-
- Crowd management
- Halting of lift during transfer of the patient to ICU
- Housekeeping personnel:
- Keep equipment ready to transfer patient to ICU
- Nursing Supervisor
- Counseling the relatives

6. POST CPR / ON RETURN OF ROSC

The patient should be shifted to ICU for further management and care.

ETHICAL ISSUES

7. CRITERIA FOR NOT STARTING CPR

The patient has a

- Valid End of life care order.
- Presence of signs of irreversible death: rigor mortis, decapitation, or dependent lividity.
- No physiological benefit can be expected because the vital functions have deteriorated despite maximal therapy for such conditions as progressive septic or cardiogenic shock.

1) CRITERIA FOR TERMINATING CPR

- The responsible clinician should stop the resuscitative effort when he or she determines with a high degree of certainty that the arrest victim will not respond to further ACLS efforts.
- No reliable criteria are available to determine neurological outcome during cardiac arrest.
- Available scientific studies have shown that, in the absence of mitigating factors, prolonged resuscitative efforts for adults and children are unlikely to be successful and can be discontinued if there is no return of spontaneous circulation at any time during 45 minutes of cumulative ACLS.

2) ROLES AND RESPONSIBILITIES

Sr.No	RESPONSIBILITY	TASK
1	Team leader / First Responder	▪ Allocate responsibility as per limitations
		▪ For running the code ▪ For administration of all medications and fluid during the code
		▪ Write a detailed note in the progress notes describing the Code process and the medication given.

	Compressor	▪ Perform Chest compressions ▪ Will switch roles with AED personnel after 5 cycles or every 2 minutes or when tired
	Airway personnel	▪ Responsible for maintaining airway during the code ▪ Responsible for securing airway during Code
	AED personnel	▪ Responsible for attaching pads to the patient ▪ Following commands of AED ▪ Clearing all during a shock ▪ Will switch roles with compressor personnel after 5 cycles or every 2 minutes or when tired
	Nurse for medication	▪ Securing Intravenous line if not in place ▪ Responsible for administration of medications and intravenous fluids during Code ▪ Confirming the medication, dose and route with Team leader before administration ▪ Doing Glucometer check for blood sugar estimation ▪ Collecting and sending blood samples to the laboratory
	Nurse for recording	▪ Recording events during CPR ▪ Recording of any problems encountered during CPR ▪ Fills out Incident Form for any violation of Code Protocols and also for non-arrival of a Team Member
	Nursing Supervisor	▪ Counseling the relatives
	Security	▪ Crowd management ▪ Halting of lift during transfer of the patient to ICU
	House-keeping Personnel	▪ Keep equipment ready to transfer patient to ICU ▪ Will assist for transfer of patient to ICU

3) QUALITY ASSURANCE

- Assessment of training records of all personnel who have received training for CPR activities.
- Availability and completeness of CPR Crash Carts at all locations, by way of physical checks.
- The record books of all crash carts are always available with each unit for inspection and scrutiny.
- A separate record book is maintained for every CPR Crash cart by the user unit.
- Records are kept for all events happening during a CPR.
- Record books are checked for CPR response times, periodicity of maintenance- preventive and breakdown maintenance, daily equipment check reports and daily emergency medications checks and also the action taken for shortcomings.
- A post event analysis of all cardiac arrests is done by the **'Code Blue'** Committee to suggest the measures for improvements in CPR activities.
- Corrective and preventive measures are taken for CPR procedures and provisioning of resources based on the post-event analysis.
- **Mock drills** are carried out for "CODE BLUE" at different places and monitoring of response times, availability of personnel and equipment, its proper functioning, coordination amongst team members, uniformity of CPR Process/ activities etc. are checked and documented.
- Mock drills are conducted every 3 months and as and when required.
- Corrective and preventive measures are taken post CPR procedures

4) CRASH CARTS:

- CPR charts should be placed at same location on each floor under the supervision of Sister In-charge of the nearest ward.
- These are wheeled carts that are easy to push or pull to the location where CPR is required to be done.
- These are sealed carts **not** to be used for any other purpose except for the CPR activities.
- The composition of each of these crash carts is identical with identical placement of devices and drugs.
- Standardization is the key to rapid resuscitation and good outcome.

5) MAINTAINENCE OF CRASH CARTS

- Nurse in-charge is responsible for stocking the Crash Carts with drugs and other equipment collaborating with the Pharmacy.
- The list of drugs and equipment is compiled by the Code Blue Committee and is reviewed as and when required.
- The Pharmacy shall place a label / seal on the Crash Cart cover. The label should clearly indicate to the users that the cart is ready for use.
- Pharmacy is responsible for ensuring that the drugs kept on the Crash Carts are within the expiry dates
- Maintaining a log of when a crash cart is to be reviewed for removal of expired drugs etc.

- Once a crash cart is used, the Nurse shall inform the pharmacy promptly.
- Crash cart should be opened only during resuscitation. This is of the highest priority and Floor Nurse Team leader shall ensure compliance. The Pharmacy shall immediately replenish the used cart and place the ready to use label.

- Crash carts are provided at all floors of the patient care areas at the same location.
- For non-clinical areas, the Code Blue team can carry a portable resuscitation kit along with AED.

6) POST EVENT ANALYSIS

- The Code Blue Committee will conduct post event analysis after CPR.
- The recorder maintains the events of records.
- Analysis of all events is done by the committee and preventive and corrective measures are taken for CPR procedures.
- The analysis is conducted on quarterly basis. It is done on the 2nd Tuesday of the quarterly month.

7) CORRECTIVE AND PREVENTIVE MEASURES

- Mock drills are conducted every quarterly and as an when required.
- Updationof knowledge is done for the team members of Code Blue Committee.
- Training of all Nursing Staff in critical areas for AHA Accredited BLS, ACLS done on monthly basis
- Training of all Nursing staff in non-critical areas for AHA Accredited BLS is done.

A crash cart has items for airway equipment, circulatory equipment, drugs as following:

Attached herewith:

1) Code Blue Kit Check list
2) Crash Cart Check list
3) ACLS Code Timer / Recorder sheet
4) Code Blue Documentation Form
5) Statistics of Code Blue (quarterly assessment)

Refer: CODE BLUE POLICY

ANNEXURE:

- CODE BLUE Documentation Form
- CODE BLUE Post Event analysis Format

COP 6: DOCUMENTED POLICIES AND PROCEDURES GUIDE NURSING CARE

I. PURPOSE:

To set guidelines for all activities of Nursing Services and to standardize the activities of the unit.

II. SCOPE:

Hospital Wide

III. RESPONSIBILITY :

Nursing Department

IV. POLICY & PROCEDURE :

Refer: Nursing - SOP & Nursing Procedure Manual

Appendix - NURSING MANUAL

COP 7- Documented Procedures Guide the Performance of Various Procedures.

I. PURPOSE:

To provide guidance for the performance of various clinical procedures

II. SCOPE:

Hospital Wide

III. RESPONSIBILITY:

Treating Doctors & all Performing Clinical & surgical Procedures Under supervision of HOD Department**.**

IV. POLICY & PROCEDURE ;

Refer: COP 15 - Minor OT procedures and other procedure rooms (Endoscopy etc.)

ANNEXURE:

1. **Pre procedure Checklist**
2. **Informed Consent Format for Procedures**

COP 8 DOCUMENTED POLICIES AND PROCEDURES DEFINE RATIONAL USE OF BLOOD AND BLOOD PRODUCTS

Prepared by :	Designation : Blood Bank Incharge Name: Dr. Seema Gupta
Approved By :	Designation : Medical Superintendent Name: Dr. K .R. Salgotra
Reviewed by & Responsibility of Updating	Designation : Chief Of Quality Name: Dr. Gauri Shivani

CONTROL COPY HOLDERS	
Chief Of Quality	Dr. Gauri Shivani

I. PURPOSE:

To define policies and Procedures for the safe And Rational Use of Blood & Blood Products.

II. SCOPE :

Hospital Wide

III. RESPONSIBILITY :

Treating Doctors , Nurses And Blood Bank

IV. POLICY :

1) To guide the rational use of blood and blood products.
2) To guide staff on appropriate handling of blood and blood products.
3) To provide patient and family education on blood and blood products.
4) To guide the appropriate disposal of blood and blood products and ancillary equipment

V. PROCEDURE :

1. DONOR SELECTION: WHOLE BLOOD

Donor selection shall be based on two aspects – Medical history and Preliminary health check.
Blood component preparation:

- Packed red cells (PRC),
- Fresh frozen plasma (FFP),
- Platelet concentrate (PC)

2. BLOOD GROUPING OF ALL PATIENTS

1) Blood grouping of all patients admitted to the hospital must be sent as a routine test to the Central Laboratory at the time of admission.

2) The blood group must be clearly endorsed in the patient's record / case sheet and mentioned in the Requisition Form sent to the blood bank.

3. BLOOD DONOR REQUISITION FORM

1) For elective surgery / procedures the requisition may be sent during 9:00am to 4:00pm

2) Blood is a drug, and is issued only on a Requisition signed by a doctor.

3) The requisition form must be completed in the prescribed format.

4) The requisition and blood sample must be endorsed with the name and ID no. legible and both must tally. Unlabelled or wrongly labeled samples will not be accepted.

5) Other details of the patient must be completed in the Requisition form.

6) The blood component and no. of units required for the patients must be clearly mentioned.

7) The expected time of transfusion must be mentioned.

8) All request forms for emergency should mention the nature of the emergency

4. Blood Donor Referral

1) All doctors are to arrange for replacement donors, as issue of blood is against replacement donation.

2) The relatives / friends need ample time to bring replacement donors, therefore they must be informed of replacement donation as soon as a patient is admitted, or as soon as need for blood transfusion is anticipated.

3) In case blood is not used, the replacement donor will be given a donor card and blood will be issued against this card from the blood bank (provided it is in stock), whenever the donor needs blood. The card is valid for a period of 6 months.

4) Patient/Patient's relatives should be asked to read donor eligibility criteria mentioned in Donor information sheet available in the blood bank

5) Directed donations must be avoided and discouraged as far as possible in order to maintain confidentiality of the donor about the infectious disease marker status.

5. Blood Donation Timings

1) The timings for blood donation are between 9 am to 5 pm on all working days.

2) Off working hour blood donations –are not encouraged as it poses risk to blood safety. However, donation may be done in off working hours in case of emergency. Support man power may be obtained by contacting Nursing Supervisor on duty.

6. Inability To Arrange Replacement Donors

1) In case of rare situations where replacement donor cannot be arranged the treating physician will discuss the situation.

2) To maintain adequate inventory and provide efficient service this situation must be considered only in exceptional cases.

7. Ordering Of Blood

Available shelf life of blood / component decreases every time a unit is held or cross matched for a patient who does not use it.

Therefore following guidelines have been developed. It has been decided that for all routine surgeries one donor replacement will be taken against each 1 unit of Packed Red Cells released, 2 units of FFP released.

- **<u>Major Elective Surgery:</u>**

  For all cardiac surgery case package will include 6 packed cells, 6 FFP, 6 platelet concentrate as (MSBOS) against 6 replacements blood donation.

- **<u>For Renal Transplant Patients Package Include:</u>**

  2 packed red cell for the recipient and 1 for donor.

1) Surgeons and Anesthesiologists may individualize specific requests to accommodate special needs of patients.

2) Any requirement other that the initial requisition sent, it will be on a fresh requisition, with a fresh blood sample.

3) Prior information to the Blood bank must be sent so as to render efficient service to the patient.

4) Each of this issue of blood will be against the replacement donation, to maintain adequate blood stocks.

5) The blood bank has a policy of "First In, First Out" for blood units to avoid wastage due to expiry.

6) If in certain clinical situations, recently collected blood is indicated for e.g. in pediatric cases, kindly mention it in the requisition.

7) Blood components meet the exact need of transfusion. Platelets and labile coagulation factors are lost in blood banked at 4^0C.

8. Issue of Blood and Components

Turn Around Time / Waiting Time -NABH requirement

(Time since receipt of requisition to issue of blood after compatibility testing)

1) Blood /components are issued from the blood bank only after compatibility tests which require minimum of 60 minutes for PRBCs.

2) For elective transfusions and compatibility testing already completed / for planned surgeries and requirements the requests are to be sent in advance, so that blood / component may be kept ready for issue

Packed Red Cells – 15 min
FFP – 45 min (includes thawing time)
Platelet concentrate – 15 min

a) Blood Compatibility Report:

- It is issued along with all blood products. This must be kept in the patient's file and the responsibility of the document will be that of the nurse of the floor/ward/OT.
- In case another blood component is requisitioned, the compatibility form must be sent back to blood bank.
- The compatibility report must be properly maintained in the patient's file, it is a permanent document.

b) No return policy:

- Blood once issued will not be taken back by the Blood Bank.
- In rare situations, Blood can be returned only by the consultants after the written request for the same, justifying the reason for return, within 30 minutes of issue of the blood from the blood bank.

c) Labeling

A compatibility label should be attached firmly to each unit of blood
This Blood Is Compatible with_____ Blood Pack NO._____
Patient Name: _____ IPD: _____Patient ABO and Rh-D group_____
Expiry date of blood: _____ Date of compatibility test: _____
Blood group of blood pack: _____

d) Storing Whole Blood Prior To Transfusion:

Whole Blood shall be issued from the blood bank in a thermacol box with adequate ice bags.
The following instructions shall be followed while collecting blood and blood products from Blood Bank:-

1) Bring written documentation to identify the patient. Personnel at the Blood Bank shall record details of the patient in the register as well as in the hospital information system.
2) Check that the following details on the compatibility label attached to the blood pack exactly match the details on the patients documentation:

- Patient's family name and given name, IPD & OPD No., ABO and Rh D group.

9. INFORMED CONSENT TO RECEIVE BLOOD TRANSFUSION (AS PER NABH GUIDELINES):

1) Inform and explain to the patient or relatives about the proposed transfusion of blood / blood products (BENEFITS and RISKS).

2) Fresh consent has to be taken for every transfusion after 24hrs and record has to be by the doctor/nurse in-charge of the patient and record has to be maintained in the patient's file.

3) Ensure proper identity of the patient and correctly fill in a blood request form.

4) Collect the blood sample from the right patient in the right sample tube and correctly label the Sample tube. Send the blood request form and blood sample to the blood bank.

5) All requests for cross-matching of routine cases should be sent 24 hrs in advance before 12 noon on working days.

6) Provide the blood bank with information on:

- The products and number of units required
- The reason for transfusion
- The urgency of the product requirement for the patient
- When and where the blood is required.

7) Ensure the correct storage of blood and blood products in the clinical area before transfusion.

8) Formally check the identity of the patients, the product and the documentation at the patient's bedside before transfusion.

9) The final patient identity check shall be as per the hospital Policy on Patient Identification.

10) Check the following details on the compatibility label attached to the blood pack exactly matching the details on the patient's documentation and identity.

- Patient's family name and given name
- Patient's hospital reference number
- Patient's blood group

11) Check that there are no discrepancies between the ABO and Rh-D group on Blood pack Compatibility label.

12) Check there is no discrepancies between the unique donation number on Blood pack Compatibility label.

13) Check the expiry date on the blood pack has not been passed.

14) Check for leakage or discoloration of the blood pack.

15) The final identity check shall be undertaken at the patient's bedside immediately before commencing the administration of the blood.

16) Instructions to be followed in case of transfusion reaction to a patient that is provided on the back of compatibility form, which is being issued with every blood and its components and inform the blood bank immediately.

10. ADMINISTRATION OF BLOOD:

1) Safety of the patient:-

Safety of the patient is the primary concern during blood transfusion. Following points are important and must be observed meticulously:-

a) Correct identification and verification of the patient and blood unit

b) Correct aseptic technique.

c) Careful observation and monitoring of the patient during transfusion.

d) Observation of precautions to be taken during blood transfusion

2) Checks Prior To Transfusion:

a) Verification of blood unit by a doctor and a registered nurse or by 2 registered nurses.

b) Positive patient identification carried out at the patient's bedside

c) The recipient's name and IPD No. on the unit must be identical to that on hospital Records.

d) Check unit for mention of: - the bag no, ABO/Rh label, component label, compatibility and non-reactive TTI status i.e. non reactive for HIV 1&2, HbsAg, HCV, Syphilis and negative for Malaria Parasite.

e) Date of expiry of the unit.

f) Inspect the unit for any leaks.

g) Visual appearance of blood in the bag.

Note: - DO NOT TRANSFUSE in the event of hemolysis, clots, or discoloration of the blood. Return the unit to the blood bank with a note to the doctor. Read and strictly observe all the instructions on the blood bag. Do not add any medication to the blood / component to be transfused.

11. RECORDING THE TRANSFUSION:

The following information shall be recorded in the patient's notes:

a) Whether the patient and or relatives have been informed about the proposed transfusion

b) Type and volume of each product transfused

c) Unique donation number of each unit transfused

d) Blood group of each transfused unit.

e) Time at which the transfusion of each unit commenced

f) Monitoring of the patient before, during and after the transfusion.

g) Any transfusion reactions if occur than follow the instruction which is given on the reaction form.

12. REPORTING TRANSFUSION REACTIONS:

a) All adverse reactions to transfusions will be reported to blood bank, on the prescribed 'Report on transfusion form which is attached to the compatibility Report.

b) The following specimens must be sent along with transfusion set:

- Donor unit along with transfusion set.
- Post transfusion blood sample of the patient in blood culture bottle, EDTA bottle and sterile container.
- Post transfusion urine sample of the patient.

13. DISCARDING INFECTED UNITS OF BLOOD:

1) All the units of blood and the various components prepared thereof shall be stored in a separate earmarked area in quarantine till the completion of all the tests for infectious diseases.

2) Keep the bag in Refrigerator, till it is physically checked for discarding by the senior technician on a daily basis.

3) All marker reactive units/expired blood components shall be charged off by senior technician in the master register for discarding. The TTI and Compatibility Records to be maintained for 20 years. These bags shall be handed over to "RAMKY" (Mumbai Waste Management) for incineration.

4) Discarding of empty transfused blood bags- Empty bags of all units of blood and its components, which have been issued from the blood bank, and transfused are discarded in blue bags and handed over to Rainbow Environments" for autoclaving and shredding.

5) RECEIVING OF BLOOD FROM OUTSIDE AGENCY- In case of non-availability of blood in M.G.M. Hospital blood bank of particular blood group then we can request the blood from any of the local licensed blood banks.

6) TRANSFUSION REACTION:-

a) If transfusion reaction takes place / happens inform the doctors / physicians then stop the transfusion, administer antihistamine and start normal saline infusion.

b) If transfusion reaction happens, along with a transfusion reaction form, urine sample and post transfusion blood is sent to the blood bank along with the blood bag and the blood transfusion IV set.

c) The transfusion reaction is analyzed and the report is sent back in the form named "Investigation of Transfusion Reaction".

d) The sticker on the blood bag is removed and pasted in the patient's file for a valid documentation.

e) A transfusion reaction register is maintained in the blood bank where all the reactions are recorded.

f) The hospital has a Blood Transfusion committee which meets quarterly to ensure safe and Quality Blood Transfusion to the needy patients, whenever required with judicious use of Blood / Components

Refer to Blood Bank Policies – Blood Bank is NABH accredited

Annexure

Informed Consent Form for Blood Transfusion
Check list prior to Transfusion
Transfusion Reaction Forms

BLOOD BANK

POLICY ON BLOOD/BLOOD COMPONENTS TRANSFUSION FEEDBACK

POLICY

1) A feedback form is issued by the Blood Bank at the time of issue of blood/ components.

2) Feedback from contains name, ward, blood unit issued, time of start and end of blood transfusion.

3) At the back of the form, there is a list of type of transfusion reactions. The doctor responsible for transfusion of blood monitors for any transfusion reaction and fills up the feedback from accordingly.

4) The feedback form is returned to the Blood Bank after completion of transfusion.

POLICY ON BREAKDOWN OF EQUIPMENT

POLICY

If any equipment /instrument break down:

1) Inform the Bio-Medical Department in writing with a copy to the Blood bank Incharge.
2) The equipment is labelled " OUT OF ORDER with DATE" .
3) The person incharge for the section will keep a follow up with the Biomedical Department and calculate the turnaround time for repair.
4) Temporarily if it's a critical equipment like Blood Bank Refrigerator or Deep Freezer, the products stored are removed and kept in the stand-by Blood Bank Refrigerator (model number:- BDI - 3379) or Deep Freezer and temperature maintained at -40^{o}C.
5) In case the ELISA washer and reader breakdown, the tests may be done in the Central Research Laboratory.
6) A label is put on the equipment stating that the equipment is :
'NOT IN USE, BREAKDOWN DATE:__/__/____'

POLICY ON CHANGE IN PROCEDURE

POLICY

1) Any change or modification can be requested by Blood Bank personnel using 'Document Change Note' available with Quality Manager.
2) The change is reviewed and approved by original approval authority (Blood Bank Incharge) of document and the document is updated.
3) Where practicable, the nature of changes is recorded in approved Document Change Note.
4) Amendment detail is recorded in Amendment Sheet.
5) All documents are reviewed at least once in year for its adequacy and suitability in the Quality Management System.

POLICY ON CONFIDENTIALITY OF DONOR AND PATIENT INFORMATION

POLICY

1) Arrangement is made in the Blood Bank to maintain confidentiality, security and eventual disposal of records pertaining to patients and donors.
2) Old records are stored in the store & records room in the designated cupboards in a year wise fashion for a period of maximum 5 years.
3) Records older than 5 years are manually shredded and discarded in general waste.
4) No information about the donor either personal or in the form of test results is revealed on the phone to anyone.
5) Donor desiring to know their test results give their consent in writing and the results are verbally informed to them in person only, by the Medical Officer or Medical Social Worker / Counselor, clearly informing them that these are screening tests and confirmatory tests must be done if positive.

POLICY ON CONSENT FROM DONOR

POLICY

1) The donor is motivated on advantages of blood donation by the medical social worker or the Medical Officer.

2) Consent for blood donation is taken from the donor at the time of medical examination by the Medical Officer in the designated format duly signed by the donor.

POLICY ON CONTINUOUS AND UNINTERRUPTED ELECTRIC SUPPLY IN BLOOD BANK

POLICY

Continuous and uninterrupted electric supply ensures proper functioning and maintenance of critical equipment/instruments of Blood Bank.

MGM Hospital has a centralized UPS system and all critical equipments of the blood bank are on inline UPS system. The following instruments are on the UPS-

1) Refrigerated centrifuge
2) Weighing scales(Excel and compo scale)
3) Plasma expresser
4) Handy seal
5) All plug points in the Component laboratory.
6) Deep freezer(-80)
7) LAF
8) BBR-4 and BBR-5
9) Die-electric sealer in Lab II
10) Deep freezer(-40)
11) Platelet incubator and agitator
12) BBR-1
13) Plasma thawing bath
14) ELISA plate reader
15) ELISA plate washer

POLICY ON DOCUMENT RETENTION

POLICY

1) All the records are identified with minimum retention period which is calculated from the date of record of generation upto five years.

2) Quality Manager / In charge of blood bank ensures that no records are disposed before the time of retention period.

3) The registers in which entries of FFP issued to RLS, and HBsAg positive units given to Yashraj Company (MGMBB/ LAB-II/FL/03) and Reliance life (MGMBB/QCR/FL/07) sciences file are recorded are stored for five years.

POLICY ON DONOR FOUND TO BE SEROPOSITIVE	
29. Prepared by: Quality Manager	30. Approved by: Blood Bank Incharge
31. 	32. 

POLICY ON DONOR FOUND TO BE SEROPOSITIVE

POLICY

1) If a donor is found to be reactive for HBsAg / HCV / HIV, the counselor is informed by the technician doing ELISA testing.
2) It is the duty of the counselor to do post-test counseling and guide him on future course of action.
3) All reactive units are autoclaved and discarded as per SOP (31/13/SOP/BLOOD BANK).

POLICY ON HEALTH CHECKUP

POLICY

1) At time appointment of an employee, a pre-employment health check-up is done as per the hospital policy.
2) It is the policy of the Blood Bank to conduct free annual medical examination and immunization for all Blood Bank personnel to ensure health safety and medical fitness as they are dealing with potentially infected materials.

POLICY ON INTERNAL AUDIT

POLICY

1) Carried out once in a year by the Quality Manager along with Blood Bank In-charge.
2) Documents pertaining to types of audit frequencies, methodologies are filed in file meant for the same.
3) Appropriate corrective and preventive actions are taken and recorded when deficiencies are noted during internal audit.

POLICY ON ISSUE OF BLOOD TO THALLESEMIA PATIENTS

POLICY

Patients suffering from Thallesemia require regular blood transfusion. MGMHBB makes every effort to keep stock of all blood groups so that they can be issued to thalesemics.

1) Requirement of blood for thallesemia patients is conveyed telephonically.
2) Usually Saline washed packed cells are requested for these patients.
3) The relative of the patient is required to produce Xerox copies of ration card and ID card issued by SBTC.
4) Blood is issued free of charge as a policy on receipt of the above mentioned documents.

POLICY ON NON AVAILABILITY OF BLOOD IN BLOOD BANK

POLICY

Maintenance of adequate stock of blood/components is very important in Blood Bank.

For units issued to patient from outside blood bank:

1) All requisitions for blood / components are first sent to the blood bank.
2) If blood/component of any group is not available, then the technician on duty notes it down in the requisition form.
3) The technician contacts other Blood Banks for the same and collects the information.
4) The technician guides the relatives to the blood bank where the required component is available.
5) If no relative is available, the technician informs the Administrator Officer / CMO (after 4pm) about the requirement, which makes necessary arrangement for vehicle and man power and the blood / component.
6) The blood / component issued from the outside blood bank are received in MGM Blood Bank for storage and testing.
7) Additional testing is done by rapid test on the units issued to the patient from outside blood bank.

POLICY ON RETURN OF BLOOD/COMPONENTS

POLICY

1) If a unit of WB / PC / Platelet is returned to the Blood Bank within half hour of issue, it is taken on stock after inspecting it for any damage.
2) If the WB / PC / Platelet unit is returned after more than half hour, it is discarded by the Blood Bank as per SOP no. 31/13/SOP/BLOOD BANK
3) Any FFP returned to the Blood Bank within half hour after thawing, is stored in the blood bank refrigerator and maybe issued to a group compatible patient within 24 hours after which it is discarded.

POLICY ON STORAGE AND USE OF CONSUMABLES AND KITS

POLICY

Adequate supplies of consumables and kits are very important for proper functioning of Blood Bank.

- **An inventory register is maintained in the Blood bank for all consumables items. Following details of consumables are recorded in the register:**

1) Date of receipt
2) Name of company
3) Opening balance
4) Number received
5) Available stock

- **The record of kits and reagents is maintained in a register. The kits and reagents are used according to their expiry dates. Kits and reagents which are near expiry (3 months) are used first. Following details of kits and reagents are recorded in the register:**

1) Name of supplier and company
2) Batch no.
3) iii)Date of manufacture
4) iv)Date of expiry
5) v)Date of receipt
6) vi)Date of opening of kit or reagent

- **Alert values have been assigned to critical consumables which are as follows:**

1) Blood bags – triple / double = 500 bag each
2) ELISA Kits (HIV/ HCV/ HBsAg) = 3 kits each
3) Anti-sera (Anti- A, B, D) = 15 bottles
4) Coombs and Bovine Albumin = 15 bottles

5) Agtrol = 10 bottles
6) VDRL = 6 boxes
7) Lancets = 5 boxes (100 lancets in 1 box)
8) Tips (yellow / blue) = yellow-500 / blue-200
9) CuSO4 = 1 bottle

- **Storage of kits, reagents and consumables:**

1) Kits and reagents are stored in refrigerators meant for the same.
2) The temperatures of the refrigerators are monitored regularly.
3) The reagents which do not require refrigeration are stored according to the required storage conditions and in such a way and place that they can be easily retrieved when required.
4) Consumables are stored in Blood bank Store room, cupboards and drawers meant for the same.

POLICY ON TRANSFUSION REACTION

POLICY

Any transfusion reaction should be investigated thoroughly.

1) Episode of transfusion reaction is reported telephonically from the ward by the treating clinician.
2) A post transfusion reaction reporting form, with the patient's blood and urine sample along with the remaining blood in the blood bag is sent to the Blood Bank.
3) Transfusion reaction investigation record form is filled by doing the necessary tests as mentioned in the form.
4) Bilirubin and urine examination is requested from the laboratory.
5) All findings are documented.

COP 9 DOCUMENTED POLICIES & PROCEDURE GUIDE THE CARE OF PATIENTS IN THE INTENSIVE CARE AND HIGH DEPENDENCY UNITS

I. PURPOSE:

To define Polices Guiding Care of Patients in the Intensive Car e unit and High Dependency Units

II. SCOPE:

Intensive Care & High Dependency Units

III. RESPONSIBILITY:

All Medical & Paramedical Staffs in Critical Care & High Dependency Units, Infection Control Team

IV. POLICY &PROCEDURE:

ADMISSION CRITERIA POLICY FOR MICU:-

- **PRIORITIES FOR ADMISSION**

Priority 1:

Critically ill, unstable patients in need of intensive treatment and monitoring that cannot be provided outside of the ICU.

Examples:

Ventilator support- post-operative or acute respiratory failure patients requiring mechanical ventilator support and shock or hemo-dynamically unstable patients receiving invasive monitoring and/or vasoactive drugs

Priority 2:

These patients require intensive monitoring and may potentially need immediate intervention. No therapeutic limits are generally stipulated for these patients.

Examples:

Patients with chronic morbid conditions who develop acute severe medical or surgical illness

Priority 3:

Unstable patients, who are critically ill but have a reduced likelihood of recovery because of underlying disease or nature of their acute illness,.

Patients may receive intensive treatment to relieve acute illness but limits on therapeutic efforts may be set such as no intubations or cardiopulmonary resuscitation.

Examples:

Patients with metastatic malignancy complicated by infection, cardiac tamponade, or airway obstruction

Priority 4:

Patients who are generally not appropriate for ICU admission. Admission of these patients should be on an individual basis, under unusual circumstances and at the discretion of admitting doctor.

Indications :

1) Cardiac system

- Acute MI with or without complications
- Cardiogenic shock.
- Arrhythmias
- Acute CHF
- HTN emergencies
- Unstable Angina
- Cardiac arrest.
- Cardiac tamponade
- Dissecting aortic aneurism
- Various AV blocks.

2) Pulmonary System

- Acute respiratory failure requiring non invasive and invasive ventilator support.
- Pulmonary Thromboembolism
- Patients in ward who are demonstrating deterioration
- Need for nursing / respiratory care not available in wards.
- Massive haemoptysis with anticipatory haemodynamic instability
- Respiratory failure with imminent intubation
- Pneumonia with complications / pneumothorax / haemothorax requiring intercostal drainage.

3) Neurological Disorders

- Acute stroke with altered mental status / massive stroke.
- Coma / mental status due to metabolic, anoxic or toxic
- Intracranial haemorrhage
- Acute subarachnoid haemorrhage
- Meningitis with altered mental status or respiratory compromise
- CNS or neuromuscular disorders with deteriorating neurological or respiratory functions
- Status epileptics
- Vasospasm
- Head injury

4) Drug Ingestion / Overdose

- All drug ingestion / overdoses

5) G. I. Disorders

- GI bleeding causing haemodynamic compromise
- Fulminant hepatic failure
- Pancreatitis
- Oesophageal perforation

6) Endocrine

- Diabetic ketoacidosis
- Thyroid *storm or myxoedema* coma
- Hyperosmolar state
- Adrenal crisis
- Severe hypercalcemia / hypo or hyper natremia / hypo or hyper magnesemia / hyperphosphatemia.
- Uncontrolled diabetes mellitus requiring IV infusion and haemodynamic monitoring

7) Surgical

- Post operative unstable patients or patients with underlying co morbid condition requiring nursing/haemodynamic monitoring or supportive care.
- Miscellaneous
- Septic shock with or without MODS
- Haemodynamic monitoring for any medical condition
- Clinical condition requiring ICU level nursing care
- Environmental injuries lightening/near drowning /hypo-hyperthermia
- Invasive procedures and haemodynamic monitoring
- Infusion of cytotoxic drugs
- For central line insertion to administer Trans parental nutrition
- Trauma cases, stab wounds, attempt to suicide

ADMISSION CRITERIA FOR SICU:

All trauma cases and all post-operative patients require critical care, medical/ critical cardiac cases. AKD patients who require dialysis

Post op, neuro patients, who requires critical care. Poison cases, snake bites, or any other.

SICU: Indications for admission / discharge, transfer out

ADMISSION	SHIFT OUT
i) SURGICAL 1) Acute Abdomen Post-operative: Major Surgeries 2) Minor/Medium surgeries with pre-existing medical conditions 3) Malignancies	1) Stabilized Vitals 2) No immediate intra/post op complications 3) Initiated on oral feeds and then shifted out
ii) TRAUMA Major orthopedic cases Head injuries Soft tissue injuries	1) Patients are stable post-operatively 2) Neurologically stable depending on nature of illness 3) If comatose/ vegetative with normal vitals/tracheostomy then shifted out for nursing care 4) If with neurological deficits are mobilized in and around ICU and then shifted out

iii) RENAL ESRD/CRF/ARF/Pulmonary Oedema/Hyperkalemia,(ARF secondary to medical problems)	1) Haemodialysis done 2) Shifted out when stable, stable to be sent to AKD for H.D
iv) ISOLATION ROOM Renal donor in Isolation room INFECTION: i)Patients with high total WBC count, Fever ii)Febrile Neutropenia	1) Vitals ok 2) Output- adequate 3) No signs of infection(Increased WBC, Fever) Counts are stabilized. Fever is reduced
When Beds are not available in MICU i)Cirrhosis of Liver with Encephalopathy ii) Eclampsia iii)Poisoning- Drugs Suicidal	-Sensorium better -LSCS done, BP Stabilised. Started on oral -Observed. If no neurological/ haematological manifestation, started on oral feeds and if tolerated shifted out

ADMISSION-DISCHARGE CRITERIA POLICY FOR CCU

Admission and discharge criteria for patients admitted in CCU:-
Cardio-thoracic care/valve/CAG/MI cases

ADMISSION	DISCHARGE
1. CABG Diagnosed cases of SVD/DVD/TVD Clinically symptomatic with poor LVEF	Vital parameters normal General condition stable, stitches dry and healing
2. VALVE CASES: Clinically symptomatic when medication fail to relieve the symptoms	Clinically stable. Relief of symptoms, stitches dry, all vital parameters normal
3. CORONARY ANGIOGRAPHY: H/o Chest pain with ECG changes, cardiac enzymes positive	Clinically stable, puncture site normal after the removal of sheath.
4. PTCA CASES Coronary Angiography. Diagnosed cases where PTCA done will benefit the patient	Clinically stable. Puncture site normal after the removal of sheath and relief of symptoms
5. MI Cases H/o Acute chest pain with radiation, sweating with acute changes in ECG, positive cardiac enzymes for continuous monitoring.	Vitals are Normal, ECG normal. Afebrile Able to attend toilet facilities

-Clinically critically ill. Patient who will need immediate thrombolisation or primary ANGIOPLASTY - Patient with cardiogenic shock following MI -Patient with Chest pain, unstable Angina, whose ECG and cardiac enzyme are normal for observation	
6. EP STUDIES Abnormal cardiac Rhythm No Considerable relief even after medication Clinically symptomatic Benefit of EP studies and ablation	Clinically stable Vitals Normal Cardiac Rhythm normal

ADMISSION PROCEDURE:

a) The reception, the casualty, wards or consultant's admission information is passed over the phone to ICU.

b) The casualty or wards nurse hands over the patient to ICU nurse.

c) The bed is made ready for the admitting patient by the ICU nurse.

d) Hands are washed properly before and after handling the patient.

e) Oxygen masks, Nasal prongs, Emergency trolley, Ventilator etc. are kept ready.

f) I.V. line is kept ready.

g) The patient's clothes are changed and handed over to the relative along with any jewellery / valuables and a signature is taken on the IP paper.

h) The Monitor is switched on and ECG Electrodes, SPO2 Probe, etc. connected.

i) Relatives are sent to the Reception to obtain an I.P. paper along with a slip mentioning the amount of deposit to be paid.

j) The amount of deposit is fixed for all cases admitted in ICU

k) The concerned consultant is informed by the ICU nurse.

l) Vital statistics of the patient are checked – Temperature, BP, pulse, Respiration, SpO2, blood glucose level by Glucometer, cardiac rhythm, airway security and patency.

m) Prepare the chart as:

- Admission paper
- Consent paper
- Charging sheet
- Flow chart (Vital signs, Intake & Output Chart, O2 chart, medication sheet)
- Diabetic chart
- Ventilator chart (if required)
- History sheet
- Doctors order sheet
- Nurses notes
- Lab Investigation sheet (if required)

n) Physical, mental and logical support is given to the patient.

o) For RTA and poison cases an MLC is initiated.

p) The orders of the consulting doctor are carried out.

q) The nurse hands over all the reports, discharge card, OPD file and explain the patient regarding the treatment to be carried out at home and follow up, after writing down the payment receipt no. on the IP paper.

r) The nurse asks the reception for the arrangement of ambulance and the social worker for the arrangement of Ayah, etc. if required for the patient.

s) The nurse sends the discharged/ transfers out file is sent to billing and after the bill is cleared, then only the patient is sent to the reception for payment and after payment, the file is stamped.

t) If Medico legal case, then the police is informed, the name and buckle number of the policeman is noted. If conscious patient, the police doesn't issue a copy of the statement, if unconscious a copy of the statement is given by they police saying that the patient is unconscious, which is certified by the duty doctor in the ICU.

u) Before starting any procedure such as Intubation, Central Line, Dialysis, Catheter, Arterial BP, and Pacing, a written consent is obtained.

v) The details of the patient are entered in the central monitor and admission book maintained in the department

w) Documentation: Admission Book, Consent Form and Ward statement book

PATIENT CARE

a) The day shift starts at 8:00 a.m.

b) The night duty staff hand over the detail report of every single patient to the day shift staff.

c) The ICU In-charge then assigns a patient to each nurse, the responsibility for that patient for the duration of her shift.

d) All critically ill patients are turned every two hours and care is taken of the pressure points.

e) Routine daily baths are done by the night staff.

f) This includes total skin care, eye care (in unconscious/sedated patients), nail care, hair wash, if necessary.

g) Dressing is changed, if required.

h) Also catheter care, mouth care, perineal care and bed making is done.

i) The senior staffs ensure that the unit is neat and tidy before the morning shift takes over.

j) Any patient who has not had a bowel movement is checked for impaction, the Intensivist is informed and the flow sheet updated.

k) Back care, mouth care, eye care, perineal care and other nursing care is provided to the patient as and when required.

l) Chest PT and limb PT is given by the Physiotherapist when recommended by the consultant.

m) Patients are mobilized and given exercise as per the instructions of the consultant.

n) Air mattresses are used for pressure sore prevention.

MEDICATION ADMINISTRATION

a) All medications are reviewed by the Intensivist/ Duty Doctor/Consultants and either recorded or stopped.

b) Nursing staff checks orders before carrying out any medication, treatment or Investigation.

c) With regard to narcotics, the signature of the Intensivist is taken and they are kept in the nurse's station under lock and key

d) It is responsibility of the nurses to look after this.

e) All infusions with additives administered by drip of syringe pump are labelled with the drug name, dosage, date and time.

f) Blood for investigations is collected from a separate vein to prevent infection.

ICU nurse is responsible for the overall procedure to be carried out

TRANSFER OF PATIENT FROM ICU TO DIAGNOSTIC CENTRE

a) If the patient is transferred using the Cardiac ambulance he is not accompanied by the nursing staff of the ICU as there is a doctor present.

b) If by other ambulance he is accompanied by the staff nurse.

c) A female staff is accompanied by a female attendant and male by a male attendant.

d) The patient is tagged with the wrist band.

e) After the doctor's order the department is informed for 2D Echo, USG, Colour Doppler or X-Ray.

f) If the patient is in critical condition then portable machines are used.

g) Ambulance is arranged for the patients requiring MRI

h) The ward staffs accompany the patient.

i) The investigations required Form is filled by the staff nurse.

j) Depending on the patient's condition a wheel chair or trolley is used.

k) If Oxygen is necessary, trolley is used for shifting.

l) Before transferring on to the trolley, the vital statistics are checked and recorded.

m) Previous investigation reports, if any, are to be taken along.

n) The patient is given an explanation as to the reason for the shift by staff nurse.

o) Nurses and ward boy's takes the patient to the diagnostic department and bring them back.

p) The patient relative goes to the diagnostic centre (outsourced) and collects the reports.

q) If The Patient Is On Ventilator, he Is Accompanied By Anesthetist

DISCHARGE CRITERIA POLICY

a) The status of patients admitted to an ICU is revised continuously to identify patients who may no longer need ICU care.

b) When a patient's physiologic status has stabilized and the need for ICU monitoring and care is no longer necessary.

c) When a patient's physiological status has deteriorated and active interventions are no longer planned, discharge to a lower level of care is appropriate.

d) The patient is discharged from the ICU only on the written instructions of the concerned doctor.

e) The relatives of the patient are informed of the discharge and also details of the bills by the ICU nurse.

f) While handing over the Discharge Card, the relatives are given an explanation regarding medication, further care, treatment and follow-up.

g) The relatives are asked to purchase medicines from the pharmacy as per the doctor's orders.

h) The patient is assisted to change out of the hospital attire into his own clothes.

i) Patients and relatives are informed about diet, post discharge exercise.

j) Before the patient leaves the ICU, the patient's unit is checked to ensure that all hospital articles are present e.g. sputum cup, etc.

k) A counter check is made whether all bills are paid before the patient finally leaves the ICU.

l) If the patient bill is not cleared, then the draft bill is sent to billing department and the patient is discharged on the order of administrator

m) The reports of the investigations such as blood, X-Ray are handed over to the patient. If TPA/COMPANY, the documents and reports are not handed to the patient/relatives. On request the photocopy is given by the MRD.

n) In case the patient is unable to walk or has been advised not to walk then a wheel chair or stretcher is provided.

o) If the patient is leaving against medical advice is noted and signature is obtained from the patient.

p) All charts are completed and sent to the reception and MLC papers to the administrative office.

q) The Dietary Department is informed of the discharge by ICU staff nurse.

Discharge against medical advice request

a) Discharge summary / card is given to the patient. Either the patient goes to another hospital or home or discharge against medical advice procedure is explained to the patient/ relative

b) DAMA is explained to the relatives and their signature is obtained.

c) The discharge entry is made in the register. And the required entries are made in the admission sheet and the signature is obtained from the relatives. The patient is discharged.

TRANSFER OF PATIENT TO THE WARD

a) The consultant plans the transfer of the patient to the ward.

b) The Intensivist writes down the consultant's orders in the file of the patient. And writes the transfer out summary.

c) The relatives are given an explanation as to why the patient is being shifted out of the ICU.

d) The staff co-ordinate with the ward and arrange for a bed / room according to the class of room the patient / relative desires.

e) The ward staffs are also informed if the patient requires Oxygen, a water bed or any other specific requirements.

f) The bill is updated and is checked for deposit paid.

g) All the papers are arranged chronologically. All printed reports are kept ready.

h) Medicines are checked to see that they are sufficient till the next morning.

i) Extra medicines are returned to the pharmacy via the relatives (for company patients / TPA, medicines are returned at the time of discharge/death)

j) All the belongings of the patient are handed over to the relatives.

k) The relatives are requested to be present during the shifting of the patient from the ICU to the ward.

l) I.V. fluids are disconnected.

m) The patient is then shifted by the ward boy/staff nurse on a wheel chair or trolley.

n) The 'Transfer-Out' book is filled by the staff nurse and is counter signed by the ward staff.

o) The patient is shifted, settled in and the I.V. fluids connected.

p) The patient is handed over to the ward staff

q) Signature of the staff nurse receiving the patient is obtained.

r) Entry is made in the Admission Book for Transfer Out.

MANAGING PATIENTS IN CASE OF NON–AVAILABILITY OF BEDS IN INTENSIVE CARES AREAS

a) Prioritize the ICU patients who do not need active intensive monitoring

b) Non critical / stable patients are shifted out of ICU at the discretion of the consultant under whom the patient is admitted.

c) If bed cannot be made available, patient is given proper medical assistance in Emergency Room (Casualty) and transferred in an ambulance to the hospital of the patient's choice.

TRANSFER OF PATIENT TO OPERATION THEATRE

a) The procedure for Transfer to the OT is explained to patients and relatives by the staff nurse.

b) Dentures and nail polish are removed.

c) Ornaments and the belonging are given to the relatives.

d) The operative site is prepared.

e) Consent is taken by DMO/Staff nurse

f) Psychological support to the patient is given.

g) Pre operative orders are carried out.

h) According to surgery chlorhexidine bath is given to the patient.

i) The patients are tied with Identification band to prevent wrong surgery.

j) The OT staff in informed.

k) The ICU staff nurse /ward boy accompanies the patient to the OT

l) The patient is handed over to the OT staff nurse with all reports.

m) After the procedure, the patient is again shifted to ICU and the signature of the anesthetist is taken. With the case file and reports and operatives notes and post- operative treatment duly written.

GENERAL PROTOCOLS FOR THE ICU

1. The night duty nurses give the duty hand over to the next shift nurse.

2. The incoming Staff Nurse allotted for a particular patient will take a detailed report about that patient by the patient's bedside from the outgoing Staff Nurse

3. Staff Nurse interacts with the patient's relatives from time to time giving them updates about the patient's condition

4. Staff Nurse ensures that all bed linen, towels, etc, has been changed daily.

5. The Ward is kept neat and clean.

6. Segregation of waste is strictly implemented.

7. The equipment's are checked to ensure it is in proper working order.

8. The Biomedical Department is notified for assistance or repairs.

9. Thorough washing of hands by all Staff is strictly followed to avoid any cross infection.

10. The Staff Nurse indents for drugs and credit unused medicines to the patient's account.

11. CSSD requisition is sent well in advance.

12. Consultant along with Staff Nurse / Intensivist visits the patients, assess their condition and issue necessary directions, orders or investigations which are entered into the patient's files.

13. Patient's files, investigation reports and other documents are kept ready for Consultant's rounds.

14. After rounds, the Staff Nurse checks the orders (if revised or altered), new medicines to be indented for or investigations, if any, to be carried out.

15. The patient or the relatives is informed about any advice / change of treatment, etc. given by the Consultant regarding the patient.

16. The Staff Nurse enters all data into the computer regarding patient's admission, transfer in or transfer out, requisitions, death, or any other incident or emergencies.

17. Patient bedside nursing care e.g. Back care, position change must be done two hourly other procedures are carried out as and when required in each shift

18. All patients scheduled for surgery are prepared with proper aseptic technique.

19. Staffs are extracareful when nursing infectious patients.

20. Gown, mask and gloves are worn and hands are washed thoroughly using disinfectants.

21. Proper aseptic technique for dressing and disposal of waste are followed.

22. Daily checking of Crash carts and trolleys are done and the carts refilled, if necessary.

23. All injections and medicines on the trolleys must be labeled.

24. Expiry dates are checked weekly by the staff Nurse.

25. The dressing trolley is cleaned daily with antiseptic.

26. Thorough cleaning of the cupboards and trolleys are done on a weekly basis.

27. The Staff Nurse accompanies the patient for any procedure which may be required to be done outside the ICU.

28. Any patient requiring suction is attended to after initiating proper safeguards.

29. Oral suction is carefully carried out without hurting the patient.

30. For Endo-tracheal suction the catheter is used once only and then discarded in a safe manner.

31. The Staff Nurse checks the IP file and over notes at every shift.

32. On discharge of a patient, thorough cleaning of the bed and carbonization of infected patient's beds carried out.

WASTE MANAGEMENT

a) Bio-medical waste is collected in according to waste management instruction.

b) Sharp waste such as needles, scalpels, blades, etc. is put in a puncture proof white container, (200ML in 10L water)

c) The used injection ampoules are put in the same puncture proof container.

d) Discarded medicines and cytotoxic vials are put in a white container.

e) Waste such as adult diapers soiled with blood, urinary catheter, Intracath, syringes contaminated with blood, soiled dressing, soiled plaster casts, soiled disposable linen, bedding and other material contaminated with blood/body fluid are also put in the YELLOW Bag.

f) Used Injection vials, syringes (which have no blood stain), slit IV bottles, cut IV tubing's, empty plastic distilled water covers, drainage bag and tubing's, used blood bags, and plastic needle covers are put in separate BLUE bag.

g) The pantry / food waste is kept in the black bag.

h) Dry and plastic papers, newspapers are disposed in black bag and sent for recycling.

i) Chart mentioning the BMW guidelines are displayed in the ward.

j) The waste is collected daily at around 7am, 3pm, & 10pm by the house keeping staff.

k) Waste is collected according to the BMW guidelines and taken to the BMW collection area by the ward staff

COP 10-DOCUMENTED POLICIES AND PROCEDURES GUIDE THE CARE OF VULNERABLE PATIENTS

I. PURPOSE:

To identify vulnerable group of patients visiting in the hospital and to provide care in a safe and secure environment

II. SCOPE:

Hospital wide

III. RESPONSIBILITY:

Medical & Paramedical staff

IV. POLICY:

Hospital has defined procedures (adhering to legal requirements and standard practices**)**

1) To guide the care of vulnerable patients to prevent them from getting injured while in the hospital.

2) Reduce the risk of abuse

3) Create awareness about vulnerability amongst care providers.

4) Offer extra care to such patients in a safe and secure environment.

V. PROCEDURE:

1) Definition:

"Vulnerability" is operationally defined as the potential risks associated with the physical and mental status of an individual, which might reasonably be anticipated irrespective of the context in which care is provided.

Vulnerability is being described in terms of potential for exposure to deliberate means that the potential for a breach of care is always present and is not restricted to specific care contexts. Maltreatment (active) and intentional or thoughtless acts (passive)

2) Vulnerable patients

- The Elderly (>65 years of age)
- Babies and children (<12 years of age)
- Mentally Challenged Patients
- Physically challenged Patients
- Unconscious Patients
- Sedated Patients

3) Protection

- The side rails of the bed are always placed upside in case of vulnerable patient to prevent a fall.
- Safe transportation or shifting of patients from bed to stretcher/wheel chair and vice versa.
- The patient is accompanied by an appropriate and trained attendant for investigations, toilet and wherever necessary.
- The room and toilets without any locking system and bolts on the doors to avoid patients getting locked inside.
- The floors are not slippery; these are kept dry to protect the patients from slipping or falling.

The hospital has provided proper environment taking into account of vulnerable group. This includes:

- Use of Orange Band & Safety First tags for easy identification of patients.
- Adequate training for the pediatric nursing staff for care of the children.
- Safety Belts are mainly used on stretchers, wheel chairs and operation tables to prevent the Patient from falling.

4) Hour Attendants

a) It is mandatory for the patient to have a responsible person 24 hours at the bedside.

b) In case the patient does not have an attendant of his/her own, the staff on duty has to report this to the Nursing Superintendent who in turn will arrange an attendant for the patient on payment basis

c) In case of children, the mother/ father or both will have to remain with the child if it is required.

5) Continuous Observation Of General Condition

a) Vital Signs of the patient are monitored around the clock.

b) Frequent visits to the patient room/bedside.

c) Proper Temp Pulse and Respiration /Glasgow coma scale/Levels of consciousness are maintained and monitored.

6) General Physical Care

a) Personal Hygiene

b) Mouth / Back Care to prevent bed sores

c) Skin care and proper positioning

d) Diet and nutrition, assist patient for self- feeding

e) Bowel and Bladder care

f) Medication and Treatment as ordered by the doctor

g) Prevention of infection

7) For Patients On Sedation

a) All Protective measures should be taken as above

b) The lights should be dim

c) No noise should be created in and around the patients room

d) The patient is observed by the duty nurses for any change of condition (in the vital signs and general condition)

8) For Mentally Challenged Patients

All the above protective measures should be taken and in addition take the following measures:

a) A Psychiatry reference should be made and treatment carried out accordingly

b) For suicidal tendency patients see that sharp instruments and harmful material and equipment are not kept near the patient

c) There should be bars on the windows and no locks or bolts on the doors

d) Make sure that the patient has swallowed the medicine administered to him as these patients have a tendency to spit out their medication

e) Informed consent for this group patient is described .

VI. Identifiers:

A `Safety First' sticker signage shall be placed at the head end panel of the patient bed (Except in the Intensive Care Units). An orange band is placed in the wrist of patients who have been assessed as vulnerable.

Guide for Care of Patients at Risk for fall	
Teaching Interventions	1. Make patients and family members aware of the surroundings and safety measures. 2. 'Safety First' policy explained to the patient.
Action Requiring Documentation	1. Vital signs recording as per orders 2. Assess Activities of Daily Life 3. Physical Restraints as ordered 4. Physical therapy as ordered 5. Document falls in Incident Forms and inform Quality cell and MS.

Annexure:

Incident Report Form

COP 11: DOCUMENTED POLICIES AND PREOCEDURES GUIDE OBSTETRIC CARE

I. PURPOSE:

To define and identify High Risk obstetric cases and manage such cases efficiently

II. SCOPE:

Obstetrics & Gynecology Department

III. RESPONSIBILITY:

Doctors and Nurses Working in Obstetrics & Gynecology Department

IV. POLICY

The organization has this on OPD basis.

The assessment of obstetric cases shall include maternal nutrition, immunizations and education.

Refer to AAC chapter and COP chapter

COP 12 DOCUMENTED POLICIES AND PROCEDURE GUIDE PAEDIATRIC SERVICES

I. PURPOSE:

To define guidelines for care of Pediatric patients in MGM Hospital.

II. SCOPE:

Casualty, Emergency department & Pediatric Department

III. RESPONSIBILITY:

Doctors & Nurses in Pediatric Department

IV. POLICY & PROCEDURE

1. Hospital Has The Facility Of OPD, IPD And NICU For Infants And Pediatric Patients

2. All facilities are prominently displayed in the OPD area for information for the visitors.

3. Days are also mentioned clearly for the services offered

4. Hospital staff is qualified, well trained and experienced to handle both routine and emergency cases pertaining to infant age group.

5. Regular training is conducted to train and update the clinical knowledge.

6. A special play corner for children is proposed in the main waiting area

7. Good number of small toys and play ways are kept in the OPD chamber to entertain visiting children.

8. Special Vigilance CCTV Camera Is Installed To Monitor All Main Areas Of The Hospital.

9. Security team is trained and active to counter any abduction case inside the hospital.

1) A Code has been assigned to report and activate Security team for necessary action in case of any abduction inside the hospital.

2) Code "PINK" is announced for activating and informing security team.

3) All gates are closed.

4) All suspicious persons are checked and questioned if required.

5) The entire hospital is thoroughly checked by the team by visiting designated areas

6) Police is to be informed after establishing the case of abduction.

7) Safety of children is looked after very well by the M.G.M hospital.

10. Policy to Prevent Child, Neonate Abduction and Abuse:

1) Mother or (in her absence) a guardian is allowed to remain with the patient 24 hours.

2) All the patients are tagged with their name, registration no, IPD no for their unique identification.

3) Patient movement outside the ward is along with an identified responsible person.

4) A security person deputed for pediatric unit keeps a check on visitors and does not allow persons without authorization to leave or enter the unit.

5) Hospital employees are to immediately report any unusual or suspicious behavior or individuals to the security person deputed for pediatric unit.

6) Inform the security immediately in the event an infant or child cannot be located.

7) All concerned staff is made aware of the safety precautions to prevent abduction and abuse.

11. Parents Of Children Are Educated About Looking After Their Children.

1) OPD file has the necessary information regarding child's Growth (Height and Weight) charts to access the growth of their child.

2) Immunization charts are also prepared and attached to the file to remind them of the next dose to be given.

3) Information on Nutritional requirements and supplements is mentioned in the OPD file for reference.

Annexure:

- **Pediatric Initial assessments Form**

COP 13 DOCUMENTED POLICIES AND PROCEDURES GUIDE THE CARE OF PATIENTS UNDERGOING MODERATE SEDATION

I. PURPOSE: To outline the management before, during and immediately following a procedure with moderate sedation.

II. SCOPE : Hospital wide

III. RESPONSIBILITY: Anesthesiologist and treating Doctor, consultant/ surgeon.

IV. POLICY:

1. Qualified and registered anesthesiologists are allowed to give sedation to the patient

2. All the patients undergoing procedure or surgery are monitored.

3. sedation may be administered in the following departments:

a) Endoscopy

b) Bronchoscopy

c) Intensive care units

d) Emergency

e) Operation Theatres.

V. PROCEDURE:

1. Monitoring of patients during procedure

1) All required equipment for care and resuscitation shall be available for monitoring vital signs including heart rate, respiratory rate and oxygen saturation.

2) Blood pressure and cardiac rhythm (ECG) shall be continuously monitored.

3) Level of sedation is monitored by the anesthetist himself.

2. Patients are monitored by the anesthetist after sedation.

1) At the end of the case, the patient is taken to appropriate recovery area for care.

2) The patient's status shall be assessed by anesthetist and the care shall be given by appropriately trained personnel.

3) Post-operative documentation to be done properly for records.

3. Post sedation care and discharge criteria:

1) Patients are monitored in recovery area manned by a Consultant / Resident doctors or trained staff nurses.

2) Minimum monitoring includes NABP, pulse-oxymeter and ECG. Only anesthesiologists or qualified doctors decide the shifting-out of the patient from recovery area.

Annexure:

- **Informed Consent Form for An aesthesia**

COP 14 - DOCUMENTED POLICIES AND PROCEDURES GUIDE THE ADMINISTRATION OF ANAESTHESIA

I. PURPOSE:

To provide anesthesia to patient, consistent with co morbidities of the patient to ensure safe, smooth and successful outcome without compromising patient's safety.

II. SCOPE:

Operation Theatres

III. POLICY:

In M.G.M. Hospital, Kamothe is administered by qualified anesthesiologist.

IV. PROCEDURE

1. Pre Anesthesia Check-up (PAC) is done for all patients undergoing a surgery by the anesthesiologist & details recorded n the form, and the type of anesthesia to be administered to the patients is pre-recorded.
2. There is a consent form signed by the patient for administration of anesthesia before the procedure / surgery. Patient has to be informed about the pros & cons in the language best understood (Informed Consent).
3. During anesthesia, patient is to be monitored closely. Parameters to be monitored are Heart Rate, Blood Pressure (NIBP), Oxygen Saturation by Pulse Oximetry, ECG – Cardiac Rhythm.
4. Each patient's post anesthesia status is monitored in the recovery area (Post Anaesthesia Recovery Room) and documented in the IPD file of the patient. This monitoring and documenting is done till the patient recovers completely from anesthesia.
5. The Surgical ICU In-charge is also the HOD-Anesthesiology and he/she along with the consultant applies criteria to decide the transfer of patient's from the recovery area.
6. All adverse anesthesia events are recorded & monitored and corrective and preventive actions are taken accordingly.

Annexure :

- Pre anesthesia Assessment Form

COP 15 DOCUMENTED POLICIES AND PROCEDURES GUIDE THE CARE OF PATIENTS UNDERGOING SURGICAL PROCEDURES

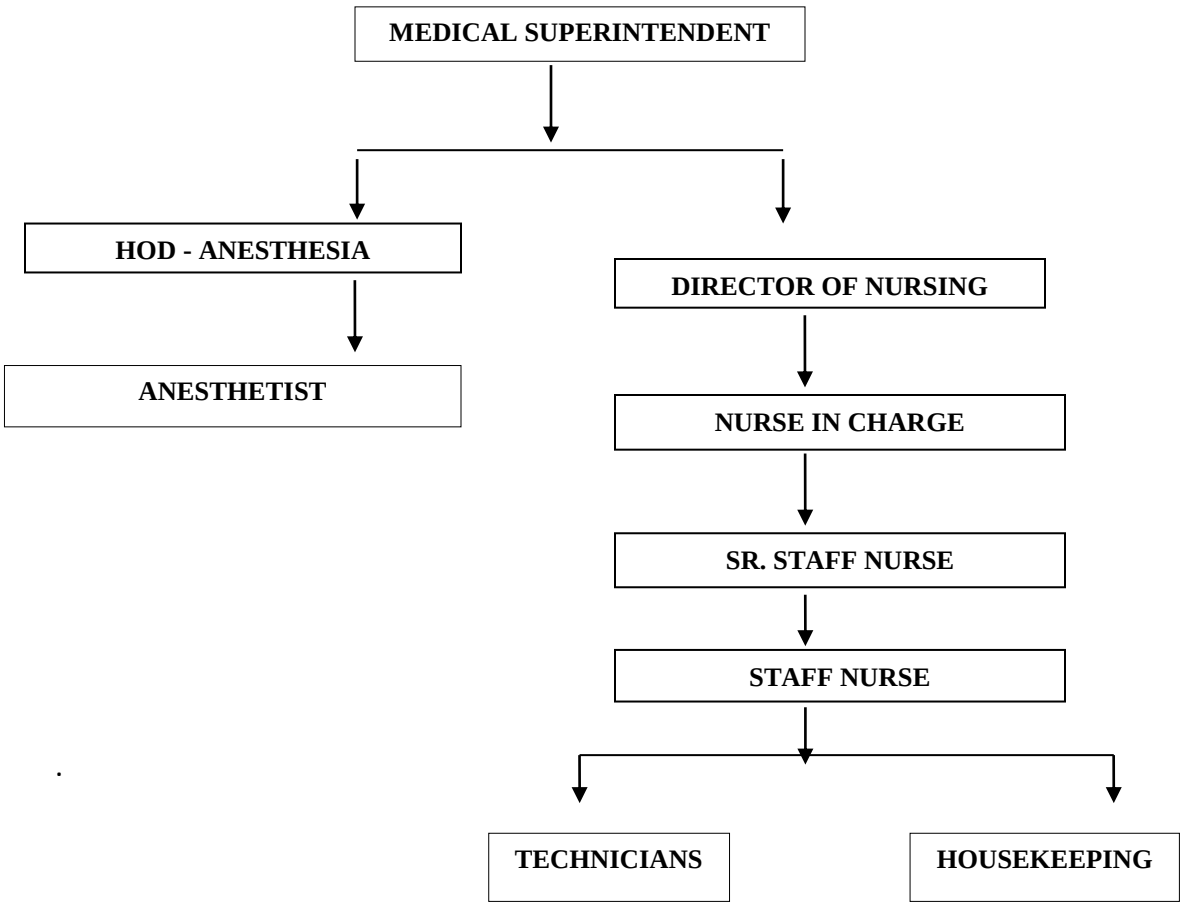
I. PURPOSE:

1. To set guidelines and facilitate the smooth working of the Operating Room
2. To outline processes in order to provide a safe environment for patients and all Operating Room personnel
3. To prevent avoidable complications
4. To establish processes for aseptic techniques in the Operating Room
5. To ensure effective communication between Doctors, Nurses, supportive staffs and other departments.

II. SCOPE: Hospital wide

III. RESPONSIBILITY: Operating surgeon, anesthesiologist, Nurses, OT technician

1. **ORGANOGRAM**



1. HOD – Anesthesia

1) To prepare the provisional & master list of surgeries in coordination with Operating Room nurse in charge
2) To Schedule the duty roster of anesthetists
3) To make the arrangements for emergency cases in coordination with surgeons and Operating Room nurse in charge or Shift in charge
4) To coordinate with the medical superintendent, & biomedical department for the procurement of new equipment for anesthesia as per need
5) To coordinate and help surgery department in organizing workshops/conducting CME/ live demonstrations.
6) To coordinate with medical superintendent and surgeons periodically, in scheduling surgeon's OR slot timings and duration
7) To ensure the junior staff updates knowledge and skill by attending, participating and organizing academics.

2. Anesthetist

1) To go through Pre Op Checklist immediately before surgery
2) To administer the necessary anesthesia after planning with HOD, & surgeon
3) To ensure the availability of all anesthetics and instruments in working conditions in co ordination with Operating Room technician and Operating Room staff nurse
4) To estimate time taken for surgery and coordinate the shift of the patient
5) To attend and participate regularly in academics and conferences to update knowledge and recent techniques.
6) To help the HOD in preparing regular and emergency Operating Room list

3. Nurse In Charge

1) To Plan and organize Human Resources in the Operating Room
2) To ensure Operating Room is fully operational and guidelines for its smooth functioning are in place.
3) Scheduling duty and leave rota of staff nurses and technicians
4) Allocating assignments for staff nurses and technicians
5) To supervise Operating Room booking, and scheduling of surgeries in co- ordination with Anesthetist In Charge
6) To co-ordinate with the ward nurse, anesthetist and surgeon in shifting of patient from respective department to Operating Room
7) To ensure adherence of scheduled slot timings.
8) To plan, prioritize and reschedule surgeries as necessary following discussions with the anesthetist and surgeon.
9) To Maintain Unit discipline/Unit facilities and patient environment -equipment, hygiene, stocks (drugs, linen) etc.
10) To supervise the nursing staff. , Operating Room Technician, and Housekeeping
11) To receive complaints from patients, patient attendants and Operating Room personnel and taking measures to solve them

12) To Plan, and Coordinate emergency surgeries along with surgeon.
13) To coordinate with other departments like biomedical department, imaging, pathology etc as required
14) To ensure the maintenance of the operating room registers and all records
15) To ensure accurate entry of data in the system by the staff nurse
16) To report any untoward incidents to the Nursing supervisor
17) To schedule fumigation of the Operating Rooms
18) To supervise Operating Room surveillance - fumigation, swabs collection for culture, reporting, etc
19) To supervise Infection control and waste management
20) To attend seminars and conference to update the knowledge
21) To perform periodic performance evaluation of the subordinates
22) To ensure updating of knowledge of staff by encouraging participation in CNE's.
23) To identify the learning needs and teaching of staff nurses and taking the measures appropriately to update their knowledge.
24) To identify learning needs of technicians, GDA's and Housekeeping staff and take measures as necessary.
25) To conduct Nursing audit

4. <u>Senior Staff Nurse</u>

1) To take the responsibilities of Nurse In charge in her absence
2) To book slots with all the details needed from the surgeon in coordinate with Nurse In charge
3) To ensure that the Operating Room is ready for surgery as per the list
4) To identify the patient with the I.D. band ,& patient's file and ensure that all documents are in order before patient is taken in for surgery
5) To assist in surgical procedures
6) To Supervise and teach junior staff
7) To supervise and coordinate patient transfers
8) To supervise the recovery room staff in monitoring of patients
9) To supervise all support staff.
10) To ensure all medicines, linen and consumables are adequate
11) To ensure that all emergency drugs and equipment are available and in working order
12) To inform and coordinate with biomedical department in case of equipment breakdown
13) To check all linen being sent to and received from the laundry
14) To supervise checking of expiry dates of medicines and consumables every month
15) To report untoward incidents to Nurse In charge
16) To conduct formal and informal teaching
17) To ensure strict maintenance of asepsis and sterile technique

5. <u>Staff Nurse</u>

1) Inventory checking.
2) Carrying out medical and nursing orders.
3) Handing and taking over from the previous shift nurse.

4) To ensure that all life saving equipments are operational and inform senior staff nurse if any equipment is not working
5) To check crash cart supplies during night shift and replenish as required
6) To perform functions as allocated by nurse in charge/shift in charge
7) Assisting for various procedures
8) To co-ordinate with the ward and ICU nurses to ensure the smooth
9) flow of patients into the Operating Room
10) To maintain strict aseptic technique during surgery to ensure safety of patients
11) To takes post-operative instructions from the surgeon and anesthetist
12) And hand over the same to pre and post operative room nurse.
13) To keep adequate linen, drugs, and other items in the Operating Room
14) To identify the patient with the I.D. band, patient's file and through verbal communication
15) To be responsible for maintaining the integrity and safety of the sterile field
16) To enter consumables and drugs used for the patient into the charge sheet
17) To check expiry dates of all drugs and consumables send to the pharmacy and/or stores as per protocol
18) To maintain proper Operating Room discipline
19) To do pre-operative visit
20) To report any untoward events to the nurse in charge/shift in Charge

6. <u>Pre & Post-Operative Room Nurse/OT Nurse</u>

1) To identify the patient with the I.D. band ,patient's file and through verbal communication
2) To check for informed consent and surgical clearance
3) To check the patient file and pre-operative check list along with the ward/ ICU nurse.
4) To ensure that pre operative checklist is completed, & signed with name and Employment ID by ward / ICU nurse
5) To counter sign the completed pre operative checklist along with name and employment ID
6) To inform surgeon, anesthetist and nurse in charge/shift in charge about the arrival of the patient.
7) To give the details of the patient to the circulatory nurse
8) To take complete endorsement from circulatory nurse about postoperative orders and details of the patient.
9) To carry out immediate post-operative orders
10) To transfer the patient from post –operative room to respective ward with GDA, after getting fitness from anesthetist and surgeon
11) To hand over the patient to respective ward /ICU staff nurse
12) To follow the waste disposal and infection control policy
13) To maintain proper Operating Room discipline
14) To report any untoward events to the nurse in charge/shift in charge

7. <u>Operative Room Technician</u>

1) To ensure that all Operating Room and equipments are cleaned and carbolized before starting of the operations
2) To fumigate Operating Rooms in coordination with housekeeping personnel, & GDA as per schedule.

3) To check all the medical gas ports and ensure that it is working order
4) To keep the equipments for charging immediately after use
5) To ensure that all equipments are in working condition and inform the nurse in charge/shift in charge
6) To keep all the Operating Rooms ready for routine and emergency cases.
7) To follow strict aseptic technique in the operating room.
8) To keep the sterile trolley ready for anesthesia
9) To update the knowledge of all equipment in the Operating Room and to teach juniors
10) To follow the waste disposal and infection control policy
11) To maintains proper Operating Room discipline
12) To report any untoward events to the nurse in charge/shift in charge

8. General Duty Assistant (GDA)

1) To assist the nursing personnel in all procedures
2) To carry the samples from the Operating Room to the pathology
3) To maintain general cleanliness of the department
4) To clean instruments before sending to CSSD under supervision of staff nurse
5) To assist technicians whenever necessary
6) To assist in transportation of patients
7) To get pharmacy & purchase indents from the respective departments in emergency
8) To separate, count & keep the soiled linen ready to send laundry department under the supervision of the staff nurse/senior staff nurse
9) To assist patient in meeting elimination needs whenever necessary
10) To shave & prepare the patient when required
11) To follow the waste disposal and infection control policy
12) To maintain proper Operating Room discipline

9. House Keeping Personnel

1) To maintain Operating Room cleanliness as per schedule
2) Deep cleaning of the department as per schedule.
3) To wash Operating Room slippers everyday during the night shift and as & when required.
4) To follow the waste disposal and infection control policy
5) Clean & disinfect articles used by the patient in the absence of GDA

IV. POLICY:

1. Patient will be screened and evaluated prior to the surgery and the findings be documented by surgeon and anesthetist.
2. Informed written consent will be taken by the surgeon who is performing the surgery
3. Only qualified and Experienced Medical professionals will perform surgical procedure

V. PROCEDURE:

1. Operating Room Booking

1) An advance booking register will be kept available in the operation theatre
2) The Operating Room in Charge/ the senior staff nurse /anesthetist does the booking
3) An operation can be booked one month in advance or minimum of one day

4) Preference of Operating Room timings should be taken from surgeon and schedule must be drawn up for each day of the week and each half of everyday

5) The person attending the call must make the appropriate entry in the Operating Room booking register

6) For the purpose of booking the Operating Room for the next day, the intimation should be given latest by 4:00 PM

7) The following details must be provided while booking a procedure

- Name of the patient
- UHID
- Age & Sex
- Name of Surgeon
- Name of proposed surgery
- Date and time and duration of proposed surgery
- Special requirements
- Intimation of known infections

8) The booking will be made only if the following procedures are complete

- Investigations
- Payment for Pre Anesthetic Check
- Pre Anesthetic Check
- Financial Counseling
- Payment for Slot booking
- Confirmation of bed in the ICU for patients requiring postoperative ICU admission
- The bookings will depend on surgeon and bed availability
- The booking will be provisional until payment/TPA clearance
- The deposit will be done at the IP billing desk by the patient/relative
- Provisional booking will be cancelled if TPA clearance is not done
- within specified time frame unless the patient/relative deposits the requisite amount with the IP Billing desk
- For all elective/ planned surgeries patient should be admitted at least two hours prior to proposed surgery time
- Elective day care patients should be evaluated and their history and physical assessment recorded and prepared before sending to Operating Room

9) Provisional list will be finalized by Operating Room In Charge and Anesthetist In Charge

10) The final List will be made by 5:00 PM-6:00pm and circulated to all Concerned departments

11) All infected cases are to be scheduled after clean cases

12) The information about the nature of infections must be made known to the Operating room In charge/senior staff Nurse and the anesthetist In charge before scheduling the case

2. Operating Room Timings

1) The Operating Room timings are to be followed meticulously

2) Planned surgeries are performed from 8.00 a.m. to 6.00 p.m. on all working days.

3) All surgeries after 8pm and on hospital approved public holidays will be considered as emergency

4) Operating Room nurse in charge/senior staff nurse will ensure that the Operating Rooms are prepared and ready on time

5) In case of cancellations due to any reason, the surgery may be postponed or rescheduled and all concerned Operating

6) Room personnel allocated for that case shall be informed of the same

7) The Operating Room Nurse In charge prepares Operation list in consultation with the Anesthetist In charge

8) The Operation list is circulated to the Director, Medical Superintendent, Nursing superintendent, all ICU, wards, and all departments of the hospital through system by 5 pm -6pm, a day prior to the surgery and on the day of surgery.

3. Cancellation / Postponing Of Surgery

1) The Surgeon informs the Operating Room nurse in charge/ Staff nurse to cancel/ postpone the slot with reason.

2) The Operating Room Nurse In charge/ senior staff nurse then reschedule the vacant slot.

3) If the surgeon who has cancelled /postponed the case wants to perform another surgery within that allocated time slot, it shall be scheduled and the concerned Operating Room personnel will be informed of this change.

4) If the slot lies vacant, the succeeding case may be pre-poned in consultation with the concerned surgeon.

5) The re-scheduling of cancelled surgery will be based on the availability of the slot.

6) Emergency cases are given priority over the scheduled cases and slotted accordingly and the concerned Operating Room personnel and surgeons are informed of the change.

7) The planned procedure is scheduled to the next available slot and the concerned surgeon is informed.

4. Preoperative Process Flow

1) Nurse shall intimate the concerned department telephonically half hour prior to scheduled time, to transfer the patient

2) The ward nurse along with the GDA shall transfer the patient to the Operative room

3) All scheduled cases should reach the department at least 15 minutes prior to surgery.

The nurse allocated in the Pre-Post Operative room will receive the patient and check the following.

a) Right patient for right surgery

b) Identification tag clearly marked with

c) name ,

d) UHID no;

e) Patient file,

f) site for surgery,

g) Informed consent

h) Investigations

i) Viral marker – one month validity only

j) All relevant medical documents

k) Pre Anesthetic Check

l) Surgical clearance

m) Part preparation for surgery

n) Pre Operative check list
o) Pre Operative medications administration
p) Known infections or allergies, if any
q) Any special instruction from surgeon or anesthetist
r) Arrangements of blood if required

4) Check list must be mutually signed by handing and taking over nurses
5) Entry to be made in the pre op register mentioning the details of the patient, and the no of X Ray, MRI, CT scans, CD's etc
6) Financial clearance for life/limb saving surgeries. If the surgeon
7) wishes to take the patient in Operating Room he/she has to give the financial guarantee

5. Perioperative Process

1) Patient will be wheeled into the Operating Room once the Operating room is completely prepped for procedure
2) All equipments must be ready and in working condition prior to receiving patient in the Operating Room
3) All personnel should be scrubbed and/or ready for procedure prior to administering anesthesia
4) Strict aseptic technique must be maintained throughout the procedure.
5) The anesthetist must be present throughout the duration of the procedure.
6) All female patients will be accompanied by a female staff nurse in the Operating room.
7) There will be personnel flow restricted to a minimum throughout the duration of the procedure.
8) The staff nurses ensure disposal of wastes as per protocol.
9) The circulatory nurse ensures that all necessary documentation is completed by the respective personnel.
10) The circulatory nurse gives the intra –operative updates, if the surgery prolongs more than one hour – every 2 hourly to the relatives.
11) Post procedure, the patient will be shifted to the post operative area after confirmation from the anesthetist
12) The circulatory nurse in charge of the case will hand over the patient to the pre post operative area nurse
13) The surgeon counsels the relatives about the patient's condition & the procedure done to the relatives and signs in the post operative counseling register.

6. Counting of Swabs, Needles and Instruments

1) All swabs, needles/sharps and instruments will be counted at least three times during a surgical procedure, at the pre-operative setting up phase, prior to a major cavity being closed and prior to skin closure, and at any time of permanent relief of scrub or circulating personnel, and at any time the scrub nurse feels the need to initiate a count.
2) The counting is done by the scrub nurse and counter checked by the circulatory nurse.
3) Results of the count will be documented and signed for by the attending scrub nurse and count team, on the white board & intraoperative count sheet which is attached to patient's records.

4) All instruments should be checked against set checklist

5) All swabs used in the Operative field is radio opaque

6) All instruments should be carefully examined for their completeness before the procedure. Any missing/broken parts must be documented on the white board before start of procedure.

7) Sharps and all the instruments are carefully examined to ensure that no missing/broken parts are left behind before closure.

8) Care is taken in counting for retractor blades and screws, power tool parts, blades and drills or, any instruments that have multiple working parts.

9) Accountable items added during the procedure are counted and recorded.

10) The scrub nurse shall audibly inform surgeon of all surgical item counts at each layer closure.

11) The surgeon must audibly acknowledge result of count.

12) No items are removed from the Operating Room till the final count

13) The same two nurses are responsible for all counts throughout the surgical procedure.

14) In case of Incorrect Counts

a. If a closing count is incorrect, the circulating nurse must inform the surgeon immediately.

b. If the missing item is a sponge, an instrument or any radiopaque accessory, and a thorough search of the room does not produce the item, then X-Ray must be done

c. A thorough search of the room includes searching the trash, the linen, the kick buckets and the area in, around and under the OR table

d. An X-Ray is not required if the missing item is a needle, or a non-radiopaque accessory. The surgeon should be asked if one is desired, however. Needles on sutures smaller then 7-0 are not radiopaque.

e. If the item is not found, the count is recorded as incorrect and is documented on an incident report and the operating room nursing record. Result of the X-Ray must also be recorded on both forms.

f. The incident report must be sent to Medical Superintendent and Nursing Superintendent after the surgeon's signature within 24 hrs.

g. The primary nursing team may not leave the case until the closing count has been resolved and documented.

15) In cases where patients may have had procedures done elsewhere where unmarked sponges may inadvertently be used/surgical items left behind in the body cavity, the Perioperative team will not assume responsibility for the same and the same shall be made a Medico Legal Case.

16) When a patient is returned to the Operative Room to retrieve a retained sponge or instrument, the above mentioned documentation /reporting process will be followed

7. SOS Surgery Process Flow

1) In case of SOS surgeries consent for the same is taken prior to surgery

2) The senior staff nurse informs the Laboratory of any special investigations a day prior to surgery (after preparation of the master list) and on the day of the surgery.

3) The allocated staff nurse prepares the sets as per requirement.

4) During procedure if any investigation reports are to be obtained immediately, the sample is appropriately labeled and sent to the lab.

5) The requisition for the same is sent through system and is marked as stat
6) 7.6.6. The laboratory technician will process the test and generate the
7) Report in the system.
8) Surgery resident/staff nurse shall collect the report through system and will inform to the surgeon.
9) After viewing the report, decision is taken and the relatives are informed of the same

8. Postoperative Process

1) All the post-operative patients are kept in pre-postoperative room for further monitoring
2) The Pre Post Operative room nurse will take over the patient from the circulatory nurse.
3) The allocated staff nurse will carry out necessary nursing care
4) The patient will be monitored in the pre post Operative room till confirmation from anesthetist and surgeon for shifting.
5) The allocated nurse completes documentation of treatment and care.
6) Following surgery, the consultant shall meet the relatives and inform them of the patient's condition, prognosis etc and the same will be attested on the charge sheet

9. Transfer Out of Patient

1) The patient is to be shifted after confirmation from anesthetist and Surgeon.
2) The allocated staff nurse will inform the ward/day care prior to transferring the patient from the Pre- Post operative area.
3) The staff nurse checks and ensures all documentation is complete.
4) The staff nurse ensures that all patient documents/investigation reports etc are checked and filed. The staff nurse along with GDA will transfer patient to respective department.
5) In case of patients requiring ICU care, the circulatory nurse informs the ICU of the transfer after confirmation from the surgeon and anesthetist.
6) The circulatory nurse ensures all documentation is complete, prior to shifting of the patient.
7) These patients will be accompanied by the anesthetist, circulatory nurse and the GDA and will be shifted directly from the Operating room to the ICU

10. Transportation of Histopathology Samples and Specimens

1) All standard precautions should be followed in specimen/samples packing and transportation.
2) The Surgeon/RMO is responsible for filling histopathology requisition form appropriately.
3) The circulatory nurse shall label and identify specimen/samples with patient I.D. , type of specimen, date and surgeon's name and enter the same in the specimen register.
4) Staff nurse will post the same on system.
5) Specimen/ Samples are transported to the laboratory by the GDA in a closed container specified for the purpose.
6) Known infections if any must be mentioned on the specimen label.
7) After receiving the specimen the lab personnel shall sign in the Operating Room specimen register.
8) The lab personnel will acknowledge the receipt of the sample

11. Disposal of Amputated Body Parts

1) The patient and the family must be explained about the need for amputation and the consent taken.

2) After the operation the amputated part must be shown to the family and their signatures obtained in the file.

3) The amputated part should be double wrapped in the yellow bio-hazard bag and labeled properly.

4) A record of the patient details, surgery done and the part amputated is made in triplicate , one to go with the amputated part, one to be retained in OT and one to MRD.

5) If the family wishes to take the body part, the family signs the triplicate form.

6) If the family does not wish to take the amputated body part, it must be disposed off in yellow bags and sent for disposal as per protocol after taking consent in the triplicate form.

7) Documentation of the same shall be completed in surgical and nursing notes

12. Medico Legal Cases

Inform Police immediately in case of the following:

1) Fall from table

2) Death on Operating Room table

3) Surgery at wrong site

4) Any Medical negligence by the team.

5) The doctor on duty informs the police telephonically and notes down the name, buckle number and the designation of the police officer.

6) Inform Police for all Medico-legal Cases through Police intimation form duly acknowledged by police station, which is in duplicate.

7) It is police prerogative to carry out the enquiry to elicit cause of unnatural death.

8) Medico-legal register will be maintained in the ER and must be filled by the respective department doctor on duty.

9) Medical Superintendent/ Medical Officer on duty and Nursing supervisor/ Nursing Superintendent must be informed of any MLC without delay.

10) All evidence collected e.g. instruments, sutures etc should be labeled legibly, sealed and kept under the custody of unit in charge till such time it is handed over to Police as per police requirement.

11) Complete identity and the signature of the police personnel must be obtained in the patient's file when handing over the evidence.

12) All medical records (Nurse's and Doctor's notes) must be completed without delay and kept separate.

13) A Medico-legal case will be discharged from the hospital on his/her recovery only after the police are informed.

14) The information will be given by doctor.

15) The doctor will note that the information is given on which date and time in the patient's file.

16) In the eventuality of death of any Medico-legal cases, the following must be informed immediately:

- Police
- Medical Superintendent/Medical Officer on Duty
- Deposition form must be made in all Medico Legal Deaths along with the death report.
- The body will be kept in mortuary and the copy of the deposition form will be handed over to security.

17) Medical records should be kept under safe custody (under lock and key) until it is handed over to the Medical Records department.

18) Nursing Supervisor will check the file during his / her shift, Unit Incharge will counter check before it is sent to Medical Records department.

19) Access to the file of a Medico Legal case file will be made with the permission of Medical Superintendent only.

20) At the time of release of body, the police officer and relative shall sign on the original and copy of deposition form in the patient's file.

13. Indenting

1) Store and Pharmacy

a) Operating Room stock and consumables are indented on predetermined days from the store/pharmacy or as required with reason.

b) Bulk Indents can only be place by nurse in charge or senior staff nurse.

c) Pharmacist/store in charge will acknowledge the indent through system.

d) The indent shall be placed through HMS.

e) The respective department GDA shall bring the items to the

2) Operating Room

a) On receiving the indent, staff nurse shall check every item along with the requisition, for quantity, strength and expiry date.

b) The Nurse in charge/senior staff nurse shall accept the indent in the HMS and update the stock in the department

3) CSSD

a) The staff nurse shall indent the sterile packs of linen and gown from CSSD on daily basis manually.

b) Sterile packs and sets are brought to the Operating Room in a closed trolley by the GDA.

c) The staff nurse will check the items against the requisition when sterile articles are received from CSSD.

d) The staff nurse will acknowledge the same in the Register.

e) The sterile linen and instruments are stored in the sterile store room.

f) Expiry date and sterile integrity should be checked by the staff nurse weekly and before taking to surgery.

g) After each surgery the GDA shall clean the instruments in disinfectant solution and send to CSSD for sterilization

h) Micro instruments and laparoscopic instruments checking, cleaning and handing over to CSSD is the responsibility of the respective scrub nurse.

i) The CSSD technician will acknowledge the receipt of the items (Name of the set, OT No, scrub nurse in charge of the case

4) Laundry

a) Department should have 3 sets of linen per bed in the stock

b) Washed linen shall be delivered by laundry GDA as per schedule

c) Emergency requisition shall be made by the Operating Room in charge/senior staff nurse with reason to laundry manager

14. Flow of Soiled Linen from Operating Room to Laundry

1) Soiled linen shall be collected by laundry GDA on scheduled time

2) All soiled linen from the Operating Room is removed and placed directly into closed hamper trolley by the GDA.

3) The linen will be sorted and counted in the Dirty Utility Room and placed accordingly in the laundry hampers.

4) The blood stained linen will be disinfected by the house keeping personnel before sending to laundry.

5) The laundry GDA will collect the soiled linen from the Operating Room twice a day.

6) The wet linen is sealed in the yellow biohazard bag and sends to the laundry.

7) The laundered linen then send to the CSSD for sterilization from the laundry

15. Consignment indent (Implantable prosthesis/Catheters)

1) OT indents are done as per patient requirement.

2) As per requirement the surgeon/OT will inform the vendor.

3) The vendor brings the items required to the OT after the security check and clearance.

4) The staff nurse in the OT receives the items and checks it against the challan which is in triplicate.

5) The original challan along with one copy is kept in the challan file and the second copy is kept with the vendor.

6) After use for the patient, the batch no and serial number of items used are mentioned in the patient file and the master log book, and also in the OT billing sheets (to be sent to billing department)

7) The original challan with the patient details is then sent to the purchase department where the GRN is prepared after which it's sent to the stores

8) The stores will transfer the stock to the MSOT sub store

9) The OT then acknowledges the stock and charges it to the patient

16. Billing of the Patient

1) The surgeon will fill the details of the patient, type of surgery, duration, name of the surgeon, assistant surgeon and anesthetist on the billing activity sheet.

2) The wheel in-wheel out (into the specified Operating Room) time is calculated.

3) The circulatory nurse / anesthetist shall enter all the consumables used for the patient in the charge sheet.

4) The Data Entry Operator will enter the consumables in the HMS.

17. Endorsement Process

1) The Staff Nurse will hand over to the next shift and communicate the following information to the nurse in charge/senior staff nurse & incoming staff nurses:

2) Number of cases scheduled for the day & its details, number remaining;

3) Any infections cases to be taken;

4) Postponement/cancellation, or rescheduling of surgeries;

5) Special instructions for cases scheduled for the next day;

6) Any untoward events, equipment damage or breakdown;

7) Investigations sent and reports to be received;

8) Detailed case specific endorsement to the allocated staff nurse of the next shift in the specified Operating Room / Pre & Post-Operative room

18. GUIDELINES FOR INFECTION CONTROL

1) All Operating Room Personnel and those entering the Operating Room complex shall be required to change their footwear.

2) All personnel shall wear Operating Room out-slipper in the pre-determined semi sterile zone and Operating Room in- slipper (closed) in the sterile zone.

3) After hand washing, personnel shall change into surgical scrub suits according to the color code.

4) Masks and gloves are for single use only.

5) Mask should not be worn around the neck or tucked into the pocket. Masks are compulsorily worn inside operating room.

6) If anyone has to leave the Operating Room on an urgent call, while coming back ensures that the person changes the scrub suit.

7) Universal precautions must be followed strictly in all procedures.

8) Activities shall be restricted according to zoning criteria of Operating Room.

9) Surgical hand washing is to be done as per protocol.

10) Visitors are not allowed in Operating Room complex.

11) Maintain strict aseptic techniques in Operating Room.

12) Ensure that any spillage of blood/body fluids on the floor is managed as per the infection control policy.

13) Routine cleaning should be done as per schedule.

14) Routine fumigation is done every Sunday keeping one Operating Room as emergency.

15) Routine infected cases are scheduled after all clean cases.

16) Fogging should be done after all infected cases and next case will be taken after half an hour.

17) For all cases with known infections use disposable items as far as possible.

18) Microbial surveillance-culture swabs and air samples are taken every 15 days and maintain the record.

19) If bacterial growth is found cleaning and fumigation should be repeated.

20) Ideal temperature in Operating Room is 18 to21° C, humidity is 30-60% and positive air pressure is maintained.

21) Ensure at least 12-15air changes per hour.

22) Atmospheric air will be filtered through high efficiency particulate air filters before being supplied to the Operating Room.

23) Ensure disposal of wastes as per protocol.

24) Before operationalization of any new Operating Room, three washings and fumigations are required on three consecutive days. Cultures are taken before the first wash and after every fumigation.

25) Only after confirmation of negative swab report, the Operating Room will be operational

19. GUIDELINES FOR OPERATING ROOM CLEANING

1) Beginning of the day

a) The assigned staff nurse shall ensure that the house keeping personnel cleans the Operating Room floor surface thoroughly with the disinfectant solution before starting the case.

b) The assigned staff nurse shall ensure scrub area shall be cleaned with disinfectant solution as per protocol.

c) The GDA along with the Operating Room technician shall carbolize the all equipments and furniture with disinfectant solution under the supervision of assigned staff nurse.

d) The house keeping personnel, GDA's shall use only sterile mops in the Operating Room.

2) In between the cases

a) All the wastes are collected into the color coded bags as per protocol and sharps into the puncture proof container.

b) Floor swabbing should be done as and when required.

c) Thorough cleaning of all the equipment should be done before taking the next case.

3) End of the day clean up

a) At the end of the day, all equipment and furniture in the OR shall be cleaned as per protocol.

b) All the Operating Rooms shall be cleaned as per protocol by the housekeeping personnel and GDA and kept ready for the next day.

c) One Operating Room shall be kept ready for emergency cases as per schedule.

20. Weekly Cleanup

1) Ventilation and air condition /heating ducts must be vacuumed to prevent the release of bacteria –laden dust into the surgical environment.

2) All the equipments and furniture shall be thoroughly cleaned and kept outside of the operating room before the thorough cleaning of the floor, wall and windows.

3) After drying the floor, replace the equipment of the Operating Room in their respective places.

4) Before fumigation all the equipments are covered with plastic sheets.

5) After thorough cleaning and carbolization, the entire area shall be fumigated.

6) Fumigation shall be done by fogging each Operating Room for 30 minutes.

7) Keep each Operating Room sealed overnight after fumigation.

8) Inform the lab to collect air sample and culture swab the next day of fumigation every 15 days.

9) If cultures come positive for any known infections, the infection control committee shall be notified and cleaning and fumigation shall be repeated.

10) The Operating Room will not be operational till the culture swabs are negative.

11) Fumigation of the emergency Operating Room will be scheduled during week days

21. GUIDELINES FOR MAINTENANCE OF EQUIPMENT

1) Operating Room technician will clean, inspect and check the working condition of the equipment daily.

2) The Nurse in charge / nurse will supervise the cleaning and checking of all Equipment.

3) Daily inventory of all equipments shall maintained by the staff nurse in each shift.

4) The Bio-medical engineer will visit the Operating Room every day for routine maintenance of equipment and as required.

5) In case of equipment break down, the Operating Room Nurse in charge / senior staff nurse shall send a requisition in the specified call book to the Bio-medical department.

6) In case of emergencies, the Operating Room Nurse in charge /senior staff nurse makes a request by telephone to the bio-medical department for immediate attention and emergency maintenance.

7) A proper equipment register is maintained with name, model no and serial no of equipments.

8) The Operating Room technician and staff nurse shall check for its working condition daily.

9) Proper and up to date equipment training shall be conducted by biomedical department for all Operating Room staff as and when required.

1. RECORDS AND REGISTERS MAINTAINED IN THE DEPARTMENT

Sr. No.	Form/Format	Title	Custodian Retention period	Mode of Disposal
1	Patient documents / for MS	Nurse In Charge	Till the forms finish. Stored in department for 1 year from the retention period.	Send to MRD
2	Narcotic Register	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Shredding
3	Booking Register	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Shredding
4	Pathology Register	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Shredding
5	Pre-op visit register	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Shredding
6	Daily Inventory Register	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Shredding
7	Assignment Register	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Shredding
8	Communication Register	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Shredding
9	Operation Register	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Send to MRD for archiving
10	Fumigation Register	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Shredding
12	Operating Room	Nurse In charge	Till the pages finish. Stored in department for 1 year from the retention period.	Shredding

	Equipment register			
13	Incident Forms	Nurse In charge	Quality Control committee.	Quality Control Committee decision.

Annexure :

1. **Pre operative Check list**
2. **Surgical safety check list**

COP 16 DOCUMENTED POLICIES AND PROCEDURES GUIDE THE ORGAN TRANSPLANT PROGRAM IN THE ORGANIZATION

Refer: Organ Transplant Program Manual

COP 17- DOCUMENTED POLICIES AND PROCEDURES GUIDE THE CARE OF PATIENTS UNDER RESTRAINTS (PHYSICAL AND /OR CHEMICAL)

I. PURPOSE:

To prevent injury to patients, staff/faculty and others by providing for the safe and appropriate use of patient restraint devices.

II. SCOPE:

Hospital wide

III. RESPONSIBILITY: Doctors and Nurses

IV. POLICY:

1. Restraints will be reserved only for patient who pose a threat either for themselves or to others.
2. Quality of Restraint will be limited to prevent any personal injury to patient himself or

V. PROCEDURE:

1. Use of restraints requires a written doctor's order.
2. Ensure physicians order that defines reason, type & duration of restraint.
3. New physician's orders are required every 12 hrs if restraint must be continued.
4. The physician must sign verbal restraint orders in 4 hrs of the initiation of the restraint.
5. Restraint is initiated by a registered nurse after appropriate assessment of patient.
6. Explain to the family members the need to restrain the patient and document it .
7. Obtain Physicians order for physical and chemical restraints.
8. Inspect the area and condition of the skin where restraints are to be applied.
9. Provide privacy and maintain comfortable body alignment before restraining.
10. Pad the skin and bony prominence.
11. Check for appropriate size and type of restraints needed.
12. Apply restraints and secure it leaving 2- finger space to ensure circulation.
13. Avoid overlapping on IV lines and other monitoring device.
14. Assess and observe the patient every half hourly.
15. Check the restrained site for skin integrity, color, sensation and edema.
16. Restrains are removed every 2- hourly.
17. Check that the patients need and treatment is not interrupted.

Record the type of restraints applied, patient's behavior and outcome achieved.

Annexure :

- **Restrain Monitoring chart**

COP 18 DOCUMENTED POLICIES AND PROCEDURES GUIDE APPROPRIATE PAIN MANAGEMENT

I. PURPOSE:

To define policies and procedures for appropriate pain management

II. SCOPE:

Hospital wide

III. RESPONSIBILTY:

All doctors & Nurses

IV. POLICY:

1. Hospital, utilizes an interdisciplinary approach to the management of pain in order to eliminate or minimize pain.

2. The patient's report of pain shall be accepted as the key indicator of the amount of pain experienced.

3. Every effort shall be made by the medical team to assess the pain felt by the patient and treat accordingly during illness / recovery to have a comfortable recovery.

4. Educate the patient and family to various forms of pain management techniques, and improve methodologies to control pain.

V. PROCEDURE:

1. ASSESSMENT

1) Patients and others shall receive pre-surgery consultation with an anesthesiologist as requested by the treating Consultant to discuss the modality of therapy.

2) Assessment criteria used to establish the patient care needs may include, but are not limited to, clinical presentation, diagnostic testing, patient interview, the patient's past experience with pain, and information obtained from significant others.

2. PAIN RATING AND PAIN ASSESSMENT

1) The presence of pain shall be assessed on admission to the hospital, at the time of admission, after an invasive procedure and finally again when the patient complaints of pain. This assessment shall be performed by a nurse and/or doctor and documented in the medical record.

2) If pain is present, a more comprehensive assessment shall be performed, including:

3) Pain Location

4) Intensity

5) Character

6) Duration

7) Relieving factor

8) Aggravating factor

9) Pain Management history

10) The patient's report of pain shall be accepted and respected as a key indicator of the amount of pain he/she is experiencing.

11) The medical/nursing staff shall assign the rating only if the patient is unable to report their pain.

12) The Numeric Pain Intensity Scale (NPIS) shall be used universally to assess pain for patients 13 years or older. Patients shall be asked to rate their pain on a scale of 0-10. Zero shall represent no pain; a rating of 5 would indicate that the patient is experiencing moderate pain, and a rating of 10 would indicate the worst imaginable pain.

13) The Wong-Baker Face Pain Scale (WBF) (see Annexure-I), consisting of graduated facial expressions of pain, shall be used for patients' ages 5 -12 years and those unable to comprehend the numerical scale. Zero shall represent no hurt and a rating of 10 would indicate the patient is experiencing the worst possible hurt. For children aged 0 -5 yrs, FLACC scale is used.

14) If pain is present, the Senior Consultant / Consultant is notified and a pain assessment is performed as often as needed by a licensed nurse or other appropriate healthcare provider. In addition, the Consultant shall be notified if the patient's pain is 5 or more, using the Numerical Pain Intensity Scale / Wong-Baker FACES Pain Scale and / or unacceptable to the patient

15) If no pain is present, the nurse / healthcare provider reassesses the patient for pain as warranted by patient condition, when the patient complains of pain and post an invasive procedure

16) All reassessments and interventions shall be documented in the medical record.

3. PATIENT / FAMILY EDUCATION

1) When appropriate, patients and families shall be educated by the doctor/patient educator about:

a) Pain

b) Risk factors for pain

c) The importance of effective pain management

d) Use of the appropriate pain assessment scale and process

e) Methods for pain management when identified as part of treatment.

2) Education shall be documented in the medical record.

4. IMPLEMENTATION

1) Therapy shall be implemented to minimize the level of pain. The plan shall be expanded from the initial therapy consistent with the diagnosis.

2) Patients and significant others shall receive pre-therapy instructions by the appropriate staff regarding the method of therapy selected.

3) Patients shall receive pain management that is individualized, based upon patient feedback/objective signs as to his/her rating.

4) Pain management may be implemented by an interdisciplinary group of healthcare professionals that may include, but is not limited to: doctors, anesthesia providers, nurses, pharmacists, physical therapist, and other ancillary clinical staff.

5. EVALUATION

5) Patients and significant others shall receive ongoing reinforcement update regarding the patient's response to pain management therapy by the doctors, staff nurses, and/or other appropriate staff.

6) Pain management shall be discontinued when the patient and/or physician determine(s) that it is no longer necessary for maintenance of pain control. This decision shall be based on the patient's progress and pain rating.

7) If needed, appropriate pain management shall be continued post-discharge. The patient shall receive appropriate post discharge education.

6. KEY POINTS OF THE PAIN MANAGEMENT GUIDELINE

The experts concluded the guideline process by summarizing the key points:

1) An effective pain program is based on an understanding of the scientific foundation of postoperative pain and pain management options.

2) Pre-procedural patient evaluation is necessary to provide safe and effective pain management.

3) Medical or surgical stabilization must be provided prior to or in conjunction with effective pain management.

4) Pain management requires systematic patient assessment postoperatively, at scheduled intervals, in response to new pain, and prior to discharge.

5) The components of a good assessment will vary depending on the patient's situation, but should include both severity of pain and its impact on functioning

6) Education of the patient and those involved in patient care is a central component of effective pain management:-

7) Pain management education should provide the patients with realistic expectations about pain, the postoperative and discharge treatment plan, and expected outcomes.

8) Pain management education decreases emotional distress, enhances coping skills, and enables the patient to participate in treatment.

9) Postoperative pain management should be multimodal and individualized for the particular patient, operation, and circumstances. Understanding the range of available interventions and considering the type of surgery are essential to safe and effective pain management.

10) Selection of a pain management option should be determined by balancing the advantages, disadvantages, contraindications, and patient preference. In most patients, more than one modality will be needed for successful pain management.

11) Interventions for postoperative pain management include both pharmacologic (using the main classes of medication: opioids, non steroidal anti-inflammatory drugs (NSAIDs), and local anesthetics) and non-pharmacologic (cognitive and physical modalities).

12) Evaluation of the balance between pain control and side effects should be routine, timely, and specific. The management plan should be modified, if indicated.

13) The discharge plan should include a plan for continued pain management. It should be in place prior to discharge and be effectively communicated to the patient and their caregiver if appropriate.

Annexure:

- Pain assessment form

COP 19 DOCUMENTED POLICIES &PROCEDURES GUIDE APPROPRIATE REHABILITATIVE SERVICES

I. PURPOSE

To define appropriate Rehabilitation Services for patients.

II. SCOPE

- Hospital wide
- Physiotherapy

III. RESPONSIBILITY:

Doctors & Physiotherapist

IV. POLICY

Documented policies of procedures guide the provision of rehabilitative services in MGM Hospital, Kamothe.

V. PROCEDURE

1. Documented policies for Rehabilitation Protocol, which are evidence based, are as follows:-

- Pre Operative preparation of patients
- Post Surgery rehabilitation
- Spinal Rehabilitation Protocol
- Pulmonary Rehabilitation Protocol

2. The process of restoration of skills of a person who had an illness or injury so as to regain maximum self-sufficiency and function in a normal or as near normal manner as possible. The center for rehabilitation medicine and physiotherapy is committed to the initiation, promotion, execution and dissemination of high quality treatment of all aspects of prevention, treatment, management and rehabilitation.

The staff works in close collaboration with the department of Respiratory Medicine, Orthopedics, Cardiology and Cardio Thoracic Surgery, Neurology, Neurosurgery, Pediatrics, Plastic Surgery and Critical Care Medicine.

The patients are referred to physiotherapy from the above-mentioned departments.

- **In-Patient Protocol**

The patients are referred from consultants of different specialties and super-specialties.
The patient is observed, assessed and treatment plan is formulated.

1) If the patient is on mechanical ventilation.

- Passive chest physiotherapy is given which includes vibrations, positioning (postural drainage) and suctioning.
- Bed mobilization is started in the form of passive / active-assisted / active limb physiotherapy depending upon the conscious level and muscle strength of each individual patient.

- All the vital parameters of each patient are taken into consideration, which includes: heart rate, respiratory rate, and blood pressure, SpO_2.

2) If the patient is not on mechanical ventilation If conscious, active chest physiotherapy is given which includes:

- Deep breathing exercises.
- Incentive Spirometry.
- Chest expansion exercises.
- Coughing and huffing techniques.
- If unconscious, passive chest physiotherapy is given.
- Bed mobilization is started in the form of passive/ active-assisted/ active limb physiotherapy depending upon the conscious level and muscle strength of each individual patient.

3) When patient is stablea and doing all exercises well, transfers are initiated from bed to chair and ambulation training is started after appropriate consultation with their respective consultants.

- The treatment is given and relevant clinical findings are noted and mentioned on the patient card on the daily basis.
- The daily treatment and charges are recorded in an inpatient register in the department.

- **<u>Out-Patient Protocol</u>**

The patient community consists of those who were either admitted in the hospital and now follow-up on an OPD basis or those who are referred by respective consultants directly to the OPD.

1) The patient is assessed and evaluated and the impairments are defined.
2) The treatment Program is planned after discussion with the respective consultants and the short term and the long-term goals are achieved, the treatment is marked as completed.
3) If the patient does not have complete relief, the case is reviewed and reassessed; any required changes in the treatment are made and treatment continues until goals are achieved.
4) Post treatment systemic follow-up plan is created for each patient including home exercises and repeat visits to the OPD so as to enable the physiotherapists to monitor the condition of the patient.
5) Each patient is provided with an “OPD patient care card”. This card contains information about the patient, assessment and treatment details with progress report. The patient is required to carry this card for each consultation so as to facilitate the update of the treatment.
6) Daily update is also made in an OPD register in the department.

Refer to Physiotherapy Manual

<u>Annexure:</u>

- Functional assessments Scale , physiotherapists to manual

COP 20: DOCUMENTED POLICIES AND PROCEDURES GUIDE ALL RESEARCH ACTIVITIES

Refer : Refer to Research Manual

COP 21 DOCUMENTED POLICIES AND PROCEDURES GUIDE NUTRITIONAL THEARAPY

I. PURPOSE: To Define Documented Policies And Procedures Guide Nutritional Therapy

II. SCOPE : Hospital wide & Canteen

III. RESPONSIBILITY:

ORGANOGRAM CHART

Medical Director

↓

Medical Superintendent

↓

Medical Administrator

↓

Dieticians

↓

Canteen in- Charge

↓

Canteen Boys

IV. POLICY & PROCEDURE :

1. **Rounds for In-Patient by the dietician**

1) The daily round of the dietician starts at 8:00 am.

2) Dietician goes through the medical files of all the patients & meets the patients on their respective floors.

3) In every visit the dietician asses/ re-assess patients for queries or complaints, personal request regarding diet and makes necessary changes in their diet chart as per dietary & medical parameters and facilities available in the kitchen department.
4) On rounds, Dietician goes through the patient's indoor paper, to check for special instruction by the doctor or changes in the diet if any.
5) The nutritional assessment form is filled for every patient by the dietician and the same is maintained in the IP records.
6) After checking the papers, she communicates the diet changes with the nursing staff, canteen manager, patient & the cook.
7) Dietary guidelines are provided to the patient verbally or in printed form according to the medical condition of the patient.
8) On basis of food request and dieticians, round, summary sheet for cook and diet distribution chart for pantry staff is prepared.
9) Patients are not allowed to have food from home. If they are getting, then instruction sheet is provided.

Documentation:

Diet sheet, nutritional assessment

2. **For OPD Patients**

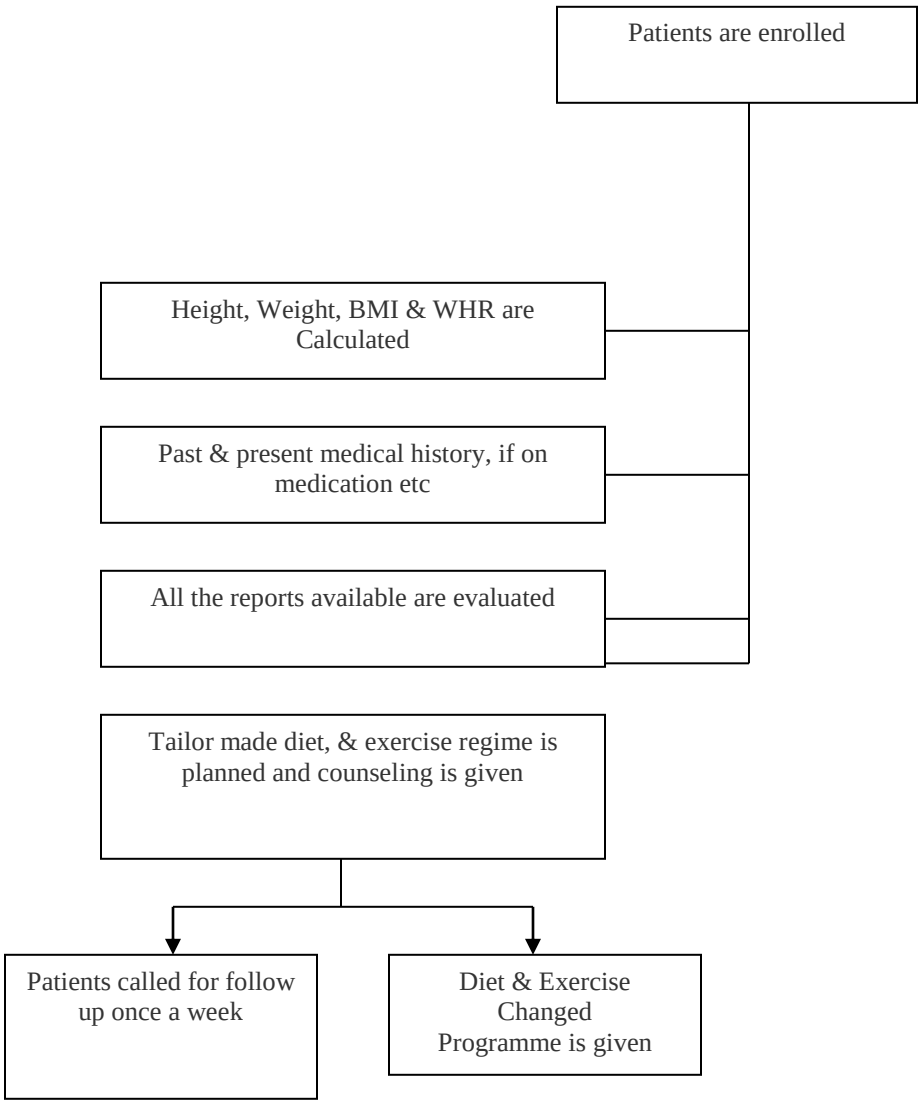
1) As per consultants advice or for personal requirement.
2) Once the patient comes to the hospital for diet consultation:
3) The patient makes an OPD Paper
4) Review all the available medical reports
5) Checks Note from the treating doctor if any
6) Takes height & weight of the patient
7) Evaluated the patient in totality
8) Prescribes appropriate diet.
9) Call for follow up in 15 days with Random sugar, PPBS reports for diabetic patients.
10) Have standardized recipes to suggest to the patients

Note: Printed instructions are given at time of discharge/ counseling patients**.**

Documentation:

Diet pamphlets

3. Protocol for the Patient's Initial Assessment for Obesity Clinic Patients



Preparation of Diet Order Sheet for Outsourced Kitchen

1) Kitchen service starts at 7:00 am
2) Mid morning list is prepared by dietician & given to the Canteen manager staff
3) Non vegetarian patients - (Only eggs are served)
4) The final summary sheet is given to cook at around 10:00 am
5) In regards of any specification regarding the diet, same is conveyed to the cook by the dietician
6) Respective pantry staff takes the diet distribution chart from the dietician

Documentation:

Diet Distribution Chart

4. Distribution of Meals

1) The photocopy of the diet sheets with detail instruction goes with the pantry staff and accompanied by one pantry manager for distribution of food as per the diet chart
2) In the wards under the supervision of the dieticians it is portioned out for the individual patients as per the diet list.
3) The food for staff is dished out in vessels and is kept hot trolleys. The Canteen staff dishes out the food for staff.

Documentation:

Diet List

5. Quality Controls:

1) Dietician tastes the food before dishing out to the wards.
2) Food is dished out according to the numbers from main list in vessels under supervision of the dietician.
3) These vessels are kept in hot cases these hot cases are taken to the wards during meal times.

6. Procedure - General Cleanliness of the Serving Area

1) Vim Liquid is used for washing as it does not stick to the vessels. Once in a week godown, wall cupboards & other storage facilities are cleaned
2) Twice a day, before serving meals, the kitchen is swept.
3) At the end of the day, the entire floor of the kitchen is swept and mopped.
4) Phenyl is used for mopping.
5) Twice a month the kitchen washing is done of all spaces, equipment's, stores, etc.
6) Pest Control- Only for mosquitoes and cockroaches once a month and records are documented.
7) General cleaning of the entire serving area is done Everyday
8) Kitchen waste is collected in black bags.
9) Municipality vans collect the garbage bags.
10) Daily cleaning of the floor, platforms, cooking range cookers etc. with soap.

Documentation:

Pest control records

7. **Procedure For Diet Order For Special Groups Pediatric, Geriatric, Debilitating Diseases, Obesity.**

1) Diet chart is prepared, food is cooked by the diet cook, send to the ward.
2) Dishing out is done in the pantry and given to the patient.
3) On discharge diet chart/ instruction sheets is given to the patient.

Documentation:

Diet chart – Till the patient is alright or discharged.

8. **Quality controls:**

Dietician visits the patient on admission as a new patient. Diet is described. Diet is given. The Dietician checks whether patient is eating and getting alright.

Standardization of Recipes / Diet.

Raw food materials weighed cooked and check the weight and see the quantity in calories, glasses, soup bowel etc.

Standardization of Diets

Raw Weight	Cooked Weight	Volume in 100 ml Calories	Calories
30 gm raw rice	140 gms.	2 Calories	100 Kcal
30 gm Dal	150 gms.	1 ½ K (150 ml.)	100 Kcal
Veg A 100 gm Cauliflower, tomato	100 gms.	1 K	25 Kcal
Legumes	100 gms.	1 ½ K	50 Kcal
Curd	50 gms.	¾ K	50 Kcal
Salad 50 gms.	-	1 K.	25 Kcal
Chapatti 45 gms fl.	70 gms.	3 chapatti or 4 Chappati	150 Kcal
Papaya (Fruit) 100 gms.	-	1 square katori	50 K cal.

Documentation:

Kitchen main list.

9. **Quality controls:**

Dietician sees that the special diet is given to the patient.

Patient's Initial Assessment for All Groups.

Patients case paper (file) is checked for reports and doctors notes height, weight for obese patients are checked, BMI calculated. Diet charts are prepared and given to the patients.

End point: Diet charts are given after counseling.

Forms/records: Diet charts till the patient comes for the follow up.

Quality controls:

- Patients are called for follow up. Obesity cases some patients come after 2 weeks or after one month. Diabetic patients come after one month with the fresh blood reports

10. FIRE SAFETY

1) All staffs of the kitchen are trained for fire fighting and training record is maintained with the HR.
2) Three fire extinguishers are placed, one at the entrance of the kitchen and the other, goods receiving entrance of the kitchen & one inside the eating area.

End Point: The firefighting training is given to the staff

Forms / Records: Fire extinguisher training records

11. HEALTH CHECK

1) All pantry staff undergoes health check-up once a year.
2) All pantry staff undergo physical check up once in two months
3) Physical Examination and routine blood investigation like CBC, urine, stool routine & culture, sputum for AFB, X-ray Chest, HIV, HbsAg, HCV &Amoebiasis.

End Point: The heath check-up is done

Forms / Records:

- Record of health check-ups are maintained with the HR.

Refer to Dietary Manual

Annexure :

- Nutritional Assessment Form

COP 22 DOCUMENTED POLICIES AND PROCEDURES GUIDE THE END OF LIFE CARE

END OF LIFE CARE POLICY

I. PURPOSE:

To provide framework to guide best practice care and support for patients who have been identified as nearing the end of their life in all areas of the organisation.

The purpose also is intended to standardise responses, processes and documentation of palliative and end of life care and raise the standard of end of life care to those of 'the best'.

II. SCOPE:

This policy applies to all healthcare professionals who care for patients who are deemed to be in the last twelve months of life. End of Life Care is everyone's responsibility and applies to all healthcare settings within the organisation.

Patients who have been identified as nearing the end of their life.

III. RESPONSIBILITY:

All members of medical and nursing staff

COMMITTEE:

Dr. K.S. Salgotra- Executive Chief & Medical Superintendent
Dr. Jayshree Ghanekar- Heads of Clinical Services
Dr. Siddarth Dubashi- Heads of Clinical Services
Dr. Rakesh Ghildiyal – HOD of Psychiatry
Dr. Suhasini Sonavdekar- Associate Director
Dr. Sagar Sinha- Associate Director
Mrs. PadmajaDhavle- Nursing Superintendent & Executive Director of Nursing
Mrs. Vaishali Shelar- Clinical Psychologist

IV. ROLE & RESPONSIBILITIES OF COMMITTEE:

1. EXECUTIVE CHIEF & MEDICALSUPERINTENDENT

- Will ensure that an evidence based policy in place to support earlyrecognition and responses to all end of life patients.
- Will support the development of resources to provide safe end of life care for all patients.

2. HEADS OF CLINICAL SERVICES:

- Will ensure the policy is fully implemented within the Directorate and will receive the annual compliance report at the Directorate quality and risk meeting and received at the Directorate board.

3. ASSOCIATE DIRECTORS:

- Will support the implementation of this policy.

- Will use resources to provide safe end of life care for all patients.

4. HOD PSYCHIATRY

- To assist communication and information passing to near relatives
- To cope with the stress of separation
- Help near relatives to accept the fact of losing the near one

5. EXECUTIVE DIRECTOR OF NURSING:

- Will ensure that an evidence based policy in place to support earlyrecognition and responses to all end of life patients

6. MATRONS:

- Ensure the Ward Sister/Charge Nurse has set up a system to disseminate thispolicy with all ward and department team registered nurses.
- Ensure the Ward Sister/Charge Nurse is clear about what actions they need to take in the scope of this policy.
- Ensure your areas are complaint with the actions within this policy that relates to your services.

7. RESIDENT DOCTORS:

- Must be aware of this policy and ensure that the process is followed correctly in the practice setting for all end of life patients, their families and carers.
- Complete all relevant documentation to evidence care delivery and decisions made about a patients care.
- All doctors are responsible for ensuring they are competent to deliver end of life care.

8. REGISTERED STAFF NURSES:

- Must be aware of this policy and ensure that the process is followed correctly in the practice setting for all end of life patients, their families and carers.
- Complete all relevant documentation to evidence care delivery and decisions made about a patients care.
- All registered nurses are responsible for ensuring they are competent to deliver end of life care.
- Must maintain privacy and dignity at all times
- Must attend to physical needs to ensure patient is comfortable and pain free within resources available
- Must accept that each situation is an individual one and not to be treated as routine

9. CLINICAL PSYCHOLOGIST

- Must respect individual wishes
- Must resolve constructively any conflicts of interest or differences of opinion with references to the individual wishes
- Must work in partnership with Health Care Professionals, Nursing Staff relatives and friends
- Must respond to emotional needs of patient
- Must respond to the needs for support of relatives in close relationship with the dying person

V. PURPOSE:

To set out the values, principles, and practices for patients who are terminally ill or whose death may be imminent

To provide framework to guide best practice care and support for patients who have been identified as nearing the end of their life in all areas of the organisation.

The purpose also is intended to standardise responses, processes and documentation of palliative and end of life care and raise the standard of end of life care to those of 'the best'.

VI. POLICY STATEMENT:

The standard requires that

- care and comfort are given to patients who are dying
- death is handled with dignity and propriety
- spiritual needs, rights, and functions are observed
- to have in place policies and proceduresfor handlingdeath and dying

VII. INFRASTRUCTURE

PHYSICAL SPACE:

1. LOCATION:

- In each ward space for 3 to 5 patients must be made available
- The area must be segregated from rest of the ward
- Must have separate entrance if possible
- Must be tiled up to 6 feet (easy to clean & maintain)

2. PATIENT'S SPACE:

- Each patient's space should have a minimum 15 sq. feet of clear floor area and minimum headwall width of 1.2 feet per bed.
- Staff assistance system should be provided
- Each patient bed area space should have space at each bedside for visitors, and provision for visual privacy
- There must be a minimum 8 feet between beds.
- The distance from patient bed to outside window should not exceed 50 feet
- Hand washing fixture should be located

3. PATIENT'S SERVICES:

- Pipeline oxygen, and suction outlets
- Medical quality compressed air
- electric sockets
- Mobile partitions
- Provision to attach monitor (Pulse Oximeter)
- One monitor may have added provision for ECG, NIBP

4. NURSING STATION:

- This area must have space for counters, storage
- It allows for complete visual control of all patient bed
- It is designed to maximize efficiency in traffic pattern
- The patients should be so oriented that they can see nurse but cannot see other patients.

5. MEDICATION AND NOURISHING AREAS:

- The provision should be there for 24 hours storage and distribution of routine drugs
- The area should contain work counter, cabinets sink with hot and cold water supply, refrigerator for Pharmaceutical
- The area should be of minimum 50 sq. feet

6. ESSENTIAL MEDICINE:

- List of all Essential Medicine including Emergency Medicine along with facility for storage of medications
- Must have all equipment for carrying out resuscitation

7. TRAINED HEALTH CARE PROVIDERS:

- Nursing staff one in each shift must be dedicated for this unit
- Nursing must have good communication skills
- Clinical psychologist must make a daily visit and as required
- Consultant In Charge along with their team must attend to the patient daily

8. ACCESS TO RELIGIOUS CLERICS, RITUAL:

- Within the perview of the committee the above facilities can be provided

VIII. DOCUMENTED EVIDENCE FOR

1. KNOWLEDGE OF DIAGNOSIS AND PROGNOSIS OF THE DISEASE

- Identify and recognise that the patient is dying
- Confirmation of the diagnosis by assessment, physical examination & investigations.
- Special investigations may be ordered if diagnosis needs to be confirmed
- Diagnosis & prognosis must be confirmed by 2 Consultants along with Medical Superintendent
- Diagnosis and prognosis to be explained to the next of kin
- Consent –informed, valid, written for **"DO NOT ACCELERATETREATMENT"** or **"MAINTAIN STATUS QUO"** obtained from next of kin i.e. first relation ONLY (Mother, Father, Son, Daughter, Sister, Brother, Spouse)and signed in presence of two un related witness
- Documented in patient's Medical Records

2. RECOGNIZING THAT THE PATIENT IS DYING*

- ✓ Progressively falling blood pressure
- ✓ Progressively falling body temperature- cooler hands and feetcompared to rest of the body

- ✓ Altered breathing pattern (Cheynes stokes)
- ✓ Skin color-dull / greyish blue, bluish nails
- ✓ Bedridden patient with decreasing spontaneous movement
- ✓ Ceases to respond to questions, no spontaneous verbalization
- ✓ Total detachment from surroundings / no interest in food / water
- ✓ Bedridden patient with diminishing spontaneous movement
- ✓ Comatosed state
- ✓ Unable to take oral medications, disinterested to feed orally
- ✓ Severe cachexia
- ✓

3. COMMUNICATION OF MEDICAL FUTILITY AND AVAILABLE MODALITIES

The policy aims at providing care and comfort to those who are dying and their death is handled with dignity.

The policy tries to follow the principle that a person should be cared for in their final days as if he / she was in their own homes.

Keeping this aim in mind following modalities are essential to be made available:

1) Attendance and companionship:

- It must be accepted that the involvement of family and close friends is essential to the wellbeing of the patient. Therefore family members and friends are encouraged to remain with the patient.
- If the patient desires to meet any of his relatives, friends it must be allowed.
- If possible staying of relatives and friends with the patient could be encouraged.

2) Comfort

- The health care providers along with Nursing Care Staff must assure that the patient is comfortable.
- Regular check-up and monitoring must be done by the Care Staff.
- Care Staff must maintain dignity and respect.
- Must help to maintain all aspects of the patient's personal day to day care such as washing, grooming, mouth care, general nursing care as directed by patient's plan of care.
- Care Staff must adopt all procedures to assess risk, monitor and treat pressure sores, tissue viability, oral hygiene and dehydration.

3) Nutrition

- Care is taken to provide diet that meets the patient's nutritional needs as per Qualified Nutritionist and the treating Consultant
- Nutrition may be provided in liquidised food, soups, food supplements as per guidance of Nutritionist.

4. Pain Management

Care Staff are responsible for the monitoring and administration of any pain relieving medication as per the Care Plan in accordance with Pain Specialist.

1) GOALS OF CARE

Aim is to follow principles of GOOD DEATH

- Principles of a good death involve
- The ability to know when death is approaching
- Have physical symptoms well controlled
- Patient centered needs met
- Right to die in a dignified manner at a place of choice
- Without life needlessly prolonged with artificial means

2) Principles Of A Good Death

- To know when death is coming, and to understand what can be expected
- To able to retain control of what happens
- To be afforded dignity and privacy
- To have control over pain relief and other symptom control
- To have choice and control over where death occurs
- To have access to information and expertise of whatever kind is necessary
- To have access to any spiritual or emotional support required
- To have access to hospice care in any location
- To have control over who is present and who shares the end
- To be able to issue advance directives, ensuring that one's wishes are respected
- To be able to leave when it is time to go and not to have life prolonged pointlessly

5. RESUSCITATION STATUS

1) ALLOWING NATURAL DEATH AND EOLC MANAGEMENT PLAN

In the process of allowing natural death it is important to assess the needs of the patient in detail which includes all -physical assessment, emotional care and frequent attention.

- A care plan must be planned along with the Consultant In Charge and it must meet the needs of patient and the relatives.
- Closed loop communication is must among the Consultant In Charge Clinical Psychologist, family members, patient and the Nursing Staff.
- The care plan must make every effort to ensure that the wishes of the patient are fully respected and dignity is maintained at all times.
- The care plan contains details of any new procedures or interventions to be made in view of patient's changing condition
- If there is any changes in patient's condition during assessing, caring and monitoring, it is important to provide information to the Consultant In Charge.
- Changes in medication, including use of controlled drugs must be recorded on the FLOW CHART as per Policy of the hospital.

The CARE PLAN includes of how to:

- Reduce or control pain and discomfort
- Reduce or control signs of restlessness, anxiety or agitation
- Manage or control respiratory secretions
- Manage or control nausea / vomiting
- Manage or control elimination of urine and faeces
- Relieve pressure, reduce or manage pressure points and bed sores

2) EOLC SYMPTOMS WERE IDENTIFIED AND MANAGED

In formulating plan for EOLC it is important to

- identify that the patient is dying
- suffering from terminal illness
- last stages of that illness

Such patients are in need of total care which includes emotional care and frequent attention.

3) RECOGNIZING THAT THE PATIENT IS DYING*

- ✓ Progressively falling blood pressure
- ✓ Progressively falling body temperature- cooler hands and feet compared to rest of the body
- ✓ Altered breathing pattern (Cheynes stokes)
- ✓ Skin color-dull / greyish blue, bluish nails
- ✓ Bedridden patient with decreasing spontaneous movement
- ✓ Ceases to respond to questions, no spontaneous verbalization
- ✓ Total detachment from surroundings / no interest in food / water
- ✓ Bedridden patient with diminishing spontaneous movement
- ✓ Comatosed state
- ✓ Unable to take oral medications, disinterested to feed orally
- ✓ Severe cachexia

4) END OF LIFE CARE DECISION MAKING PROCESS

- ➢ Decision makers:
- Primary treating team in collaboration with the palliative care team
- Consensus decision

- ➢ Timing the decision (when to consider):
- Advanced progressive disease, on treatment, and not a candidate for further disease modifying treatment, with poor performance status, uncontrolled symptoms and cachexia
- Prolonged coma with non - reversible causes
- Catastrophic illness with multi organ dysfunction, unresponsive to a reasonable period of aggressive treatment

- ➢ Communicating the decision:
- Provide honest and realistic prognosis
- Open and consistent information by all healthcare providers
- Do not make unrealistic promises that are inconsistent with clinical evidence
- Shared decision making, and arriving at a consensus decision on future goals of care

- ➢ Transition of care:
- Communication on cessation of a disease specific therapy
- Change in focus and goals of treatment
- Introduction / escalation of input from palliative care and non-abandonment by the primary care giver

- Key end life communication:
  - Discussing life expectancy
  - Discussing future symptoms and management
  - Discussion and documentation of not for resuscitation and allowing natural death
  - Advance care planning
  - Discussing the process of death and dying

5) <u>INITIATING END OF LIFE CARE</u>

- Clinical Criteria:
  - Criteria to initiate EOLC is met

- Agreement Criteria:
  - Consensus among treating physicians that all potentially reversible causes are corrected, and the patient is dying
  - The family understands that the patient has advanced progressive disease and is dying as a result of a progressive irreversible disease process and its complications

- Symptoms Criteria (at least 4 present)
  - Semiconscious state
  - Unable to take oral medications
  - Confined to bed
  - Unable or lack of interest in food or fluids
  - No response to questions and no spontaneous ventilation
  - Detached from surroundings
  - Failing vital parameters

6) <u>PROCESS OF END OF LIFE CARE</u>

- Guiding principles
  - Symptoms well controlled
  - Preferred place of care
  - Safe and secure place of care, with fewer crises
  - Carers feel supported, involved, empowered and satisfied
  - Health care staff feels confident and has sense of team work

- Family
  - Prepared
  - Educated
  - Supported

- Team
  - Accepting
  - Anticipating
  - Providing

7) SCOPE OF PALLIATIVE CARE IN END OF LIFE CARE

- Relief of end of life symptoms such as pain, dyspnea, delirium, respiratory secretions
- Review of existing care protocols (medical / nursing)
- Review of medication chart and stopping unnecessary medications
- Stopping routine and unnecessary investigations that may not contribute to the process of care
- Continued communication throughout the process
- Counselling regarding optimal hydration and food intake
- Psychosocial support to patient, family and caregivers
- Meeting special family requests(religious,spiritual,cultural)

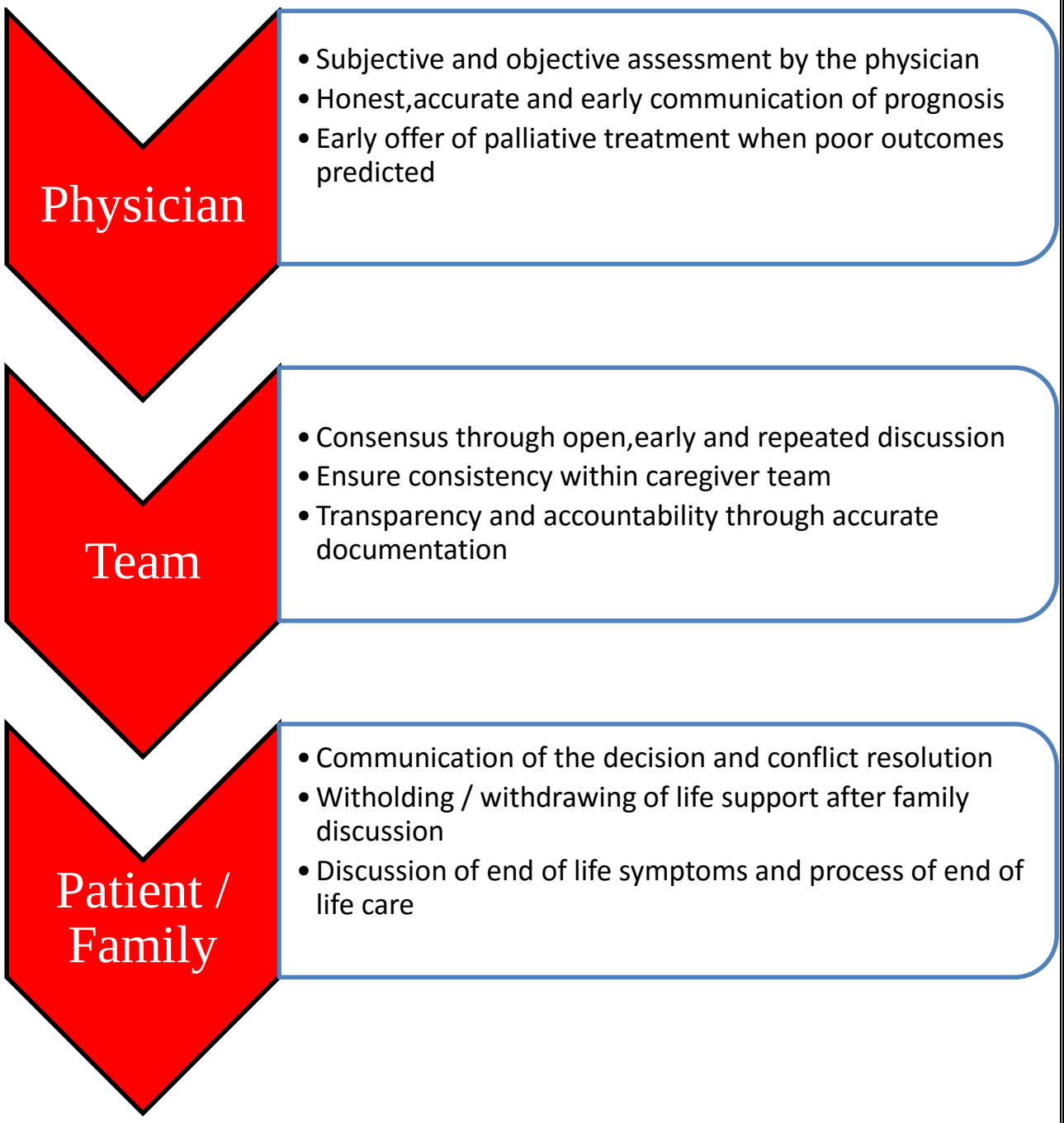
8) AFTER DEATH CARE

- Information about the death is communicated early and sensitively to the family
- The primary team is informed
- Body laid out in the culturally appropriate manner (take inputs from family as needed)
- Provide presence and support to the family
- Privacy and space to the family
- Timely and correct verification and certification of death
- Timely and dignified transfer of the deceased from the hospital

6. REVIEW OF CARE PROCESS

- To know and understand if the care process is completed and if there were any gaps
- To know whether the family received adequate health related communication
- To know whether the family fully understood and accepted the care process
- To know if the family had any concerns regarding the care process, was it freely expressed and whether these concerns were addressed
- To know if the family felt supported, and appreciated the care process
- To assess the satisfaction of health care providers
- Initiate any improvement needed in the EOLC process

▪ ALORITHM OF END OF LIFE CARE



Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

M.G.M Medical College and Hospital, Kamothe	Continuous Quality Improvement		
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CONTENTS

S.No	Standards
CQI 1	There is a structured quality improvement and continuous monitoring Program in the organization.
CQI 2	There is a structured patient- safety Program in the organization.
CQI 3	The organization identifies key indicators to monitor the clinical structures, processes and outcomes, which are used as tools for continual improvement
CQI 4	The organization identifies key indicators to monitor the managerial structures, processes and outcomes, which are used as tools for continual improvement.
CQI 5	There is a mechanism for validation and analysis of quality indicators to facilitate quality improvement.
CQI 6	The quality improvement Program is supported by the management.
CQI 7	There is an established system for clinical audit.
CQI 8	Incidents are collected and analysed to ensure continual quality improvement
CQI 9	Sentinel events are intensively analysed

CQI 1. QUALITY ASSURANCE MANUAL

CQI 3. QUALITY INDICATORS CLINICAL STRUCTURES

CQI 4. QUALITY INDICATORS MANAGERIAL STRUCTURES

CQI 5. VALIDATION AND ANALYSIS

CQI 6. QUALITY IMPROVEMENT PROGRAM

I. POLICY

To provide a framework to sustain existing quality of clinical care and safety of patients at par with globally accepted norms with focus on strong organisational culture committed to perpetually improve through constant dynamic monitoring.

II. PURPOSE

To integrate nationally and globally accepted standards of clinical care and patient safety in routine hospital functions to evolve as national benchmark in quality of clinical care; introducing innovative methods to improve affordability, clinical outcomes and patient satisfaction.

III. DEFINITIONS

1. Quality:

Degree to which a set of inherent characteristics fulfill client expectations or degree of adherence to pre-established values and criteria developed as standards by recognised external agencies.

*(*Characteristics are distinguishing features of product or service which are of value to the client. Expectations are stated, implied and/or obligatory needs of person/society).

2. Quality Assurance:

1) A process-centered approach to ensure that organization is providing the best possible products or services. It focuses on enhancing and improving the processes used to achieve the end results. It inculcates confidence in the clients that quality needs will be fulfilled.

2) (It demands a degree of detail at every step. Planning includes determining specific levels of quality or measurable results that the organization wants to achieve. Checking involves testing and other objective measurements to determine whether the goals were met).

3. Quality Improvement:

Revision of a measurable and accountable process to improve efficiency or accuracy with the goal to exceed customer expectations and satisfaction

IV. ABBREVIATION

The Abbreviation are as follows-

1. QCI Quality Council of India
2. HOD Heads of Department
3. CQI Continual Quality improvement
4. QA Quality Assurance
5. QI Quality Indicator
6. OPE Outpatient evaluation
7. QMS Quality Management Systems
8. NABH National Accreditation Board for Hospitals and Health Care providers
9. SOP Standard Operating Procedure
10. QAC Quality Assurance Committee

V. SCOPE

All hospital employees, patients and visitors coming to the hospital

VI. RESPONSIBILITY & PROCEDURE

1. Continuous Quality Improvement (CQI):

Quality improvement shall endeavour to further improve services at M.G.M. Medical college and hospital Mumbai. It shall focus on accessibility, efficiency, effectiveness, appropriateness and acceptability of service, and safety of consumers (patients, visitors and staffs). Salient aspects of CQI are as follows:-

Continuous quality improvement shall be implemented through the following:-

- Monitor patient and staff satisfaction
- Monitor indicators of quality
- Monitor Adverse Drug reactions and medication errors
- Monitor results of medical audit
- Ensure fire safety mock drill twice in a year
- Ensure Facility Safety Round twice a year in patient care areas and once a year in non- patient care areas.

2. Aim of Continuous Quality Improvement.

1) Patient satisfaction.
2) Improved Clinical Outcome.
3) Reduction in Mortality and hospital induced Morbidity.
4) Improve efficiency & effectiveness of hospital processes.

Optimise resources utilization.

a) Employee growth and Job Satisfaction.Facilitate and monitor implementation of chosen strategies for Quality Assurance and Quality Improvement (QA/QI) in the organization in line with the quality policy of the hospital.

b) To develop Annual plan for QA/QI. Quality improvement Program shall be reviewed at least once in a year.

c) To monitor improvement through revision/modification of processes based on recommendations of external accreditation agencies and required for accreditation/certification by such agencies.

3. Goals of Continuous Quality Improvement

1) To develop an interdisciplinary hospital-wide team to improve Quality.
2) To prioritise Quality improvement activities.
3) To introduce standard format to document and report on all hospital-wide indicators of Quality.
4) To develop Departmental Quality Improvement Teams responsible to evaluate key departmental processes (reviewing policies and procedures relating to that process) and to suggest necessary revisions to improve outcomes.
5) To involve everyone, clinicians in particular, to improve patient care relating to various procedures.
6) To develop a formal tool to prioritise Quality improvement activities.
7) To strive to raise Benchmark in all aspect of service delivery and meet the quality standard expected for the same.

1. VISION

To evolve as benchmark in quality healthcare available to one and all

Vision statement

By the year 2020, MGM Institute of Health Sciences aims to be a top ranking Center of Excellence in Medical Education and Research. Students graduating from the Institute will have the required skills to deliver quality healthcare to all sections of the society with, compassion and benevolence, without prejudice or discrimination, at an affordable cost. As a Research Centre, it shall focus on finding better, safer and affordable ways of diagnosing, treating and preventing diseases. In doing so, it will maintain highest ethical standards.

2. MISSION

1) To ensure accessible and affordable quality healthcare by compassionate medical professionals to all.
2) To be the centre of excellence for medical research and academics.
3) To cultivate an environment of trust, honesty, mutual respect, equality and ethics.

Mission statement

Improve the quality of life, both at individual and community levels imparting quality medical education to tomorrow's doctors and medical scientists and by advancing knowledge in all fields of health sciences through meaningful and ethicalresearch.

3. QUALITY POLICY

To provide value added innovative, consistent and continuously improving health and medical care to sustain and further improve clinical outcomes, patient safety and patient satisfaction.

4. QUALITY PLAN

All departments in the hospital shall follow Quality Plan to improve targeted areas of concern.

1) Quality Manual is the apex document that broadly describes the QMS of Hospital. It lays down standard operating procedures of the hospital.

2) Forms and Formats have been standardised to effectively control operations. Some of these formats, convert into quality records as evidence of compliance to the QMS. These records are controlled as control of quality records procedures.

5. QUALITY OBJECTIVES

1) To focus on Quality of patient care.
2) To improve the performance of all professionals.
3) To monitor, measure, assess and improve performance and to enhance patient satisfaction.
4) To guard, measure and improve patient safety.
5) To inculcate an excellent hygienic treatment process.
6) To involve all employees to participate in improving Quality.
7) To search for pattern of non-compliance with goals, objectives & standards through:-
8) Problem identification
9) Problem assessment
10) Finding the root cause
11) Solution Generation
12) Plan for the solution implementation
13) Implementation of corrective action
14) Monitoring

6. STRUCTURE FOR QUALITY ASSURANCE

Hospital has developed a structure for carrying out processes related to Quality Assurance in the hospital. This is as follows:

1) Quality Assurance Committee/Department

Quality assurance related activities is planned, undertaken, and controlled by Quality Assurance Committee/department which is a multidisciplinary committee having representation from various clinical, non-clinical, and administrative departments. Details of committee, its scope of work, frequency of meeting and mode of operations are detailed Quality Assurance Committee's file.

2) Scope of Work.

To formulate and document quality policies, define scope of services, and deal with all matters concerning quality management and quality improvement. It shall be apex committee to monitor performance indicators/ parameters of QMS and quality of medical care, adequacy of patient care and monitor staff for compliance with the policies.

a) Frequency of Meeting: Quarterly or as required for quality improvement.

Members of the Committee are available in the file.

b) Chief Of Quality.

The hospital has designated **Chief Of Quality**, who has overall responsibility to coordinate the work of NABH . His/her responsibility will include:-

(i) To issue various documents to departments from time to time.
(ii) To keep a record of all the documentation of the hospital, in relation to accreditation.

(iii) To delegate the activities in departments and ensure its timely completion.
(iv) To regularly receive feedbacks from departments regarding status of their work related to accreditation preparation.
(v) To plan and execute regular assessment of the hospital in accordance with accreditation standards.
(vi) To coordinate all such activities required for quality assurance and continuous monitoring of the hospital

c) Departmental coordination.

HOD will coordinate all activities relating to quality in their respective depts. The responsibilities are as follows:-

(i) To receive and retain all the documents and official correspondence related to accreditation from time to time.
(ii) To inform and orient the staff of their department on policies and procedures developed for their department.
(iii) To ensure the completion of all the work assigned to their department for NABH accreditation preparation.
(iv) To organize regular training programs for staff of their department.

d) Departmental pioneers

Each department has identified a pioneer for developing and improving the quality of service provided by the department. These pioneers continuously strive to improve quality standards of the department and train the staff on best practices.

e) Service standards.

As laid down by National and International accreditation agencies.

7. SERVICES AVAILABLE AT M.G.M. MEDICAL COLLEGE AND HOSPITAL MUMBAI

Services Available at M.G.M Medical college and Hospital kamothe. Hospital.The following services provided at M.G.M. Medical college and hospital Mumbai are displayed and the staffs are trained and oriented to services available.

1) Anaesthesiology
2) Dermatology and Venereology
3) Emergency Medicine
4) General Medicine
5) Geriatrics
6) General Surgery
7) Ophthalmology
8) Orthopaedic Surgery
9) Otorhinolaryngology
10) Paediatrics
11) Psychiatry
12) Respiratory Medicine
13) Orthopaedic Surgery

14) Radiology
15) Cardiology
16) Cardiothoracic Surgery
17) Medical Gastroenterology
18) Nephrology
19) Neurology
20) Neurosurgery
21) Paediatric Surgery
22) Urology
23) Critical Care
24) Blood transfusion services

- **Laboratory**

1) Pathology Clinical Bio-Chemistry
2) Clinical Microbiology and Serology
3) Clinical Pathology
4) Cytopathology
5) Haematology
6) Histopathology
7) Molecular Biology
8) Microbiology

- **Diagnostic Imaging**

1) CT Scannig
2) Mammography
3) MRI
4) Ultrasound
5) X-Ray

- **Rehabilitation**

1) Occupational Therapy
2) Physiotherapy
3) Speech and Language Therapy

- **Other Diagnostic Services:**

1) 2D Echo
2) Audiometry
3) EEG
4) EMG/EP
5) Holter Monitoring
6) Spirometry
7) Tread Mill Testing
8) Urodynamic Studies

Professions allied to medicine

1) Dietetics
2) Psychology

Non Clinical and Administrative departments

- **In House**

1) Bio-medical Engineering
2) Blood Bank
3) Catering
4) Catering and Kitchen Services
5) Community Service
6) CSSD
7) General Administration
8) Human Resources
9) Information Technology
10) Maintenance/Facility Management
11) Laundry
12) Mortuary Services
13) Pharmacy
14) Social Service

- **Out Sourced**

1) Security
2) Housekeeping
3) Management of Bio-medical Waste
4) Ambulance Service

8. ASSURING QUALITY OF SERVICES

1) Standards of service and adequate patient care. Ratio between doctor to patient, nurse to patient and beds to patients are maintained, as also the extent of availability of resources and facilities. The hospital efforts are directed to provide standard services for adequate patient care.
2) Ensure easy access and competent professional medical care to all patients who visit the hospital.
3) Lay down maximum waiting time for qualified doctors/specialists to attend outpatients. The hospital continuously strives to improve upon it.
4) Hospital ensures all equipments are maintained efficiently in proper working order.
5) Hospital ensures availability of beds and operation theatre facilities as freely as possible.
6) Hospital ensures prompt treatment of emergency cases with utmost care and attention.
7) Hospital respects patients' and families' rights in consonance with accreditation standards.
8) Hospital ensures; patients and visitors will receive courteous and prompt attention from its staff and officials to use its various services.
9) Hospital ensures reliable and prompt delivery of diagnostic investigation results and whenever possible hard copies of such reports will be made available.
10) Hospital ensures Operation theatres are maintained and are serviceable all the time.
11) Hospital keeps its premises and its surroundings, clean, infection-free and hygienic.

12) Hospital has evolved regular system to get daily feedback from its clientele through exit interviews and written feedback on structured format. The inputs are analysed to improve service standards.

13) Hospital has necessary equipments required to provide services mentioned in 'scope of services'. It has a system to ensure proper maintenance and working of these equipments.

14) If any major equipment is out of order, information regarding it shall be displayed suitably, indicating the alternate arrangements, if any, and likely date of repair of the equipment after repairs/replacement.

15) Appropriate action is taken on system failure and those responsible for it. Remedial measures are initiated to rectify deficiencies. Complainants will also be informed of the action taken, if requested.

16) In case of likely persistence of deficiency, the reasons for the delay to rectify the deficiency and the time taken for the same will be displayed prominently for the information of the public.

17) Special training is imparted to the non-medical staff to deal with the patients and public courteously. Any breach in this regard when brought to the notice of the hospital authorities shall be dealt with appropriately.

18) Hospital encourages the patients and the public to inform the authorities of their perceived deficiency of service. Complaint/Complement boxes are provided at the reception of Front Office and OPD.

19) Hospital follows all policies, processes, Programs, committee meetings; regulatory guidelines, which have been prepared to meet the standards of accreditation, enumerated by accreditation agencies.

9. AUTHORITY AND ACCOUNTABILITY.

1) The quality improvement Program is supported by the hospital management. The management provides adequate resources (men, materials and machines) required for quality improvement Program.

2) The Management of the hospital has earmarked adequate funds from its annual budget to support the Continuous Quality Improvement Program.

3) The management defines organizational and departmental quality objectives, lays down targets, monitors them with their analysed reports and takes required remedial actions.

4) Quality objectives are discussed in various committee meetings periodically and comparative analysis report will be discussed at least once in 4 months. Control charts are prepared for the comparative analysis of various quality objectives.

10. Medical Superintendent (MS)

1) MS is responsible to support hospital wide Quality improvement activities.

2) The MS supports opportunities to improve care or services and directs to resolve problems, if any.

3) In the absence of MS, the matters/issues shall be referred to management committee.

11. HOD

1) The HOD are responsible for the following:-

Develop and implement mechanisms designed to ensure uniform quality of patient care processes within their department.

2) Develop and implement process to effectively and continuously measure, assess, and improve Quality.

3) Continuously assess and improve Quality of care and services provided.
4) Plan, prioritise, systematically organise, implement and assess Quality improvement activities and maintaining achieved improvements.
5) Participate in intra & interdepartmental activities to appropriately improve hospital Quality.
6) Communicating information relevant to cross-organizational Quality improvement activities to appropriate functionaries.
7) Allocate adequate resources to improve managerial, clinical, and support processes as needed to participate in Quality improvement activities:-
8) Assign personnel.
9) Provide adequate time to participate in Quality improvement activities.
10) Create and maintaining information systems.
11) Support collection, collation and analysis of data to facilitate Quality improvement.
12) Provide training to staff in Quality improvement methods.
13) Analyse and assess effectiveness of their contributions to improve Quality.

12. DOCUMENTATION

Hospital has documented policies, procedures, and guidelines developed by various committees of the hospital, reviewed by heads of the departments and approved by Hospital Management. These documents are available as soft copies as well as control copy. Soft copies pertaining to departments are available to respective HOD.

1) Document Control.

Documents such as regulations, standards, and other normative documents as well as drawings, software, and specifications, instructions and manuals form part of the Hospital Management System. A copy of each of these controlled documents shall be archived for future reference. The procedures and equipment details are retained in respective department as long as the machine is being used or until condemned. The documents are maintained in paper or electronic media as appropriately required.

2) Classification of Documents.

- Three types of Documents are identified. Each document has a title and name of the document.

a) Quality manual.
b) SOP/ instruction manuals.
c) Records

- Label for Document Identification. The documents are uniquely labelled for easy identification as follows:-

a) Date of issue.
b) Identification of revision status.
c) Page numbering with the total number of pages.
d) Identification of the end of the document.
e) Approving authority

3) Review of Documents.

The HOD shall review all documents of respective departments annually and shall approve it for use. The MS shall approve the final document for implementation through Quality Head.

13. Chief Of Quality (COQ)

1) The Chief Of Quality ensures that:-

Authorized editions of appropriate documents are available at all locations where operations essential to the effective functioning of the hospital are performed.

2) Documents are periodically reviewed and revised where necessary to ensure suitability and compliance with applicable requirements.

3) Invalid or obsolete documents are promptly removed from all locations of issue or use, or otherwise assured against unintended use.

4) Obsolete documents are retained for either legal and/or knowledge purposes. Preserved documents are suitably marked.

5) Documents or the record, which are destroyed; the record of their destruction is maintained in a separate register.

14. REVISION, AMENDMENTS AND CHANGES IN DOCUMENTS.

1) The original author usually undertakes review and revision of management systems documents annually or as and when required. In the absence of original author, when alternate persons are detailed for review, they shall first familiarise themselves with pertinent background information on which the original document was based and then they will undertake review and revision of the original document.

2) Any alteration in the text is either documented on the existing original document in track change mode or a copy of the obsolete document is kept along with the new revised document.

3) Document control system does not allow amendments by hand, except under rare exceptional circumstances. The amendments shall be written, signed and dated only by the HOD. The amendment shall be forwarded to Medical Superintendent for ratification by hospital management. The ratified amendment shall be incorporated in the document under intimation to Chief Of Quality. The ratified amendment shall be notified to the environment within 7 working days to take effect.

4) Hospital currently maintains documents on computers. The computer system has established adequate control and security procedures and protocols to maintain the documents and to allow changes, amendments and revisions in the documents maintained by it.

15. CONTINUOUS QUALITY IMPROVEMENT PROGRAM

CQI Program. The comprehensive CQI program covers quality assurance of inputs, processes and outcomes and their continuous monitoring. The program has been developed by Quality Core Committee in collaboration with various HsOD and implemented by various committees and Hs OD for following hospital facilities:-

1. Hospital wide
2. Hospital laboratory
3. Hospital Radiology & Imaging Dept
4. Intensive Care Unit
5. Hospital Surgical Services

6. Hospital Infection Control

Procedure to Implement CQI Program

The CQI program shall be implemented as follows:-

1) Quality Core Committee and Hospital Infection Control Committee shall implement, monitor and improve hospital wide and infection control program respectively.

2) The indicators mentioned are incorporated in the reports. The report shall include the values for all indicators. The report shall review deviations from standard values. QCC and ICC shall recommend remedial measures based on analysis of the report.

3) The program applicable for Laboratory, Radiology, Intensive Care area and Surgical services shall be implemented through respective HsOD. QCC shall monitor the implementation of CQI program.

4) Each of the departments mentioned above shall maintain a quality assurance register with the key characteristics of their department mentioned therein. The key characteristics shall be identified from accepted norms/criteria. Compliance to accepted norms and criteria shall be recorded.

5) The record shall be endorsed in the register as 'C/PC/NC' (C for Compliance, PC for partial compliance and NC for non-compliance). The record shall be reviewed periodically as laid down in the concerned table.

6) Overall responsibility shall be of Chief Of Quality.

16. APPROACH TO DESIGN, MEASURE, ASSESS AND IMPROVE QUALITY

The hospital is committed to improve quality as follows:-

1) Hospital has identified processes needed for the QMS and their application throughout the hospital.

2) Hospital has determined the sequence and interaction of these processes.

3) Hospital has determined criteria and methods needed to ensure that application and control of these processes are effective.

4) Hospital ensures availability of resources and information necessary to support the working and monitoring of these processes.

5) Hospital periodically monitors, measures and analyses these processes.

6) Hospital implements revisions and amendments necessary to achieve planned results and remains committed to continuous improvement of these processes.

17. Planning

Planning for the improvement of patient care and health outcomes includes a hospital wide approach.

1) The hospital maintains a plan that describes the hospital's approach, processes, and mechanisms that comprise the hospital's Quality improvement activities.

2) The Team approach serves as a means of coordination between departments and disciplines in planning and provides systematic hospital wide improvements.

18. Designing Services, Functions & Processes

Processes, functions or services are designed based on the following:-

1) Mission and vision of M.G.M. Medical college and hospital Mumbai and the needs and expectations of patients, staffs, and local environment guide the design of the services.

2) Needs and expectations are functionally grouped. Based on the availability of resources services which can be offered are identified.

3) The extent to which any particular service can be offered (functions) is also decided based on available resources.

4) The modality (process) as to how a particular service will be delivered is developed as per policy of the hospital.

5) Stepwise procedures are put in place as standard Operating Procedure (SOP). and Benchmarks are developed for performance assessment on each parameter.

19. Measurement & Benchmarking

Various services offered by the hospital are evaluated as follows:-

1) Appropriate quantifiable parameters are identified for each service provided by the hospital.

2) The parameters may belong to functions, processes or outcomes.

3) Data is collected for all identified parameters of the service over a period of time.

4) Baseline is established for the parameters on the basis of the above data.

5) Consistency of baseline data on any particular parameter indicates its stability.

6) The stable parameters which are valued by the patients are identified. These parameters describe the quality of the service offered by the hospital.

7) Internal comparisons of processes and outcomes are made over a period of time.

8) The assessment process includes the use of statistical process control techniques/ tools as appropriate.

9) The measured value of the quantifiable quality parameter of a service is compared with the values from other establishments offering similar service and available databases.

10) Based on national and international comparison, benchmark of quality for each parameter of a service is developed.

11) The benchmark is then notified. All efforts are made by the concerned department with assistance from the management to achieve and maintain the quality standard as per established benchmark.

20. Services Included for Quality Assessment.

Data will be routinely and continuously collected/ captured to measure the following processes or outcomes, however any priority issue can be included:-

1) Clinical assessment of the patient.

2) Operative and other invasive and non-invasive procedures that place patients at risk.

3) Laboratory safety & quality.

4) Diagnostic Radiology safety & quality.

5) Processes related to safe use of medication.

6) Processes related to safety of anaesthesia administration.

7) Processes related to the safe use of blood and blood components.

8) Processes related to medical records content, availability and its use.

9) Processes related to timely procurement of supplies.

10) Submission of statutory reports. *(as required by law)*

11) Risk management activities

12) Assessment of Needs, expectations, and satisfaction of patients

13) Assessment of Staff expectations and satisfaction

14) Assessment of processes related to patient and staff safety
15) Assessment of Surveillance for Hospital Acquired Infection
16) Assessment of Utilization of facility.

21. Objectives of Quality Assessment

The objectives of quality assessment are as follows:-

1) The assessment process allows concerned departments to draw conclusions on the need for more stringent measurement.
2) It allows departments to determine whether specifications for newly designed processes were appropriately measured for desired level of Quality.
3) It indicates stability of important existing processes and prioritises existing processes for possible improvement.
4) It indicates whether earlier changes, if any, in the processes resulted in improvement, and if not, whether further improvement of the existing process is required/feasible with available resources.
5) Benchmark established for each Quality measure assists in the analysis of collected data. It triggers a more in-depth review
6) When assessment of data indicates, a variation in Quality, more intensive measurement and analysis will be conducted. Intensive assessment is initiated when statistical analysis shows the following:-

- Unexpected significant variations in Important events, Quality indicators, and patterns/trends.
- Significant variance of Quality from other hospitals.
- Significant variance of Quality from recognised standards.
- Major discrepancies between preoperative and postoperative diagnoses in pathology reports.
- Confirmed major transfusion reactions.
- Significant adverse drug reactions.
- Adverse events or patterns of adverse events during anaesthesia use.
- Unexpected patient death.
- Wrong site/side/patient surgery.

22. Medical Audit Committee

Evaluates medical record keeping, quality, content, formats, accuracy, pertinence, staff compliance with documentation, policies, review, and evaluates fatal cases/ death in hospital.

Similarly Nursing Audit Committee audits nursing care, medication errors, assessment of pain, vulnerability and risk to fall, record keeping, compliance to policies and documentation.

23. SHARING INFORMATION ON QUALITY

1) Collected data is assessed periodically and findings are documented and are forwarded through proper channels to concerned departments for appropriate action.
2) The assessment process includes the use of statistical process control techniques/tools as appropriate. Training for use of statistical process control is provided to the hospital leaders where needed; team members/staff are educated regarding statistical process control techniques on an 'as needed' basis.

3) When findings of the assessment process are relevant to an individual's Quality, the pertinent information will be provided to the Medical Superintendent for determining their use in peer review and/or periodic evaluations of a licensed independent practitioner's competence at reappointment

4) When a Quality measurement does not reach the predetermined acceptable level of Quality, or if it is reached, but evaluation indicates the Quality is not acceptable, the Quality improvement process should continue. If the level of Quality shows no improvement for the time frame established by the department/service team, an intensive evaluation is conducted with input from the Quality Committee regarding the need for continued measurement or reprioritisation.

5) The quality assurance Program is reviewed & opportunities for improvements are identified and updated.

24. INTERNAL COMMUNICATIONS

The top management has defined and implemented an effective and efficient process for communicating Quality Policy, Quality Objectives and accomplishments. This helps the hospital to improve the performance and directly involves its people in the achievement of the Quality Objectives. The Management actively encourages feedback and communication from people in the hospital as a means of involving them through the following modes:-

1) Periodic meets

2) Management Review Meetings

3) Team briefings and other meetings.

4) Emails & Notice Board, where available.

25. KEY PROCESSES

The identified key processes are Service Delivery, Resource Management, Management Responsibility and Continual Improvement of Quality

1. Service Delivery

Planning and development of processes required for the service delivery has been developed and documented in process map in accordance with the other requirements of QMS. While planning for any new service, hospital shall determine the following:-

1) Quality Objectives and requirements for the services

The need to establish processes, documents and provide resources specific to the service is established. Required verification, validation, monitoring, inspection and test activities, specific to the service and the criteria for service acceptance are carried out. Record must provide evidence that the service delivery process meets the requirement.

2) Patient(s) Related Process

Determination of requirements related to the Services. Patients/their relatives' stated and implied requirements (including if any additional requirements determined by the hospital, legal & regulatory requirements) are identified before delivery of the service, initiating action to provide necessary treatment to the patient which are as per the documented procedures.

3) Review of requirements related to the service.

The type of treatment (OPD or indoor) is reviewed for its adequacy based on the information available for the concerned patient or accompanying relative along with the records of vital parameters and investigation results. Any changes required subsequently, its communication to the concerned patient/ relative and to the relevant department is done as per the documented procedures.

4) Documents.

Records of type of treatment identified/provided are maintained as per the documented procedures.

5) General Consent

Where the patient is unable to provide enough details the statement of requirements as captured by the concerned doctors are taken as base for providing necessary service and same is conveyed to the patient and/or the relatives for acceptance before providing the treatment.

6) Specific Consent.

During the course of the treatment or at the end of one set of treatment the consent of the patient/relative is taken for subsequent treatment, subject to the willingness of the patient and in case of their unwillingness they may be discharged or referred to other hospital as the case may be.

7) Information on Cost of Treatment.

Communication on enquiries and service related information, approximate charges are intimated at the time of registration or at the time of admission or prior to initiation of treatment by the billing (estimates) dept as per existing tariffs.

8) Patient Grievance.

Patient feedbacks including complaints are handled as per procedures for handling of patient grievances.

9) Design and Development of Clinical Management.

The hospital is not directly involved in design and development of devices, equipment or drugs. Clinical use of established treatment modalities is adopted designed individually for each patient. As each patient is unique the outcomes are documented and monitored individually and modifications carried out in the treatment plan. Deviations from expected outcome are documented in the patient record and discussed by the concerned department. The frequency of such a review depends upon critically of the disease

10) Quality Objectives and requirements for the services

The need to establish processes, documents and provide resources specific to the service is known. Required verification, validation, monitoring, inspection and test activities specific to the service and the criteria for service acceptance are laid down. Record needs to provide evidence that the service delivery process met the requirements.

2. Resource Management

1) Training

a) Competence, Awareness and Training.Competence of the personnel is assessed on the basis of the education, experience, skill and training before they are assigned the responsibilities in the QMS.

b) Training needs of all the personnel are identified, established and reviewed to ensure competence for the responsibility to be assigned. The responsibility for these lies with the department heads while the facility manager does the overall coordination.

c) Training needs of the new recruits and personnel transferred to new assignments are identified and established as per the requirements. The responsibility of general training program is with the HR department, while specific job related training is the responsibility of the department head.

d) HOD is responsible to ensure the training on identified needs is provided to the employees.

e) Records of personnel qualified for performing specific assigned tasks and activities is also maintained by the HR department & HOD of the individual.

2) Infrastructure. :

Infrastructure required by all personnel to achieve the conformity of the service requirements are identified and provided before the commencement of the work/ activity and are maintained and improved regularly as per the documented procedure.

3) Work Environment:

Work environment needed by all personnel to achieve the conformity of the service requirements are identified and provided before the commencement of the work/activity and are maintained and improved regularly.

4) Responsibility of Management

Top Management of the hospital is committed to development and implementation of an effective and efficient QMS for continual improvement of service quality.

a) Top management has established vision, mission, policy and strategic objectives consistent with the purpose of the hospital, which leads to the achievement of patient satisfaction.

b) Top Management provides its full support by participating in improvement projects, searching for new methods & Solution. Top management also ensures the availability of the resources that are necessary to support the Hospital's strategic plan.

c) Patient needs and expectations are determined and converted into requirements and fulfilled as documented in process map & procedure for service delivery process and Management Responsibility.

d) Obligations related to the statutory and regulatory requirements are taken care as appropriate.

e) Top management takes initiatives in communicating the Hospital's values, vision, mission, policies and objectives and targets. Some examples are as follows:

- The Medical Director has released the vision, values and policies to all the employees.
- The Medical Superintendent, Accreditation coordinator, Chief Of Quality communicates the Quality Policy and Objectives of the hospital to all the employees.
- Medical Director / Medical Superintendent preside over the management review meeting as per the agenda and review the progress of the implementation of the quality system periodically.

- Medical Superintendent and Chief Of Quality addresses all the employees through inter officer Memo whenever new initiatives are taken towards improvement.
- The top management of the hospital is committed to process - oriented approach. Accordingly all the processes are documented and implemented. Internal audits and management review meetings are used as effective tools to ensure the implementation of the laid down processes and also verifying their continuing suitability, effectiveness and adequacy of the system.
- Various committees have been incorporated into the managements system of the hospital for effective implementation of the QMS.

5) <u>Quality Management System (QMS)</u>

Quality Management System of hospital is established, documented, implemented and maintained for continuous improvement in accordance with requirements of Quality Objectives. The hospital has established, implemented and maintains a Quality Management System appropriate to the scope of services. The hospital has documented its policies, processes, Programs, procedures, and instructions and has communicated this to all relevant personnel. It has ensured that these documents are understood and implemented. The respective Department Heads/in Charges ensure that all the personnel working under their control in the Hospital have understood the Quality Policy, Quality Assurance system and the objective for adopting the Quality Assurance System. The hospital outlines its Quality Assurance System through three-tier documentation structure as below:-

a. Quality Manual: An outline of Hospital and functioning of its management system.

b. Quality System Procedures:

The system's functioning is detailed in separate documents that are maintained by the Chief Of Quality as controlled documents. The quality manual makes continuous references to system procedures in the relevant sections.

c. Work instructions/Standard-operating procedure: Detailed document outlining various protocols, procedures, activities and standards to be maintained. This document is also maintained with the Chief Of Quality as controlled document.

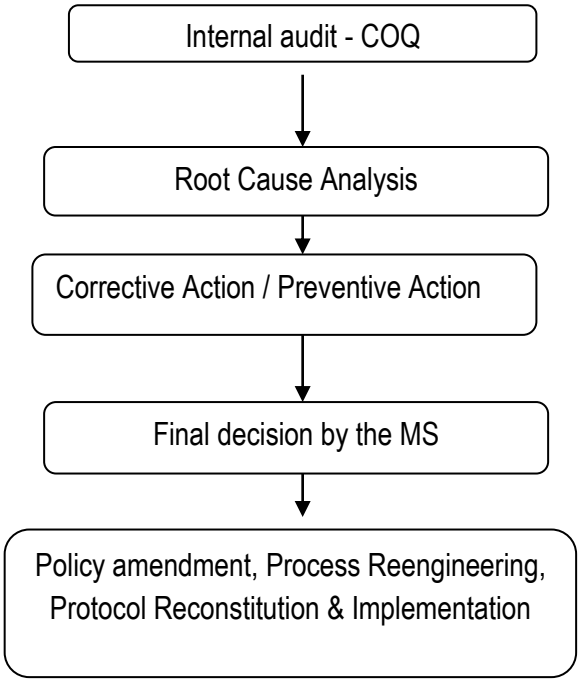
6) Chief Of Quality has the overall authority, responsibility and commitment to communicate, implement, control and supervise the compliance of quality management system with standards.

7) The roles and responsibility of the Chief Of Quality include:-

a. Establish and maintain quality management system
b. Documentation of all activities of quality management system
c. Design Quality Improvement Program and implement it through the Committees , HsOD
d. Document control
e. To ensure that quality manual is up to date
f. Schedule and conduct internal audits
g. Schedule and conduct of management review meetings
h. Ensure implementation of approved corrective and preventive action

26. PROVISION OF AUDITS

Significant variances from the procedures and processes, trends from the incidents reports and become apparent through audits. Appropriate remedial measures can be suggested and, if approved, implemented. The Flow Chart is as follows:-



27. PREVENTIVE ACTIONS

The COQ is perpetually vigilant and identifies potential sources of non-compliance and areas that need improvement. These are ensured implementation under the instructions of the Medical Superintendent. These may include trend analysis of specific markers such as turnaround time, risk analysis and introduce proficiency tests for self-assessment. Where preventive action is required, a prevention plan is prepared and implemented. The impact evaluation of prevention plan must monitor efficacy to reduce any occurrence of non-compliance or produce opportunities for improvement.

1. CORRECTIVE ACTION

The Medical Superintendent of the hospital takes all necessary corrective actions when any deviation is detected in Quality Management System.

1) **Cause Analysis**. Deviations are detected through the following:-

(a) Patient complaints/feedbacks.

(b) Non receipt of items/samples.

(c) Non-compliance at Internal/external Quality Audit

(d) Management Reviews.

(e) Chief Of Quality conducts detailed analysis of the nature of the root cause of non-compliance with responsible persons from the respective depts/sections.

2) <u>Selection and Implementation of Corrective Actions</u>.

Potential corrective actions are identified and the one that is most likely to eliminate the problem is chosen for implementation. Corrective action considers the magnitude and the impact of the problem. Policy amendments, if any required, to regularise corrective actions, are documented and implemented.

3) <u>Monitoring Of Corrective Actions</u>.

Chief Of Quality shall monitor the outcome parameters to ensure corrective actions taken have been effective in eliminating the problem. In case there is deficiency and further improvement required it is intimated to the Medical Superintendent and other stakeholders through the Quality Core Committee meeting to meet the required standards.

4) <u>Additional Audits</u>.

When departmental performance in compliance to documented procedures becomes questionable due to magnitude of non-compliance cases additional audits are conducted. Chief Of Quality Is responsible.

a) <u>AUDIT AS A TOOL FOR QUALITY CONTROL</u>

An audit is a systematic and official examination of a record, process or account to evaluate performance. Auditing in health care organization provide managers with a means of applying control process to determine the quality of service rendered. Nursing audit is the process of analyzing data about the nursing process of patient outcomes to evaluate the effectiveness of nursing interventions. The audits most frequently used in quality control include outcome, process and structure audits.

- **<u>Outcome audit</u>**. Outcomes are the end results of care; the changes in the patients' health status, which can be attributed to delivery of health care. Outcome audit determines results of specific nursing intervention on patients. The audit reflects the outcome accurately and demonstrates the quality of care provided. Examples of outcomes traditionally used to measure quality of hospital care include mortality, hospital induced morbidity, and length of hospital stay.

- **<u>Process audit</u>**. Process audit measures the process of care or how the care was administered. It is task oriented and focuses on whether or not practice standards are being fulfilled. These audits assumed that a relationship exists between the quality of the nurse and quality of care provided. Examples are time taken for nursing evaluation, to send samples for lab investigations and to initiate treatment after admission, documenting adverse drug reaction, evaluation of vulnerability and risk fall assessment.

- **<u>Structure audit</u>**. Structure audit monitors the physical structure in which patient is cared for, such as nursing service, medical records and environment.

b) CONCLUSION

Concern for quality of service constitutes the core responsibility of the hospital to the public. Audit helps to ensure that the gap in the quality of nursing care ideally desired and practically feasible is narrowed optimally. This concept is often referred to as quality assurance.

2. QUALITY ASSURANCE & CONTINUOUS QUALITY IMPROVEMENT : PLAN AND RESPONSIBILITY

Table – 1. Quality Assurance & Improvement : Hospital wide

PURPOSE	METHODOLOGY	RESPONSIBILITY
Setting goals and objectives	Setting of mission, vision, objectives, quality policy and service standards through committee discussion and approval of Medical Superintendent	ROM
Infrastructure	Identifying infrastructural requirement including Physical facility Manpower Equipments This is determined on the basis of workload and change in scope of service	Hospital Administration
Policies, procedures and other documentation requirement	This documentation is done to develop systems and processes that are necessary to provide uniform service of desired level of quality and communicate it to relevant personnel.	Various committees, Chief Of Quality and Medical Superintendent
Compliance monitoring	Compliance is monitored and non-conformity is tracked for taking corrective and preventive actions. This is done through compliance monitoring registers kept in various departments	All the staff of the hospital and Quality Core Committee
Walk through monitoring	Walk through monitoring or physical monitoring is done by designated member of QCC, Hospital infection control committee, hospital safety committee, Chief Of Quality and MS.	QCC, Hospital infection control committee, hospital safety committee, Accreditation coordinator, Chief Of Quality and MS
Indicator monitoring	A list of indicators has been developed to monitor the key	QCC

PURPOSE	METHODOLOGY	RESPONSIBILITY
	features necessary for quality assurance. These are developed for structure, process, clinical and managerial activities. A monthly report is generated with all these indicators which is reviewed for necessary action by Quality Core committee	
Training and orientation	Necessary instructions to the staff for quality assurance are communicated through their departmental In-charges. Quality Core is also included as one of the training needs, on which training is organized at regular intervals	QCC and hospital administration
Continuous process	The contents of this Program are reviewed every year by Quality Core Committee for adequacy.	QCC

Table – 2. Quality Assurance & Improvement : Radiology

Sr No.	KEY CHARACTERISTICS	ACCEPTANCE NORMS / CRITERIA	RESPONSIBILITY AND CONFORMANCE VERIFICATION	FREQUENCY
1.	Surveillance of test results	Weekly surveillance of a sample of test results	HOD / Laboratory In-charge	Weekly
2.	Compliance monitoring	Compliance as per standards, SOP and policies	Laboratory staff	Continuous
3.	Timely intimation of critical results	Within ½ hour	Technician	Daily
4.	Waiting time for investigation.	X ray : 30 min or less (90% cases) Ultrasound : 40 min after preparation (90% cases) CT Scan : 30 min after preparation (90% cases)	Technician / Radiologist	Weekly

Sr No.	KEY CHARACTERISTICS	ACCEPTANCE NORMS / CRITERIA	RESPONSIBILITY AND CONFORMANCE VERIFICATION	FREQUENCY
5.	Report delivery time	90% x-ray and ultrasound reports delivery on time as per policy CT reports by 10:30 AM next day	Technician / radiologist	Weekly
6.	Wastage of film because of repeat process	5% - 7%	Supervisor/ Technician / Radiologist	Monthly
7.	Uptime of equipment	95 % - 98 %	Supervisor/ Technician / Radiologist	Monthly

Table – 3. Quality Assurance & Improvement : Intensive Care Unit

Sr No.	KEY CHARACTERISTICS	ACCEPTANCE NORMS / CRITERIA	RESPONSIBILITY & CONFORMANCE VERIFICATION	FREQUENCY
1.	Infection control and sterility of ICU	Carbonization Weekly Air Culture Weekly swab culture	ICU in charge / staff	Once in a week
2.	Sterility of Ventilator	Sterilization after each utilization followed by culture.	ICU in charge / staff	Once in a week
3.	Monitoring and measurement of life saving equipment and other equipments	Functional status check. Calibration – Yearly/as and when required AMC/Preventive Maintenance – Yearly/as and when required	ICU in charge / staff	Monthly

Table – 4. Quality Assurance & Improvement : Surgical Services

Sr No.	KEY CHARACTERISTICS	ACCEPTANCE NORMS / CRITERIA	RESPONSIBILITY & CONFORMANCE VERIFICATION	FREQUENCY
1.	Punctuality of O. T staff	Start functioning at time	OT in charge	Once in a week
2.	Complete pre operative preparation before patient is shifted to O. T	Part preparation Nail polish removing. Removal of all ornaments. Consent for procedure Change of clothes.	O.T. Staff Anesthesiologist	Daily Once in a week
3.	Anesthesia induced after 17.00 hrs.	Acceptable only during emergency	Anaesthesiologist	Once in a week
4.	Infection Control and sterility of O. T	Weekly air culture Weekly fumigation Hypochlorite treatment of infected linen / instruments for 3 – 4 hrs before autoclaving. Restricted entry of visitors into O.T. complex	OT incharge / O.T. Staff / Anaesthesiologist	Once in a week
5.	O.T turnaround time between two operations	Not more than 30 mins.	HOD	Once in a week

Table – 5. Quality Assurance & Improvement : Hospital Infection Control

Sr No.	PURPOSE	METHODOLOGY	RESPONSIBILITY	REMARK
1.	Surveillance and collection of data related to hospital acquired infections	Infection control nurse shall do daily surveillance of the hospital and record the patients infections in the hospital	Infection control nurse	This data shall be presented to Hospital infection control committee for analysis
2.	Adherence to standard precautions	Non-adherence to standard precautions shall be recorded in compliance monitoring register by observing staff	All staff of the hospital	Hospital infection control committee shall keep a check on these registers and shall also do physical monitoring to identify non-conformity
3.	Catheter associated Urinary tract infections	Urine of all symptomatic catheterized patient shall be sent for culture	Treating physician	Infection control nurse and hospital Infection control committee shall be vigilant about this
4.	Ventilator associated Respiratory tract infections	All patients on the ventilator having clinical feature suggestive of infection shall have their sputum or ET/tracheostomy secretions (obtained using a suction catheter) or ET/tracheostomy tip or protected specimen brusing (PSB) or mini bronchoalveolar lavage(BAL) for culture.	Treating physician	Infection control nurse and hospital Infection control committee shall be vigilant about this
5.	Intra-vascular device infections	For patients with symptoms suggestive of intra-vascular device infection and having central line the same shall be done by sending the tip for culture. For all peripheral lines clinical evidence of	Treating physicians	Infection control nurse and hospital Infection control committee shall be vigilant about this

Sr No.	PURPOSE	METHODOLOGY	RESPONSIBILITY	REMARK
		thrombophlebitis would suffice.		
6.	Surgical site infections.	Pus / swab of such patients shall be sent for culture.	Treating physician	Infection control nurse and hospital Infection control committee shall be vigilant about this

3. QUALITY ASSURANCE AND CONTINUOUS QUALITY IMPROVEMENT : INDICATORS

Following indicators shall be measured and monitored by quality assurance committee to assure quality and continuously improvement it.

S. No		INDICATOR	CALCULATION FORMULA	REMARKS
		BLOOD BANK		
1.	CQI 3f (23)	Percentage of transfusion reactions	Number of transfusion reactions ---------- x 100 Number of transfusions	Includes blood & its components.
2.	CQI 3f (24)	Percentage of blood & blood products wastage	Number of blood and blood products used ---------- x 100 Number of Blood and Blood products issued from Blood Bank	Includes blood & products found unfit for use. Include blood & its products. Number of transfusions not included.
3.	CQI 3f (25)	Percentage of bloc component usage	Number of components used ---------- x 100 Number of blood & Blood products used	
4.	CQI 3f (26)	Turnaround time for issue of blood and blood components	Sum of total time taken ---------- x 100 Total number of blood & components issued	Time order is raised to time it reaches clinical

				unit.
		BIO MEDICAL ENGINEERING		
5.	CQI 4c (49)	Critical Equipment Down Time (Period Equipment fails to perform its function)	Sum of down time for all critical equipments	Critical equipment Life saving equipment Standby NA Spares/Repairs take long period of time Cost > 3 Lacs.
		DIAGNOSTICS (**Hospital Lab & Radiolo**		
6.	CQI 3b (5)	Number of reporting errors per 1000 investigations	Number of Reporting Errors ---------- x 1000 Number of Tests performed	Reported every month Includes errors picked up before & after dispatch of report & transcription errors.
7.	CQI 3b (6)	Percentage of Re-Do (includes repeats prio to release of report t confirm finding).	Number of Re-Dos ---------- x 100 Number of tests performed	
8.	CQI 3b (7)	Percentage of reports co-relating with clinical diagnosis.	Number of reports correlating with clinical diagnosis ---------- ---------- x 100 Number of tests performed	Includes both clinical diagnosis & differential diagnosis
9.	CQI 3b (8)	Percentage of adherence to safety precautions by employees working in diagnostics	Number of employees adhering to safety norms ---------- ---------- x 100 No of employees sampled	Even a single non compliance will be considered as non-adherence
10.	CQI 4d (53)	Waiting time for diagnostic tests(time requisition presented at diagnostic counter	Sum of every patient time at diagnostic counter ---------- ---------	

		to initiation of test procedure).	Total number of patients reported at diagnostic	
		DIETETICS		
11.	CQI 3a (3)	Percentage of cases (in-patients) screened for nutritional needs.	Number of In-Oatient records with Nutrition assessment ---------- x 100 Total number of patients (Sample Size)	Sample consists of patients who are still in the hospital.
		EMERGENCY (**CASUALT**		
12.	CQI 3h (33)	Return to emergency dept. within 72 hrs with similar presenting complaints	Number of return to emergency within 72hrs with similar presenting complaints ---------- x 100 Number of patients who came to emergency.	
		HUMAN RESOURCE DEP		
13.	CQI 4b(46)	Percentage of employees provided pre-exposure prophylaxis	Number of Employees provided pre exposure prophylaxis ---------- x 100 Number of employees due for pre exposure Prophylaxis	Will include all new and old employees. Will include at least Hepatitis-'B' vaccine.
14.	CQI 4 e(56)	Employee satisfaction index	Score achieved on Measuring Instrument - x 100 Maximum possible score	Every 6 months. Will include all staff categories.
15.	CQI 4 e(57)	Employee attrition rate	Number of Employees who left ---------- x 100 No of employees at the beginning of month & new joiners	Every month end
16.	CQI 4 e(58)	Employee absenteeism rate.	Number of employees on unauthorized absence ------- x 100 Total number of Employees	
17.	CQI 4 e(59)	Percentage of employees who are aware of employee right, responsibilities & welfare schemes	Number of Employees aware of rights, responsibility & welfare schemes. ---------- x 100 Number of employees interviewed	
		INFECTION CONTROL		
18.	CQI 3	Bloodstream infection	Number of central line associated blood	Every month

	g (28)	rate	stream infections ---------- ---------- x 1000 Number of central line days in the month	
19.	CQI 4 f (61)	Incidence of blood/body fluid exposure	Number of blood & body fluid exposure ---------- x 100 Number of In Patient days	Contact of staff's eye, mucosa, abraided skin or mouth.
20.	CQI 4 f (62)	Incidences of needle stick injuries.	Number of par-enteral exposures ---------- x 100 Number of In Patient days	Includes injuries due to any sharps.
21.	CQI 3g (28)	Pneumonia Rate	Number of ventilator associated Pneumonias ---------- ----- x 100 Number of ventilator days in the month	Every month
22.	CQI3g (30)	Surgical site Infection Rate	Number of surgical site Infections ---------- x 100 Number of surgeries performed in the month	Every month
23.	CQI 3 g (27)	Urinary tract Infection rate	Number of urinary catheter associated UTIs ---------- ---- x 100 Number of urinary catheter days in the month	Every month
		<u>IN PATIENTS</u> (<u>IPD</u>)		
24.	CQI 3a & b(1)	Time for Initial assessment (indoor & emergency patients)	Sum of time taken for initial assessment ---------- = Average time Total number of patients (sample size)	±20% will be outliers
25.	CQI 3 (2)	Percentage of cases (in-patients) wherein care plan with desired outcomes is documented and counter signed by the clinician	Number of inpatient records with documented desired outcomes ---------- ----- x 100 Total number of Inpatients	Sample will include inpatients undergoing treatment.
26.	CQI 4c (47)	Bed occupancy rate. (Available bed days is number of official beds x number of days in the month)	Number of inpatient days in the month ---------- x 100 Number of available bed days in the month	Patient formally admitted & discharged or death after any unit of time is

				counted as one bed day.
27.	CQI 4 c (47)	Average Length of Stay.	Number of inpatient days in the month ---------- = Average days Number of discharges & deaths in the month	
28.	CQI 4 d (54)	Time taken for discharge.(starts when consultant approves discharge and ends when process is completed)	Sum of time taken for every discharge ---------- = Average time Number of patients discharged	Patient's request for additional time is not counted.
		INTENSIVE CARE UNIT (ICU)		
29.	CQI 3h (32)	Return to ICU within 48 hours.	Number of returns to ICU within 48 hours ---------- x 100 Number of discharges/transfers/deaths in ICU	Every month
30.	CQI 3 h (34)	Re-intubation Rate	Number of Re–intubations within 48 hours of extubation ---------- ---------- x 100 Number of Intubations	Every month
31.	CQI 4c (48)	ICU Equipment Utilisation (equipment days = number of equipments x number of days in the month)	Number of equipment utilised days ---------- x 100 Number of equipment days available	
32.	CQI 4 c (48)	ICU Beds Utilisation (available bed days = number of beds in ICU x number of days in the month)	Number of days ICU beds utilised ---------- x 100 Number of ICU bed days available	
		MEDICAL RECORDS DEP (MRD)		
33.	CQI 3h (31)	Mortality Rate	Number of Deaths ---------- x 100 Number of discharges & deaths	
34.	CQI 4 g (63)	Percentage of medical records not having discharge summary	Medical records without discharge summary ---------- -- x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.

35.	CQI 4 g (64)	Percentage of medical records not having codification as per International Classification of Diseases (ICD)	Number of medical records not codified as per ICD ---------- x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.
36.	CQI 4 g (65)	Percentage of medical records with incomplete or improper consent	Percentage of medical records with incomplete or improper consent ---------- x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.
37.	CQI 3 c (11)	Percentage of medication charts with error prone abbreviations	Percentage of medication charts with error prone abbreviations ---------- x 100 Number of medication charts reviewed	Monitoring can be concurrent or for past 3 months admissions.
38.	CQI 4 g (66)	Percentage of missing medical records	No of missing medical records ---------- x 100 Total number of records	
39.		NURSING CARE		
40.	CQI 3 a (4)	Percentage of Cases wherein nursing care plan is documented	Number of Inpatient records with documented nursing assessment (Nursing care plan) ---------- x 100 Total number of patients (sample size)	Sample will include patients admitted in past 24 hours.
41.	CQI 3 c (9)	Incidence of medication errors (includes errors in prescribing, transcribing, dispensing, administering. Also wrong patient, drug, strength & dose and so on)	Total number of medication errors ---------- x 100 Number of patient days (as per sample size)	Monitoring can be concurrent or for past 3 months admissions.
42.	CQI 3 c (10)	Percentage of admissions with adverse drug reaction(s)	Number of adverse drug reactions ---------- x 100 Number of discharges & deaths	
43.	CQI 3 c (12)	Percentage of patients on high risk medication developing adverse drug reaction	Number of patients on high risk medication who developed adverse drug reaction ---------- x 100 Total number of patients on high risk	

			medication	
44.	CQI 4 b (45)	Incidences of bedsores after admission	Number of patients who develop bed sore/bed sores deteriorate ---------- ---------- x 100 Number of discharges & deaths	Use National Pressure Ulcer Advisory Panel staging system for deteriorating ulcer.
45.	CQI 4 b (44)	Incidence of falls (includes falls from bed, chair, staircase, slip, trippin, stumble, shove, push, collision, into an open hole, ditch and so on)	Number of falls ---------- x 100 Number of discharges & deaths	
46.	CQI 4 c (50)	Nurse-patients ratio for ICUs and wards (in ICU calculate separately for Ventilated & Non ventilated patients)	Total number of Nurses for the facility ÷ Number of Shifts ---------- ---------- Total number of beds in the facility	Exclude nurse incharge/ supervisor from the count of nurses.
		OPERATION THEATRE (OT)		
		ANAESTHESIA		
47.	CQI 3d (13)	Percentage of modification of anesthesia plan. (Deviation from plan after pre anaesthesia assessment)	Number of patients in whom planned anaesthesia was changed ---------- ----- x 100 Number of patients who underwent anaesthesia	Data captured prior to shifting patient from OT.
48.	CQI 3d (14)	Percentage of unplanned ventilation following anesthesia. (Post anaesthesia ventilation will be mentioned in anaesthesia plan)	Number of patients put on unplanned ventilator after anaesthesia ---------- ---------- x 100 Number of patients who underwent anaesthesia	
49.	CQI 3d (15)	Percentage of adverse anesthesia events. (untoward medical event due to anaesthetic agent without any causal relation to treatment)	Number of patients with adverse anaesthesia event ---------- ------ x 100 Number of patients who underwent anaesthesia	
50.	CQI 3d	Anesthesia related	Number of deaths due to anaesthesia	

	(16)	mortality rate.	---------- ---- x 100 Number of patients who underwent anaesthesia	
		SURGERY		
51.	CQI 3 e (17)	Percentage of Unplanned return to OT	Number of unplanned return to OT ---------- x 100 Number of patients operated	
52.	CQI 3 e (17)	Percentage of rescheduling of surgeries	Number of cases rescheduled ---------- x 100 Number of surgeries performed	
53.	CQI 3e (19)	Percentage of cases where hospital's safety procedures have been adhered. (to correctly identify patient, site and surgery)	Number of cases where procedure was followed ---------- ------ x 100 Number of surgeries performed	To be checked in recovery room.
54.	CQI 3 e (20)	Percentage of cases who received appropriate prophylactic antibiotics within the specified time frame.	Number of patients who received prophylactic antibiotics ---------- ----- x 100 Number of surgeries performed	Antibiotic administered within 2 hours prior to surgical incision.
55.	CQI 4c (48)	OT Utilisation Rate	OT utilisation time (in hours) ---------- x 100 Resource hours	Resource hours = (Number of OTs x Number of hours every OT is available for surgery).
56.	CQI 3e (21)	Percentage of cases in which the planned surgery is changed intraoperatively	No. of cases in which the planned surgery is changed intraoperatively_____ Total no. of surgeries performed x 100	Monthy
		PATIENT SATISFA (PATIENT SERVICES)		
57.	CQI 4c (50)	Out Patient Satisfaction Index.	Score achieved on measuring instrument ----------	Sample will be randomly taken

			x 100 Maximum score on measuring instrument	from repeat patients.
58.	CQI 4d (52)	In Patient Satisfaction Index.	Score achieved on measuring instrument ---------- x 100 Maximum score on measuring instrument	
		PHARMACY		
59.	CQI 4a (39)	Percentage of drug and consumables procured by local purchase.	Number of items purchased by local purchase ---------- ---- x 100 Number of drugs in hospital formulary and consumables list	Includes drugs patient was taking prior to admission & needs to continue.
60.	CQI 4a (40)	Percentage stock outs including emergency drugs.	Number of Stock outs ---------- ---- x 100 Number of drugs in hospital formulary and consumables list	
61.	CQI 4a (41)	Percentage of drug and consumables rejected before preparation of Goods Receipts Note (GRN)	Total quantity rejected ---------- x 100 Total quantity received before GRN	It means quantity of every item. Does not mean number of items.
62.	CQI 4a (42)	Percentage of variations from the procurement process. (Variation from SOP to procure from authorised licensed vendors)	Number of variations from usual procurement process ---------- ---------- x 100 Total number of items procured	
63.	CQI 4 f (60)	Percentage of near misses.	Number of near misses reported ---------- x 100 Number of Incidents reported	
64.	CQI 4f (59)	Number of sentinel events reported, collected & analyzed within the defined timeframe.	Number of sentinel events reported, collected & analyzed within the defined timeframe ---------- ---------- x 100 Number of sentinel events reported, collected & analyzed	

65.	CQI 4b ((43)	Number of variation observed in mock drill.	Total number of variation in mock drill. (Absolute Number)	
		RESEARCH		
66.	CQI 3 I (35)	Percentage of research activities approved by ethics committee.	Number of research projects approved by ethics committee ---------- ---------- x 100 Number of research protocols submitted to ethics committee	Quarterly
67.	CQI 3I (36)	Percentage of patients withdrawing from the study.	Number of patients withdrew from all ongoing projects ---------- -------- x 100 Number of patients in all ongoing projects	Quarterly
68.	CQI 3I (37)	Percentage of protocol violations/ deviations reported.	Number of protocol violations/ deviations reported ---------- -------- x 100 Number of protocol violations/deviations occurred	Quarterly
69.	CQI 3I (38)	Percentage of serious adverse events reported to ethics committee within defined time frame.	Percentage of serious adverse events reported within defined time frame. ---------- -------- x 100 Total number of serious adverse events reported	Quarterly
70.	CQI 3J (68.)	Compliance to hand hygiene practice	Total no. of actions performed _____ Total no. of hand hygiene opportunities x 100	monthly
71.	CQI 3J (70)	Compliance rate to medication prescription in capital letters	Total no. of prescriptions in capital letters_____ total no. of prescriptions x 100	Monthly
72.	CQI3j (67)	Appropriate handovers during shift change(to be done separately for nurses and doctors)	Total no. of handovers done appropriately _____ Total no. of handover opportunities x100	Monthly

4. REFERENCES

'Hospital Committees', Apex manual

5. RECORDS AND FORMATS

Minutes of meetings, Record of Quality Indicators with their Analysis, Internal audit reports

CQI 2 PATIENT SAFETY MANUAL

ROM 5 Display professionalism in management

I. POLICY:

All Patient Care Services Staff shall use every reasonable precaution to provide a safe environment to the patients.

II. PURPOSE

This Safety Management Plan serves to describe the policies and processes in place to minimize safety risks to patients and staff through a comprehensive hazard surveillance program and analysis of aggregate information.

III. DEFINITION:

1. Patient Safety Program- A Program focused on patient, staff and visitors safety.
2. Adverse Event- An injury related to medical management, in contrast to complications of disease. Medical management includes all aspects of care, including diagnosis and treatment, failure to diagnose or treat, and the systems and equipment used to deliver care.
    a. Adverse events may be preventable or non-preventable.
3. No Harm- This is used synonymously with Near Miss. However, some authors draw a distinction between these two phrases.
4. A Near Miss- is defined when an error is realized just in the nick of the time and abortive action is instituted to cut short its translation. In the NO Harm scenario the error is not recognized and the deed is done but fortunately for the health care professional, the expected adverse event does not occur. The distinction between the two is important and is best exemplified by reaction to administered drugs in allergic patients.
5. A prophylactic injection of Cephalosporin may be stopped in time because its suddenly transpires that the patient is known to be allergic to penicillin (Near Miss).If this vital piece of information is overload and the Cephalosporin is administered, the patient may fortunately not develop an anaphylactic reaction (No Harm Event)
6. Sentinel Event- A relatively infrequent, unexpected incident, related to system or process deficiencies, which leads to death or major and enduring loss of function for a recipient of health care services.
7. Major and enduring loss of function refers to sensory, motor, physiological or psychological impairment not present at the time services were sought or begun. The impairment lasts for a minimum period of two weeks and is not related to an underlying condition.

IV. ABBREVIATION:

ID- Identity

BME- Bio Medical Engineer

WHO- World health organization

V. SCOPE:

The Safety Management Plan defines the mechanisms for controlling hazards, promoting and implementing safety measures for the patients, staff in particular and the hospital in general.

VI. RESPONSIBILITY:

Hospital Management and Safety Committee

A.	Aim	A Hospital Safety & Disaster management Committee as per the following terms of reference is hereby established. To Coordinate, implement and monitor the 'Hospital-wide safety program' that specifically includes the 'Laboratory safety program', 'Radiation Safety Program' and "Occupational health and safety Program"
B.	Key Objectives	The hospital safety & Disaster management committee's key objective is to provide a safe and secure environment to both patients and staffs.
C.	Specific Areas of Responsibility	1. Develop and issue policy on patient, staff and visitor safety and security. 2. Develop and issue policy on prevention, management and control of emergency situations within hospital and outside hospital. 3. Develop plans for handling fire and non fire emergencies. 4. Conduct training on all aspects of safety to hospital employees and maintain a record of the same. 5. Conduct various emergency mock drills and

		maintain record of the same. 6. Monitor occupational health and safety of employees. 7. Ensure safe water supply and maintain records of regular water checks carried out in the hospital. 8. Conduct various risk assessments to maintain safe and secure environment 9. Hazardous materials management across the hospital
D.	**Chairperson**	
E.	Members	1. Head of Services & Hospital Safety 2. Chief Security Officer 3. Chief Of Quality 4. Hospital laboratory 5. Emergency Department 6. Bio Medical Engineering. 7. Radiation Safety Officer 8. Fire Safety Officer
F.	**Convenor**	
G.	Responsible to	1. The safety committee is responsible to the Director Medical /Head of organisation. 2. The minutes of safety committee meetings shall be formally recorded. 3. The safety committee shall assess its own performance annually, and shall submit report to the Director Medical tor/Head of organisation. 4. The report shall also include a review of the safety committee's Terms of Reference.
H.	Frequency of Meetings	Meetings will be held at least once in three month. In addition, the Chairperson, safety committee may convene one or more special meetings of the safety committee.

J.	Record Keeping	Records of minutes and papers relating to safety committee meetings will be kept with Convenor.
K.	Lifespan of the Committee	The safety committee is a standing committee of the Hospital.
M.	Miscellaneous	Attendance at Safety committee meetings. The safety committee has the overriding authority to restrict attendance or invite observer at a meeting, if the safety committee considers this to be appropriate in the specific circumstances of that meeting.

VII. PROCEDURE:

1) PATIENT SAFETY

All Patient Care Services Staff shall use every reasonable precaution to provide a safe environment to the patients.

Responsibility: Safety officer, all health care providers and patients.

Process:

The precautions listed herein should not be considered to be all inclusive, as safe practice requires sound judgment in individual situations and constant awareness of the environment.

General Precautions

All patients shall be oriented to the clinical area(s). Orientation shall include the following:

a) Room number and unit layout.
b) Call bells and how to request assistance.
c) Bed operation.
d) Visiting hours,
e) Non-skid shoes or slippers shall be encouraged.
f) All staff shall wear photo I.D. badges when on duty.
g) The patient care area and hall shall be clean, well-lighted, and free from clutter.
h) The floor shall be clean and dry. Appropriate signage is in place when floor is wet.
i) Patient beds and treatment tables shall be kept at the lowest possible height except when elevated for delivery of care and when the staff member is continuously at the bedside (e.g., intensive care units).

j) Supplies, machines, and equipment shall be stored in designated areas. Equipments not in use shall be promptly returned.
k) Patient care equipment shall be inspected and labeled by the Biomedical Department prior to initial use and according to Preventive Maintenance Schedules.
l) Broken or malfunctioning equipment
m) The equipment shall be removed from clinical area
n) The breakdown shall be reported immediately to the BME Department.
o) All spills shall be cleaned immediately according to applicable guidelines for the type of spill.
p) Each staff member shall continuously assess for unsafe conditions and takes appropriate corrective action.
q) "Near misses", accidents, and occurrences (patients, visitors, and staff) shall be immediately reported to Quality department in an incident reporting form.

2) Identification Bands

a) They shall be used when the patients are admitted in the hospital
b) The identification band shall be placed on the wrist of inpatients.
c) If the patient's medical condition prohibits the application of the identification band to the patient's wrist or ankle, the identification band shall be attached to a visible part of the patient's body using tape appropriate to the patient's condition/allergies.
d) If the Identification Band is removed by a staff member, then a new band shall be made, identification re-confirmed, and the band placed on the patient.
e) Before a patient is transferred, the transferring nurse shall verify the identification band is in place.

3) Side Rails

a) Patients shall be placed in a bed that has functional side rails.
b) The following patients shall have side rails raised when unattended by staff:
Vulnerable patients

c) Those given pre-op or pre-procedural medication.
d) Patients on stretchers (unless equipped with safety belts).

4) Seizure Precautions

Basic Precautions - In-patients with a history of seizure disorder shall be observed for.

Oral airway patency. Side rails shall be always up and bed shall be in low position.

High Risk Precautions - Patients admitted for active seizure disorder or who experience seizures shall be observed while in hospital/clinic. Suction equipment shall be readily available for all such patients.

5) Ambulation

Staff shall accompany all patients:

For initial ambulation after surgery, After procedures requiring sedation, After prolonged bed rest, and In other situations as deemed necessary and as ordered by the physician.

6) Transportation

a) Wheels of stretchers, wheelchairs, and beds shall be locked when a patient is lifted from or assisted onto them.

b) Side rails shall be raised on stretchers, where no side rails exist, safety belts shall be fastened for patients in wheel chairs.

c) Patient's Role in Promoting Safe Health Care:
Patients shall be encouraged to become an active, involved, and informed member of their health care team. Listed below are ways that the patients may be encouraged to promote their own safety.

d) Patients shall be instructed to ask if they have questions about their health or safety.

e) If the patient is scheduled for a surgery, the patient shall be asked to verify prior to the procedure, the site/side of the body that will be operated on.

f) If the patient's identity is not checked before medications are given, blood/blood products are administered; blood samples are obtained or prior to an invasive procedure, the patient shall be asked to remind the staff.

g) Patients shall be instructed to adhere to the hospital's 'No Smoking Policy'.

h) Patients shall be instructed to follow the 'Patients Responsibilities'.

VIII. DESCRIPTION OF THE PROCESS:

1. Process of Risk Management

1) Identification of Potential Risks & Hazards

2) Evaluate the likelihood and degree of risk

3) Documentation & Reporting of Risks and Incidents & near misses

4) Implementation of Corrective actions & Control Measures to reduce, prevent incidents

5) Review and monitor risk management process for continuous quality improvement

2. Categories of incidence

Generally incident occurrences fall into two categories –

1) Indirect patient care and

2) Direct patient care.

Examples of incidents relating to Indirect Patient care are inclusive of the following but not limited to:

1) Fire
2) Security
3) Violence & Aggression
4) Environmental

Examples of Direct Patient care are inclusive of the following but not limited to:

1) Drug Error & Adverse Clinical Event
2) Failure/Incorrect Diagnosis
3) Incorrect Reporting
4) Any non-compliance to standard procedure
5) Unexpected death

3. Objectives

1) An over-view of all incidents is obtained throughout Hospital by analysis of data, including those submitted
2) Any lessons which can be learned from what has gone wrong in one part of Hospital can be applied generally across the whole Hospital
3) Effective reporting to statutory agencies occurs from a centralized managed point
4) A learning, fair blame culture is fostered.
5) Loss of reputation, or assets, of the Hospital and its staff is minimized and
6) There is effective implementation of the Hospital's Risk Management Policy / Strategy.

4. The Hospital fully recognizes and endorses the need for:

1) Open reporting of all adverse incidents, accidents and near misses
2) Being open with patients when an adverse incident has occurred which means apologizing and offering an explanation to patients and caretakers who have been involved in a patient safety incident
3) Completion of the Incident Reporting Form (IRF) for all adverse incidents, accidents and near misses
4) Compilation of adverse incident reporting onto the Hospital's Incident & Risk Register, including quarterly reporting to the Hospital Board
5) A systematic approach to incident investigation as set out in this policy and guidance and in particular the thorough investigation of serious incidents as defined in this policy
6) Sharing of investigation findings within the Hospital, so that lessons can be learned (where appropriate)
7) Appropriate actions implemented following investigation with subsequent evaluation
8) Support to staff involved and re-education (where appropriate)

9) Immediate action and onward reporting for serious adverse incidents to limit damage / complications and to alert other external agencies as appropriate
10) Clear communications and media management where necessary
11) All staffs employed by the Hospital have a duty to report all adverse incidents and near misses as this is an important element of the Hospital's risk management strategy.
12) **Disciplinary proceedings might be considered appropriate where there are grounds for believing an employee has, for example, acted in one of the following ways:**
13) Intending to cause harm which she/he knew would result in harm (e.g. deliberately injecting potassium, intentionally removing safety devices)
14) Recklessly taking an unjustifiable risk where she/he either knew of the risk or she/he deliberately closed his/her mind to its existence (e.g. administering a non-prescribed controlled drug or carrying out a procedure or performing any task for which she/he lacks the knowledge, skills, qualifications or experience to do competently)
15) Negligently bringing about a consequence which a reasonable competent person with his / her skills should have foreseen and avoided
16) Illegally by committing a criminal act including circumstances resulting in a police investigation or prosecution

5. Guide on the completion of the Incident Report Form

Section 1: Date of Accident / Incident

State date and time and location of incident, please record fact only.

Section 2: Person involved / affected

Fill in this section if a person is involved in the incident. If more than one person is involved a separate Incident Report form should be used for each person. If a person is not involved, this section can be omitted.

Section 3: Type of Incident / Accident

Some examples of type of incidents are detailed below to help you decide what type of incident it is.

Clinical Incidents

1 Patient has or may have received sub-optimal care

2 Patient has sustained harm or injury due to care given or not given

3 An unexpected clinical outcome or complication has occurred such as a 'Trigger event'

4 Consent procedure not followed or evidence of failure to warn.

5 When a clinical procedure or guideline has not been followed with a significance consequence for the patient.

Non-clinical incidents

1 Damage or loss of Hospital property or equipment

2 Staff accidents or injuries while carrying out their duties

3 Security incidents such as theft, trespass, violence against the person

4 Fire incidents including false alarms

5 Verbal abuses from a visitor or patient directed toward staff.

6. Environmental damage e.g. atmospheric pollution, dangerous substances entering the

6. <u>Near Miss Incidents</u>

Any incident that did not happen due to discovery or chance must be reported as a 'near miss' incident. Reporting a near miss event is just as important as reporting an event that actually happened or caused harm. Tick the appropriate clinical or non-clinical near miss box.

Medication Incidents

The wrong drug or dosage, (This also includes any incident involving blood products and blood transfusion procedures.)

The wrong route of administration,

Equipment failure or incident e.g. infusion pump not working properly,

A patient receives another patient's drugs.

Verbal abuse & violence

(Physical or verbal incidents directed at staff, a patient, or visitor)

A patient throws a cup of tea at another patient

Sustained patient or visitor swearing or shouting, or behaving inappropriately

7. Security incidents

Can involve any damage or threat to Hospital property, the theft of property or personal belongings and incidents relating to trespass, or unauthorized access

Examples:

Suspicious person(s) hanging around

Unauthorised people on Hospital property

Suspected theft, anything unusual noted, e.g. coded door breached

Equipment failure / misuse
Bed hydraulics not working
Monitoring equipment is faulty
Oxygen pipe inlet broken

8. Data Security

Data security incidents should be reported immediately. Details of the data security breach should be entered in the incident description text box. Director and Administrative heads should be informed without any delay

Patient Consent
These incidents involve anomalies or errors in the consent procedure and could involve the process of patient identification.
Wrong operation site recorded on the consent form
Consent form unsigned by patient, doctor or both

Handling of events

1) Details of Accident / Incident
2) Provide as much detail as possible regarding the incident. State the facts only and the information that you know that are correct.
3) Action Taken (include first aid or treatment)
4) Provide as much information around the actions that were taken immediately after the event.
5) Name / Position
6) Provide all the details in a legible manner. Stating clearly the time, date and telephone contact number for you (I.e. the person completing the form).

9. Subsequent Action

This section is a very important part of the risk management process; it is an opportunity to prevent future incidents of this type. Detail the actions taken, lessons to be learned and what has been done. Examples of cause are listed below to help- list not exhaustive.

1) **Environment**: a substance on the floor, isolated areas, poor lighting, lack of space, high unit activity
2) **Equipment**: equipment is inadequate, unavailable, and poorly designed, misused or inadequately decontaminated.
3) **Knowledge base**: insufficient training, misunderstandings, errors of judgement, inadequate technique and inexperienced staff
4) **Patient**: Intoxicated, uncooperative, confused or violent. The effects of their illness may also have contributed to the incident
5) **Procedure Problem**: protocol not being followed, inadequate preparation, labelling or calculating errors and equipment not being checked or assessed
6) **Staff**: the staff skills mix, the number of staff, haste in carrying out procedures and distracted, fatigued or stressed staff.
7) **Work Practice**: communication failure, insufficient staff, and inability to contact staff, illegible documentation and lack of supervision.

IR forms are used to record the details of an incident as soon as possible after the event occurred. Later investigations may result in a different description of the incident as more accurate facts are gathered. Such detail will be provided in a separate report.

IR forms should not be altered once completed and staff should be fully aware that IR forms are disclosable in the event of litigation.

The person completing the form signs to confirm they have personally recorded and formally reported the incident.

Heads signing to indicate they have seen the IR form, checked that all sections have been completed and that appropriate management action has been taken or is planned and detailed on the form. If a member of staff is injured and leaves the department before an

IR form is completed it is acceptable that the Incharge to complete the form. Statements can be collected later if necessary.

10. <u>Retention of Records</u>

1) Hospital shall keep a record of all the reportable incidents. Incident forms shall be retained for a minimum of two years after the incident except where a legal action has been taken, advice shall be sought from the legal advisors. The incident forms shall be retained at the Risk Management Unit of Administrative block. The Risk Management Unit will retain all other significant records based on current statutory requirements and best practice.

2) Staff Absence

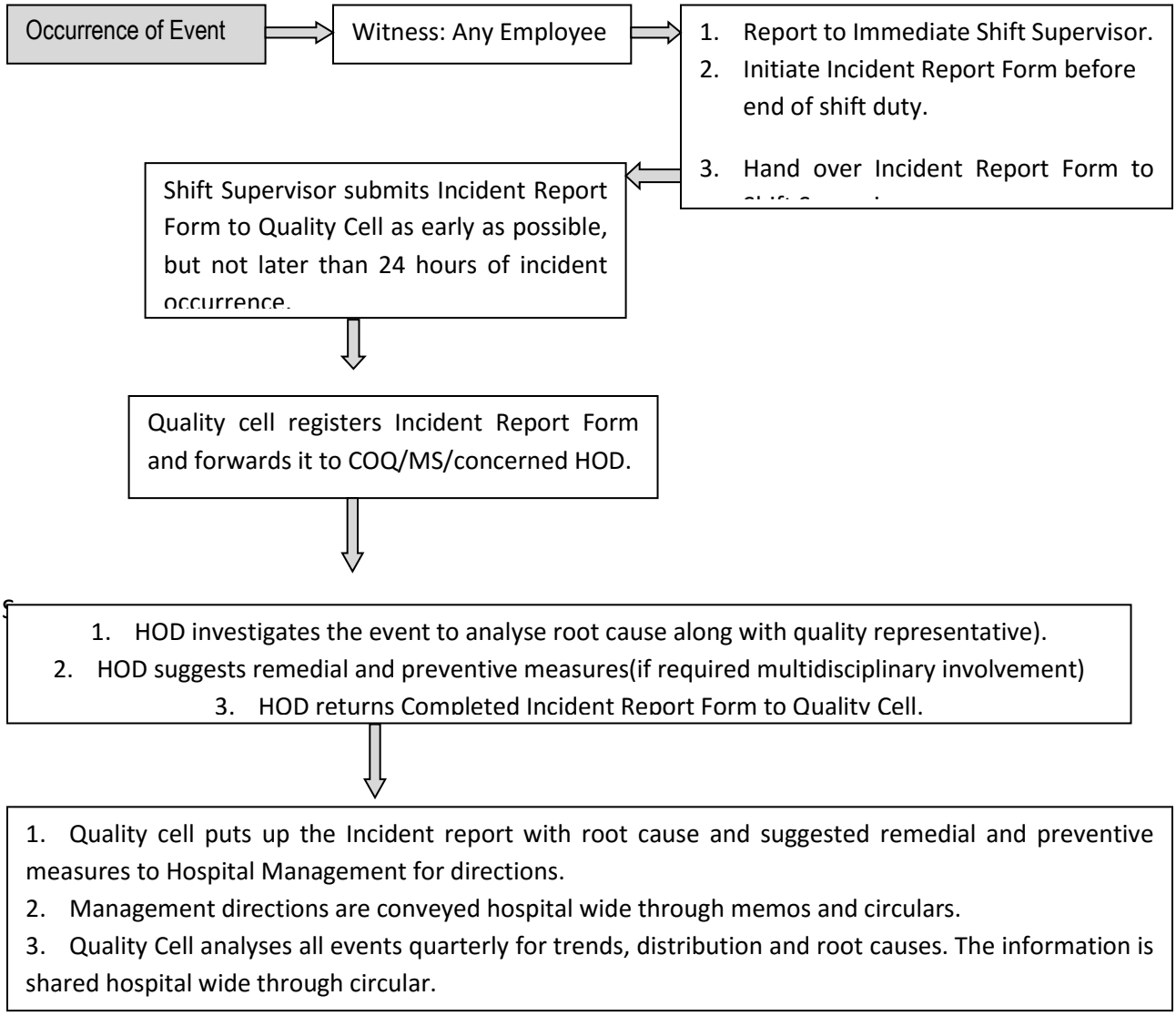
3) For some incidents it will be clear that a member of staff will be absent for more than three days and the appropriate tick box should be selected. Whenever staff absence of more than three days following an injury occurs, the departmental head is advised to contact Human Resources In-charge by telephone as soon as possible after the event.

4) Where absence is marked, and not reported by telephone, Chief Of Quality will contact the departmental manager upon receipt of the IR

5) Form to confirm the number of day's absence and to further investigate the incident.

11. <u>Overview of Incident Management System:</u>

- **<u>INCIDENT REPORTING</u>:** PROCESS FLOW



For all In-patients the feedback forms shall be provided to Patients during discharge process by the nurses. All the filled feedback forms shall be collected from the patients before leaving the ward and other patient care areas and submitted to department of administration on the next working day. They shall analysis all the feedback forms and prepare patient satisfaction index in monthly basis. The patient satisfaction index results shall be discussed in the quality assurance committee meeting.

12. Policy Review:

1) The Hospital Authorities should consider changes in agreed policies and procedures as required for meeting changing circumstances.

2) Patient Safety Manual must be updated once a year by Hospital Safety Committee.

3) Security

4) The security department and their personnel are responsible for maintaining safety of the staff, patient and other users of the Hospital in situations like violence & aggression, disasters etc. are further discussed in the Safety Manual

5) Laboratory Safety

6) Risks associated with the laboratory and safety measures and precautions in the laboratory are further discussed in the Laboratory Safety Manual.

7) Radiology Safety

8) Risks identified with the radiology department and the safety precautions taken to prevent incidents are discussed in detail in the Radiology Safety protocol.

13. Adverse Drug Reaction

1) All incidents relating to adverse events due to drugs used in treatment of patients are discussed in the policy on Adverse Drug Reactions

2) Blood Transfusion Reactions

Any reactions resulting because of transfusing blood or blood components are documented and reported appropriately. Further information is available in the policy document on Blood Transfusion.

3) Responsibility for staff in safety issues-The staff is trained in safety issues of the Hospital so that they are able to handle safety issues in case of any incidents or accidents

4) To take reasonable care of the health and safety of themselves and other persons who may be affected by their acts or omissions.

5) To report any hazard or unsafe working practices to their manager or other person in authority, as soon as it is possible to do so, to enable the hazard to be rectified.

6) The failure of a member of staff to observe his or her duty in this respect will be regarded as misconduct and will be treated as such in accordance with the Hospital's disciplinary procedure.

7) All members of staff are required to attend induction and annual update training in health and safety matters (like fire safety drills etc,) as arranged by Hospital and their department supervisors.

14. International Patient Safety goals (IPSG)

Hospital International Patient Safety Goals:

The purpose of the International Patient Safety Goals is to improve patient safety. The goals focus on problems in health care safety and how to solve them.

- **IPSG-1 Identify patients correctly**

DESCRIPTION

A. The initial identification process will be performed by hospital personnel at OPD/Admission desk, who will then apply a patient identification band.

1) The Admitting Office staff shall place the plastic identification band on each patient. Patients admitted directly to an inpatient unit shall have the identification band placed by *nursing personnel* immediately upon receiving the ID band. Nursing personnel must perform the initial identification process before placing the ID band.
2) Outpatients not undergoing an operative or invasive procedure or receiving a blood transfusion (such as routine Laboratory and Radiology patients who do not receive an identification band) will be identified through verbal confirmation of their name and their unique hospital Identification number.
3) Non-communicative Emergency Department patients without identification are identified as an unknown number 1/2/3 & so on. Hospital account numbers are generated for these individuals as per the routine hospital process. The assigned unknown numbers are used as unique identification until true identity is established.

B. The identification band shall remain on the patient until discharge.

1) If an ID band must be removed for procedural access or other clinical circumstance, another ID band is obtained prior to removing the original, the information is verified by comparing the patient identifiers on the new band with that of the band to be removed, and ID band is replaced at an alternate site.
2) If at any time, the patient is found without an ID band, the initial identification process must be performed and a replacement ID band applied.

C. Patients transferred from M.G.M Medical College and hospital kamothe. are transferred out with their ID band intact/present.

1) All staff will compare the patient's two unique identifiers on the blood or specimen collection container, medication, blood, blood product, or physician's order for treatment or procedure with the information that appears on the patient's identification band prior to providing the care, treatment, or service. Outpatients not undergoing an operative or invasive procedure or receiving a blood transfusion (and who do not receive an identification band) will be identified through verbal confirmation of their name and date of birth. So as to avoid patient misidentification, the patient or their responsible relative/guardian will be asked to state the patient’s name and date of birth prior to the

patient's receiving care using positive (rather than passive) communication). Both patient identifiers on the source (blood or specimen collection container, medication, blood, blood product, or physician's order for treatment or procedure) are to match up with the two identifiers on the patient's identification band or as verbally stated. Any mismatch in these identifiers will bring the procedure (blood/specimen collection, medication/blood administration, or other treatment/procedure) to an immediate stop until the source of the mismatched identification can be resolved.

2) All blood and specimen collection containers are to be labeled in the presence of the patient according to the following procedure:

3) Enter the order for the blood or specimen collection into the computer system.

4) Print the label or hand-write a label (including the patient's name and date of birth) for the blood or specimen collection container

5) Go to the patient and conduct the patient identification process as outlined in step D above (*match the patient to the specimen collection container label*)

6) Draw/collect the blood or specimen

7) Place the label on the specimen (blood, sputum…) container at the time of collection and in the presence of the patient, before leaving the bedside.

8) Any mismatch in the two identifiers on the specimen collection container label and the patient's ID band will bring the procedure (blood/specimen collection, medication/blood administration, or other treatment/procedure) to an immediate stop until the source of the mismatched identification can be resolved.

- **IPSG-2 Improve Effective communication**

DESCRIPTION OF THE PROCESS

Documentation:

1) All verbal orders shall be documented by person receiving orders in patient's medical file. The verbal order shall be read back to the doctor giving verbal orders by the person recording such orders. All verbal orders shall be endorsed with date, time, name and signature of the person recording the verbal order The name of the doctor giving verbal order shall also be documented. These documented orders shall be cross checked as soon as possible, (but not later than 24 hours) by the consultant who has given the verbal orders. The cross check shall be endorsed with signature, name, date and time by the consultant.

2) Telephone or Verbal Orders:
   Safety is the overriding principle in accepting verbal or telephone orders. Verbal and telephone orders have a higher potential for errors as these orders can be misheard, misinterpreted and/or mistranscribed.

3) Verbal or telephone orders are to be accepted only by Resident doctor when it is not possible or impractical for the clinician to write them.
4) Verbal or telephone orders for chemotherapy are not be given to nurses or other Para-medical staff.
5) Abbreviations should not be used when a verbal order is given or reordered.

Process for giving verbal or telephonic orders:

1) The clinician will call up the concerned Resident Doctor/Nursing in charge at the hospital.
2) The clinician identifies self, specifies the patient's name and communicates the order.
3) The Receiver will document the order immediately on the physician's order form/case sheet including the date, time, physician's name and pager number/service and shall also endorse Receiver's name, status and signature.
4) The Receiver should read back the order to the physician including the patient's name, drug name and spelling of the drug to avoid an error due to sound alike drugs, dosage, pronouncing it in single digits (e.g. 15 mg should be read as one five), route, frequency (e.g. three times daily, not TID)
5) The Receiver should also Request the indication for the medication to assist in avoiding errors.
6) The Receiver should question the Physician if there is any uncertainty regarding the order.
7) The Physician must counter sign the order as soon as possible or within 24 hour after communicating the order.

- **IPSG-3 Improve the Safety of High-Alert Medications**

DESCRIPTION OF THE PROCESS

1. M.G.M Medical college and hospital kamothe. identifies the following as high alert medications
2. Narcotic Drugs
3. Concentrated Electrolytes
4. High Risk Drugs
5. Chemotherapeutic drugs

Look alike & Sound alike Medicine

1) In accordance with M.G.M Medical college and hospital kamothe. Policy Verbal or telephonic ordering of Medications shall be permitted only when the physician is

unable to attend to the patient and write the order, and a delay in ordering the medication would compromise patient safety and care,.

2) An independent double-check is required prior to the administration of any dose which requires use of the following high alert medications:
3) Insulin (excluding subcutaneous insulin administered through Home Care)
4) Intravenous anticoagulants (excluding prefilled heparin syringes used in hem dialysis),
5) Concentrated electrolytes,
6) Narcotic Drugs
7) Intravenous vasoactive agents and neuromuscular blocking agents.

Look alike & Sound alike Drugs

1) Documentation of independent double-checks will be completed on the medication administration record. It will include provider's initials and time of double-check.
2) Verification is required at shift change and transfer of care for any intravenous or epidural infusions of high alert medications.
3) Documented verification will be completed on the medication administration record. It shall include initials and time of verification.
4) HIGH ALERT medications shall be dispensed in a separate High Alert Envelope where ever applicable.
5) Commercially packaged or pharmacy prepared pre-mixed solutions of high alert medications will be used when available.
6) The number of concentrations and / or volume options available for all high alert medications on patient areas will be optimally minimised
7) All high alert medications administered as intravenous or epidural infusions will be administered in standardized concentrations for adult patients. If a concentration other than the standardized concentration is ordered, it must be identified and recorded as such.
8) All premixed epidural solutions will be clearly labelled, "For Epidural Infusion Only" and stored separately from all intravenous solutions.
9) Insulin (refrigerated) and heparin (room temperature) will be stored separate

INSULIN

1) Insulin will be stored in the refrigerator. The storage space will be identified with a High Alert sticker.
2) INTRAVENOUS ANTICOAGULANTS
3) Heparin will be stored at room temperature.

CONCENTRATED ELECTROLYTES

1) Concentrated electrolytes include hypertonic saline (3%, 5%), sodium chloride 14.6%, potassium chloride (2 mEq/mL), potassium phosphate, magnesium sulphate and calcium chloride.
2) Concentrated potassium chloride will not be kept in patient care areas with the exception of PICU. In these areas concentrated potassium chloride will be kept in a designated, dedicated storage area.
3) Potassium phosphate injection will not be available as stock in patient care areas.
4) Hypertonic saline will not be available as stock in patient care areas, with the exception of PICU. Prior to being dispensed, it will be labelled "High Alert, Double Check" and stored in a designated area separate from intravenous solutions.
5) Sodium chloride 14.6% (50 mEq/20mL) will not be kept in patient care areas with the exception of NICU and PICU. In these areas it will be kept in a designated, dedicated storage area, clearly marked "High Alert, Double Check". Documentation is required for each vials of sodium chloride 14.6% removed from the storage in any paediatric area. Calcium chloride is available only in drug modules on Code carts.

- **IPSG-4 Ensure Correct-Site, Correct-Procedure, Correct-Patient Surgery**

DESCRIPTION OF THE PROCESS

1) Adverse event in surgical patients those preventable occur due to neglect, human errors or due to improper co-ordination. For e.g. Surgery on wrong site, surgery on wrong patient, or wrong surgery on the patient.
2) Any adverse event with surgical patient shall be reported to hospital management and to safety committee. The committee shall do a root cause analysis and take appropriate preventive measures to prevent occurrence of similar event in future.
3) Following are re-emphasised for surgical patients
4) Proper identification of the patient (through identification tag, name and medical record)
5) Proper identification of the site (through site marking)
6) Proper identification of surgery to be performed (through medical record) pre-operative verification process
7) TIME OUT performing prior to surgery by ward/ICU staff, OT staff, medical officers, Anaesthesiologist and Consultant surgeon.

ACTIVITIES AND RESPONSIBILITY:

Sr. No	Procedure Steps	Responsibility
1	Scheduling: The following information must be filled out in pre-operative check list when scheduling an invasive/surgical procedure. Correct spelling of the patient's full name In-patient number Consent for Procedure to be performed.	Staff Nurse
2	Any discrepancies should be clarified with consultant	Staff Nurse
3	*Pre-procedure/preoperative verification* The physician & anaesthetist will verify patient's identity by asking Patient's full name Date of birth Procedure/surgery to be performed. If patient is minor, incompetent or sedated, or is not able to speak the informed consent will be taken from the first of kin.	Physician & anaesthetist
4	Site Marking: Preferably, completed before patient enters procedure/operating room. Site Marking is required in invasive/surgical procedure that involves: Laterality (e.g. right, left) Multiple structures (e.g. toes, fingers, limbs) Multiple levels (e.g. spine) Includes bedside invasive procedure. Site marking to be done on intra operative per apical radiograph in Dental surgeries by the dentist.	Physician & anaesthetist Staff Nurse OR Nurse

5	Procedures exempt from the site marking are: Endoscopies Tonsillectomy Haemorrhoidectomy Single organ cases (e.g. cardiac surgery) Interventional cases for which catheter and instrument site is not predetermined (e.g. Central line, cardiac catheterisation). Premature infants.	
6	Prior to making the site mark the consultant performing the procedure/surgery verifies the patient's identity and medical records. In case of minor verification process must involve parents or legal guardian.	Physician & anaesthetist
7	If a telephonic site marking verification is obtained, the doctor who is the witness should ask the next of kin the identification of the person on the telephone, the relationship, patient's date of birth, procedure and procedure site.	Witnessed Physician or any Doctor
8	There is a standardized marking for all invasive procedures using an ARROW where the arrow head depicts the surgical site. The marker should be hypo allergic, latex free, and sterile. The marking should be clear and unambiguous.	Infection Control Nurse OR Staff Nurse.
9	If patient refuses for site marking, patient's consultants should be informed and documented in the patient's medical record	Physician & anaesthetist OR Staff Nurse
10	The site mark should not be removed until the procedure is over	Physician & anaesthetist OR Staff Nurse

11	*Time out procedure:* *Time out is required for confirmation of:* Correct Patient Correct side/site Correct procedure Correct patient position Correct radiographs Correct implants and equipment Counting of needles, instruments, sponges	
12	A verbal "time out" or pause is called by operating surgeon immediately before the induction of anaesthesia for the procedure/surgery in the operating room.	Chief Operating Surgeon
13	The patient needs to be awake and aware for the "time out". Site marking must be visible at the time of "time out" or pause.	Chief Operating Surgeon
14	As soon as patient enters the operating room the Chief Operating Surgeon calls "time out" will call for a pause and he/she will loudly call the full name of the patient, in-patient number, procedure name, side and site.	Chief Operating Surgeon
15	The scrub nurse, anaesthetist and surgeon will say yes to all the details. "Time Out" will be documented in the medical records. It should include: Personnel present at the time out Verification of correct Patient Verification of correct side and site Agreement on the procedure/verification of radiographs	Physician & anaesthetist and all in the OT

	Verification of the correct position Available implants and equipments	
16	Discrepancies If any discrepancy is found at any point, the case must stop from proceeding until resolved.	Physician & anaesthetist, OR Staff Nurse
17	All team members and patient (if possible) must agree on resolution to the identified discrepancy. The attending consultant in patient's medical records must document discrepancy and resolution.	Attending Consultant (Physician & anaesthetist)

- **IPSG-5 Reduce the Risk of Healthcare Associated Infections**:-

M.G.M Medical college and hospital kamothe. monitors various healthcare associated infections such as surgical site infections, urinary tract infections, ventilator associated pneumonia and central blood stream infection.

- **IPSG-6 Reduce the Risk of Patient Harm Resulting from Falls**:-

DESCRIPTION PROCESS

1) Patients shall be assessed for fall risk factors during admission assessment, daily assessments, and as the patient condition warrants. Assessments and periodic reassessments shall include the potential risk associated with the patient's medication regimen. If determined to be at risk, M.G.M Medical college and hospitals. safety first program shall be initiated.
2) Document of patient/family education regarding fall risk factors shall be placed in the medical record.
3) The safety first program requires that a visible marker be placed on the inpatient's door or above the patient's bed when a patient has been identified as at risk for falls.
4) The staff is responsible for implementing falls precautions, including frequent patient monitoring, using supplied fall prevention equipment, assessment of patient and maintaining a safe environment.
5) A patient who has experienced a fall shall have an immediate physical assessment, notify the Chief Nursing Officer, and the event documented in the medical record and incident report: including a date/time, description of fall, location of fall, patient physical assessment, current medications, and other related factors that are pertinent.

6) An incident report is completed for every fall during shift of occurrence and forwarded to Quality Management. A fall resulting in a major injury (fracture, head injury, death) shall be reported immediately to the departmental head
7) The Safety Committee promotes proactive practices for patient care planning which minimizes the risk for falls; works to develop a falls prevention program that reduces the risk of patient harm resulting from falls; collects and evaluates falls data on a monthly basis; and makes recommendations based on data and trends, as appropriate.

REFERENCES:

Hospital Committees, WHO Patient safety guidelines, JCI Patient safety goals, Patient safety Program

CQI 7 CLINICAL AUDIT

1. POLICY:

The Policy lays down processes and criteria (parameters) to monitor and assess retrospective/concurrent clinical care provided to the patients in the hospital and to disseminate and share the observations with the hospital environment to improve existing level of clinical care and patient safety.

2. PURPOSE:

Purposes are as follows:

To improve clinical outcomes, optimize resource utilisation, in seamless delivery of clinical care to achieve patient satisfaction.

To retrospectively/concurrently evaluate conformance of clinical care to the norms and standards of modern medical practice and to identify specific parameters for its improvement.

3. SCOPE:

(a) Hospital wide clinical, diagnostic, imaging and support departments.

(b) Quality Cell with Departmental Quality Improvement Teams DQITs.

4. RESPONSIBILITY:

HOD respective departments and DQITs.

5. DISTRIBUTION:

Quality Cell, Quality Assurance manager, HOD, clinical departments

6. DEFINITIONS:

Clinical Audit.

A systematic review of clinical care provided against explicit criteria with a view to improve patient care outcomes.

7. ABBREVIATIONS:

Abbreviations are as follows:

1) HOD Heads of the department

2) MS Medical Superintendent

8. PROCEDURE:

1) Quality Assurance Committee shall periodically visit clinical as well as supportive services to regularly assess care provided to the patients.

2) The committee shall meet periodically to discuss deficiencies of service observed during its visits, as well as, issues related to patient care services brought to its notice.

3) The committee shall decide on remedial measures to rectify observations resolve issues. It shall also decide on measures to improve the quality of patient care.

4) The committee shall periodically hold a patient care review meeting to discuss patient care services with following objective:-
5) To review the overall work carried out in the departments including outpatient department, inpatient department and emergency department.
6) To discuss the institutional deaths.

7) The following shall attend the meeting:-

- Medical Superintendent — Chairperson / Vice Chairperson
- HOD of clinical departments — Members
- Quality Head — Member
- Nursing Superintendent — Member
- Director- Laboratory services — -do-
- Manager- Radiology Services — -do-
- Medical Record Officer — Member Secretary/convener

8) The meeting shall be presided by the Medical Superintendent.
9) All audit documents and audit report shall be placed on table. However name of the audit committee member who audited patient record and name of the patient shall not be disclosed.
10) All important points of discussion and decisions taken during meeting shall be recorded.
11) In the process of Clinical audit name of the patients and the hospital staff who conducted the clinical audit not be disclosed in public discussions and conference.

9. PARAMETERS FOR CLINICAL AUDIT:

The hospital shall follow the following parameter to audit the patient care services:-

1) **Part – I : Patient Identification data**
   - **a.** Unique Hospital Identification (UHID) Number
   - **b.** Registration (OPD/IPD) Number
   - **c.** Month of admission
   - **d.** Patient Name (will be withheld)
   - **e.** Bed No
   - **f.** Diagnosis on admission
   - **g.** Final diagnosis
   - **h.** No of days in hospital
   - **i.** Final Outcome – (Discharged/Expired/LAMA/Transferred)

2) **Part - II: Particulars of Clinician treating the case**
   - **a)** Specialty
   - **b)** Status (Fulltime, part time, honorary)

3) **Part - III : Relating to the records**
   - **a)** Has the patient been adequately assessed?
   - **b)** Has the assessing doctor put own name, signature, time and date on the record?

c) Are history, physical examination, diagnosis and treatment details available?
d) Have laboratory and radio diagnostic reports been attached and entered at appropriately?
e) Are progress notes relevant and adequate to follow the clinical course?
f) Has the discharge summary prepared appropriately?

4) Part IV : Relating to Diagnosis

a) Was provisional diagnosis made and endorsed after the admission?
b) Whether the provisional diagnosis tallies with the final diagnosis?
c) Whether laboratory findings support final diagnosis?
d) Whether radiological findings support final diagnosis?
e) Are laboratory investigations sufficient in relation to nature and gradient of illness?
f) Was any laboratory investigation unnecessarily asked for?
g) Was any radiological examination superfluous?
h) Was any radiological examination indicated and yet not asked for?
i) Whether the preoperative diagnosis tallies with the post operative diagnosis?
j) Was there any avoidable delay in arriving at the diagnosis?

5) Part V : Relating to treatment

a) Are the operation notes adequate?
b) Are the anesthesia notes adequate?
c) If the case required consultation by other specialists, was the same sought for?
d) Was the treatment given generally acceptable or open to question?
e) Whether the overall treatment given to the patient can be judged from the data
f) endorsed in the medical record?
g) Whether the clinician exceeded the privilege or limits of his or her training and
h) competence?
i) Whether there was adequate indication for surgery?
j) Whether any normal organ or tissue removed?
k) Whether any part of the treatment given was superfluous?
l) Whether the patient refusal to undergo a prescribed treatment was justifiable?

6) Part VI : Relating to End result

a) Was the final result in consonance with the nature of the case and expected prognosis?
b) Were the complications foreseeable and/or avoidable?
c) Was death foreseeable and/or avoidable?

7) Part VII : Relating to Complications and Cross-infection

a) Whether there was any hospital cross infection which could have been
b) avoided?
c) Whether there was postoperative infection which can be avoided?
d) Whether there was a complication because of faulty surgical operation?
e) Whether there was postoperative complication which could have been avoided?
f) Whether there was any anesthetic complication which could have been avoided?

8) Part VIII : Relating to Operation cases

a) Was consent for anesthesia and operation obtained?
b) Was there adequate indication for surgery?
c) Was any normal tissue removed and if so was it justified?
d) Was pre anesthetic assessment for anesthesia done and recorded?

9) Part IX :Relating to the Length of Stay of Patient

a) Was there any inordinate delay between admission and surgical operation?
b) Whether there was inordinate delay between admission and commencement of Specific/definitive treatment?
c) Whether there was inordinate delay between admission and ordering of Laboratory or radiological investigations?
d) Whether there was inordinate delay in arriving at final diagnosis?
e) Was the length of stay of the patient in hospital longer than was really necessary?
f) Did he or she develop any ailment during stay in hospital necessitating longer stay?

10) Part X :Relating to Post event analysis

a) Whether post event analysis of CPR conducted and recorded?
b) Whether post event analysis of blood transfusion conducted and recorded?
c) Whether post event analysis of adverse drug event conducted and recorded?

10. AUDIT AS A TOOL FOR QUALITY CONTROL:

An audit is a systematic and official examination of a record, process or account to evaluate performance. Auditing in health care organization provide managers with a means of applying control process to determine the quality of service rendered. Nursing audit is the process of analyzing data about the nursing process of patient outcomes to evaluate the effectiveness of nursing interventions. The audits most frequently used in quality control include outcome, process and structure audits.

(a) Outcome audit:

Outcomes are the end results of care; the changes in the patients' health status, which can be attributed to delivery of health care. Outcome audit determines results of specific nursing intervention on patients. The audit reflects the outcome accurately and demonstrates the quality of care provided. Examples of outcomes traditionally used to measure quality of hospital care include mortality, hospital induced morbidity, and length of hospital stay.

(b) Process audit:

Process audit measures the process of care or how the care was administered. It is task oriented and focuses on whether or not practice standards are being fulfilled. These audits assumed that a relationship exists between the quality of the nurse and quality of care provided. Examples are time taken for nursing evaluation, to send samples for lab investigations and to initiate treatment after admission, documenting adverse drug reaction, evaluation of vulnerability and risk fall assessment.

(c) Structure audit:

Structure audit monitors the physical structure in which patient is cared for, such as nursing service, medical records and environment.

11. CLINICAL AUDIT INDICATORS:

Following will be clinical audit indicators:-

MEDICAL RECORDS DEPT (MRD)			
(a)	Mortality Rate	Number of Deaths ---------- x 100 Number of discharges & deaths	
(b)	Percentage of medical records not having discharge summery	Medical records without discharge summary ---------- ------ x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.
(c)	Percentage of medical records not having codification as per International Classification of Diseases (ICD)	Number of medical records not codified as per ICD ---------- ---------- x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.
(d)	Percentage of medical records with incomplete or improper consent	Percentage of medical records with incomplete or improper consent ---------- ---------- x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.
(e)	Percentage of medication charts with error prone abbreviations	Percentage of medication charts with error prone abbreviations ---------- ---------- x 100 Number of medication charts reviewed	Monitoring can be concurrent or for past 3 months admissions.
(f)	Percentage of missing medical records	No of missing medical records ---------- x 100 Total number of records	

12. CONCLUSION:

Concern for quality of service constitutes the core responsibility of the hospital to the public. Audit helps to ensure that the gap between quality of clinical care ideally desired and practically feasible is narrowed optimally. Clinical audit is a tool to assure sustained quality of clinical care.

CQI 8 Policy on collection and analysis of incidents

ROM 5-c Risk management

I. POLICY:

To ensure safety of all patients, visitors and staffs. All hospital staff shall remain vigilant to identify and report events which can or have the potential to compromise safety and security of patients, visitors, staffs, building and property of the hospital, to enable hospital to initiate corrective and preventive measures also to ensure the collection and analysis of all the complaints and feedback from the patients/visitors of seven hills hospital.

II. PURPOSE:

The purpose is as follows:-

1) To ensure prompt assessment and response to all potential incidents this can result in injury to Patients, employees, visitors, building or property
2) To accurately document threats or actions of violence, inappropriate sexual behavior, fires and environmental emergencies
3) To accurately document incidents of property damage
4) To accurately assess staff response to the events
5) To identify contributing factors/conditions that led to the incident and
6) To identify remedial measures to prevent the recurrence of similar incidents in future.
7) To provide accurate incident database and timely information for an ongoing incident.
8) To provide proper attention towards all type of patient complaints received through various modes such as verbal and written

III. SCOPE :

All hospital employees

IV. RESPONSIBILITIES:

1. Every hospital employee is responsible for safety, security and reporting of safety concerns and incidents to their immediate supervisor.
2. Every hospital employee shall inform the incident immediately on its occurrence.
3. Every hospital employee shall initiate INCIDENT REPORT FORM regardless of the severity of the incident/injury.
4. Incident Report must be submitted prior to the end of the shift.
5. In case of patient, identification and complete details of the patient will be noted and intimated.
6. Injury to the patient, visitor or the staff shall be immediately attended to by the nursing staff. In case of patients, the concerned RMO and the Consultant shall be immediately informed by the nurse.
7. In case of visitors and employees, they will be immediately taken to ER (Casualty) for first aid and further management, if needed.

8. In case of building and property, Service dept, security, store and concerned department will be informed immediately.
9. The supervisor receiving the incident report shall immediately inform the department Head and shall initiate remedial action to contain and minimize the impact of injury/damage.
10. Hospital Safety Officer shall maintain data base of all reported incidents. All Incident Reports will be assigned a severity rating and categorized according to type of injury/damage by the HSO.
11. HSO will analyze the data base and shall suggest preventive measures based on identified root causes. HSO shall also analyze the instant incident and shall initiate immediate remedial measure to control the damage.
12. Hazardous Materials (Hazmat) spills shall also be immediately reported and attended to as per Hazmat protocol.
13. The incident details will be noted on Incident report Form only. The incident will not be recorded on the patient case file.

V. DISTRIBUTION:

All nursing stations, all patient care areas, Hospital Safety Officer, Quality Cell

DEFINITIONS:

Event: Any unusual or unexpected occurrence that results in injury or injury to patients, staff, or visitors including threats or actions of violence, inappropriate sexual behavior, fires and environmental emergencies and any other event that results in damage or potential damage to or loss of hospital property, patient property or specified employee property.

Near Miss: The likely occurrence of (impending) event is realized just at the last moment and the event is aborted or actions are taken to immediately terminate it in its course and thus the event does not take place. As for example a person falling is immediately caught by another accompanying person, the fall is interrupted, thus the person who was falling does not get fall.

Adverse Event: The event takes place and some degree of harm or injury occurs, but it has only trivial impact. For example, person falls from the bed but does not have any overt/covert injury. Adverse events may be preventable or non-preventable. It includes injury related to medical management which are not complications arising out of the disease process itself. Adverse events may be preventable or non-preventable.

Sentinel Event: An unexpected event/incident leading to enduring loss of sensory, motor, physiological or psychological function or impairment, which was neither present at the time when services were sought (OPD/IPD/Emergency) nor was related to the underlying disease condition. The impairment lasts for a minimum period of two weeks.

Feedback-The supply of an input to some process or system as a function of its output

VI. ABBREVIATION:

(a)	IP	Inpatient
(b)	OP	out Patient
(c)	ER	Emergency Room (Casualty Dept)
(d)	HazMat	Hazardous Material
(e)	HSO	Hospital Safety Officer
(f)	PSO	Patient Safety Officer
(g)	PSM	patient service manager

VII. PROCEDURE DEATIL:

The following list of incidents is not exhaustive; it is only a suggestive guideline. However any incident which has the potential to endanger patients, visitors and staffs or has the potential to damage must be immediately reported:-

(a) Surgical events:

1) Surgery performed on the wrong body part
2) Surgery performed on the wrong patient
3) Wrong surgical procedure performed on the wrong patient
4) Retained instruments in patient discovered after surgery/procedure
5) Patient death during or immediately post surgical procedure
6) Anesthesia related event.

(b) Incidents associated with device or product:

1) The use of contaminated drugs, devices, products supplied by the organization
2) The use or function of a device in a manner other than the device's intended use
3) The failure or breakdown of a device or medical equipment
4) Intravascular air embolism

(c) Patient protection events:

1) Patient Injury, serious disability, death due to absconding from the health care facility.
2) Patient suicide, attempted suicide, or deliberate self-harm.
3) Intentional injury to a patient by a staff member, another patient, visitor, or others.
4) Any incident in which a line designated for oxygen or other came to be delivered to a patient and contains the wrong gas or is contaminated by toxic substances.
5) Nosocomial infection or disease causing patient death or serious disability.

(d) Environmental events:

A burn sustained from any source
A slip, trip, or fall
An electric shock
The use of restraints or bedrails

(e) Care management events:

1) Patient condition deterioration, serious disability or death associated with a hemolytic reaction due to the administration of ABO-incompatible blood or blood products

2) Maternal injuries, serious disability or death associated with labor or delivery in a low-risk pregnancy.

3) Disability or Death developed after sterilization surgery

4) Medication error leading to the death or serious disability of patient due to incorrect administration of drugs, for example:-

- Omission error.
- Dosage error.
- Dose preparation error.
- Wrong time error.
- Wrong rate of administration error.
- Wrong administrative technique error.
- Wrong patient error.

5) Deterioration of patients' condition, serious disability or death associated with an avoidable delay in treatment or response to abnormal test results

6) Criminal events.

7) Any instance of care ordered by or provided by an individual impersonating as a clinical member of staff.

8) Abduction of a patient from the patient care facilities or hospital premises.

9) Sexual misconduct/ harassment/ assault on a patient (which is not part of clinical management), and on visitor or staff within the hospital or hospital premises.

10) Injury trivial or significant or death of a patient or staff member resulting from a physical assault or other crime that occurs within the premises of the health care facility.

11) Miscellaneous

- Patient sustaining burns.

12) Diagnostic errors.

- Imaging errors.

13) Violation of patient's rights.

14) Consents not obtained prior to procedure/surgery.

15) Malfunctioning equipments/instruments.

16) Malfunction of facilities (Lifts, escalator, broken sofa/chair, broken glass, falling objects, bursting of pipes and conduits).

17) Missing medical record.

18) Damage / loss to hospital's building and structures.

19) Motor vehicle accidents.

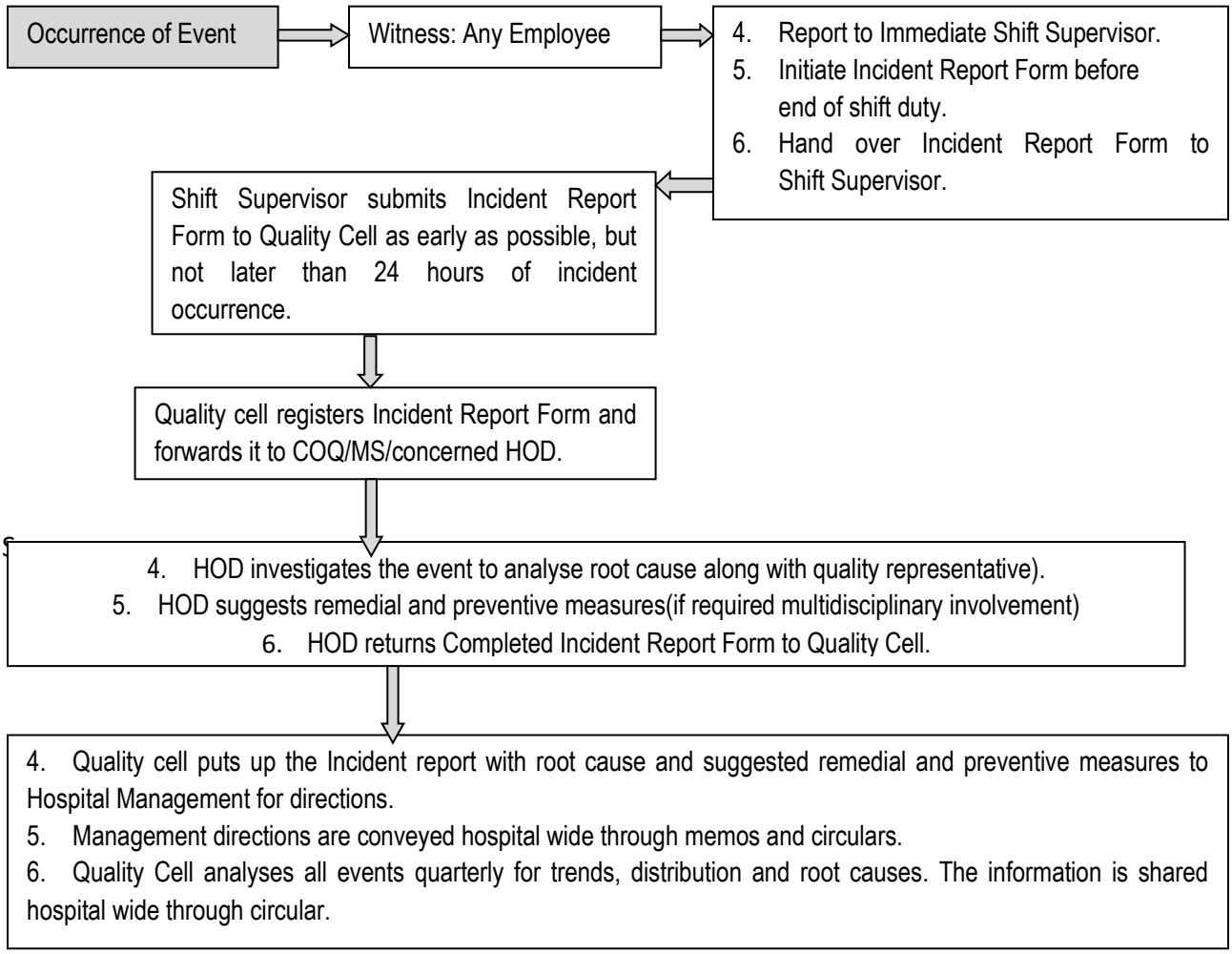
20) Incident shall be reported immediately on its occurrence to the individuals' supervisor and INCIDENT REPORT FORM completed and submitted by the person who witnesses the incident prior to the end of the shift.

21) The supervisor immediately informs HOD and initiates measures to control and minimise the damage.

22) Depending on the severity of the incident HSO, PSO and Incident Commanders of various emergency codes immediately respond and take control of the incident.

23) HSO will maintain the database of all reported incidents. HSO will periodically analyse the data for trends, recurrences, root cause and remedial preventive measures.

- **<u>INCIDENT REPORTING</u>:** PROCESS FLOW



For all In-patients the feedback forms shall be provided to Patients during discharge process by the nurses. All the filled feedback forms shall be collected from the patients before leaving the ward and other patient care areas and submitted to department of administration on the next working day. They shall analysis all the feedback forms and prepare patient satisfaction index in monthly basis. The patient satisfaction index results shall be discussed in the quality assurance committee meeting.

CQI 9 Analysis of Sentinel Events

I. POLICY:

The incidences of sentinel events occurring in the hospital shall be brought down to lowest possible, if not eliminate them altogether. All sentinel events shall be investigated and analysed thoroughly for the cause and contributory circumstances to work out effective and implementable remedial measures.

II. PURPOSE

1. To ensures prompt response to all incidents resulting in injury to patients, visitors or staffs.
2. To immediately investigate, identify and analyze the cause and contributory circumstances.
3. To initiate remedial measures to prevent occurrence of such event in future.

III. SCOPE

It includes patients, visitors and hospital employees

IV. RESPONSIBILITY

Sentinel Event Investigation Committee and HOD.

V. DEFINITIONS

Definitions are as follows:

1. Event: An unusual or unexpected occurrence, which may result in injury/injuries, damages or has potential to damage, cause loss of property belonging to patient, visitor, staff or hospital, threat or violent action, inappropriate sexual behavior, fires and environmental emergencies which may harm patient, visitor, staff or hospital.

2. Near Miss: A near miss is defined as any process variation which did not affect the outcome but for which a recurrence carries a significant chance of a serious adverse outcome. The likely occurrence of (impending) event is realized just at the last moment and the event is aborted or actions are taken to immediately terminate it in its course and thus the event does not take place. As for example a person falling is immediately caught by another person, the fall is interrupted, thus the person who was falling is not hurt.

3. **Adverse Event**: It is defined as any process variation or event which causes harm or injury but the harm, hurt or injury has only trivial impact. For example, person falls from the bed but does not have any overt/covert injury.

4. **Sentinel Event**: It is defined as an unexpected event/incident leading to enduring loss of sensory, motor, physiological or psychological function or impairment, which was neither present at the time when services were sought (OPD/IPD/Emergency) nor was related to the underlying disease condition.

5. **Root Cause Analysis**: A systematic process to objectively identify the causal factor(s) based on factual evidence, which contributed to the occurrence of an event/incidence.

6. **Hazardous Conditions**: Circumstances which significantly increase possibility of adverse outcomes

VI. DISTRIBUTION

Hospital Wide

VII. ABBREVIATIONS

Abbreviations are as follows:

CEO Chief Executive Officer
VP Vice President
HOD Heads of the Department
RCA Root Cause Analysis

VIII. PROCEDURE

The procedure is as follows:-

1. Sentinel Event Committee

The Hospital head Medical Director / Medical Superintendent shall constitute an inter department committee, as and when a sentinel event is reported, by Quality cell, for in-depth investigation and analysis of the event.

Composition of Sentinel Event Investigation Committee. The committee shall have representation of departments which are expected to substantially contribute and facilitate in depth analysis of the event. Depending on the seriousness/enormity of the event Medical Director may nominate an Investigation Committee laying down the terms of reference and composed of all the following or some of the following appointments:-

1) CEO.

a) Vice President (Medical).
b) Vice president (Operations).
c) Medical Superintendent.
d) Head of Departmental.
e) Any other member deemed necessary by hospital management.

2) Duties of the Committee.

Following are the duties of the committee:-

a) Objectively investigates an occurrence or process variation.
b) Determines whether the event or process variation meets the definition of a Sentinel event.
c) Identifies the exact cause for the event.
d) Postulates and implements remedial measures to prevent such incidences in future.

2. LIST OF SENTINEL EVENTS

Following is the list of sentinel events for guidance. Events of similar nature may be incuded at the discretion of the CEO/Management Committee:-

1) Surgical events.

a) Surgery performed on the wrong body part
b) Surgery performed on the wrong patient
c) Wrong surgical procedure performed on the wrong patient
d) Retained instruments in patient discovered after surgery/procedure
e) Patient death during or immediately post surgical procedure
f) Anesthesia related event

2) Patient death or serious disability associated with device or product.

a) The use of contaminated drugs, devices, products supplied by the organization
b) The use or function of a device in a manner other than the device's intended use
c) The failure or breakdown of a device or medical equipment
d) Intravascular air embolism

3) Patient protection events.

a) Patient death or serious disability due to absconding from the health care facility.
b) Patient suicide, attempted suicide, or deliberate self-harm resulting in serious disability.
c) Intentional injury to a patient by a staff member, another patient, visitor, or other.
d) Any incident in which a line designated for oxygen or other came to be delivered to a patient and contains the wrong gas or is contaminated by toxic substances.
e) Nosocomial infection or disease causing patient death or serious disability.

4) Environmental events.

a) A burn sustained from any source
b) A slip, trip, or fall
c) An electric shock
d) The use of restraints or bedrails

5) Care management events.

a) Patient death or serious disability associated with a hemolytic reaction due to the administration of ABO-incompatible blood or blood products
b) Maternal death or serious disability associated with labour or delivery in a low-risk pregnancy
c) Death or disability developed after sterilization surgery
d) Medication error leading to the death or serious disability of patient due to incorrect administration of drugs, for example:-

- Omission error.
- Dosage error.
- Dose preparation error.

- Wrong time error.
- Wrong rate of administration error.
- Wrong administrative technique error.
- Wrong patient error.

e) Patient death or serious disability associated with an avoidable delay in treatment or response to abnormal test results

f) Criminal events.

g) Any instance of care ordered by or provided by an individual impersonating as a clinical member of staff.

h) Abduction of a patient from the patient care facilities or hospital premises.

i) Sexual misconduct/ harassment/ assault on a patient (which is not part of clinical management), visitor or staff within the hospital or hospital premises.

j) Death or significant injury of a patient or staff member resulting from a physical assault or other crime that occurs within the premises of the health care facility.

3. REPORTING OF SENTINEL EVENTS

1) All sentinel events occurring in the hospital shall be reported to their Departmental Head, Medical Superintendent and Chief Of Quality immediately but not later than 72 hours of occurrence.

2) Sentinel events must be reported on INCIDENT REPORT FORM appropriately filling up required information and a brief description of the sentinel event as narrative.

3) A sentinel event involving patient in clinical area will be reported by the nursing staff. The nurse identifying the Variance/Sentinel Event, or the nurse to whom the Variance/Sentinel Event is first reported, shall be responsible for initiating the INCIDENT REPORT FORM prior to laying down scheduled shift of duty. The attending physician shall be notified immediately when the variance involves a patient.

4) If a patient or visitor is injured in a common area (sidewalks, stairwell, elevator, waiting area and so on) the hospitals Security shall be responsible to initiate INCIDENT REPORT FORM prior to laying down scheduled shift of duty.

5) In addition to the above any hospital employee who identifies Variance or witnesses a Sentinel Event or to whom the Variance/Sentinel Event is first reported, shall initiate INCIDENT REPORT FORM prior to laying down scheduled shift of duty.

6) In addition to internal hospital reporting; sentinel events shall be reported to the relevant regulatory bodies as per the law of land.

4. INVESTIGATING SENTINEL EVENT

1) Sentinel event is a serious incident in the hospital. It therefore, requires thorough investigation and analysis of the cause(s). A sentinel event investigation committee with members mentioned earlier shall be constituted. The terms of reference shall be clearly spelt out in the convening order of the committee. The principles of natural justice as mentioned below, shall be followed by the Investigation Committee:-

2) Persons involved in an incident shall be given adequate opportunity to present their case.

3) Committee members hearing the case shall be unbiased.

4) The oral evidence by witnesses shall be recorded by the Presiding officer of the Committee serially as narrative and in the chronological occurrence of the events in minute details. The oral evidence of the witnesses will be corroborated from other witnesses/ documentary proof.
5) The documentary evidences issued/authenticated by appropriate authorities shall only be accepted in original. Certified photocopies will not be accepted.
6) Principles of the law of evidence shall be strictly adhered to.
7) Findings of the committee shall be chronologically recorded and Root Cause clearly brought out based on recorded evidence.
8) Remedial measures shall be suggested based on the findings of the committee. The remedial measures should focus on procedures, processes, protocols and system as a whole.
9) The committee may recommend penal action on persons, if it is included in its terms of reference or if the committee strongly feels so.
10) Investigation Report- The committee after going through the recorded and documentary evidence produced before it, analysis of its findings to objectively, clearly and unambiguously bring out Root Cause and pin pointing the responsibility and deficiencies of the processes, protocols and the system as whole in a report form along with the evidences shall submit it to the hospital authority who convened the Investigation Committee. The report shall be submitted within 15 days from the date of convening order.
11) Action Plan-The hospital management will discuss the investigation report, its recommendations and implications thread bare and shall approve/disapprove the report.
12) If the report is approved, the management shall identify changes, if any, to be made in the existing procedures, processes, protocols and the system as a whole with specific objectives to prevent such occurrences in future.
13) The management shall direct implementation of approved changes in the existing system by target dates.
14) If the management does not agree with the report of the Investigation Committee, it will record the reasons for disagreement. It may then either seek further details to clarify the findings which the management does not agree with, or it may decide to get the incident reinvestigated with particular reference to the reasoned disagreement to the findings.
15) The final decision on the prevention of future incidents and the need to modify or change a particular process, procedure, protocol or the system itself shall rest with the hospital management.

5. NEAR MISS AND ADVERSE EVENTS

1) All incidents of variance from the guidelines or processes and procedures and events that either just missed hurting/damaging a patient, visitor, staff, equipment or property or when the hurt/damage had been minor or inconsequential are require to be reported. The events just mentioned have been classified as NEAR MISS; when the event could be aborted just before its occurrence and ADVERSE EVENT; when the event that took place caused only inconsequential hurt or damage.

2) Near Miss and Adverse Events shall also be immediately reported on the INCIDENT REPORT FORM as per para 23 to 25 above. However the incident shall be reported to the immediate supervisor and HsOD. The supervisor shall inform VP (Medical) and VP (Operations). Incident report form shall be submitted to Quality Cell as early as possible, but not later than 72 hours of the incident taking place.

3) The HOD will conduct preliminary inquiry to find root cause. The Incident Report Form shall be forwarded to concerned HOD by Quality Cell. HOD will write the analysis of the event, identify the root cause and will suggest remedial and preventive measures to avoid such incidents in future on the INCIDENT REPORT FORM. The Form duly completed shall be returned to Quality Cell within a week.

4) The incident report form along with the observations and recommendations of the HOD shall be forwarded to hospital management for approval of suggested remedial and preventive measures.

5) The hospital management may approve the suggested measures *mutatis mutandis* or may direct a more intensive analysis by an appropriate senior person or through an Inquiry Committee. Following Near Miss and Adverse Events may be intensively analysed:-

6) Confirmed transfusion reactions.

7) Significant adverse drug reactions.

8) Significant medication errors and hazardous conditions.

9) Major discrepancies or patterns of discrepancies, between preoperative and postoperative (including pathologic diagnoses, including those identified during the pathologic review of specimens removed during surgical and invasive procedures.

10) Significant adverse events associated with the use of anaesthesia.

11) After Root Cause Analysis, the hospital management may direct some changes to improve performance. The plan may include the following:-

12) Identify who will implement the plan.

13) When actions will be implemented.

14) How monitoring for effectiveness will be conducted.

15) When to review performance of improved plan.

16) The improvement plan will be intimated to Quality Cell. The HOD shall communicate results from the improved plan to Quality Cell.

6. CONFIDENTIALITY OF DOCUMENTS

1) All documents of the Investigation Committee including oral and written documents produced as evidence, its findings, root cause analysis and recommendations shall be marked “CONFIDENTIAL” on top of each page. All pages will be serially numbered including those produced as evidence and attached as appendices, annexure, site maps and photographs.

2) The management strategy and action plan approved by it to prevent future incidents shall also be marked as “CONFIDENTIAL”.

3) All incidents identified as Sentinel Event shall be treated as “CONFIDENTIAL”. All employees of the hospital and investigation committee members will not release any information related to the incident to any individual or agency including patient, patient’s family, police, media, social organizations and so on.

4) Medical Director / Medical Superintendent in consultation with the legal advisor may release limited confidential information to the patient, family or the police.
5) Medical Director / Medical Superintendent shall inform unanticipated outcomes of clinical care classified as sentinel event to the patient and the patient's family as and when considered appropriate.

IX. RECORDS AND FORMATS

Incidence Report Form, Record of Safety Committee meetings, Entire documents of Investigation Committee and approved improvement plan.

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

M.G.M Medical College and Hospital, Kamothe	Facility management & safety		
	Doc.No. NABH/MGMH/KAM/FMS	Effective Date: 01/01/2018	Revision No: 001
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Prepared by :	Designation : Chief Of Quality Name: Dr. Gauri Shivani
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CONTENTS

Sr.No	Standards
FMS. 1	**The organisation has a system in place to provide a safe and secure environment.**
FMS. 2	The organisation's environment and facilities operate in a planned manner to ensure safety of patients, their families, staff and visitors and promotes environment friendly measures.
FMS. 3	The organisation has a Program for engineering support services and utility system.
FMS. 4	The organisation has a Program for bio-medical equipment management.
FMS. 5	The organisation has a Program for medical gases, vacuum and compressed air.
FMS. 6	The organisation has plans for fire and non-fire emergencies within the facilities.
FMS. 7	The organisation has a plan for management of hazardous materials.

FMS 1. The organisation has a system in place to provide a safe and secure environment

I. POLICY:

. The hospital has system in place to provide safe and secure environment, with patient safety devices installed. M.G.M Medical Collage and Hospital, Kamothe is also a 'SMOKING FREE ZONE'. Smoking is strictly prohibited in the hospital.

II. PURPOSE:

. The Purposes are as follows:

- To provide safe, Smoking free environment to Patients, Patients family, Visitors, Doctors, Nurses, Paramedical Staffs and other employees (including contract employees)
- To set forth the policy mandating M.G.M Medical Collage and Hospital Kamothe a "Smoke Free" Facility

III. SCOPE:

. This policy applies to all places in the Hospital premises and to all patients, Patient family, Visitors, Doctors, Nurses, Paramedical Staff and other employees (including contract staff).

IV. RESPONSIBILITY:

. Top management is responsible to ensure and monitor compliance of this policy and procedure.

All Doctors, Nurses, Paramedical Staff, HOD's, In charges, and all other employees (including contract staff) are responsible to implement this Policy and Procedure

V. DISTRIBUTION:

. Medical Administration, Nursing Administration, General Operations, All HOD / In-charges

VI. ABBREVIATION:

. Abbreviations are as follows:

HOD – Head of the division / department
DMO – Deputy Medical Officer
BLS – Basic Life Support
ALS – Advanced Life Support
CPR – Cardio Pulmonary Resuscitation
EMS - Environmental Management System
RSO – Radiation Safety Officer

VII. PROCESS DETAILS:

1. Safety Committee:

The aim of the committee is to ensure and improve the safe working conditions of all who work and study within Hospital. This involves both increasing the awareness of potentially dangerous or unsafe circumstances and taking appropriate measures to overcome these situations.

1) If you have any suggestions for improving safety, or feel that there are hazards within the department / hospital, then you should contact the Hospital Safety Officer or designated representative.

2) The said committee would comprise of following members to carry out individual & joint responsibilities to meet its aim.

Hospital Safety & Disaster Management Committee at hospital.

Aim:-A Hospital Safety & Disaster management Committee as per the following terms of reference is hereby established.

To Coordinate, implement and monitor the 'Hospital-wide safety program' that specifically includes the 'Laboratory safety program', 'Radiation Safety Program' and "Occupational health and safety Program"

Key Objectives**:-**The hospital safety & Disaster management committee's key objective is to provide a safe and secure environment to both patients and staffs

Specific Areas of Responsibility:-

1) Develop and issue policy on patient, staff and visitor safety and security.

2) Develop and issue policy on prevention, management and control of emergency situations within hospital and outside hospital.

3) Develop plans for handling fire and non fire emergencies.

4) Conduct training on all aspects of safety to hospital employees and maintain a record of the same.

5) Conduct various emergency mock drills and maintain record of the same.

6) Monitor occupational health and safety of employees.

7) Ensure safe water supply and maintain records of regular water checks carried out in the hospital.

8) Conduct various Risk assessments to maintain safe and secure environment

9) Hazardous materials management across the hospital

Frequency of Meetings:-Meetings will be held at least once in three month. In addition, the Chairperson, safety committee may convene one or more special meetings of the safety committee.

Record Keeping:-Records of minutes and papers relating to safety committee meetings will be kept with Convenor

a. Hospital Safety Officer

Authority

1) Appointed by Medical Superintendent.
2) Has the authority to enter all areas of the Department, assess safety practices

Responsibilities

1) Administer safety policies of the hospital and department
2) Liaise with hospital authorities and other regulatory authorities
3) Inspect laboratories and other areas to ensure safety practices are being observed
4) Head of Department on new and proposed legislation, together with safe work practices needed for compliance
5) Ensure suitable personnel are appointed to positions to oversee biohazards, chemicals and radiation matters within the respective department
6) Prepare Departmental procedures dealing with health and safety issue within the Department
7) Identify training needs and arrange for Departmental staff and student training in consultation with Hospital Officers
8) Must ensure that all tasks associated with and required for the position of Chairperson of the Hospital Safety Committee are undertaken

b. Radiation Safety Officer(RSO)

Authority

1) Reports directly to Hospital Safety Officer on all radiation issues
2) Advises and reports to the Safety Committee on all matters pertaining to radiation safety, assumes control in any emergency involving radiation hazards and notifies the Safety Officer
3) Has the authority to enter all areas of the hospital, to conduct tests required for monitoring, safe handling and disposal of radiation sources
4) RSO's must attend approved radiation safety training course by AERB

Responsibilities

1) Administer the radiation policies of the Hospital
2) Liaise with the Hospital Safety Officer and other regulatory authorities
3) Review all orders for radiation materials or equipment before purchase
4) Maintain an inventory of radiation sources within the hospital
5) Advise the Safety Committee on new and proposed legislation, together with safe work practices needed for compliance
6) Ensure that suitable personal and other monitoring devices are provided where required, kept in good working order, properly used and calibrated at least once each year
7) Identify training needs and arrange training for staff and students in consultation with Safety Officer.

c. Hospital Fire safety Officer

Responsibilities of Fire Officer

1) 1. To advise the Head of Departments and Departmental Fire & Safety Personnel on matters relating to fire precautions and emergency procedures.
2) To liaise with State Fire authority for fire Safety protection requirements.
3) To carryout Fire audit once in six months through authorized agency and submit report to the State Fire Department.
4) To rectify the discrepancies and shot comings found during Fire audit and submit satisfactory completion to the State Fire dept.
5) To carry out weekly inspections in the area of responsibility regarding escape routes, fire alarm indicator panels, repeater panels, water pumping system and alarm tests.
6) To ensure that new staff members are given instruction on Fire Emergency Procedures (in co-operation with the HR department)
7) To provide refresher training to the existing staff once in six months , and that each area for which they are responsible.
8) To ensure that fire drills are carried out at least twice per annum.
9) To ensure that all fire incidents are reported through incident report form to the designated Authority.
10) To ensure that in conjunction with medical authorities are in place for assisting the evacuation of medically impaired.
11) 11. To check the fire signages are fixed properly and to take necessary steps to fulfill deficiency...
12) Check the census of Fire Extinguishers and check their health, if required necessary arrangement for filling.

2. Installation of Patient Safety devices

The organization ensures that patient safety devices are installed across the organization and inspected periodically, for ex. grab bars, bed rails, sign postings including warning signs like radiation or biohazard, safety belts on stretchers and wheelchairs, safety alarms, call bells, fire safety devices etc.

3. No Smoking Policy of the hospital

This policy is frame to create awareness among the patients / visitors and employees of the hospital. Smoking shall be prohibited in the premises of the M.G.M Medical Collage and Hospital Kamothe Hospital.

1) The administration of hospital shall prohibit the sale and use of smoking materials throughout the facility.
2) The hospital has been declared a “no smoking” zone.
3) All patients and their attendees are counselled and educated about the adverse effects of smoking on people’s health due to active and passive smoking & encouraged to give up smoking.
4) Signage for “no smoking” are displayed in both outpatient and inpatient care area of the hospital.

5) Exceptions - The Hospital recognizes that for some patients there may be medical reasons to permit a patient to smoke while hospitalized. A written physician's order must be obtained and the specific criteria met.

S. No.	STEPS	RESPONSIBILITY
PATIENTS		
1	Patients are not permitted to smoke at Hospital premises.	Security Staff
2	Patients are informed that Hospital is a smoking free zone at the time of admission.	Admission Executive
3	However it is recognized that in some circumstances allowing a patient to smoke may be the safest option available. In such cases the treating Doctor should decide on alternatives like Nicotine replacement Therapy - Narcotic patches / chewing gum. The same to be recorded in the Doctors notes of 'In Patient Record' by treating Doctor or his / her team member, if advised.	Treating Doctors
4	If Patient become angry or violent on being asked not to smoke, the same to be informed immediately to Sister In charge / Nursing Supervisor, Treating Doctor or his / her team member and DMO for necessary action.	Staff Nurse
PATIENT FAMILY AND VISITORS		
1	Patient Family members and Visitors are not allowed to smoke at Hospital Premises. If any staffs find a visitor or patient family member smoking, the staff should explain that this Hospital is a 'SMOKING FREE ZONE.	Security Staff & all other staff of the Hospital
2	If visitors / Patient family member react adversely, the same should be intimated to Senior Staff / DMO / Treating Doctor or his / her team member / Security staff for necessary action.	Security Staff & all other staff of the Hospital
EMPLOYEES		
1	All employees including contract employees are not allowed to smoke at Hospital premises.	Security Staff & all other staff of the Hospital
2	If any employee is found breaching this policy will be subjected to disciplinary action	Security Staff & all other staff of the Hospital
GENERAL		
	"No Smoking" signage board to be displayed prominently at appropriate places of Hospital.	Security Staff & all other staff of the Hospital

4. Safety Inspection Rounds and records

The hospital undertakes periodic inspection of the Hospital safety precautions undertaken either internally in regular intervals or with the help of an appropriate external agency at the time of requirement. The reports of the Hospital safety inspections are reviewed by the safety committee. The internal Hospital safety rounds shall conduct quarterly by the hospital Safety officer.

1) **The Hospital Safety Officer or Committee may require quarterly assessment of the following areas**:
   - **a)** Environmental (lighting, dusts, gases, sprays, noises)
   - **b)** Hazardous materials (flammable and caustic)
   - **c)** Equipment (biomedical equipments etc.)
   - **d)** Power equipment (boilers, motors, etc.)
   - **e)** Electrical equipment (switches, breakers, fuses, outlets, connections).
   - **f)** Personal protective equipment (safety glasses, ventilators, radiation safety aprons etc).
   - **g)** Personal service/first aid supplies (Medical Check Up).
   - **h)** Fire protection equipment (alarms and extinguishers).
   - **i)** Walkways/roadways (sidewalks, roadways).
   - **j)** Transportation equipment (Ambulances, lifts).
   - **k)** Containers (hazardous waste bags).
   - **l)** Structural openings (windows, doors, stairways).
   - **m)** Buildings/structures (floors, roofs, planter walls, fences).
   - **n)** Miscellaneous (any items not covered above).

2) **Hospital safety round records**

Hospital safety Round Report shall recorded by the Safety officer and the same record has to be submitted in the Safety committee. The corrective action and Preventive action of the safety round report shall recorded and approved by the chairmen of the Hospital safety committee. All the documents (Safety round report and CAPA report) shall be kept with hospital safety officer.

5. Safety education program for employees

The Hospital requires all new employees to attend Induction and orientation Program. This orientation is intended to provide new employees with an awareness of safety importance and their responsibility for maintaining a safe and healthy work environment, and to give an overview of workplace safety basics. The results should be more safety conscious employees who are receptive to learning and practicing the specifics of a safe, healthy workplace. Hospital fire safety officer shall conduct regular training program of Fire safety prevention program for all the staffs in various departments. The training calendar of “Fire safety” shall be circulated by the Fire safety officer to all departmental HODs in a quarterly interval.

- **Safety Orientation for New Employees**

All new employees receive safety orientation. The orientation will consist of the following information: The Safety Management Officer or external instructors will present the general safety policies of the Hospital, and the new employee's supervisor will present:

1. Procedures and policies specific to the new employee's position

2. Fire reporting procedures

3. Fire extinguisher location and use

4. Fire prevention

5. Safe lifting techniques

6. Any information the supervisor feels will provide the new employee with a safe environment.

FMS. 2 The organisation's environment and facilities operate in a planned manner to ensure safety of patients, their families, staff and visitors and promotes environment friendly measures.

I. POLICY:

1. The policy is to explain the scope of services and its limitations for the community by the hospital.
2. The hospital shall ensure that layout and drawing of the hospital is updated for upkeep of the hospital building.
3. Preventive and breakdown maintenance of the hospital's equipments shall be done as per the documented procedure. The hospital is having a fulltime biomedical engineer to take care of such breakdowns.
4. The delivery of modern hospital services depends heavily on medical equipment, whether for life support, for diagnosis, for patient monitoring, or for the delivery of therapies.

II. PURPOSE:

1) To communicate the scope of services which hospital can provide without any consideration of caste and creed.
2) To provide a guideline of the hospital building the its employees as well as the management of the hospital.
3) To provide scope for early detection of potential maintenance problems as well as proper care and routine maintenance of all equipment in possession of the Hospital.
4) To provide Management of Medical Equipment within the hospital for smooth functioning of services which require equipment supports

III. SCOPE:

This policy is applicable to provide scope for maintenance and repair of the plant and equipment user of major equipment's of the hospital

IV. RESPONSIBILITY:

Administrative Officer (Stores & Services), Site Engineer, Maintenance In-Charge, Biomedical Engineer

V. ABBREVIATION:

Abbreviations are as follows:

- Lts. – Liters
- DG – Diesel Generator
- UPS – Uninterruptible Power Supply
- pH – Power of Hydrogen
- RO – Reverse Osmosis
- TDS – Tax Deducted at Source
- GM – General Manager

- KB – Kilobyte
- AMC – Annual Maintenance Contract
- OT – Operation Theatre
- ICU – Intensive Care Unit
- HDU – High Dependency Unit
- HVAC - Heating, Ventilation, and Air conditioning

VI. PROCESS DETAILS:

1. Scope of Services

Refer to AAC chapter – 1

2. Up – to – date drawings

Up to date drawings of the hospital are maintained the Site Engineer.
In-case there are any future changes then they too are maintained by the Site Engineer.

3. Signage

There shall be internal and external sign postings in the organization in a language understood by patient, family and community or bilingual.These signage shall guide patients and visitors. Fire signage shall follow the norms laid down by National Building Code or respective statutory board.

4. Provision of space

The provision of space shall be in accordance with the available literature on good practices and directives from government agencies.

5. Alternate sources of electricity and water

- Availability of alternate sources of electricity and water

The organization shall make arrangements for supply of adequate potable water and electricity, provided as backup for any failure / shortage. The organization shall ensure that there is sufficient water supply to meet the requirements of the organization. In case of a shortfall in water or electricity, alternate sources shall be required. Alternate electric supply could be DG sets, UPS and any other suitable sources. The organization can have multiple alternate sources depending on the criticality of the activity

a. Domestic water policy

1) The hospital shall supply safe and Potable water across the hospitals

2) The hospital shall have more than one source of water at all part of time

Primary source: BMC
Secondary source: Water Tankers
Tertiary source: Bore Well

3) The hospital shall have additional water source in case of failure of the all internal source(bore well)

4) The hospital shall ensure round the clock water supply

5) The facility department shall be responsible for the water supply system

6) The facility technician shall do a proper check on the source of water supply system and the storage area and pumping mechanism every shift. He checks the water level and proper operation of motor etc, and enters into the shift technician Log Book.

7) The water will be properly chlorinated to proper dose prior to the supply, The dosing pump is connected in the same circuit of the motor operation so that it automatically gets dosed as per the preset pulse

8) The water from the source (bore well) will be pumped into the Fire tanks

9) A number of alternative arrangements exist in the system; if one fails water can be supplied through other alternative pumps/pipe lines.

10) In case any failure of the Water sources and corresponding circuitry it is to be immediately informed to the Administration Department.

11) All the possible steps are to be taken for the water conservation.

b. Reverse Osmosis Plant

1) The water from the Reverse osmosis plant will be used only for the hemodialysis purpose.

2) The hospital shall ensure water quality shall comply to International norms

3) The treated water shall be stored in the water tank 1000 litres

4) The Engineering department shall ensure the proper operation of the plant.

5) The shift technician shall check the plant for level of water in raw water tank and treated water tank every shift and enters into the Pump Room Log Book.

6) On a daily basis the facility technician shall check the operation of the plant by checking the pressures

7) The total preventive maintenance of the plant will be conducted every six months or earlier on requirement and is to be entered in the history card

8) The total preventive maintenance is to be performed by trained professional and plant is to be rinsed with copious amount of water.

9) After the rinsing of the line with sodium hypochlorite it is to flushed not less than 30 min of fresh RO water.

10) The tank shall be emptied and cleaned every six months and same to be entered in the history card

11) The microbiologic sampling is to done by the infection control nurse for microbiologic contamination and it is being informed to the engineering service in case of adverse findings.

12) Run hours of the RO plant shall be entered in the daily report of the facility.

13) The softening plant prior to the RO plant shall be back washed every day by the technician

14) Any increase in the TDS up to 20 ppm in the treated water shall be informed immediately to the company

c. Electrical Safety-Preventing Overload

1) The hospital receives power supply**.** In case of any breakdown in the power supply, the hospital has three generators for alternate source of power

2) Trip switches are located to prevent any form of short circuit. The electrician maintains consumption record of electricity which is updated on a regular basis by the electrician of the hospital.

3) A record register of the response time of generators is maintained by the maintenance staff of the hospital.

4) The electrician checks the wiring system regularly to locate any fault such as short circuit etc and immediately rectifies the same.

5) The generators are regularly tested by the electrician in order to locate any fault in the same. This is done to ensure that there is **no** interruption in power supply. The generators are also under AMC record of the same is maintained by the clerk in-charge.

6) When adding a receptacle:

a) Ascertain what is to be used on the circuit and check to see how many amps the item will be using.

b) Find out what is already on the circuit and if you may tap into the circuit.

c) Add the new circuit only if the amperage is available.

d. Power Supply Shutdown

1) If there is a power failure, the generators automatically come on the mains.

2) On the every 20 minutes of the DG running the facility technician check the load current and diesel level noise level etc.

3) If the anticipated time for restoration is more than 2 hours at stretch **the** DG operator immediately, inform to the Facility excutive to arrange for the additional Diesel supply**.**

e. Diesel Procurement

1) The Diesel is always procured only from the Approved vendor decided Company as per an annual contract.

2) When the stock falls below our safe stock limit the facility technician request for the Diesel indent voucher from the authorities.

3) The diesel indent form duly filled by the authorized signatory and signed is handed over to the technician.

4) The technician arranges for the transport through the approved transport provider and the payment for the transport through the petty cash.

5) The facility technician or the security supervisor is sent with the transport to the Gasoline station and ensure the quantity and quality.

6) The diesel is brought in the barrels to the hospital and then unloaded and pumped into the existing diesel storage tanks

7) The Acknowledgement receipt from the gasoline station is given the stores or the next working day for further action

8) The payment for the diesel is done on a monthly basis by the accounts department

9) The stock above the stipulated storage level is decided by the facility – executive/ supervisor depending on the nature of the contingency.

f. Shut Down Protocol

1) Shut down schedule for maintenance will be prepared for above mentioned areas.

2) Time for shut down will be identified according to least activity/usage time of that service.

3) All the concerned departments will be intimated in written 48 hours prior to the shut down.

4) Check list will be prepared for critical areas which require constant supply for above mentioned areas.

5) Those critical areas will be fed by back up supply.

6) Time will be calculated beforehand and maintenance will be tried to get accomplished in that given time frame.

7) Log book for shut downs will be maintained.

Electricity: Main supply will be taken for shut down and maintenance only when DG supply is there for back up for critical areas already identified.

In this HT panel, Transformer, Lt Panels will be taken for shut down.

DGs will be taken on shut down only when supply is via mains and Other DG is ready for back up.

HVAC: Chillers will be taken on shut down one by one, not all together.

Critical areas [OT, ICU, and HDU] will be fed by other working chiller.

Water Tanks: All tanks be taken for maintenance.

Backup server will be provided for shut down hours. Re switching to the main server will be done once maintenance is over.

g. Air-Conditioning and Refrigeration

1. Testing of alternate sources

The organization shall regularly test these alternate sources. The results of these tests shall be documented. In case of water, the testing includes bio – chemical and microbiological analysis.

2. Designated Individuals for Maintenance of facility

There are designated individuals responsible for the maintenance of all the facilities. Individuals who are qualified and available to do preventive maintenance must be identified. A person in the organization shall be designated to be in – charge of maintenance facilities. The organization shall have supervisors to manage the facilities. The necessary infrastructure and tools shall be provided by the organization. A list should be drawn up of personnel who are readily available. Once the personnel have been listed, specific responsibilities should be assigned, perhaps in the form of a work order, giving clear instructions for the task. Each person should have a clear knowledge of his or her responsibilities. Job assignments must correspond to the training, experience and aptitude of the individual. Maintenance staff shall be contactable round the clock for emergency repairs. If emergency repair is not possible by staff on duty, more qualified / experienced staff shall be available. Response time shall be monitored from reporting to inspection and implementation of corrective actions.

VII. STAFF STRUCTURE

RECORDS AND FORMATS:

- List of Drawing / Layout
- Breakdown register
- Annual Maintenance Schedule
- List of Major equipments
- Work order request Form
- Preventive maintenance plan schedule
- Preventive maintenance monthly checklist

FMS. 3 The organisation has a Program for engineering support services and utility system

Prepared by :	Designation : Electrical Engineer Name: MR. Amol Vetal
Approved By :	Designation : Medical Superintendent Name: Dr. K .R .Salgotra
Reviewed by & Responsibility of Updating::	Designation : Chief Of Quality Name: Dr .Gauri Shivani

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Chief Of Quality	Dr. Gauri Shivani

I. POLICY:

The delivery of modern hospital services depends heavily on medical equipment, whether for life support, for diagnosis, for patient monitoring, or for the delivery of therapies. Preventive and breakdown maintenance of the hospital's equipments shall be done as per the documented procedure. The hospital is having a fulltime biomedical engineer to take care of such breakdowns.

II. PURPOSE:

Purposes as follows:

- To provide and document the methodology for Maintenance & Service of Air conditioning, Electrical Services, Lifts, Civil works, Plumbing and Calibration of Non Medical Equipment to ensure that

  Process capability continues to be satisfactory,

1. Required data / records are maintained, and
2. Corrective actions / improvements are initiated.
3. Preventive maintenance is done in all areas of the hospital to minimize / avoid breakdown of hospital facility

- To provide Management of Medical Equipment within the hospital for smooth functioning of services which require equipment supports
- To provide scope for early detection of potential maintenance problems as well as proper care and routine maintenance of all equipment in possession of Hospital.

III. SCOPE:

The scope of the Engineering department is to ensure surveillance and maintenance of all other than biomedical equipments. This process document also includes the Telephone exchange, PA system, CCTV, access control, & Transport facility.

IV. RESPONSIBILITIES

Site Engineer, Maintenance In-charge, Administrative Officer (S&M)

V. DEFINITION:

Strategic Plan: Strategic planning is an organization's process of defining its strategy or direction and making decisions on allocation its resources to pursue this strategy, including its capital and people.

VI. ABBREVIATION:

Abbreviations as follows:

1. Lts. – Liters
2. DG – Diesel Generator
3. UPS – Uninterruptible Power Supply
4. PH – Power of Hydrogen
5. RO – Reverse Osmosis
6. TDS – Tax Deducted at Source
7. KB – Kilobyte
8. AMC – Annual Maintenance Contract
9. OT – Operation Theatre
10. ICU – Intensive Care Unit
11. HDU – High Dependency Unit
12. HVAC - Heating, Ventilation, and Air conditioning
13. PA system – Public Announcement system
14. ID – Identity
15. PPM – Periodic Preventive Maintenance
16. MCB – Miniature Circuit Breaker
17. HEPA - High-Efficiency Particulate Arresting

18. AHU – Air Handling Unit

19. FCU - Fan Coil Unit

20. PPE – Personal Protective Equipment

VII. PROCESS DETAILS:

1. Equipment Procurement and Management Policy

The organization shall have Program for engineering support services. The organization shall plan for equipment in accordance with its services and strategic plan. This shall also take into considerations future requirement. The plans shall be fully implemented and there shall be a process for periodic review of plans.

2. Equipment Procurement and Management Policy

1) A Purchase requisition for purchase of new equipment is forwarded to Purchase committee.

2) A feasibility study is done by the Purchase committee to identify the need for procurement of a new equipment or replacement of existing equipment. The feasibility study includes cost analysis, efficiency, space requirements and merits and demerits in terms of Operations

3) The Purchase committee as per the provision in the purchase guidelines procures the equipment.

4) Upon receiving and installation, the equipment is inspected for functioning and specification as mentioned in the Purchase order requirements. Any difference is reported to Purchase committee.

5) After being convinced of the conformity of the equipment specifications, the name of the equipment is added in the Equipment Log book.

6) It is ensured that the manufacturer of the equipment imparts appropriate training after installation to the concerned personnel. A certificate of training is also received from the Manufacturer.

7) All equipments, electrical devices, are allotted ID no. Identity (ID) number is pasted on the rear side of the equipment. The ID no comprise of an alphanumeric number. The first letter series of the ID no is initials of the hospital- MGM; the second number denotes floor no. Followed by the name of the equipment (abbreviated acceptable), serial order no in the floor (for that category of the equipment)

8) History Card

a) All the Equipments in the hospital will have an individual History card.

b) All the history cards are maintained by the engineering services department and a copy maintained at the user department.

c) These history cards would be updated by the Engineering service team as per the set parameter requirements.

9) An Equipment Log book is maintained in the department. The contents of the Log book are:

a) Name of the Equipment.

b) Model No.
c) Brand name.
d) Serial number as per the Manufacturer.
e) Equipment ID no as allotted by the department.
f) Annual Maintenance Contract status/ self maintenance by the department.
g) Warranty status with warranty period.
h) Date of installation.
i) Location of the Equipment in the Hospital.

1. <u>Annual Maintenance Contract (AMC)</u>

a) Equipment Annual Maintenance Contract Log books is maintained for all equipments.
b) The Equipments on AMC are identified and marked in the History card
c) The history card contains the preventive maintenance frequency and calibration requirements and break down maintenance details.
d) On the basis of the information gathered on the history card, Periodic Preventive Maintenance (PPM) schedule is made.
e) The Maintenance In-charge follows the PM schedule in conjunctions with the user department on the availability of the machine to conduct the preventive maintenance by the contract agency.
f) The facilities supervisor collects and documents the Service report of the maintenance conducted on the equipment by the AMC contractor.
g) The break down time is recorded.
h) All the spares details are recorded.
i) The response time of the AMC contractor is recorded.
j) After the Service the Machine is thoroughly tested by the Facilities executive and hands over to the User department.
k) The user department signs the work order request if the service was done on a break down maintenance. The Log book contains the following

- Name of the Equipment
- Equipment ID number
- Service provider's name
- Contact person
- Address
- Frequency of the service annually
- Tenure of the contract

1) The Contract Period is reviewed and renewed accordingly by the Purchase committee
2) The service provided during the visit by the AMC service provided is documented and filled as Service Reports. The service reports are retained at least till completion of the Contract tenure.

3) Instruction/operating guidelines are provided to all personnel handling the Equipment

4) The frequency and visits of the AMC service provider is monitored. Reminder is sent in case of delay and purchase committee is also informed.

5) A Calibration and maintenance schedule of all equipment is prepared if the calibration will have to be done by the Department. The completion of the task is also recorded.

6) Petty Spares Purchase

- Purchase of spares parts is routed through General Stores.

7) Out Going Equipment for Repair and Servicing

a) Any equipment found defective will be repaired locally in the plant.

b) If the Equipment is not under Annual Maintenance Contract or the nature of the repair is out of the scope of the AMC then, the requisition is raised for repair is raised to the Purchase committee, quotations will be called for and analyzed for issue of contract.

c) In case the equipment requires any service at AMC Service provider's premises then, the equipment will be sent for repairs through a gate pass. No equipment can be taken out of the Hospital premises without a gate pass. The gate pass will be signed by the Department manager and ultimately by the Security Officer.

8) Condemnation of equipment

a) Any equipment, without lives its life and requires unusual frequent repairs.

b) Or any equipment which consumes more energy and the version is out dated and hence cannot compete with new version will condemned by the purchase committee after thorough verification though it has not out lived its life prescribed by the manufacturer.

c) The Purchase committee decides the Method of condemnation. The Maintenance department forwards the repair status of the Machine to the Purchase committee.This report is studied by the purchase committee and arrives at a conclusion.

d) Options of condemnation

Scrap: If the equipment is totally Obsolete or repairable and no likely takers then the equipment is sold as scrap.

Buy back: Such equipments are replaced by new equipment and returned to the Vendor in replacement of new equipment at discounted price. The decision for such an option is completely on discretion of the Purchase committee.

Sold at discounted price to any taker.

Condemned Equipment Retained by the department: Some of the equipments are retained by the department so as to use its spare parts for future use. However the machine will be used. Such spares would generally be not available or are expensive otherwise and are still useful.

2. <u>Complaints and Repairs</u>

1) The Department functions round the clock. Almost all kinds of repairs can be attended to during night hours

2) A Logbook is maintained wherein all call received for complaints or request for repairs are entered. The time of call is also entered. The Department must report the site of repair within 10 minutes of receiving the call.

3) The complaint repair is investigated and attended immediately if possible.

4) The date and time of attending the call, Nature of repair or complaint, ID no of the equipment and the date and time of completion of repair is entered in the complaint logbook.

5) The department maintains a logbook which contains the following

Some common type of repairs expected.

Repairs that can be addressed by the department itself or are under AMC.

The average time for completion of the repair.

6) The Average time of attending to the call site and average time of attending the repair is tally and monitored regularly.

7) Corrective and Preventive actions are taken in case of any deviation.

3. <u>Quality and Monitoring Systems</u>

1) Alternate arrangement of supply of water and electricity are available whenever required. These are tested if the need to utilize them doesn't arise in past 6 months.

2) Cleaning and disinfecting of storage tanks is carried out once in 6 months or even earlier depending on the condition.

3) Water is tested once in two months or earlier on specific requirement including microbiology analysis. Appropriate corrective and preventive actions are taken based on the report.

4) At least two Fire fighting mock drills are conducted in a year to test the efficiency of the system and training of the staff.

5) Facility inspection rounds are conducted once in a year to all non-patient care areas and twice a year to all patient-care areas. The observations are documented. A documented copy is forwarded to Organization Safety Committee. Appropriate corrective and Preventive actions are taken. Organization safety committee also studies these actions.

6) Appropriate renewal of licenses etc are done with documented reports submitted on time to the licensing authority e.g., Electricity department.

7) Electrical Safety Measures are available such earth fitting etc (refer Organization Safety manual).

8) The staff of the department is educated about the hazards in the department. The staff is trained to handle and prevent of the hazards. Appropriate Health surveillance is done in a year on all staff. Refer HR manual.

9) UPS is available to all critical areas, life saving equipments, OT, Laboratory, Dialysis, and Casualty.

10) Potable water is supplied for all purpose in to OT, and for drinking purpose throughout the hospital.

4. Calibration & Maintenance

S. No.	Activity	Responsibility
1.0	**In puts for Maintenance**	
1.1	A comprehensive list of Facilities /instruments / devices(unit wise – containing all different types of instruments / devices used available with details such as 1) Their Identification, 2) Location, 3) Range of Operation, and 4) Maintenance & calibration certificate (as per requirements.)	Engineer
1.2	The maintenance and calibration requirements are normally identified using the operational & maintenance manuals. Where maintenance manuals are not available, these are based on knowledge and experience. For all new procured instruments / devices, it is ensured that these manuals are controlled through the control of, External Origin Documents.	Engineer
1.3	When any instrument / device break down Engineering is informed. Engineering Help desk log the requirement of maintenance / repair	Engineer
2.0	**Maintenance Process**	
2.1	Preventive Maintenance	
2.1.1	Preventive maintenance schedules are prepared based on manufacturers' recommendations /review of History Card maintained. The intimation of preventive maintenance is communicated in advance to the various departments for release of equipment.	Engineer / biomedical Engineer Concerned Engineer
2.1.2	The availability of necessary spares, consumables, tools and necessary materials are ensured through standardization and /or advance planning, through Stores and guidance by CE / Engineer -Engineering Department.	Site Engineer / Maintenance In-charge Concerned Engineer
2.1.3	Preventive maintenance is carried out as per Maintenance Schedule. The concerned engineer checks	Site Engineer / Maintenance In-charge

	the maintenance activities regularly.	Concerned Engineer
2.1.4	After completion of maintenance (whether preventive or breakdown) the O K report is taken from the user department.	Site Engineer / Maintenance In-charge / Concerned Engineer
2.1.5	All preventive maintenance jobs done are recorded in History Card maintained for each equipment / device (unit wise).	Site Engineer / Maintenance In-charge/ Concerned Engineer
2.2	Breakdown Maintenance	
2.2.1	Breakdown of an equipment or device is reported is informed to Bio Medical areas. Bio Medical Engineer logs the requirement of maintenance / repair.	Biomedical Engineer
2.2.2	After completion of maintenance (whether preventive or breakdown) the O K report is taken from the user department.	Maintenance Engineer / Biomedical Engineer
2.2.3	All preventive maintenance jobs done are recorded in History Card maintained for each equipment / devices.	Maintenance Engineer
2.2.4	Instruments / devices which are given in AMC (Annual Maintenance Contract) are given to AMC Company for maintenance. A report of failure / break down is taken from company for monitoring purposes.	AMC Company / CE
3.0	**Calibration of Devices**	
3.1	A list of all instrument /equipment/ devices requiring calibration is prepared and maintained. The list identifies the measurement instruments by name, type, serial number, location, applicable calibration requirements, date of calibration done and calibration due date. The calibration status is updated continuously.	Concerned Engineer
3.2	This list also indicates, whether calibration is done in house or through external sources. Calibration requiring an out side agency - a contract or purchase order is issued.	Concerned Engineer
3.3	Where required Calibration agency is provided with necessary facilities and support to carry out calibration in the hospital itself.	Concerned Engineer
3.4	Such instruments that are to be calibrated at an outside location are collected and sent to the identified calibration agency.	Concerned Engineer

3.5	The following is checked when calibration is done - 1) Physical condition of instrument /test equipment 2) Calibration report verification 3) Calibration certificate to be obtained from calibration agency and after verification marked as O.K. /Not O.K. 4) Sticking of calibration sticker.	Concerned Engineer
3.6	Calibration history is maintained and calibration certificates filed.	Concerned Engineer
3.7	Maintenance preserves the machine's accuracy and fitness for use. If equipment is out of calibration or is otherwise not fit for use, it should be withdrawn from use.	Concerned Engineer
3.8	Accessories associated with Test instruments are identified and calibrated along with Test Instruments.	Concerned Engineer
3.9	In case an instrument has an error – the materials already checked by this instrument are quarantined. This lot is re-checked with other instruments which are in order/the same instrument after its re-calibration.	Concerned Engineer
3.10	Persons using instruments are trained on aspects like Do's, Don'ts, handling, storage, safety, preventive maintenance and minor repairs as and when required. Records of training imparted are maintained.	Concerned Engineer
3.11	Faulty instruments are re-calibrated when received after repair.	Concerned Engineer
4.0	**Maintenance of Telephone & Exchange System**	
4.1	Problems of non-working telephone lines, instruments, etc. (internal / external) is brought to the notice of the engineering department.	Concerned technician / Engineer
4.2	Engineer deputes the responsible technician to find the problem and repair it. Problem telephone sets are replaced immediately.	Concerned technician / Engineer/ IT engineer
4.3	Cases where the problem is due to external exchange, these are taken up with the external authorities by Chief Engineer.	Chief Engineer.
5.0	**Records Generation**	

	Breakdown Slip/ Register Preventive maintenance Schedule / Record History Card List of instrument requiring calibration Calibration Sticker Calibration Reports	

3. Inventory & logs

Equipments shall be inventoried and proper logs shall be maintained as required. All equipments should be checked by Biomedical Engineer prior to use. Field strength measurements will be made and equipment locations. All equipment will be set up on a preventive maintenance program and scheduled for a re-testing as and when required.

S. No.	STEPS	RESPONSIBILITY
1	Identify the need to prepare list of major equipments	Concerned Engineer
2	Provision shall be made of appropriate infrastructure and services in the hospital for major equipments	Concerned Engineer
3	Proper storage and disposition of equipment shall ensure by the Biomedical engineer	Concerned Engineer
4	Prepare final list of all the major equipments	Concerned Engineer

4. Personnel

Qualified & trained personnel shall operate and maintain equipment and utility systems. The person could be qualified by experience or training also. Individuals who are qualified and available to do preventive maintenance must be identified. A list should be drawn up of personnel who are readily available. Once the personnel have been listed, specific responsibilities should be assigned, perhaps in the form of a work order, giving clear instructions for the task. Each person should have a clear knowledge of his or her responsibilities. Job assignments must correspond to the training, experience and aptitude of the individual.

5. Preventive & Breakdown Maintenance Plan

Refer table 8.2.4.

- **Domestic water policy**

12) The hospital shall supply safe and Potable water across the hospitals

13) The hospital shall have more than one source of water at all part of time

Primary source: BMC

Secondary source: Water Tankers

Tertiary source: Bore Well

14) The hospital shall have additional water source in case of failure of the all internal source(bore well)

15) The hospital shall Ensure a round the clock water supply

16) The facility department shall be responsible for the water supply system

17) The facility technician shall do a proper check on the source of water supply system and the storage area and pumping mechanism every shift. He checks the water level and proper operation of motor etc, and enters into the shift technician Log Book.

18) The water will be properly chlorinated to proper dose prior to the supply, The dosing pump is connected in the same circuit of the motor operation so that it automatically gets dosed as per the preset pulse

19) The water will be tested for the compliance by pollution control board authorized testing laboratory

20) The water from the raw water tanks is softened by the simple softener and the chlorinated and pumped into the treated water tanks

21) Then from them the water is pumped into the Systemic circulation system of the water supply system of the hospital

22) In case any failure of the Water sources and corresponding circuitry it is to be immediately informed to the Medical Superintendent

All the possible steps are to be taken for the water conservation.

6. Engineering Department / Service Safety

1) Department head is responsible for maintaining safety standards, developing safety rules, supervising and training personnel in departmental standards.

2) Department Head is responsible for notifying the support service manager in case of any safety hazard.

3) All department employees shall report defective equipment, unsafe conditions, acts or safety hazards to supervisor.

4) Keep electrical cords clear of passageways. Only use electrical extension cords in compliance with policy.

5) All equipment and supplies must be properly stored. Do not store heavy items on top shelves.

6) All personal electric appliances shall be inspected by the Engineering Department for safe use.

7) Scissors, knives, pins, razor blades and other sharp instruments must be safely stored and used. Use of sharp spindles is prohibited.

8) All electric machines with heat producing elements must be turned off when not in use.

9) Smoking is prohibited in the hospital.

10) Do not permit rubbish to accumulate.

11) Notify Engineering Department immediately of improper illumination and ventilation.

12) Furniture and equipment must be arranged to allow passage and access to exits at all times.

13) Minor spills, i.e., water, will be cleaned by the employee who discovers the spill. This will be done immediately. Major spills will be cleaned by the Housekeeping Department.

14) Report faulty equipment to Engineering Supervisor or vendor as per policy.

15) Warning signs must be obeyed.

16) File drawers and cabinet doors shall be closed when not in use. Open only one drawer at a time. Evenly distribute material to prevent the file cabinet from being unbalanced and tipping over.

17) Wear suitable clothing (avoid high heels or jewellery that may catch in machinery).

18) Use appropriate personal protective equipment (PPE).

19) Keep all hand tools in safe condition. Cutting tools must be kept sharp. Be sure that all tools are clean and free from damage, grease or corrosion. Hammers, screw drivers and similar tools need safe handles. Chisels and similar tools shall be dressed smooth and shall be free from mushroomed heads.

20) Use only non-sparking tools when working around flammable or explosive vapours or gases.

21) Extension cords for power tools shall be checked carefully before using to be sure they are free from defects. Use ground connectors whenever possible.

22) A tool box is the safest way to carry tools and to keep them together on the job.

23) Never use a defective or broken ladder. Report such defects so they can be corrected or the ladders replaced.

24) Do not use step ladders as straight ladders. Be sure that straight ladders have "safety feet." When setting up straight ladder, its base shall stand not more or less than 1/4 the length of ladder from the wall.

25) Never use metal ladders when working on electrical equipment, wiring or changing light bulbs.

26) Protect your feet with safety shoes. Wear safety goggles whenever there is a possibility of foreign bodies flying in your eyes, especially when grinding or chipping. Wear sound barriers when indicated.

27) Always shut off valves or switches when working on steam and hot water pipelines or electrical switches and systems. Warning tags shall also be on such switches or valves so that others will not operate them.

28) Tag out must be used when repairing any machinery.

29) Do not overload circuits under any circumstances. Never fuse too heavily. Electrical work shall be done only by qualified electricians, since poor wiring is one of the principal causes of fire.

30) All necessary safety precautions shall be taken while window cleaning. Inspect your equipment regularly, and make periodic checks of window studs and frames.

31) Make certain that adequate and proper guarding is provided for all machinery in maintenance shops. Never operate equipment when guards have been removed.

32) All lacquers and thinners shall be kept only in an approved safety cans and stored in accordance with the State pollution control norms.

33) Respond as promptly as possible to request of any personnel to repair unsafe conditions.

34) Regulate hot water thermostat control so temperature does not exceed 60 degree at tops.

35) Check all wheelchairs regularly from a maintenance and safety standpoint.

36) Eliminate accumulations of oily rags which could produce spontaneous combustion. Where they may accumulate provide Underwriters' Laboratories approval metal safety cans.

37) A preventive maintenance chart and periodic check system will prevent many accidents.

38) Handle all tools carefully. Tools damaged from being carelessly piled into drawers or dropped on hard surfaces can cause mishaps.

39) Clean oil or grease from a tool before using it. A tool which slips out of the user's hand is likely to cause an injury.

40) Steady and secure material to be cut, sheared, chiseled or filed to prevent the tool from slipping.

41) Except when using a spoke shave or draw knife, always cut away from the body.

42) Take extreme care in the use of torches and soldering irons to prevent explosions and burns. Always wear protective gear. The soldering iron must be placed so that the hot point cannot come in contact with flammable material or with the body.

43) Keep floors clean and free of sawdust, scraps of wood and other objects which might cause tripping or slipping.

44) Ensure that starting and stopping switches are within immediate reach of the person operating the machine.

45) Do not leave a running machine unattended.

46) Check saws frequently for defects and cracks.

47) Ensure that electrical equipment is effectively grounded.

48) Ensure that the power controls are identified by appropriate labels.

49) Gasoline powered equipment shall be operated in well ventilated areas.

50) Fuel and flammable gas cylinders are stored separately from oxidizing gas cylinders.

51) Compressed gas cylinders must be chained or secured in the upright position and kept away from heat sources.

52) Understand and practice good body mechanics.

53) Keep to Left when going down corridors. Approach intersections carefully. Be sure traffic on other side is clear when opening swinging doors. Do not push doors open with equipment. Use push panel or door knob.

54) Do not leave equipment standing in traffic lanes. Return equipment to its proper location when not in use.

55) Do not obstruct fire equipment. Know location of fire fighting equipment and how to use it. Know evacuation routes and what to do in case of fire.

- **Electrical Safety-Preventing Overload**

7) Trip switches are located in each floor to prevent any form of short circuit. The electrician maintains consumption record of electricity which is updated on a regular basis by the electrician of the hospital.

8) A record register of the response time of generators is maintained by the maintenance staff of the hospital.

9) The electrician checks the wiring system regularly to locate any fault such as short circuit etc and immediately rectifies the same.

10) The generators are regularly tested by the electrician in order to locate any fault in the same. This is done to ensure that there is no interruption in power supply. The generators are also under AMC record of the same is maintained by the clerk in-charge.

11) When adding a receptacle:

Ascertain what is to be used on the circuit and check to see how many amps the item will be using.

Find out what is already on the circuit and if you may tap into the circuit.

Add the new circuit only if the amperage is available.

- **Power Supply Shutdown**

4) If there is a power failure, the generators automatically come on the mains.

5) On the every 20 minutes of the DG running the facility technician check the load current and diesel level noise level etc.

6) If the anticipated time for restoration is more than 2 hours at stretch the DG operator immediately, inform to the Facility excutive to arrange for the additional Diesel supply.

- **Diesel Procurement**

10) The Diesel is always procured only from the Approved vendor decided Company as per an annual contract.

11) When the stock falls below our safe stock limit the facility technician request for the Diesel indent voucher from the authorities.

12) The diesel indent form duly filled by the authorized signatory and signed is handed over to the technician.

13) The technician arranges for the transport through the approved transport provider and the payment for the transport through the petty cash

14) The facility technician or the security supervisor is sent with the transport to the Gasoline station and ensure the quantity and quality

15) The diesel is brought in the barrels to the hospital and then unloaded and pumped into the existing diesel storage tanks

16) The Acknowledgement receipt from the gasoline station is given the stores or the next working day for further action

17) The payment for the diesel is done on a monthly basis by the accounts department

18) The stock above the stipulated storage level is decided by the facility – executive/ supervisor depending on the nature of the contingency

7. Air-Conditioning and Refrigeration

- **Engineering Policy on Infection control**

1. All the infectious waste collecting, dust accumulating, areas and probable epicentre of the infection within the ambit of the engineering to be identified by the engineer Executive and infection control nurse
2. All possible design changes to be made to the all the equipments to prevent the infection and prevent accumulation of the moisture
3. All the AHU's is to be cleaned every month as per the preventive maintenance schedule, and all the corresponding filters to be cleaned
4. he cleaning of the AHU's is to be done with fresh water and the filter also is to washed
5. After cleaning of the AHU's and FCU's it is to be sprayed with 5% of disinfectant (basilocid) solution and the total unit is to be aerated for 4 hours before the usage
6. If in case of air vector borne bacteria is found swabs is to be taken In HVAC ducts and if it is positive then the total Unit is to be fogged
7. All the Tap filter and health faucet filter is to be cleaned every month
8. At all given time the engineering personnel working with any of this should use the personal protective equipments

9. All the HEPA filters are to be changed every year or earlier based on the condition of the filter in all the areas such as Major operation room.
10. All the Clean room should always work with the exhaust in "ON" status. This is found by the end-users, if there is only positive pressure, it is reported to the engineering services to put "ON" the exhaust system.
11. In case of problem with the suction apparatus the technician takes all the standard precautions like wearing gloves and PPE etc Preferable disinfect with the 1:1000 concentrate solution of the sodium hypochlorite solution prior to doing any active repair work.
12. A very high degree of precaution is to be taken by the engineering staff while handling any equipments relating to patients
13. Any injury to Engineering personnel while working with the equipment of patients care is to be informed immediately to infection control nurse and a relevant incident report to be made
14. Any accidental spillage of any infectious material and the area of spillage is to be notified to the engineering team. The engineering team is to asses any soaking and seepage into any clean area is to be found and corresponding disinfection procedure is to be coordinated with the infection control nurse/committee.
15. All the process/procedural change relating to engineering service in the hospital is to be notified to the engineering service.
16. All the decision on disinfectants and cleansing solution is to be notified engineering service for the equipments and material compatibility
17. Any leakage or seepage and any abnormal moisture accumulation is to be notified and bought to notice immediately to the engineering service
18. Any gaps, cracks, holes, etc., which can potential accumulation area dust or dirt is notified immediately to engineering team
19. In case if the biological indicator or the bowie dick test fails in the Autoclave is to be immediately intimated to engineering service
20. prior to any fogging of any area engineering service is to intimated
21. Prior to fogging the dose calculation is to be done with engineering service
22. Engineering service should always play a role in infection control committee
23. All the engineering staff is to be vaccinated as per the hospital policy

- **<u>Shut down Protocol</u>**

Following categories are broadly identified for periodic shut down

1. Electricity
2. HVAC
3. Water
4. Gas Manifold
5. Computer Server

Shut down schedule for maintenance will be prepared for above mentioned areas.

Time for shut down will be identified according to least activity/usage time of that service.

All the concerned departments will be intimated in written 48 hours prior to the shut down.

Check list will be prepared for critical areas which require constant supply for above mentioned areas.

Those critical areas will be fed by back up supply.

Time will be calculated beforehand and maintenance will be tried to get accomplished in that given time frame.

Log book for shut downs will be maintained.

Electricity: Main supply will be taken for shut down and maintenance only when DG supply is there for back up for critical areas already identified.

In this HT panel, Transformer, Lt Panels will be taken for shut down.

DGs will be taken on shut down only when supply is via mains and Other DG is ready for back up.

HVAC: Chillers will be taken on shut down one by one, not all together.

Critical areas [OT, ICU, HDU] will be fed by other working chiller.

Water Tanks: Both underground and over head tanks will be taken for maintenance.

Backup server will be provided for shut down hours. Re switching to the main server will be done once maintenance is over.

IX RECORDS AND FORMATS:

. List of Major equipments

S N.	LOCATION	EQUIPMENT	COMPANY	QUANTITY	DATE OF INSTALLATION	WARRANTY PERIOD	AMC PERIOD	CALIBRATION	EQUIPMENT STATUS	REMARKS
1.										
2.										

- Breakdown register
- Annual Maintenance Schedule
- List of Major equipments
- Work order request Form
- 52 week preventive maintenance plan schedule
- Preventive maintenance monthly checklist

FMS. 4 The organisation has a Program for bio-medical equipment management

Prepared by :	Designation : Biomedical Engineer Name: Ms Manisha Mane
Approved By :	Designation : Medical Superintendent Name: Dr. K. R. Salgotra
Reviewed by & Responsibility of Updating::	Designation : Chief Of Quality Name: Dr. Gauri Shivani

CONTROL COPY HOLDERS	
Chief Of Quality	Dr. Gauri Shivani

I. POLICY:

The appropriate and safe operation of clinical equipment is paramount to the proper functioning of any health care facility. The Biomedical Engineering department is responsible for testing, repairing, and maintaining in proper and safe operating condition, the hospital's diagnostic and therapeutic equipment

II. PURPOSE:

The purpose of the biomedical department is to:

- Provide timely servicing to all the equipments in the hospital
- Train and guide the staff of user departments regarding the use and safety of the equipments

Keep track of all AMC schedules of all the equipments and ensure timely maintenance

III. SCOPE:

The scope of the biomedical department is to provide calibration, maintenance and servicing to the equipments in the hospital in order to ensure safety and maximum utilisation.

The biomedical department shall be responsible for the following:

- BARC act
- AERB guidelines for construction of Nuclear medicine department

IV. RESPONSIBILITY

Manager Biomedical Department and all the heads of the user departments

Major functions of Biomedical Engineering are to:

1. Perform installation, preventive and corrective maintenance, and special request service on clinical equipment owned, and/or used within the hospital in compliance with regulatory agencies.
2. Provide pre-purchase evaluations of new technology and equipment.
3. Provide coordination of clinical equipment installations including, planning, scheduling, and oversight.
4. Conduct device incident investigations.
5. Educating by taking regular classes to Nurses, other allied, Health care professionals, and Students on Hospital Engineering, Safety and creating awareness on norms etc.,
6. Monitoring by the Bio-medical Engineers of the concerned departments on daily basis to check the proper functioning of the equipments.
7. Equipments under Monitoring are:

Equipments	Process
Medical equipments	Maintenance of all the medical equipments viz. therapeutic, diagnostic, investigating equipments
Clinical Engineering	Assist in all the medical studies relating to the engineering aspects. Supports in all the purchase of ward equipments work out feasibility

VII. PROCESS DETAILS:

1. Annual Maintenance Contract (AMC)

The Equipments on AMC are identified and marked in the History card

The record contains the following

i. Name of the Equipment
ii. Equipment ID number
iii. Service provider's name
iv. Contact person
v. Address
vi. Frequency of the service annually
vii. Tenure of the contract

1) The history card contains the preventive maintenance frequency and calibration requirements and break down maintenance details.

2) On the basis of the information gathered on the history card, Periodic Preventive Maintenance (PPM) schedule is made.

3) The bio-medical engineer follows the PPM schedule in conjunction with the user department on the availability of the machine to conduct the preventive maintenance by the contract agency.
4) The bio-medical engineer collects and documents the Service report of the maintenance conducted on the equipment by the AMC contractor.
5) The break down time is recorded.
6) All the spares details are recorded.
7) After the Service, the Machine is thoroughly tested by the bio-medial engineer and handed over to the User department.
8) The user department signs the service report if the service was done on a break down.
9) The Contract Period is reviewed and renewed accordingly by the Purchase committee.
10) The service provided during the visit by the AMC service provided is documented and filled as Service Reports. The service reports are retained at least till completion of the Contract tenure.
11) Instruction/operating guidelines are provided to all personnel handling the Equipment.
12) The frequency and visits of the AMC service provider is monitored. Reminder are sent in case of delay and purchase committee is also informed.

2. <u>Equipment profile</u>

An Equipment profile will be maintained in the department. The contents of the profile are:

- Name of the Equipment
- Model No.
- Brand name
- Serial number as per the Manufacturer
- Equipment ID no as allotted by the department
- Annual Maintenance Contract status/ self maintenance by the department
- Warranty status with warranty period
- Date of installation
- Location of the Equipment in the Hospital

Equipment uptime down-time charts will be maintained for all equipments. The cumulative downtime will be calculated at the end of every year.

Out Going Equipment for Repair and Servicing

a. Any equipment found defective will be repaired locally in the plant.
b. If the Equipment is not under Annual Maintenance Contract or the nature of the repair is out of the scope of the AMC then, the requisition for repair is raised to the Purchase committee, quotations will be called for and analysed for issue of contract.
c. In case the equipment requires any service at AMC Service provider's premises then, the equipment will be sent for repairs through a gate pass. No equipment will be taken out of the Hospital premises without a gate pass. Biomedical

manager will send the request to Store manager for preparation of gate pass .The gate pass will be signed by Store manager and ultimately stamped and signed by security officer.

3. <u>Engineering Department/Service Safety</u>

Procedures:

1) Department head is responsible for maintaining safety standards, developing safety rules, supervising and training personnel in departmental standards.
2) Department head is responsible for notifying the Bio-medical manager in case of any safety hazard.
3) All department employees shall report defective equipment, unsafe conditions, acts or safety hazards to biomedical engineer.
4) Keep electrical cords clear of passageways. Only use electrical extension cords in compliance with policy.
5) All equipment and supplies will be properly stored. Heavy items will not be stored on top shelves.
6) All personal electric appliances shall be inspected by the Engineering Department for safe use.
7) Scissors, knives, pins, razor blades and other sharp instruments will be safely stored and used. Use of sharp spindles is prohibited.
8) All electric machines with heat producing elements will be turned off when not in use.
9) Smoking will prohibit in the hospital.
10) Report faulty equipment to Biomedical Engineer.
11) Warning signs will be obeyed.
12) Use appropriate personal protective equipment.
13) Only non-sparking tools will be used when working around flammable or explosive vapours or gases.
14) A tool box is the safest way to carry tools and to keep them together on the job.
15) Defective or broken ladder will never be used. Such defects will be reported so they can be corrected or the ladders replaced.
16) Do not use step ladders as straight ladders. Be sure that straight ladders have "safety feet." When setting up straight ladder, its base shall stand not more or less than 1/4 the length of ladder from the wall.
17) Metal ladders will not be used when working on electrical equipment, wiring or changing light bulbs.
18) Safety shoes will be worn to protect feet. Safety goggles will be worn whenever there is a possibility of foreign bodies flying in your eyes, especially when grinding or chipping. Sound barriers will be worn when indicated.
19) Valves or switches will always be shut off when working on steam and hot water pipelines or electrical switches and systems. Warning tags shall also be on such switches or valves so that others will not operate them.
20) TAG OUT will be used when repairing any machinery.
21) Electrical work shall be done only by qualified electricians, since poor wiring is one of the principal causes of fire. Overloaded circuits shall not be worked on.

22) Adequate and proper guarding will be ensured for all machinery in maintenance shops. Never operate equipment when guards have been removed.

23) All lacquers and thinners shall be kept only in approved safety cans and stored in accordance with the State or Local Fire Codes.

24) All wheelchairs will be checked regularly from a maintenance and safety standpoint.

25) Accumulations of oily rags which could produce spontaneous combustion will be immediately removed.

26) A preventive maintenance chart and periodic check system will be maintained to prevent many accidents.

27) All tools will be handled carefully. Tools damaged from being carelessly piled into drawers or dropped on hard surfaces can cause mishaps.

28) Oil or grease from a tool will be cleaned before using it. A tool which slips out of the user's hand is likely to cause an injury.

29) Steady and secure material to be cut, sheared, chiselled or filed to prevent the tool from slipping.

30) Extreme care will be taken in the use of torches and soldering irons to prevent explosions and burns. Always wear protective gear. The soldering iron will be placed so that the hot point cannot come in contact with flammable material or with the body.

31) Floors will be kept clean and free of sawdust, scraps of wood and other objects which might cause tripping or slipping.

32) Ensure that starting and stopping switches are within immediate reach of the person operating the machine.

33) Good body mechanics will be practised.

34) Equipments will not be left standing in traffic lanes. Equipment will be returned to its proper location after service

4. <u>Inspection of Biomedical Equipment</u>

Procedures:

1) Basic biomedical engineering inspection of equipment shall be performed by: Bio Medical Engineer

2) Inspection

- **a.** Visual Inspection
- **b.** Performance Tests
- **c.** Calibration
- **d.** Lubrication
- **e.** Other operations specified for equipment by preventive maintenance tables

3) Performance tests will be made by bio medical engineer, or a request shall be made for the operator to perform the check while the service engineer of the company observes various meter actions, mechanical responses and operating procedures of the operator.

4) During scheduled visit, bio medical engineer will attempt correction of any minor defects found.

5) Defects which cannot be corrected during the visit, due to lack of parts or time, will be scheduled for repair at the earliest practical time.

6) If a defect is found which is dangerous to the patient, operator or equipment, the item will be tagged and withdrawn from service until repaired. Upon completion of the inspection, the respective unit will be returned to service if all aspects of the unit are found to be satisfactory.

5. Condemnation

1) Any equipment, which out lives its life and requires repairs or renewals will be condemned provided the cost of the repairs or renewals exceeds 50% of its original value.

2) Or any equipment which consumes more energy and the version is out dated and hence cannot compete with new version will condemned by the purchase committee after through verification though it has not out lived its life prescribed by the manufacturer.

3) The Purchase committee decides the Method of condemnation. The Maintenance department forwards the repair status of the Machine to the Purchase committee. This report is studied by the purchase committee and arrives at a conclusion

Options of condemnation:

4) Scrap: If the equipment is totally Obsolete or irreparable then the equipment is sold as scrap

5) Buy back: Such equipments are replaced by new equipment and returned to the Vendor in replacement of new equipment at discounted price. The decision for such an option is completely on discretion of the Purchase committee.

6) Sold at discounted price to any taker

7) Condemned Equipment Retained by the department: Some of the equipments are retained by the department so as to use its spare parts for future use. However the machine will be used. Such spares would generally be not available or are expensive otherwise and are still useful.

6. Quality and Monitoring Systems

1) All equipments are checked for proper functioning on a daily basis.

2) Calibration of the equipments are done as per manufacturer's guidelines

3) Appropriate corrective and Preventive actions are taken if downtime of the equipment is large or delay in repairs or missed calibration.

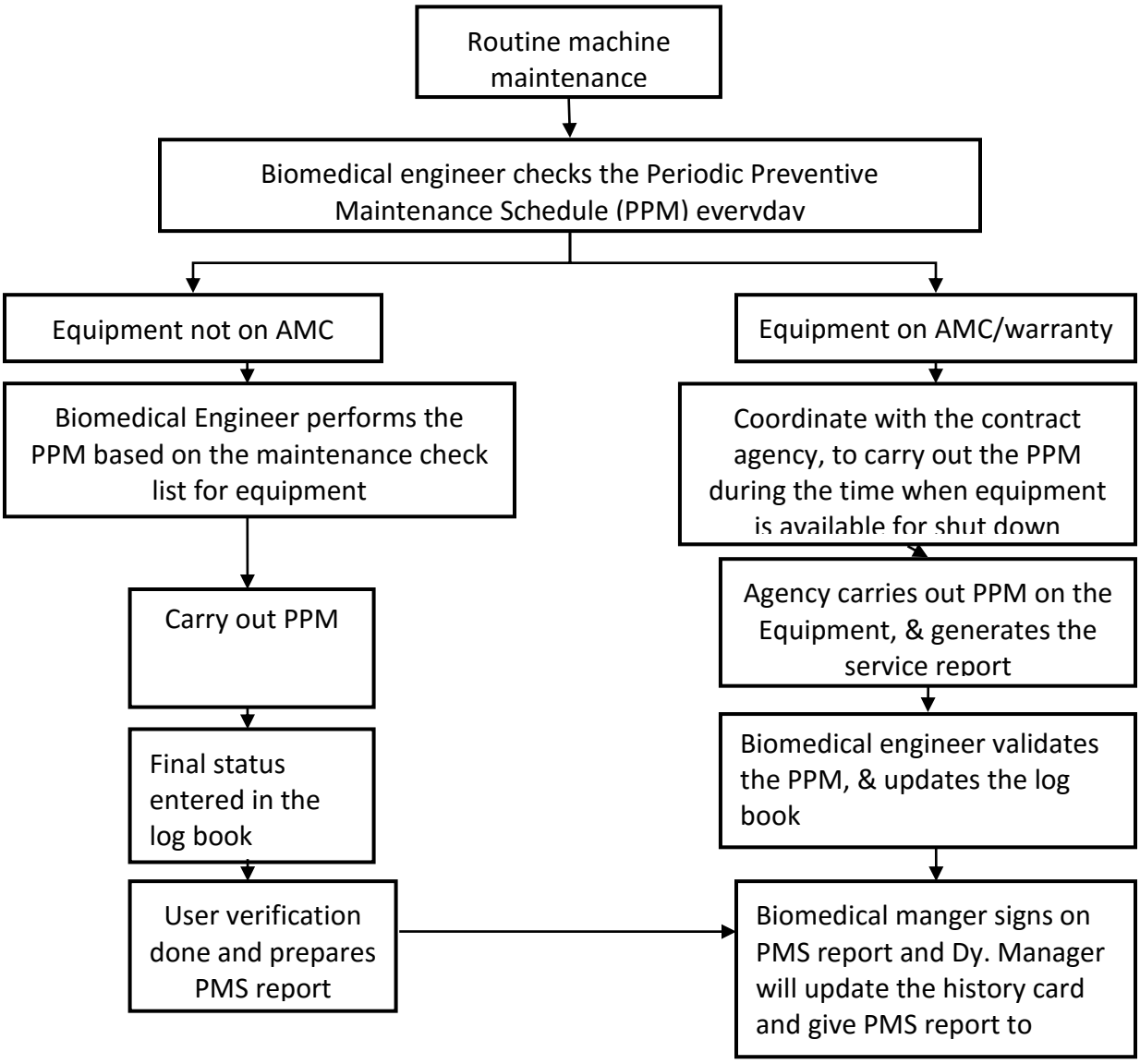
4) The personnel using the equipment are educated about the safe and effective operation and functioning of the equipment at the time of installation and as and when required.

5) The staff is trained to handle and prevent of the hazards. Supplement Guidance and training are imparted to the concerned department. In case of any incidence reported such accidents etc are analysed, and appropriate corrective ad preventive actions are taken.

6) Organization safety committee will also study these actions.

VII. PROCEDURE:

1. Complaint/ Breakdown management



2. Preventive Maintenance

History card

1) All the Equipments in the hospital will have an individual History card
2) All the history cards will be maintained by the engineering services department
3) These history cards would be updated by the Engineering service team as per the set parameter requirements

3. **Annual Maintenance Contract (AMC)**
   1) The Equipments on AMC are identified and marked in the History card
   2) The history card contains the preventive maintenance frequency and calibration requirements and break down maintenance details
   3) On the basis of the information gathered on the history card, Periodic Preventive Maintenance (PPM) schedule is made
   4) The bio-medical engineer follows the PPM schedule in conjunction with the user department on the availability of the machine to conduct the preventive maintenance by the contract agency
   5) The bio-medical engineer collects and documents the Service report of the maintenance conducted on the equipment by the AMC contractor
   6) The break down time is recorded
   7) All the spares details are recorded
   8) The response time of the AMC contractor is recorded
   9) After the Service, the Machine is thoroughly tested by the bio-medical engineer and handed over to the User department.
   10) The user department signs the service order/ work order request if the service was done on a break down.

4. **Fire safety for Bio Medical Equipment**
   1) In the event of Fire the area is electrically isolated by cutting of the Main circuit Breaker
   2) Elevators are brought to ground level and power shut off
   3) Bio-medical engineer monitors and shuts off the section affected by fire of medical gases or the entire Manifold room if required
   4) All electrical equipment will be effectively grounded.
   5) All the power controls will be identified by appropriate labels.
   6) Gasoline powered equipment will be operated in well ventilated areas.
   7) Fuel and flammable gas cylinders will be stored separately from oxidizing gas cylinders.
   8) Staff shall be adequately trained on fire fighting. Department shall be equipped with adequate no. of fire extinguishers
   9) Once the Patients are shifted from the area on fire, Equipments are salvaged.
5. **Equipment Calibration**
   1) All the equipments when purchased the manufacturer defined frequency of calibration is taken as frequency of calibration.
   2) The frequency of calibration is entered in the history card
   3) As the per the frequency stipulated the equipments are calibrated internally or through the AMC provider All the necessary certification will be maintained
   4) The history card is upgraded with calibration codes
   5) The next calibration due will also be mentioned in the history card

6. **Quality Indicator**

Quality Indicator is based on Critical Equipment Downtime, average downtime for rectification, repair of the required product.

Definition:-

Critical Equipment:- Critical equipment are those equipment

a. Required for patients life saving purposes.
b. Must be available 24x7
c. Back up equipment are not available.
d. Cost > 3 lacks
e. Having high lead time.

Down time:- refers to periods when system is unavailable.

Downtime or outrage duration refers to a period of time that a system fails to provide or perform its primary function.

Sr.No.	Name of Indicator	Formula for Calculation	Frequency
1	Critical equipment Downtime	Sum of down time for all critical equipment in hours	Monthly

IX. ANNEXURES:

1. Forms/ Documents

- Master List
- PO copy
- Weekly Check list (MIS Daily & Weekly Report with down time)
- Weekly Preventive Maintenance Plan (PMP) schedule
- Preventive maintenance Monthly Check list
- History card (Soft copy)
- Complaints Register: Retention period: (MIS 3 months reports)
- Equipment File: Retention Period: Till the life of the equipment
- AMC Contract Register: Soft copy of Under AMC list
- Service Reports: Retention period: Till the tenure of the contract
- Equipment Manual: Retention period: Till the life of the Equipment
- Spare Catalogue: Retention period: Till the life of the Equipment

2. Breakdown Slip/ Register

M.G.M. MEDICAL COLLAGE AND HOSPITAL KAMOTHE. New MUMBAI

Daily Breakdown requisition form (Bio-Medical Engineering) [logo]

Department _____

Equipment/Item _____

Asset No/Sr No _____

Problem :

_____

User Name _____

Date _____ Time _____

For BME only:

_____

Action Taken :

_____

Item/Spare use:

_____

Job status

_____

Full Signature of Engineer _____

Date: _____

Response Time .End Time

_____

After Completion

User Full Signature _____

Date _____ Time _____

3. History Card (soft copy)

Unit Name:

Model:

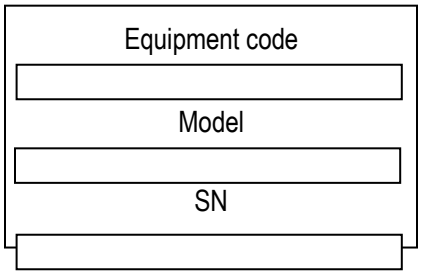
Date	Equipment Code	Maintenance / Breakdown Details	Maintenance/repair Done	Spares Changes	Remarks & Sig. Of I / C

4. Calibration Record & History (soft copy)

Sl. No.	Location / Department	Instrument	Mark / Identification	Range Or G/L	Control #	Date Of Cal.	Due Date Of Cal.	Frequency Of Cal.	Remark & Status. (History)

5. Equipment Log Sticker

1) Equipment Code sticker



2) PMS sticker

Year				
PMS due on				
PMS done on				
Done by				

3) <u>Calibration sticker</u>

Year		
Calibration due on		
Calibration done on		
Done by		

FMS. 5 The organisation has a Program for medical gases, vacuum and compressed air

Prepared by :	Designation : Biomedical Engineer Name: Ms Manisha Mane
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Reviewed by & Responsibility of Updating::	Designation : Chief Of Quality Name: Dr. Gauri Shivani

CONTROL COPY HOLDERS	
Chief Of Quality	Dr. Gauri Shivani

I. POLICY:

To ensure safe handling of medical gases throughout Hospital complying with legal requirements the hospital has a functional centralized gas manifold.

All medical gases are procured and used in centralized pipe line system at present which are made available in every patient care area.

II. PURPOSE:

. To provide guideline/ instruction to facilitate safe use of medical gases

1. To prevent any untoward incident due to mishandling of Medial gases
2. Cylinders to be stored inside covered accommodation in horizontal position on racks.
3. The valve of every cylinder should be tightly closed immediately after use and should be kept in a closed condition when the cylinder is exhausted and returned to the depot / supplier.

III. SCOPE:

All the medical, nursing and technical/maintenance staff of the hospital

IV. RESPONSIBILITY:

1. Biomedical Engineer and all user departments.
2. Manifold services also provide vacuum suction at required pressure at the outlet points
3. Proper co-ordination between engineering department, hospital administration and OT technical staff is ensured at all levels for successful functioning of the system.
4. Adequate ventilation is ensured to prevent the accumulation of medical gas.

5. Proper signages are placed for easy recognition and safety compliance.
6. Adequate fire safety arrangements are ensured at central storage area.
7. Bulk liquid oxygen facility is available with all safety requirements.
8. Emergency oxygen supply is ensured through a secondary manifold comprising of five banks of oxygen cylinders

V. ABBRIVIATION:

1. . Abbreviations are as follows:
2. OT= Operation Theatre
3. ICU= Intensive Care Unit
4. AGSS- Anesthetic gas scavenging system
5. PPE- Personal Protective Equipment

VI. PROCEDURE:

The hospital shall have the following medical gas facilities

- Oxygen
- Nitrous Oxide
- Compressed air
- Vacuum
- Carbondioxide

1. Procurement

All Medical Gases are procured from different suppliers as per national regulatory requirements. While Ordering of and inspection of cylinders and regulators there must be detailed records covering the ordering and inspection including.

2. Staff must

1) Ensure that the official order and subsequent delivery notes are carefully kept and accessible
2) Ensure that each delivery is clearly identified and that the supplier and delivery date are clearly recorded on the goods themselves. It is not sufficient for this information to be merely on the packaging
3) Ensure that the record of supplier and delivery date remain with the goods throughout their life and these records must be updated every time the goods are subsequently checked
4) Procure cylinders from more than two vendors so as to avoid any delay in emergency conditions
5) Undertake a full maintenance inspection of all gas regulators at least once a year by an authorized and approved inspector.
6) Inspect cylinders regularly to ensure that they are stored correctly and have not been damaged.
7) Ensure appropriate pressure at all vent points. This can be done by the staff nurses appointed in the wards, ICU and OTs wherever vents points are present

3. Storage

1) Storage areas for compressed gas cylinders should be well ventilated, fireproof, and dry. Cylinders should not be stored near steam pipes, not water pipes, boilers, highly flammable solvents, combustible wastes, unprotected electrical connections, open flames, or other potential sources of heat or ignition. Cylinders should be properly labeled.

2) There will be no electrical appliances, sockets or switches in the gas manifold room.

3) Empty and filled cylinders shall be marked and kept separately

4) Cylinders shall be stored in an upright position.

5) The valve protection cap should not be removed until the cylinder is secured and ready for use.

6) Personnel concerned with the use and transport of compressed gas must be trained in the proper handling of cylinders, cylinder trucks and supports, and cylinder-valve protection caps

8) All cylinder storage areas, outside and inside, must be protected from extremes of heat and cold and from access by unauthorized persons.

9) Cylinders must be secured at all times so they cannot fall.

10) Valve safety covers must be left on until pressure regulators are attached.

11) Containers must be marked clearly with the name of the contents. Tanks with wired on tags or color code only must not be accepted.

12) Cylinders are not stored near elevators, in corridors, or in locations where heavy objects may strike or fall on them.

13) Storage areas must be posted as NO SMOKING areas

14) Storage cabinets should be labeled FLAMMABLE- KEEP FIRE AWAY.

15) Metal cabinets must be constructed of steel sheet that is at least No 18 gauge. They must be double-walled with a 1.5 inch air space, and they must have joints that have been riveted, welded, or otherwise made tight.

16) Cylinders shall not be stored in damp areas, near salt or corrosive chemicals, fumes, heat or where exposed to the weather

17) Cylinders shall not be stored longer than one year without use.

4. Handling

1) Hand trucks or dollies must be used in moving cylinders. Do not roll or drag cylinders.

2) No more than two cylinders must be manifold together; however, several instruments or outlets are permitted for a single cylinder.

3) Tighten regulators and valves firmly with the proper sized wrench. Do not use adjustable wrenches or pliers. Do not force tight fits.

4) Open valves slowly. Do not stand directly in front of gauges (the gauge face may blowout). Do not force valves that stick.

5) The maximum rate of flow must be set by the high pressure valve on the cylinder. Fine-tuning of flow must be regulated by the needle valve.

6) Shut off cylinder when not in use.

7) Cylinders and connections shall be tested by "snoop" or a soap solution. First test the cylinders before regulators are attached and test again after the regulators or gauges are attached.

8) Never drop cylinders or allow them to strike each other.
9) If cylinders are temporarily stored outside in the summer, make sure they are shaded from the rays of the sun.
10) Ensure the rotation of cylinders to enable cylinders with the oldest filling date to be used first
11) Ensure that cylinders are used prior to their expiry date
12) Cylinders shall not be picked up by the cap.
13) Ensure the cylinders are regularly checked for any damage
14) Ensure the trolleys are inspected for any damage

5. <u>Owner' record:</u>

The owner of a cylinder shall keep for the life of each cylinder, a record containing the following information regarding each cylinder, namely
Cylinder manufacturer's name and the rotation number
The specification number to which the cylinder is manufactured
Date of original hydrostatic test or hydrostatic stretch test
Cylinder manufacturer's test and inspection – certificates
Number and date of letter of approval granted by the Chief Controller.

1) Do not attempt to open a corroded valve; it may be impossible to reseal.
2) Cylinders that have been dropped with potential impact to the valve are:

- Removed from service
- Marked that they were dropped
- Returned to the vendor, as appropriate.

3) No oil or similar lubricant should be used on the valves or other fittings of this cylinder.
4) Please look for the next date of test, which is marked on a metal ring inserted between the valve and the neck of the cylinder, and if this date is over, do not accept the cylinder for filling.
5) Check the regulator has been formally inspected and is under 5 years old
6) Check that the "hand-grip" on the regulator is in a proper condition. If not isolate the regulator and return to the supplier as soon as possible

6. <u>Manifolds, Valves and Regulators</u>

1) The following information applies to the use of manifolds, valves and/or regulators:
2) Where compressed gas containers are connected to a manifold, the manifold and its related equipment, such as regulators, shall be of proper design for the product(s) they are to contain at the appropriate temperatures, pressures and flows.
3) Use only approved valves, regulators, manifolds, piping and other associated equipment in any system that requires compressed gas. Care must be taken to ensure that pressure gauges on regulators are correct for the pressure of the gas cylinder used. With the exception of lecture bottles, threads, configurations and valve outlets are different for each class of gases to prevent mixing of incompatible gases.
4) Label all associated equipment with the gas name to prevent unintentional mixing of incompatible materials.
5) Valves and regulators should undergo periodic maintenance and repair. A visual inspection should be performed before each usage to detect any damage, cracks,

corrosion or other defects. Long term maintenance or replacement periods vary with the types of gases used, the length of use, and conditions of usage. Consult the cylinder, regulator or gas supplier for recommended valve and regulator maintenance schedules.

6) Valves and regulator maintenance histories should be known before usage.

7) Valves and regulators should only be repaired by qualified individuals. Valve and regulator manufacturers, gas supply companies, or valve and regulator specialty shops should be consulted for any repair needs.

7. Fuel, High Pressure and Oxidizing Gases

The following information applies to the use and handling of fuel, high pressure and oxidizing gases

Oxidizing gases are non-flammable gases (e.g., nitrous oxide), but in the presence of an ignition source and fuel can support and vigorously accelerate combustion.

1) Oxygen Use

- Oxygen and other gases are potentially dangerous. Special safety precautions must be followed at all times while using or storing oxygen.
- Be sure cylinders are secure on rack and never hang anything on cylinder.
- Crack valves to clear them before bringing tank into patient's room.
- Read labels, tags and color code before administering any compressed gas.
- Check oxygen supply regularly.
- Store oxygen cylinders upright and secured.
- Do not use oil in any apparatus where oxygen will be used. Gauges and regulators for oxygen shall bear the warning “OXYGEN - USE NO OIL.”

2) Leaks

- Leaks can be identified by a hissing noise
- Leaks can be found by brushing the suspected area with an approved leak test solution.
- The gland packing around the valve spindle may become loose and can be cured by tightening the gland nut clockwise. Do not over tighten.
- Sealing or jointing compounds must never be used to cure a leak.
- Never use excessive force when connecting equipment to cylinder

3) Minor Leaks

Occasionally a gas cylinder or one of its component parts may develop a leak. Most of these leaks occur at the top of the cylinder in areas such as the valve threads, pressure safety device, valve stem and valve outlet. The following information applies to the remediation of minor leaks:

- For flammable, inert or oxidizing gases, move the cylinder to an isolated, well-ventilated area (e.g., within a fume hood) away from combustible materials. Post signs that describe the hazard.
- For corrosive gases, move the cylinder to an isolated, well-ventilated area (e.g., within a fume hood) and use suitable means to direct the gas into an appropriate chemical neutralizer. Post signs that describe the hazards.
- If it is necessary to move a leaking cylinder through populated portions of the building,

place a plastic bag, rubber shroud or similar device over the top and tape it (duct tape preferred) to the cylinder to confine the leaking gas.

4) Major Leaks

In the event of a large gas release or if an accident takes place in which readily available personal protective equipment (PPE) is inadequate to ensure worker safety, activate the following Emergency Procedures:

- Activate building and area fire alarms (or chemical safety alarms if applicable).
- Evacuate the area, securing entrances and providing assistance to others on the way out.
- Provide emergency response officials with details of the problem upon their arrival.

8. Guidelines for Medical Gases Supply

1) Piping

1 Piping shall be protected against physical damage, corrosion etc.

2 Buried piping subject to surface load shall be installed at sufficient depth to prevent the piping from excessive stress. The minimum backfilled cover should be 36".

3 Trenches shall be excavated so that the pipe has a firm and substantial continuous bearing on the bottom of the trench.

4 Piping shall not be installed in kitchens or electrical switchgear rooms. Areas/corridors where movement of equipment may cause physical damage shall be avoided. If unavoidable protective shields will be used.

5 Correct size piping is one of the most important aspects to be considered in designing system for central for medical gas delivery system. Undersized pipes may not give adequate pressure and flow under peak load. Oversized pipes would make the system more expensive.

6 Good system design requires that risers be larger than laterals and laterals be larger than drops.

7 Piping system is sized to confine the pressure drop over the total system within 5 psig for positive pressure gases and 3" of Hg for vacuum system.

2) Control panel

1 Separate rooms shall be constructed for housing the Gas Control Panels and other equipment.

2 It will be preferably located on the ground floor and will have easy access to delivery vehicles.

3 It will be well ventilated and lit.

4 For ease of handling of cylinders the floor level will be at a height of one meter from the ground level.

5 A separate room called Plant Room will be used for compressors and vacuum pumps. This room will be in close proximity of the Manifold Room.

6 Oil or oil mist and other hazardous material will not contaminate the surrounding atmosphere.

7 No grease, oil or naked flame will be used in the near vicinity

8 The area will be a 'No Smoking' zone. Oxygen is normally supplied as compressed gas in cylinders. The color code for oxygen cylinder is black body with white neck.

9 For ensuring uninterrupted supply two separate banks will be used. Gas from one bank is utilized at any point of time. The other bank is kept as stand by or reserve. A control panel installed between the two banks will ensure that both banks are not depleted simultaneously and the control of the manifold automatically shift the flow of gas from the primary side to secondary side when the primary bank pressure falls below the set level. The control panel used shall be built in accordance to the international standards.

10 There will be a regulator for each cylinder bank to initially reduce the cylinder pressure to the two line regulators that control the final pressure. Both line pressure regulators should be in service at all times.

11 Alarm systems shall be attached to alert as soon as the pressure falls down.

12 Medical compressed air should not have any contaminants in the form of particulate matter, odor, oil vapour or other gases.

13 The air intake of medical air compressors should be located outdoors and at a distance of at least 10 feet from an opening in the building such as doors/ windows.

3) Vacuum

The Vacuum source should consist of two or more vacuum pumps duplexed with provision for operation alternately or simultaneously depending on demand.

Each pump will be capable of maintaining the required vacuum at 100 per cent of the total calculated system demand.

Each pump will have by-pass valves to isolate it from the central piped system and other pump for maintenance. Alarm should indicate failure of any vacuum pump.

Exhaust from vacuum pumps must be discharged outdoors and located in such a fashion that noise and contamination to the surroundings shall be minimized. It is recommended to use bacterial filter between drain trap and reservoir having a maximum penetration up to 0.005 per cent.

Pipes will be joined by flux less silver brazing with continuous purging with oil free dry nitrogen to avoid formation of copper oxide on the inside surface.

Outlets shall be gas specific and prevent use of other probes. It will be double locking type to prevent loss of gas due to leakage and also for facilitating on line servicing.

Properly designed monitoring alarm systems will provide audiovisual indication of system pressure levels and reorder conditions necessary to provide continuous supply of gases. Alarm systems comprise of master alarm panels, area alarm panels and remote sensing devices.

Master Alarm Panel will provide audible and non-cancelable visual signals indicating when pressure or vacuum exceeds or falls beyond 20 per cent of normal limit.

12 Safety measures for medical gas delivery system

a) Safety valves provided to be set at 1.5 times the working pressure

b) Locknut provision on regulators for preventing inadvertent high-pressure settings.

c) Two stage regulators for avoiding fluctuation in flow.

d) Line pressure alarms for continuous monitoring pipeline pressure. These pressure monitoring units shall be installed in OT, ICU and the gas manifold room.

e) Gas specific color-coding in each pipeline according to international standards. (Oxygen-green, CO2- Grey, Nitrous Oxide- Blue, Compressed air- Yellow).

f) Gas specific color-coding on cylinders (Oxygen- black with white collar, CO2- Grey, Nitrous Oxide- Blue, Compressed air- Yellow).

g) Specific color-coding on each outlet.

h) Non-interchangeable adaptor for each outlet.

i) The department shall be well equipped with fire extinguishers, sand store etc in case of accidents.

j) The concerned patient care area staff is responsible for safe storage and handling of the medical gas cylinders and should observe the following precautions.

k) The cylinder check list should be filled by the respective patient care staff at the beginning of each shift.

l) Staff should check the cylinders to ensure that there is no leakage.

m) Incase of any leakage maintenance staff should be immediately informed

n) **Operating precautions are as follows** :-

- Always "crack" cylinder valves (open the valve just enough to allow gas to escape for a very short time) before attaching regulators in order to expel foreign matter from the outlet port of the valve.
- Always follow the regulator manufacturer's instructions for attaching the regulator to an oxygen cylinder.
- Always use the sealing gasket specified by the regulator manufacturer.
- Always inspect the regulator and seal before attaching it to the valve to ensure that, there is no leakage.
- Always be certain the valve, regulator and gasket are free from oil or grease. Oil or grease contamination is widely known to contribute to ignition in oxygen systems. Tighten the T-handle firmly by hand, but do not use wrenches or other hand tools that may over-torque the handle.
- Open the post valve slowly. If gas escapes at the juncture of the regulator and valve, quickly close the valve. Verify the regulator is properly attached and the gasket is properly placed and in good condition. If you have any questions or concerns contact your supplier.

VIII Quality Assurance

1. Purpose

To provide and document the methodology for Quality Assurance of the Gas Manifold Room Equipment to ensure that

1) Process capability continue to be satisfactory,

2) Required data / records are maintained, and

3) Corrective actions / improvements are initiated.

2. Outcome Indicators

Potential outcome indicators in this related to this department shall be-

1) No. of times services outsourced

2) No. of accidents

3) No. of incidents where the pressure monitored at any vent point was less than desired

3. Preventive Maintenance

1) Preventive maintenance schedules to be prepared based on manufacturers' recommendations /review of History Card maintained.

2) The availability of necessary spares, consumables, tools and necessary materials to be ensured through standardization and /or advance planning, through Stores and guidance by Head Manifold.

3) After completion of maintenance (whether preventive or breakdown) the O K report to be taken from the Head of Anaesthesia (in charge of the manifold room).

4) All preventive maintenance jobs done will be recorded in History Card maintained for each equipment / device (unit wise) using format.

4. Breakdown Maintenance

1) In any event of breakdown manifold engineer is informed who logs the requirement of maintenance / repair in format of Breakdown Slip

2) After completion of maintenance / repair, an O K report is taken from the Head of Department / Manager Engineering

3) All breakdown repair jobs done are recorded in History Card maintained for each equipment / devices.

4) Instruments / devices which are given in AMC (Annual Maintenance Contract) are given to AMC Company for maintenance. A report of failure / break down is taken from company for monitoring purposes.

5. Calibration of Devices

1) The pressure gauges in the Central Manifold panel are to be calibrated and maintained. The name of equipment, type, serial number, location, applicable calibration requirements, date of calibration done and calibration due date to be documented. The calibration status to be updated periodically.

2) Documentation will indicate whether calibration is done in house or through external sources. Calibration requiring an out side agency - a contract or purchase order will be issued.

3) Where required Calibration agency is provided with necessary facilities and support to carry out calibration in the hospital itself.

4) Such instruments that are to be calibrated at an outside location are collected and sent to the identified calibration agency.

The following is checked when calibration is done –

a) Physical condition of instrument /test equipment

b) Calibration report verification

c) Calibration certificate to be obtained from calibration agency and after verification marked as O.K. /Not O.K.

d) Sticking of calibration sticker

- Calibration history is maintained and calibration certificates filed.
- Maintenance preserves the machine's accuracy and fitness for use. If equipment is out of calibration or is otherwise not fit for use, it should be withdrawn from use.

- Persons using instruments are trained on aspects like do's, Don'ts, handling, storage, safety, preventive maintenance and minor repairs as and when required. Records of training imparted are maintained.
- Faulty instruments are re-calibrated when received after repair.

IX. Training of staff

Since there is no formal course in the country related to gas manifold the staff of this department shall be imparted with training from personals from BOC (Bharat Oxygen Company). Another option that is viable is to outsource the facility

1. General precautions:

1) Care must be taken when handling or transporting cylinders to prevent their being dropped since they are liable to break and explode with violent effects.

2) If large stocks of cylinders are being handled suitable trolleys shall be provided for transporting and handling them.

3) The name or chemical symbol of the gas shall be stamped, stenciled or painted on or near the shoulder of the cylinder.

4) No person shall be allowed to smoke/use combustible material/fire/inflamed material within 100 mts. from where the gas cylinders are placed. Fire extinguishers shall be made available within the complex for any fire hazards.

5) Cylinder shall not be kept in warm places where temperature is high such as in the neighborhood of furnaces, boilers etc. This may cause an undesirable rise of pressure owing to expansion of the gas.

6) The cylinder shall be painted correctly according to the colour code for their identification e.g. oxygen – black body and white top, carbon dioxide – black body and silver/ grey top and nitrous oxide – blue

2. Guideline/instructions

- **Storage of cylinders**

1) Cylinders should be stored under cover, preferably inside, kept dry and clean and not subjected to extremes of heat or cold.

2) Cylinders should not be stored near stocks of combustible materials or near sources of heat.

3) Medical cylinders containing different gases should be segregated within the store strictly in accordance to their color codes.

4) Full and empty cylinders should be stored separately. Full cylinders should be used in strict rotation.

5) Cylinders must not be repainted, have any markings obscured or labels removed.

6) Larger cylinders should be stored vertically. Smaller cylinders should be stored horizontally.

7) In the respective patient care areas cylinders should be stored under the supervision of the nursing staff that would be responsible for its safe storage and use.

8) ii. Preparation for use

9) Cylinder valves should be opened momentarily prior to use to blow any grit or foreign matter out of the outlet.

10) Ensure that the connecting face on the yoke, regulator is clean and the sealing washer or 'O' ring where fitted is in good condition.
11) Cylinder valves must be opened slowly.
12) Only the appropriate regulator should be used for the particular gas concerned.
13) Cylinder valves and any associated equipment must never be lubricated and must be kept free from oil and grease.

- **Use of cylinders**

1) Cylinders should be handled with care and not knocked violently or allowed to fall.
2) Cylinders should only be moved with the appropriate size and type of trolley.
3) When in use cylinders should be firmly secured to a suitable cylinder support.
4) Cylinders containing liquefiable gas must always be used vertically with the valve uppermost.
5) Medical gases must only be used for medicinal purposes.
6) Smoking and naked lights must not be allowed within the vicinity of cylinders.
7) After use cylinder valves should be closed using moderate force only and the pressure in the regulator.
8) When empty the cylinder valve must be closed.
9) Ensure the plastic valve cap is refitted to bullnose valves/outlets.

Immediately return empty cylinders to the vendor for replenishment.

- **Replenishment of empty cylinder:**

The nursing staff of the concerned patient care area is responsible to replenish the empty cylinders with filled in cylinders from the cylinder storage area of the hospital.

The empty cylinders are collected by the vendor from the cylinder storage area for re-filling.

X. RECORDS AND FORMATS:

1. Breakdown Slip/ Register
2. Preventive maintenance Schedule / Record
3. AMC Records (for Compressor)- company generated
4. History Card
5. List of instrument requiring calibration
6. Calibration Sticker
7. Calibration Reports
8. Complaint Slip
9. Complaint & Breakdown register
10. Preventive Maintenance Schedule Record
11. Gate Pass slip (for sending out empty cylinders)
12. Gate Pass Register/Record
13. Oxygen cylinder refill register
14. Inventory Handover register
15. Company cylinders record
16. Manual of equipment & pipelines
17. LPR copies
18. Oxygen storage license .

FMS. 6 The organisation has plans for fire and non-fire emergencies within the facilities.

Prepared by :	Designation : Fire Officer Name: MR. Vaibhav Bele
Approved By :	Designation : Medical Superintendent Name: Dr. K. R. Salgotra
Reviewed by & Responsibility of Updating:	Designation : Chief Of Quality Name: Dr. Gauri Shivani

CONTROL COPY HOLDERS	
Chief Of Quality	Dr. Gauri Shivani

I. POLICY:

Hospital shall identify the emergency plan within the hospital before any emergency situation arises

II. PURPOSE:

1. To provide policy for response to both fire and non – fire emergencies that may affect hospital staff, patients, visitors and the community.
2. Identify responsibilities of individuals and departments in the event of a disaster situation.
3. Identify Standard Operating Procedures & Guidelines (SOG's) for emergency activities and responses
4. Ensure the safety of people;
5. Ensure continued delivery of critical and essential functions and services;
6. Reduce losses and damage to records, facilities, and systems
7. The policy is intended to provide guidelines for Emergency Planning requirements for hospital buildings.
8. Prevent or lessen the impact that a disaster may have on the hospital
9. Identify resources essential to disaster response and recovery and facilitate their access and utilization
10. Prepare staff to respond effectively to disasters or emergency situations that affects the environment of care (response) and test response mechanisms

III. SCOPE:

This policy shall apply to entire hospital buildings

IV. RESPONSIBILITY:

. Employees at every level of the hierarchy

V. DISTRIBUTION:

Hospital wide

VI. DEFINITION:

Disaster: A disaster is defined as a sudden massive disproportion between hostile elements of any kind and the survival resources that are available to counterbalance these in the shortest period of time. In. mass casualty situations, demands always exceed the capacity of personnel and facilities

Disaster preparedness plans must encompass the possibility of hotel and high-rise fires, terrorist attacks, aviation accidents, bomb blasts, riots, nuclear accidents and industrial explosions as well as natural calamities such as floods, epidemics drought and earthquakes.

VII. ABBREVIATION:

- . Abbreviations are as follows:
- SCR – Security Control Room
- ERT – Emergency Response Team

VIII. PROCESS DETAILS:

1. FIRE—EMERGENCY RESPONSE PLAN

A. Minor Fire

1) There are two ways by which the indication/ information of fire reaches Fire Control Room (FCR)

2) Individual discovers the fire.

3) Fire indication detected at the 'fire control panel' located at the FCR The individual discovering the fire will take the following actions:

- Dials 7900/7901 (FCR) and give his / her name, department, exact location of fire.

Starts immediate action to fight the fire (without panic) & with the assistance of colleagues in the close vicinity. 'PICK UP FIRE EXTINGUISHERS FROM THE CLOSEST FIRE POINT'.

- ERT (Emergency Response Team) members available on the floor will also assist in fighting the fire.

Security assistant at FCR will immediately flash a message, giving location of the fire, on walkie-talkie to:

1) Fire Officer

2) Duty Security Supervisor

3) Nurse Supervisor

Fire Officer Duty Security Supervisor Nurse Supervisor will move to location of fire

Informer will report the type & extent of fire to FCR. Fight the fire with the assistance of others in the vicinity, including ERT members available on the floor.

Site Engineer will ensure adequate water supply and also alert engineer control room in case oxygen / electric supply is to be switched off.

When the fire is extinguished, Fire Officer will assess the damage and submits a preliminary report to Medical Superintendent.

NOTE: -

Equipment to be carried at all times by staff:

1. Security Guard---a torch.
2. Duty Security Supervisor -- Master Key of all the floors (while on duty).
3. Duty Lift man -- emergency elevator key.

B. Major Fire (Without Evacuation)

1. Even after stage 2, if the fire is not contained / extinguished, Fire officer at the location of fire will inform security control to page ERT.
2. Fire officer at FCR will inform telephone operator to page ERT, Shift Engineer, Head of Security/Security officer, and all HODs.

Note:

- All other ERT members on duty will immediately report to the FCR on receiving the page for fire.
- Fire officer at FCR will divide ERT members into 04 teams:
    1) Core fire fighting Team - 2
    2) Rescue Team - 2
    3) Cordon Team - 2
    4) Salvage Team - 2
- Fire officer will lead all the 04 teams to the location of fire.
- All present at location of fire will fight the fire.
- If the fire is still not contained/extinguished, a decision on calling fire tenders will be taken by Medical Superintendent , Chief Administration Officer, Head Of Security, Site Engineer or Duty Manager, Security Officer, Shift Engineer (During night operations).

2. Hospital Evacuation Plan

1) MAJOR FIRE (With Partial/full evacuation)

In case of a major fire a decision will be made by Medical Superintendent , Chief Administration Officer, Head Of Security,after consulting Medical Director whether to evacuate the hospital or not.

Three decisions, which can be made, are as follows: -

2) NOT TO EVACUATE

This could be because the fire has been extinguished or can be extinguished by ERT, without any further spreading to new area.

3) PARTIALLY EVACUATE

This could be because there is no danger of the fire spreading but there is sufficient smoke to cause discomfort to patients in the immediate area or because it is not certain that ERT will be able to bring the fire under control without further spreading.

A partial evacuation would normally be up to 02 floors above and 01 floor below the floor of fire

4) FULL EVACUATION

Based on the fact that the fire is fully out of control

NOTE : Should the situation arise that either the Medical Superintendent , Chief Administration Officer, Head Of Security, if does not arrive promptly , the final decision to evacuate the hospital will be made by Fire Officer.

A. In the event of fire or other internal disaster, all patients and personnel will have to be removed from immediate danger to a safer section of the building, behind fire doors or removed from the building.
B. Moving will be done first behind fire doors on the same floor and then if those areas become dangerous patients and personnel will be moved to lower floors or to the outside of the building.
C. Moving will be done in a systematic fashion by moving all patients and personnel closest to the danger first.
D. Make sure the fire doors are kept closed as much as possible when moving into each section.
Evacuation of First & upper Floors of Hospital

- Activate the fire plan by pulling the fire alarm when a dangerous situation is found.
- Start evacuating all patients and personnel from the immediate danger area, in a systematic manner.
- The Medical Superintendent, Chief Administration is responsible for calling 101/100 and requesting all available fire and ambulance personnel to respond. In their absence Fire officer and Security Supervisor.

Remember keep cool, calm, and collected and we should have a successful evacuation.
If we evacuate the entire building, everyone will report to the parking lot. A roll call will be made of each department area involved by the person in charge of each area. The supervisor will check with each department head to make sure everyone is accounted for.

3. Fire Fighting system in the facility

Fire Hydrant & Automatic Sprinkler system:-

- The hydrant used in this system is water. It extinguishes fire by opening the valve after connecting the hoses and nozle manually.
- The fire sprinkler system is arranged in equal dimensional gaps

- The sprinkler system comprises of sensor glass tube filled with volatile liquid and calibrated to rupture at 68 degree of Celsius of temperature and give way to water to sprinkle
- When the sprinkler sprinkles water, the pressure in hydrant matrix reduces and the same drop in the pressure activates the motor to pump water ensuring uninterrupted flow of water
- Fire hoses located at various locations are also connected to the fire hydrant system
- In case of power failure the motor would switch over to the generator power
- Locations where the fire hydrant systems are installed

a. 10 No's yard hydrants all around the Hospital building.

b. On every floor 8 risers (IPD 6 OPD 2 on each floor)

- Automatic sprinklers systems are installed on all floors except basement.

Manual System

- Portable fire extinguishers are provided throughout the hospital and every employee is trained to identify the type of fire and type of fire extinguisher to be used.
- All these fire extinguishers are serviced regularly and have service card attached to them indicating the date of service.

Types of Fires

a. Class A: Ordinary combustibles such as papers, rags, wood, etc.

b. Class B: Oil, flammable solvents, gasoline, grease, etc.

c. Class C: Electrical fires, energized electrical equipment

Types of Extinguishers

a. Pressurized water - use only on Class A fires

b. Dry chemical - use on Class A, B, or C fires

c. Carbon dioxide - use on Class B or C fires

d. Other systems available

- Hose Reel – at specific locations
- Alarm / warning systems

The alarm system is designed such that when it is activated the alarm on the particular floor/area will ring and the alarm on the other area will also blink intermittently and ring in the control panel

- Heat and smoke detectors
- Press down

The press down is meant for anybody to activate the alarm system. They will be located on all corridors and near the exit doors on each floor.

- Manual call points

Some areas are installed with localized alarm panel that will sound whenever any system is activated. Manual call points are installed at various locations, which can be activated on seeing the fire.

- Control Panel

The main control panel of the Alarm and warning systems is located in the ground flooe Fire Control Room

Fire Prevention & Fire fighting protocol & duties of various departments

Objectives:

a. To safeguard the human lives first in the event of fire, followed by materials
b. To ensure prompt rising of fire alarm and fire fighting efforts in the event of a fire.
c. To ensure that the patients, visitors and staffs are evacuated safely and orderly.
d. To advice the management and the staff on the policies and programs that one need to be implemented to help create an awareness of fire hazards.
e. Plan of action on fire prevention and also various steps to be taken during a fire emergency.

Activities

a. Safe operating procedure to be followed in prevention and containing fire hazard.
b. Staff training with regards to the available fire prevention and detection system.
c. Training of staff in the use of fire fighting equipments.
d. To organize fire drills.
e. To liaise closely with the state Fire department.

Fire Prevention

Safe work procedures ensure a fire safe working environment.

a. Ensure that all waste products such as papers, cloths etc are removed daily.
b. Excessive storage of inflammable articles provide fuel should fire occur.

- Storage of inflammables such as alcohol, spirit and gas cylinder should be according to the requirement of the hospital needs complying with such handling rules.
- Ensure these articles are kept in a safe and well ventilated area away from source of heat and potentially spark producing instruments.

c. Smoking is not allowed in the ward and hospital area.
d. All electrical appliances are to be periodically checked for defects.
e. Do not use multi socket electrical attachments.
f. Do not attempt to repair faulty electrical appliances. All such items to be directed to facility or biomedical department.
g. All fire fighting equipments are to be placed in an accessible place. Ensure they checked periodically.
h. All staff must make a priority to learn to use the fire fighting equipments.
i. Ensure the exit routes are not blocked by any furniture.
j. Emergency exit charts must be placed at sites where they are easily visible.
k. Ensure that all emergency lightings are working.

In the event of Fire

a. In the event of a fire the fire alarm is activated:
- By sensors which are placed across the hospital
- By pressing down fire alarm point.

b. The alarm is received in the Fire Control room and personnel in emergency department identify the Zone in which the alarm is triggered and inform the facilities technician & Security supervisor.

c. The facilities and security teams rush to the location.

d. The facilities team would assess the fire and if the fire is intense (i.e. when the fire has the possibility to cause damage to patients, men or materials)

e. The Fire control room receptionist would then on the Public addressal system announce "CODE RED – *location"*

The organization shall have plans and provisions of adequate training Programs for the staff and ERT members. It shall also conduct regular mock fire drill and records of the same shall also be maintained

4. <u>Fire / Emergency Exit Plans</u>

A hospital should assign a designated, trained representative to the affected department(s) or unit discharge / exit point. This individual should be able to help provide in-house transportation information and real time guidance required to move patients to the appropriate Refuge or Triage Areas within the facility. This individual should maintain communication contact with the assigned representative within the and relay information regarding departmental conditions and needs. They will maintain contact with the Fire Officer throughout the incident or until evacuation of the area is complete.

S. No.	STEPS	RESPONSIBILITY
1.	If a disaster occurs in a patient care area, or threatens a patient care area, employees should remove patients who are in immediate danger. *DO NOT WAIT FOR INSTRUCTIONS*. Patients should be taken to the nearest safe area on the same floor if possible (horizontal evacuation). If the patients are not in immediate danger and the alarm has been activated, WAIT for evacuation orders.	All hospital employee
2	Do not leave patients unattended. It should be ensured that hospital staff members assume responsibility for patients under someone else's care before they leave to report to pre-assigned disaster response assignments. For example, appropriate hand-off must be conducted before leaving any patient.	Emergency Team / Residents/Nurses
3	Ensure that an officer is dispatched to the front entrance of the hospital to meet the emergency responders and direct them to the scene of the problem. Ensure that officers are dispatched as needed to direct entrances/exits and activate lock-down procedures for the facility.	Duty Security Supervisor

	Security officers should follow their Security Emergency Operations Procedures Manual. Security staff, using radios or an alternate communications system, should be located at exit(s) of patient care units to ensure that all patients, visitors and staff are accounted for.	
4	Assist in directing visitors in the food service areas to exit the hospital. Immediately clear hallways of all tray carts, steam carts and food serving carts. Prepare and serve nourishment to patients, family members, volunteers and other Personnel if good health practices can be maintained. Set up menus or backup service in disaster situation and maintain adequate supplies. Evaluate the impact of the disaster situation to determine if utilities and appliances in kitchen and cafeteria areas should be shut off and are safe.	F & B Services
5	Stand by to ensure shutdown of gas valves, heating, ventilation, air conditioning and other facility equipment as appropriate. Maintain and control functioning of all available elevators, ventilation equipment and emergency generators. Be available to set up extra beds in hospital if needed. Assume additional duties as needed.	Biomedical Engineer Lift Man Electrical Engineer Nursing Head

5. <u>Handling of Non – Fire Emergencies</u>

The organization shall take care of non – fire emergency situations by identifying them and by deciding appropriate course of action. These may include:

- Terror attack
- Earthquake
- Invasion of swarms of insects and pests
- Hysteric fits of patients and / or relatives etc.

The organization shall establish liaison with civil and police authorities and fire brigade as required by law for enlisting their help and support in case of an emergency.

Staff shall be trained for their role in case of such emergencies. The training shall include various classes of fire, information and demonstration on how to use fire fighting equipments and the procedure to be followed in cases of fire and non – fire emergencies.

6. Mock Drills

Mock drills shall be held twice in a year, but can vary. This shall test all the components of the plan and not just awareness / demonstration on use of fire fighting equipment. Dummy patients shall be used for evacuation.

At the end of every mock drill, the variations shall be identified, reason for the same shall be analysed, debriefing of the drill shall be conducted and where appropriate the necessary corrective and / or preventive actions shall be taken.

There shall also be maintenance plan for fire related equipments and this shall adhere to manufacturers and / or statutory recommendations.

FMS. 7 The organisation has a plan for management of hazardous materials.

I. POLICY:

. The hospital shall ensure that steps are taken to minimise the potential of harm from hazardous materials by appropriate management & by providing appropriate training.

II. PURPOSE:

. Purpose of the policy is to ensure that:

- Hazardous materials in the hospital are identified
- Processes for sorting, labelling, handling, storage, transporting & disposal of hazardous materials are identified
- The risk associated with spill of blood & hazardous chemicals to staff, patient & others are identified, assessed, managed & minimised.

III. SCOPE:

. Hospital wide

IV. RESPONSIBILITY:

. Radiation safety officer, Technicians, Infection Control Nurse, Housekeeping Department and material handling staff of each dept.

V. DISTRIBUTION:

. Hospital Wide

VI. DEFINITIONS:

. **Hazardous materials**- These are those substances that are dangerous to human & other living organisms. They include radioactive or chemical materials

Hazardous waste- Hazardous waste materials are dangerous to living organisms. Such materials require special precautions for disposal. They include biological waste that can transmit disease (for example- blood, tissues), radioactive materials & toxic materials & toxic chemicals. Other examples are infectious waste such as used needles, used bandages & fluid soaked items.

VII. DESCRIPTION:

1. List of Hazardous Chemicals

1) Sodium **HYPOCHLORITE**
2) Tincture Benzoine
3) Cidex
4) Savlon
5) Absolute Alcohol/Clinical Spirit
6) Betadine/Wokadine
7) Concentrated Haemodialysis Solution

8) Formalin Solution
9) Isopropanol /Handrub Sterillium
10) Lugol's Iodine
11) Nitric Acid
12) Sulphuric Acid
13) Hydrocloric Acid
14) Virkon /Bacillocid
15) Acetone
16) D.P.X. Mount
17) E.O Gas
18) Heavy Metals (Mercury)
19) Hydrogen Peroxide
20) Leishmann's Stain

The hazardous materials are continually identified & their risk is analyzed. These are found to be of substantial risk, it is included in the above list of hazardous materials & its safety instruction is prepared.

2. Spill Policy

There shall be a procedure for management of spill of blood & hazardous chemicals by trained personnel.

1) SODIUM HYPOCHLORITE

Health Effects & First Aid Measures

- Irritant to eyes.
- Wash eyes with copious water for at least 10 – 15 min, keeping eyelids open.
- Get medical attention.
- Can cause irritation to the skin.
- In case of ingestion, give at least 2 glasses of water.
- Do not give anything orally if the patient is unconscious.
- Do not induce vomiting and seek medical help.
- Remove to open ventilated space. If not breathing give artificial respiration.
- If breathing difficult, give oxygen.

Handling & Transportation

- It should be handled using proper PPE.
- Use measuring jar to take chemicals out from can.
- Remove contaminated clothing.
- Transporting should be done in covered jars or in cans

Storage

- Keep in tightly closed containers in a well ventilated area.

2) TINCTURE BENZOINE

Health Effects & First Aid Measures:-

- Can cause irritation to skin & eyes
- Wash eyes with water for at least 10 – 15 min.
- Immediately remove contaminated clothing and wash the skin with copious flow of water for at least 15 minutes.
- In case of ingestion give at least 2 glasses of water.
- Do not give anything orally if the patient is unconscious.
- Seek medical help.
- If not breathing give artificial respiration. If breathing difficult, give oxygen.

Handling & Transportation

- Remove contaminated clothing.
- Chemical should be handled using proper PPE.
- Use measuring jar to take chemical out from can.
- Transporting should be done in covered jars or in cans
- The glass container may be placed in bottle Carrier to lessen the danger of breakage

Storage

- Keep away from heat, spark and open flame.
- Keep away from sources of ignition.
- Store in place away from traffic
- Chemical hazard symbol to be posted at storage location
- Keep in tightly closed containers in a well ventilated area

Spill & Disposal Procedure

- Dilute with water and mop up, or absorb with an inert dry material and place in proper waste disposal container.

3) CIDEX

Health Effects & First Aid Measures

- Irritant to eyes.
- Wash eyes with copious water for at least 10 – 15 min, keeping eyelids open.
- Can cause irritation to the skin.
- Immediately remove contaminated clothing and wash the skin with copious flow of water for at least 15 minutes and seek medical attention in case irritation occurs or in case of burns.
- In case of ingestion give at least 2 glasses of water.
- Do not give anything orally if the patient is unconscious.
- Do not induce vomiting and seek medical help.
- Remove to open ventilated space. If not breathing give artificial respiration.
- If breathing difficult, give oxygen.

Handling & Transportation

- The chemical should be handled using proper PPE.
- Use measuring jar to take chemicals out from can.
- Remove contaminated clothing and launder before reuse.
- Transporting should be done in covered jars or in cans

Storage

- Keep in tightly closed containers in a well-ventilated area.

Spill & Disposal Procedures

- Control the spill and collect to the maximum of spill
- Dilute with water and mop up or absorb with an inert dry material and place in an appropriate waste disposal container.
- Immediately remove contaminated clothing and wash the skin with copious flow of water for at least 15 minutes and seek medical attention in case irritation occurs or in case of burns.

4) SAVLON

Health Effects & First Aid Measures

- Irritant to eyes.
- Wash eyes with copious water for at least 10 – 15 min, keeping eyelids open.
- In case of ingestion give at least 2 glasses of water.
- Do not give anything orally if the patient is unconscious.
- Seek medical help.
- If not breathing give artificial respiration. If breathing difficult, give oxygen.

Handling & Transportation

- Ensure good ventilation/exhaustion at the workplace
- Avoid contact with the eyes and skin.
- Use only in well-ventilated areas

Storage

- Keep away from foodstuffs, beverages
- Keep away from heat, spark and open flame.
- Keep away from sources of ignition.
- Store in place away from traffic
- Keep in tightly closed containers in a well ventilated area

Spill & Disposal Procedures

- Control the spill and collect to the maximum of spill
- Dilute with water and mop up or absorb with an inert dry material and place in an appropriate waste disposal container

Blood or OPIM (Other Potentially Infectious Materials) spills

- Are to be immediately cleaned up by a gloved staff member.
- Any broken glass that may be contaminated should be removed by mechanical means such as tongs, forceps, or brush and dustpan, rather than with the hands and placed in a Sharps container for disposal.
- Blot excess blood with absorbent material. All contaminated items used in the cleanup should be placed in a bio hazardous bag for disposal.
- Initial cleanup of blood or OPIM must be followed with the use of an approved disinfectant.

5) ABSOLUTE ALCOHOL/CLINICAL SPIRIT

Drug Name - Alcohol

Brand Name- Absolute alcohol, AR, 500ml./ Methanol, SQ, 500ml / clinical spirit 500ml.

- **Description-** Appearance: colourless clear liquid. Flammable liquid and vapour may cause central nervous system depression.
- **Storage-** Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store above 23°C (73.4°F).
- **Potential Hazard-** Causes severe eye irritation. Causes respiratory tract irritation. Causes moderate skin irritation. This substance has caused adverse reproductive and fetal effects in humans. May cause liver, kidney and heart damage.
- **Safe Handling Procedures -** Keep locked up. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis, moisture.

Action To Be Taken In Case Of Spillage/Accident -

- **INHALATION-** Remove patient to fresh air. If respiratory irritation, nausea, dizziness or headache occurs, seek immediate medical attention. Apply artificial respiration if breathing stops.
- **INGESTION-** If swallowed, give large amount of water to drink. Do not induce vomiting. Contact a doctor or poison information center.
- **SKIN-** Remove contaminated clothing, and wash skin with water. Launder contaminated Clothing before use.
- **EYE-** Hold eyelids open and flush eye with gently running water for at least 15 min. seek medical attention if irritation persists.

6) POVIDONE IODINE

Drug Name- Povidone Iodine

Brand Name - Betadine/Wokadine solution

- **Description-** Betadine Treating minor wounds and infections, as well as killing bacteria. Povidone/Iodine Solution is an antiseptic combination. It works by killing sensitive bacteria
- **Storage –** Betadine can be stored between 10^{o}C and 30^{o}C (50^{o}F - 86^{o}F) and remain within specification for their two year shelf life. The higher storage temperature was established through accelerated aging studies; the lower temperature was established to prevent freezing which can lead to brittle packaging.
- **Potential Hazard-** Normal handling does not cause hazard. However uncontrolled exposure can lead to irritation of eye, skin etc.
- **Safe Handling Procedures** - Close container after each use. Keep away from contact with oxidizing materials. Do not get in eyes, skin or clothing. Wash properly after handling.

Action to Be Taken In Case Of Spillage/ Accident

- **Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
- **Skin:** Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops of persists.
- **Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately. Wash mouth out with water.
- **Inhalation:** Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- **Spills/Leaks:**

Absorb spill with inert material, (e.g., vermiculite, dry sand or earth), then place into a chemical waste container. Wear appropriate protective clothing to minimize contact with skin. Remove all sources of ignition.

7) FORMALIN SOLUTION

Drug Name- Formaldehyde.

Brand Name- Formalin solution.

Description-

- **STORAGE-** Formalin solution should be stored in a cool, dry, well-ventilated area and properly labeled. Formalin should never be stored in vehicles except to transport to and from field during sampling operations. Used formaldehyde, either from spill clean-up or from activities generated from the process of change-out of sample containers must be stored in a properly labeled hazardous waste container and made available for recycling under Resources Conservation Recovery Act (RCRA) protocols. Storage of waste formaldehyde should be in an area not frequented by the general population or duty workers and should be in an area not subject to heat cycles and well ventilated.

- **Potential Hazard -** Non flammable (vapors may be explosive). Cause severe irritation to eyes, skin and respiratory tract. Prolonged exposure to the vapor may cause asthma like symptoms, conjunctivitis, laryngitis, bronchitis or bronchopneumonia. May cause sensitization by skin contact. Possible carcinogen. Avoid any contact directly with skin or mucous membrane.
- **Safe Handling Procedures -**Wear protective clothing such as apron, gloves, and goggles. Work in well ventilated area. Keep container tightly closed and away from incompatibles. Avoid ingestion and inhalation.

Action To Be Taken In Case Of Spillage/ Accident

Minor spill: < 30 cc

- Place tissue over spill
- Wear Nitryl gloves
- Place in black plastic bag
- Place this bag in another black plastic bag, and label it as "Formalin / Cidex Spill"
- Ask housekeeping to mop area

Major spill: > 30 cc

- Place tissue paper over the spill
- Place inverted trash can over the spill

8) ISOPROPANOL/HANDRUB STERILLIUM

Drug Name- propan-2-ol

Brand Name- Isopropanol 2.5lit/ hand rub sterillium 500 or 100 ml

- **Storage-** Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry and cool place
- **Potential Hazard-** Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness.
- **Safe Handling Procedures -** Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling. Wear chemical resistant gloves. Wear protective clothing and boots

Action to Be Taken In Case Of Spillage/ Accident -

- **INHALATION**

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

- **INGESTION**

Do not induce vomiting. Immediately rinse mouth and drink plenty of water. Get medical attention immediately.

- **SKIN CONTACT**

Immediately remove contaminated clothing and wash before re-use. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

- **EYE CONTACT**

Promptly wash eyes with plenty of water or eye wash solution while lifting the eyelids. If possible remove any contact lenses and continue to wash. Get medical attention immediately

9) LUGOL'S IODINE

Drug Name -Iodine + potassium iodide

Brand Name :-LUGOL'S IODINE

Description:- Lugol's iodine solution contains 5% iodine and 10% potassium iodide in purified water according to the original formula. It may be used as a iodine supplement or to purify drinking water. Two drops contains 12.5mg of iodine.

- **Storage** :-Store in tightly closed original container in a dry and cool place.

- **Potential Hazard:-** Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant). The substance may be toxic to blood, kidneys, liver, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage.
- **Safe Handling Procedures:** - Keep locked up.. Keep container dry. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

Action To Be Taken In Case Of Spillage/ Accident

- **Inhalation**

Move the exposed person to fresh air at once.

- **Ingestion**

Do not induce vomiting. Immediately rinse mouth and provide fresh air. Get medical attention if any discomfort continues.

- **Skin contact**

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

- **Eye contact**

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if discomfort continues.

10) SULPHURIC ACID & HYDROCLORIC ACID

Drug Name- Sulphuric Acid

Brand Name- Sulphuric Acid, Excelar, 500ml

Description- Sulphuric acid is a highly corrosive strong mineral acid with the molecular formula H_2SO_4. It is a colorless to slightly yellow viscous liquid which is soluble in water at all concentrations.

- **Storage: -** Store below 25°C. do not freeze. Keep in closely tight amber color bottle. Keep away from sunlight.
- **Potential Hazard-**

Sulphuric acid is highly corrosive, it causes irritation to the eyes, skin, nose, throat; pulmonary edema, bronchitis; emphysema; conjunctivitis; stomatis; dental erosion; eye, skin burns;

dermatitis. The substance is very corrosive to the eyes, the skin, and the respiratory tract and attacks the enamel of the teeth

- **Safe Handling Procedures -**
  - Always wear protective goggles, gloves and a lab coat, as concentrated H_2SO_4 causes serious damage to skin and clothing, charring it.
  - When diluting H_2SO_4 & HCL, add small volumes of the acid to large volumes of water to disperse heat whilst mixing thoroughly. During pouring of the liquid, pouring down the sides prevents splashing.
  - Work near a running supply of water. If the acid contacts the skin, it must be washed off rapidly with copious amounts of tap water (however with large spills onto the skin, wipe off excess first).
  - Have a supply of neutraliser (sodium carbonate or bicarbonate) in case it is split. It should be first isolated to prevent it spreading and the area evacuated in case of fumes. Sand and a bucket can be used to clear acid for neutralisation.
  - Store the acid in smaller, easier to handle bottles (<1L). Avoid dribbling acid down the sides of containers, and wipe off any as soon as possible if present. Always place the bottle in a drip tray to ensure that do not contact the bench or shelf.

ACTION TO BE TAKEN IN CASE OF SPILLAGE/ ACCIDENT

FIRST AID-

- inhaled -move victim to fresh air, rest and maintain a half-upright position. Use artificial respiration if indicated, immediately seek medical attention.
- skin contact- occurs remove contaminated clothes, rinse skin with plenty of water or shower. Immediately seek medical attention.
- eye contact- occurs, first rinse with plenty of water for 15minutes. Immediately seek medical attention. If ingested rinse mouth. Do not induce vomiting. Immediately seek medical attention.

11) VIRKON/BACILLOCID

Drug Name- (Ethylenedioxy) dimethanol

Brand Name - virkon/bacillocid

Description- Virkon is the trade name of a disinfectant active against viruses, bacteria, and fungi pathogenic to animals and poultry. It is composed of peroxygen compounds, organic acids, surfactant and buffer.

- **Storage-** Solution is stable for 7 days at normal temperatures and storage Conditions. Avoid Moisture, direct sunlight and excessive heat.
- **Potential Hazard: -** Danger, powder is corrosive. Causes skin burns and irreversible eye damage. Harmful if swallowed, absorbed through skin or inhaled. Do not get in eyes, on skin.
- **Safe Handling Procedures** :- Wear protective clothing and rubber gloves. Avoid breathing dust. Wear goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse

ACTION TO BE TAKEN IN CASE OF SPILLAGE/ ACCIDENT -

- **EYE-** hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get prompt medical attention.
- **SKIN** washes with plenty of soap and water. Get medical attention if irritation persists.
- **INHALATION** intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult physician if necessary.
- **SWALLOW** do not induce vomiting. DO NOT GIVE ANYTHING TO DRINK.
  Call a physician immediately. Never give anything by mouth to an unconscious person.
- **NOTICE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

12) ACETONE

Drug Name – Acetone
Brand Name – Acetone solution 500 ml

DESCRIPTION- Acetone is a clear, colorless, low-boiling, flammable and volatile liquid characterized by rapid evaporation and a faintly aromatic, sweetish odor. It readily mixes with most organic solvents and mixes completely with water

- **STORAGE-** Avoid direct sunlight. Store in a cool, dry, well ventilated place, in securely closed original container.
- **Potential Hazard-** Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.
- **SAFE HANDLING PROCEDURES -** Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Avoid vapour inhalation, skin and eye contact. Do not use contact lenses. Avoid vapour formation and ignition sources. Ensure good ventilation and local exhaust extraction in work place. (engineering controls must be to explosion/flameproof standard). Earth container and transfer equipment to eliminate accumulation of static charge

Action to Be Taken In Case Of Spillage/ Accident

- **IN HALAT ION :** Move affected person to fresh air.If recovery not rapid, seek medical attention. If breathing stops, provide artificial respiration. Keep affected person warm and at rest
- **IN GE ST ION:** Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx 500ml). DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Keep patient at rest and obtain medical attention.
- **SKIN :** Remove contaminated clothing. Wash affected area with plenty of soap and water. Obtain medical attention.
- **EYES :** Rinse immediately with plenty of water for at least 5 minutes while lifting the eye lids. Seek medical attention. Continue to rinse.

13) D.P.X. MOUNT

Brand Name- D.P.X. mount 250 ml.

Description- It's a traditional synthetic, non-fluorescent, resinous mounting medium

- **Storage-** Store in tightly closed original container in a cool, dry well-ventilated place.
- **Safe Handling Procedures -** Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Pregnant or breastfeeding women must not handle this product.

Action To Be Taken In Case Of Spillage/ Accident

- **INHALATION**

Move the exposed person to fresh air at once. Get medical attention.

- **INGESTION**

DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Get medical attention.

- **SKIN CONTACT**

Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention.

- **EYE CONTACT**

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention.

14) E.O GAS

Drug Name- Ethylene oxide

Brand Name - E.O. GAS CARTRIDGE

Description- Ethylene oxide is a flammable gas with a somewhat sweet odor. It dissolves easily in water.

- **Storage-** Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Segregate from oxidizing materials. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).
- **Potential Hazard-** Exposure to ethylene oxide may depress the central nervous system. This chemical is suspected of being a human carcinogen and toxic to the reproductive system. Highly flammable.
- **Safe Handling Procedures –**

Keep away from heat, sparks and flame. Do not puncture or incinerate container. Do not ingest. Avoid breathing gas. Avoid contact with eyes, skin and clothing. May cause target organ damage, based on animal data. Risk of cancer depends on duration and level of exposure. Use only with adequate ventilation. Wash thoroughly after handling. Keep container closed.

Action To Be Taken In Case Of Spillage/ Accident

- **EYES:**
  Persons With Potential Exposure Should Not Wear Contact Lenses. Flush contaminated eye(s) with copious quantities of water. part eyelids to assure complete flushing

15) HEAVY METALS (MERCURY)

Drug Name- Mercury

Brand Name - Mercury

SYMBOL- Hg

Description- Mercury in its elemental state can pose a hazard to humans. The hazard for any person is based on how sensitive that person is to the effects of mercury, how long that person is exposed to mercury, and how much mercury is present, among other factors.

- **Storage -** Glass or plastic vessels should have a secondary steel or plastic container around them in case the vessel fails.

- **Potential Hazard-** mercury and all of its compounds are toxic, exposure to excessive levels can permanently damage or fatally injure the brain and kidneys. Elemental mercury can also be absorbed through the skin and cause allergic reactions
- **Safe Handling Procedures –**

Do not leave open containers of mercury in the laboratory. If used in a bubbler, the exhaust should go up a vertical tube to eliminate splashing and should be vented to a fume hood. Clean up spills promptly. When handling mercury use a glass, plastic or steel tray to contain any spills that might occur. Do not keep excess mercury around if you do not need it. Do not use mercury where it could contact a hot surface and vaporize

Action To Be Taken In Case Of Spillage/ Accident

16) HYDROGEN PEROXIDE

Drug Name- Hydrogen peroxide

Brand Name- Hydrogen peroxide 30% excelar 500 ml

- **Description-** Hydrogen peroxide is the simplest peroxide (a compound with an oxygen-oxygen single bond). It is also a strong oxidizer. Hydrogen peroxide is a clear liquid, slightly more viscous than water. In dilute solution, it appears colourless. Due to its oxidizing properties, hydrogen peroxide is often used as a bleach or cleaning agent.
- **Storage-** Keep container closed when not in use. Store in cool, dry, well- ventilated areas away from incompatible substances. Do not get water inside containers.
  Potential Hazard- Danger! Acidic and corrosive in nature. Strong oxidizer. Contact with other material may cause fire. Harmful if inhaled, can lead to respiratory tract irritation with burns. May cause eye and skin burns also digestive tract irritation with possible burns if ingested.

- **Safe Handling Procedures -**Handling- Keep container tightly closed. Do not get on eyes, skin, ingest or inhale. Use with adequate ventilation. Do no store near combustible materials. Discard contaminated shoes.

Action To Be Taken In Case Of Spillage/ Accident

- **Eyes:** Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed. Extensive irrigation is required (at least 30 minutes).
- **Skin:** Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
- **Ingestion:** Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. Wash mouth out with water. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.
- **Inhalation:** Get medical aid immediately. Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. DO NOT use mouth-to-mouth respiration. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.
- **Spills/Leaks:**

Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the protective Equipment section. Use water spray to disperse the gas/vapor. Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as saw dust. Flush spill area with water. Provide ventilation. Do not get water inside containers

17) LEISHMANN'S STAIN

Drug Name- Polychromic methylene blue

Brand Name- Leishman's stain

Description - This solution is dark blue/violet in color and inliquid form having characteristic odour. It is stable in water.

- **Storage** -For daily use, store the stain in an airtight (prevent moisture entering the stain) amber (semi-opaque) container. Closable dropper bottle. The stock stain should be kept in a tightly stoppered light opaque (e.g. amber) container in a cool dark place. Renew every 3 months or earlier if indicated. To obtain optimum colour reaction, some suggest that 3–5 days should be allowed before using freshly made stain.
- **Potential Hazard -** Harmful by inhalation, in contact with skin and if swallowed. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.
- **Safe Handling Procedures -** Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid eating, drinking and smoking when using the product. Wash hands after handling.

Action To Be Taken In Case Of Spillage/ Accident

- **Inhalation**

  Move the exposed person to fresh air at once.

- **Ingestion**

Do not induce vomiting. Immediately rinse mouth and provide fresh air. Get medical attention if any discomfort continues.

- **Skin contact**

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

- **Eye contact**

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if discomfort continues.

3. Management of Spills:-

For efficient management of spills, hospital must constitute a spill team which must comprise of Housekeeping Supervisor & Departmental Technicians

Steps to be followed in case of spills by the staff in the area of spill:-

1) Raise an alarm
2) Warn everyone to stay clear
3) Cover with Tissue/newspaper
4) Place empty trash can over the spill
5) Inform spill team for major spills (all spillage greater than 30ml are termed as major spills & less than 30ml are termed as minor spills)
6) Housekeeping Spill Team to collect spill kit from office and reach spill site within 10 minutes
7) Alert people in immediate area of spill
8) Wear appropriate protective equipment, including safety goggles, gloves, and long-sleeve lab coat.
9) Avoid breathing vapours from spills.
10) Use appropriate spill kit or absorb the spill with tissue paper.
11) Collect residue, place in a waste disposal bag.
12) Clean spill area with water.

- **Content Of Spill Kit:-**

Spill Kit: The admixture room shall have a ready spill kit with the following items-

1. Sodium Hypochlorite 5%
2. 0.1N Hydrochloric Acid
3. Powder Free Gloves -2 pairs
4. Aerosols Free Mask -1
5. Absorbent Towel -2, 12"x12"
6. Eye Glass -1
7. Cytotoxic Disposal Poly Bag -1
8. Shoe Covers -1pair
9. Head Cap -1

- **Location of spill kit:**
  One spill kit to be made available on each nursing station.

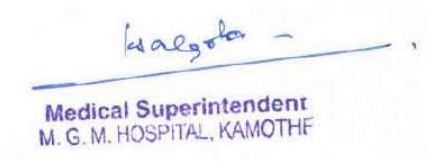

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TABLE OF CONTENTS

Sr. No.	CONTENT
HIC1	The organisation has a well-designed, comprehensive and coordinated Hospital Infection Prevention and Control (HIC) program aimed at reducing/eliminating risks to patients, visitors and providers of care
HIC2	The organisation implements the policies and procedures laid down in the infection Control Manual in all areas of the hospital
HIC3	The organisation performs surveillance activities to capture and monitor infection prevention and control data
HIC4	The organisation takes actions to prevent and control Healthcare Associated Infections (HAI) in patients.
HIC5	The organisation provides adequate and appropriate resources for prevention and control of Healthcare Associated Infections (HAI)
HIC6	The organisation identifies and takes appropriate action to control outbreaks of infections
HIC7	There are documented policies and procedures for sterilization activities in the organization
HIC8	Biomedical waste (BMW) is handled in an appropriate and safe manner
HIC9	The infection control program is supported by the management and includes training of staff

HIC1- Infection control program

I. POLICY:

To establish an Infection Prevention and Control Program, conducted by an Infection Control Committee responsible to review all infection control policies and procedures, periodically review infection control surveillance data, and formulate recommendations to the administrator regarding infection control activities.

II. PURPOSE:

To establish an Infection Control Program (ICP) across the organization.

III. SCOPE:

All Patients, family, friends, visitors and the hospital employees who come into direct or indirect contact of the hospital.

IV. RESPONSIBILITY:

All the hospital employees are responsible for a full-fledged establishment of infection control

V. DISTRIBUTION:

Hospital wide

VI. DEFINITION:

Infection control is the discipline concerned with preventing nosocomial or healthcare-associated infection, a practical (rather than academic) sub-discipline of epidemiology. It is an essential, though often under-recognized and under-supported, part of the infrastructure of health care. Infection control and hospital epidemiology are akin to public health practice, practiced within the confines of a particular health-care delivery system rather than directed at society as a whole.

Infection control addresses factors related to the spread of infections within the health-care setting (whether patient-to-patient, from patients to staff and from staff to patients, or among-staff), including prevention (via hand hygiene/hand washing, cleaning/disinfection/sterilization, vaccination, surveillance), monitoring/investigation of demonstrated or suspected spread of infection within a particular health-care setting (surveillance and outbreak investigation), and management (interruption of outbreaks). It is on this basis that the common title being adopted within health care is "Infection Prevention & Control."

VII. ABBREVIATION:

ICP – Infection Control Program

HIW- Health Care Worker

VIII. PROCESS DETAILS:

1. DESCRIPTION OF THE PROCESS:

Introduction

Nosocomial or hospital acquired infections are a major public health problem in hospitals throughout the world. At least 5% of patients entering hospitals will develop a nosocomial infection. Nosocomial infections represent a leading cause of death. Nosocomial infections, such as bacteremias, surgical wound infection, pneumonia and urinary tract infection, are also associated with major morbidity in hospitalized patients. These nosocomial infections add significantly to the expected length of stay for patients. It is estimated that these infections add $5 billion to $10 billion to US national health costs annually and much more in India, which has never been estimated.

The Study on the Efficacy of Nosocomial Infection Control project, conducted by the Centers for Disease Control, found that up to one third of nosocomial infections can be prevented by an effective infection control Program.

Philosophy: An infection control Program is essential to the modern hospital because it provides guidelines and standards for the recognition, prevention, and control of infection in patients, personnel and visitors within the hospital community.

1) The Infection Control Program is dedicated to minimizing infection risks in order to prevent infections in patients, personnel and visitors.

2) The Infection Control Team and the Infection Control Committee are responsible for coordinating the Infection Control Program for the prevention and control of infection in patients and personnel.

3) The individual is responsible for compliance with hospital-wide and departmental infection control policies and procedures.

4) Standard Precautions provide a consistent approach to managing contact with body substances from ALL patients and is essential to prevent transmission of potentially infectious agents, from patient to patient, from one body site to another within the same patient, from patient to health care worker, and from health care worker to patient.

5) The individual is responsible for compliance with infection control and safety policies and procedures to include:

a) Standard Precautions

b) Prevention of Needle stick Injuries Policy

c) Biomedical Waste Management Policy

d) Other administrative or departmental policies and procedures

2. DESCRIPTION OF INFECTION CONTROL TEAM

The infection control team consists of the lead Infection Control Doctor or Consultant Microbiologist along with the Infection Control Nurse Practitioner.

3. THE GOALS OF THE ICP

1) To provide epidemiologic activity consisting of surveillance, risk assessment, communicable disease exposure follow-up, outbreak investigation, and data management, analysis and presentation.

2) To provide direct interventions at the patient, location, and service level where they are needed.

3) To provide education to personnel, patients and visitors with an emphasis on the importance of their role in infection control.

4) To develop thresholds of infection rates for surgical procedures above which departmental action, investigation and/or intervention is indicated.

4. DESCRIPTION OF INTERNAL AND EXTERNAL CUSTOMERS/TYPES AND AGES OF

Patients Served

All inpatient units and outpatient practices associated with the hospital are served by ICP. IC Practitioners have a working knowledge of the principles of epidemiology, microbiology and infectious processes of all age groups and are able to provide oversight, follow-up and evaluation regardless of patient's age or diagnosis.

5. SCOPE AND COMPLEXITY OF PATIENT/CUSTOMER NEEDS AND SERVICES

Patients of all ages and medical/surgical specialties are included in infection control surveillance activities. Surgical site infection (SSI) rates are calculated for high volume, high risk services. Comprehensive isolation policies are utilized which address all common communicable diseases and whose intent is to reduce spread of these conditions. Staff provides general education in the principles of infection control as they relate to unit or practice specific concerns. Staff also accommodates requests for education and consultation on specific areas of interest to the nursing units, practices, and general staff including bioterrorism, endemic pathogen trends, targeted surveillance results, etc. Practitioners field questions from physician and nursing staff regarding exposure risk and correct isolation procedures. The department creates policies and procedures for the recognition, prevention, and control of infections in the patients, personnel and visitors, and reviews infection control policies developed by other departments which are then approved by the Infection Control Committee (ICC).

6. METHODS USED TO ASSESS AND MEET PATIENT AND CUSTOMER NEEDS

Focused surveillance in high risk areas is used to assess infection rates for high risk procedures, i.e. central line related bacteremias and ventilator associated pneumonias. For identification of problems and timely intervention, a review of the microbiology reports is done on a daily basis. IC investigates verbal and written incident reports of potential infection control problems. Other methods used to meet patient care needs, in addition to those listed previously, are interdisciplinary committee participation such as the Pharmacy and Therapeutics Committee and Clinical Guidelines Committee, and review of interdepartmental policies and procedures.

7. APPROPRIATENESS, CLINICAL NECESSITY AND TIMELINESS OF SUPPORT AND SERVICES

The spread of infectious agents between patients or between HCWs and patients can result in serious negative outcomes and/or outbreaks. Therefore, IC addresses concerns about isolation practices and exposures to communicable diseases in a timely manner. Practitioners oversee exposure follow-up so that personnel can get timely prophylaxis and follow-up significant findings of the microbiology laboratory as soon as they are known to assure that patients are in the isolation appropriate to their clinical condition. ICPs evaluate clinical practices during rounds to ensure that proper IC measures are followed and make recommendations to bring units/practices into compliance with established standards.

8. EFFECTIVENESS OF SERVICES

The IC department uses Center for Disease Control benchmarks to determine infection rates for monitored procedures, device related illnesses and surgical site infections. Should rates exceed the established benchmarks, an investigation for cause is initiated and interventions recommended and/or instituted as necessary. Rates are then recalculated to measure effectiveness of interventions applied.

9. THE INFECTION CONTROL COMMITTEE

A competent and active infection control committee is a most important part of the programme for prevention and control of nosocomial infections among patients and personnel. The committee meets at least every three months. There is a planned agenda for each meeting and minutes are kept. The committee reviews data concerning infections and infection risks and recommends policies to appropriate medical staff committees, hospital administration, and hospital personnel. The committee may develop, recommend, and set policies. Hospital department managers have line responsibility for implementation of these policies.

10. MEMBERSHIP AND DEPARTMENT REPRESENTATION:

The Infection Control Committee is a medical staff committee. Membership includes representation from the Medical Staff, Administration, Department of Nursing, and the Infection Control Department. Representation from supporting services is used on a consultative basis. The committee members are the following:

The ICC consists of the infectious disease Physician and the Infection Control Nurse (ICN). The is responsible for day-to-day infection control activities within Hospital.

Refer to the ICC Terms of Reference.

11. LINES OF COMMUNICATION:

The Infection Control Committee Chairperson has the authority to institute appropriate control measures or studies when there is considered to be a danger to patients or personnel

12. INFECTION CONTROL SURVEILLANCE:

Surveillance of endemic and epidemic nosocomial infections and risk factors related to those infections in patients and health care workers is an ongoing process. The Infection Control Team will develop annually, and submit for Infection Control Committee approval, a "Surveillance Plan."

1) Definitions

Identification of nosocomial versus community acquired infection is based upon the definitions developed by the Centers for Disease Control and Prevention (CDC) for use in the National Nosocomial Infection Surveillance (NNIS) Program (see appendix). In addition, nosocomial infection and case definitions not addressed by CDC will be developed as needed by the Infection Control Department. These definitions will be approved by the Infection Control Committee when formulated or changed.

2) Rationale

Surveillance provides a process for monitoring specific outcomes of patient care delivery related to infection risk factors and infection prevention/control activities. It provides baseline and trend data for use in problem identification and monitoring and for assessment of outcomes related to interventions. It assists in targeting intervention and identifying educational needs.

3) Patient Populations

a. Inpatient
b. Outpatient
c. Health care workers and volunteers

4) Methods for Reporting and Follow-up

a. The goal of reporting and follow-up is to focus interventions that will improve patient outcomes.
b. "Surveillance" reporting will be an ongoing component of the Infection Control Committee Agenda.
c. Reports will be made to the appropriate unit, department, service, or committee in a timely manner by Infection Control.
d. When possible, rates will be used when reporting data. Denominators will vary based on appropriateness and availability (e.g. admissions, discharges, patient days, procedures, device days, at-risk days).

5) Responsibilities

a. Data collection: Infection Control Practitioners (ICPs), Employee Health, Quality Assurance personnel
b. Data evaluation: Infection Control Team
c. Follow-up: Infection Control Team, the Infection Control Committee and appropriate unit(s), department(s), or committee(s).
d. Health care worker issues will be the primary responsibility of Employee Health. Infection Control Department will provide consultation and support.

6) Data Collection Methods and Intensity

a. Microbiology Laboratory reports – comprehensive
b. Patient records – focused
c. Pathology reports - focused and periodic
d. Pharmacy - limited and disease/condition specific
e. Unit specific data e.g. patient days, device days - focused and periodic-
f. Verbal or written reports - limited and disease/condition specific

7) Quality Control Procedures

a. Single occurrences of unusual diseases/organisms will trigger investigation
b. Clusters/outbreak in any patient or health care worker population will trigger investigation
c. Routine microbiology sampling on patients, staff or environmental surfaces will not be performed unless used as part of an outbreak or cluster investigation.
d. Thresholds will be established, when appropriate, and deviation from a threshold will trigger investigation.

IX. REFERENCES:

- CDC Guidelines

HIC 2- a High Risk areas

I. POLICY:

To identify High-risk Areas hospital wide for the surveillance activities and other infection control measures. These areas shall specially be focused for appropriate infection control measures.

II. PURPOSE:

To ensure that a proper identification of High risk areas are done by the around the hospital such that staff follows proper evidence based practices for the Cleaning Disinfection and Sterilization, to minimize the risk of Infection to Hospital Staff and patients.

III. SCOPE:

It includes all stakeholder directly attached to these High risk areas

IV. RESPONSIBILITY:

All clinical staff, Infection control team

V. DISTRIBUTION:

Hospital wide

VI. DEFINITION:

High risk areas in hospital are defined as those areas or departments that are highly prone to infections and require special attention for appropriate infection control measures.

VII. ABBREVIATION:

Abbreviations are as follows:

ICU - Intensive Care Units

VIII. PROCESS DETAILS:

DESCRIPTION OF THE PROCESS

The infection control department has identified High risk Areas hospital wide for the surveillance activities and other infection control measures. These areas shall specially be focused for appropriate infection control measures.

Surveillance activities are appropriately directed towards the identified high-risk areas

1. Operation theatres
2. Laboratory
3. Catha- lab
4. Isolation areas
5. Post-operative ward
6. CSSD
7. Dialysis department
8. Casualty
9. All ICU areas
10. Blood bank
11. Bio Medical Waste Storage Area

HIC 2- b , d Standard Precautions

I. POLICY:

. Standard precaution shall be strictly adhered to by all healthcare staff in all situations as indicated in the document. Infection control committee and team shall monitor the adherence of standard precaution by healthcare staff. Regular training shall be provided by Infection control team on standard precaution.

Cardinal rules of standard precautions:

1. Consider all Patients potentially infectious
2. Assume all Blood and body fluids are contaminated with a blood borne pathogen.
3. Assume all non sterile needles and other sharps are similarly contaminated.

II. PURPOSE:

. To ensure that staff follows proper evidence based practices for the Cleaning Disinfection and Sterilization, to minimize the risk of Infection to Seven Hills Hospital Staff and patients.

III. SCOPE:

All hospital staff involved in direct or indirect patient care

IV. RESPONSIBILITY:

Doctors, Nurses, Technicians and Housekeeping staff

V. DISTRIBUTION:

Hospital wide

VI. DEFINITION:

Standard precautions are meant to reduce the risk of transmission of blood borne and other pathogens from both recognized and unrecognized sources

VII. PROCEDURE:

1. Certain standard precautions are needed to be followed in all health care settings. They are –

1) Wash hands before and after all patients or specimen contact.
2) Handle the blood of all patients as potentially infectious.
3) Wear gloves for potential contact with blood and body fluids.
4) Place used syringes immediately in nearby impermeable container. DO NOT recap or manipulate needle in any way.
5) Wear protective eyewear and mask if splatter with blood or body fluids is possible (e.g. bronchoscopy, oral surgery etc.)
6) Wear gowns when splash with blood or body fluids is anticipated.
7) Handle all linen soiled with blood and / or body secretion as potentially infectious.
8) Process all laboratory specimens as potentially infectious.

9) Wear mask for TB and other respiratory organisms (HIV is not airborne).Do not recap needles

10) Dispose of used needles and small sharps in puncture-resistant container, which are located as close as possible to the area of use.

11) Needles should not be recapped, bent or broken by hand.

12) Do not overfill a sharps container. All sharps containers to be discarded when 3/4^{ths} full.

13) Sharps should not be passed from one HCW (Health Care Worker) to another. The person using the equipment should discard it. If necessary a tray can be used to transport sharps.

2. Cleaning

1) Care of equipments and articles - Sterilize or disinfect according to the use of article.

2) Waste segregation and disposal - Segregate waste at source as per hospital protocol

3) Clean clinical contact surfaces e.g. - examination couch, lamp and nearby articles more often than

4) Housekeeping surfaces e.g. - floor, walls etc.

a) Clinical contact surfaces:

High potential for direct contamination from spray or spatter or by contact with gloved hand.

b) Housekeeping surfaces

Do not come into contact with patients or devices. Limited risk of disease transmission

c) Cleaning the spill:

- Wear gloves
- Cover the area with absorbable material e.g. - paper, gauze
- Pour freshly prepared Sodium Dichlorosocyanurate 1000PPM available chlorine (4 tabs in 110 ml of water) and leave for 15-20minutes
- Collect in the scoop with gloved hand and discard in yellow bag
- Mop the area with disinfectant.

d) New elements in standard precautions:

- Respiratory hygiene/cough etiquette
- Safe injection practices
- Infection control practices for special lumbar puncture

Respiratory Hygiene/cough etiquette

This strategy is targeted at patients and accompanying members with undiagnosed transmissible respiratory infections and applies to any person with signs if illness including cough, congestion, rhinorrhea or increased production of respiratory secretions when entering health care facility. The elements of Respiratory Hygiene/cough etiquette includes:

- Education of healthcare facility staff, patients & visitors
- Posted signs at entrances

- Using surgical masks on coughing person when tolerated or cover the mouth & nose during coughing /sneezing.
- Hand hygiene after contact with respiratory secretions
- Spatial separation, ideally more than 3 feet, of persons with respiratory infections in common waiting areas.

Safe Injection Practices

- Use of single-use sterile, disposable needle & syringe for each injection given
- Single dose vial preferred over multi dose vials
- Use fluid infusion & administration sets (IV bags, tubing & connectors) for single patient only.

Infection control practices for special lumbar puncture & placement of central venous catheter – face masks are effective in limiting dispersal of oropharyngeal droplets.

3. SELECTION OF PROTECTIVE BARRIERS

Type of exposure	Protective barriers	Examples
Low risk: Contact skin, no visible blood.	• Gloves helpful but not essential	Injections, minor wound dressing
Medium risk: Probable contact with blood splashing unlikely	• Gloves • Gowns and apron may be necessary	Vaginal examination, insertion or removal of intravenous cannula, handling of laboratory specimens, large open wounds dressing, venepuncture spill of blood.
High Risk Probable contact with blood in splashing uncontrolled bleeding.	• Gloves • Waterproof gown or apron • Eye wear • Mask	Major surgical procedures particularly orthopaedic surgery and oral surgery, vaginal delivery.

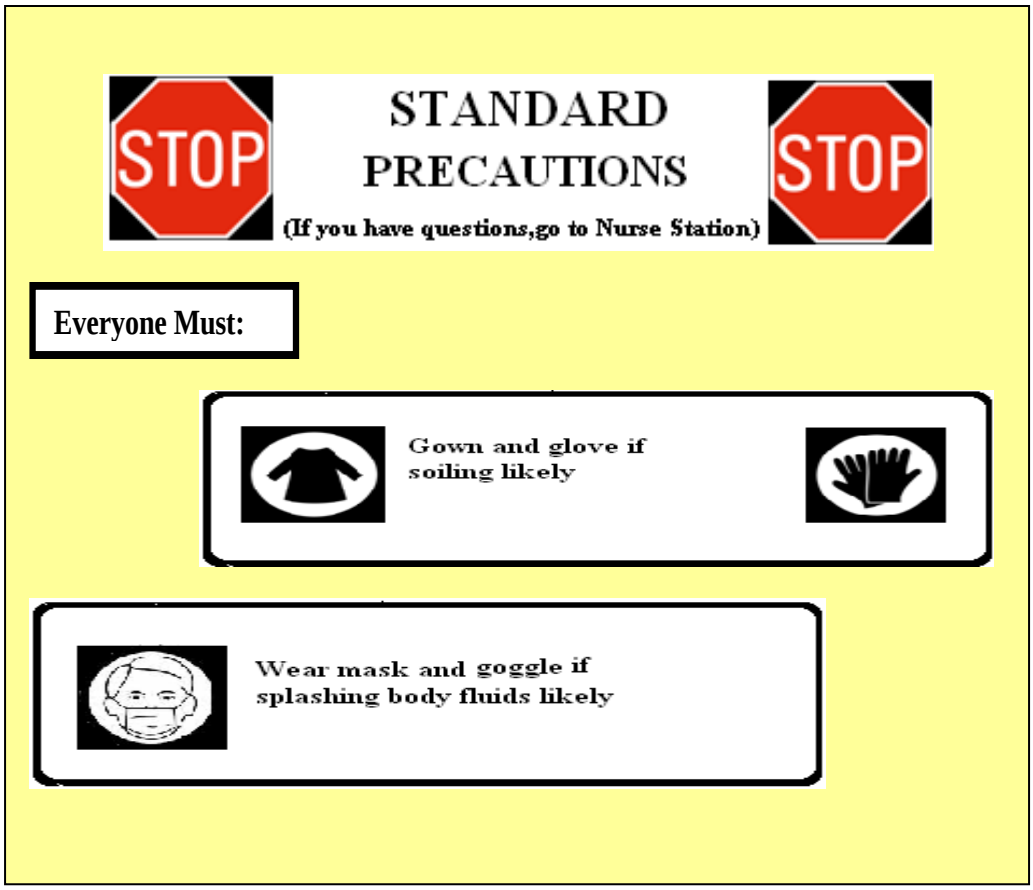
GUIDELINES FOR COLLECTION OF BLOOD SAMPLES

1. Use gloves and take special care if there are cuts or scratches on the hands.
2. Take care to avoid contamination of hands and surrounding area with the blood.
3. Use disposable / autoclaved syringes and needles.
4. Use 70% ethanol or isopropyl alcohol swabs / sponges for cleaning the site of needle puncture.
5. Use thick dressing pad or adsorbent cotton below the forearm when drawing blood and tourniquet above
6. Tourniquet must be removed before the needle is withdrawn.
7. Place dry cotton – swab and flex the elbow to keep this in place till bleeding stops.
8. Place used needles and syringes in a puncture resistant container containing disinfectant.

9. Do not recap used needles.

Handing Syringes and Needles	
Do's	Dont's
1. Pass syringes and needles in a tray. **2.** Put needle Sodium Dichlorosocyanurate solution if needs clutter is not available. **3.** Remove cap of needle near the site of use. **4.** Pick up open needle from tray / drum with forceps.	**1.** Never pass syringe and needle on directly to next person. **2.** Do not bent/or break used needle with hands. **3.** Never test the fineness of the needle's tip before use with bare or gloved hand. **4.** Never pick up open needle by hand. **5.** Never dispose it off by breaking it with hammer / stone.

Good Practice For the Safe Handling And Disposal Of Sharps
1. ALWAYS use disposable needle and syringes **2.** ALWAYS dispose of your own sharps. **3.** NEVER pass used sharps directly from one person to another. **4.** During exposure – prone procedures, the risk of injury should be minimized by ensuring that the operator has the best possible visibility e.g. by positioning the patient, adjusting good light source and controlling bleeding. **5.** Protect fingers from injury by using forceps instead of fingers for guiding suturing. **6.** NEVER recap, bend or break disposable needles. **7.** Directly after use, place needles and syringes in a rigid container until ready for disposal. **8.** Locate sharps disposal containers close to the point of use, e.g. in patient's room, on the medicine trolley and in treatment room etc.


STOP
STANDARD
PRECAUTIONS
(If you have questions,go to Nurse Station)
STOP
Everyone Must:
Gown and glove if
soiling likely
Wear mask and goggle if
splashing body fluids likely

STANDARD PRECAUTIONS

Standard Precautions is routine care that is provided to ALL patients.

Hand Hygiene:

1. Before and after every patient contact, wash or sanitize hands.
2. Remove gloves and clean hand when moving from dirty to clean procedures.

Gloves, Gowns, Mask, and Eye Protection

Use before coming into contact with non – intact skin, blood, body fluids, or secretions

Personal Protective Equipment:

Put **ON** this order	Take **OFF** & dispose in this order
1. Wash or gel hands	1. Gloves (if used)
2. Gown (if needed)	2. Goggle (if used)
3. Mask (if needed)	3. Gown (if used)
4. Goggle (if needed)	4. Mask (if used)
5. Gloves (if needed)	5. Wash or gel hands (even if gloves used)

Equipment/Supplies:

- Clean & disinfect reusable equipments including IV infusion pumps, cell phones or pagers (if used in rooms), other electronics, supplies & equipment prior to removing from the patient's room.
- Only essential supplies in room.

Room Cleaning:

Routine cleaning procedures with addition of cubicle curtain changes per hospital procedures.

If toys in room, appropriate cleaning and disinfection prior to next patient.

VII. REFERENCES:

- CDC & WHO Guidelines

HIC 2- c Policy on Hand Hygiene

I. POLICY:

All healthcare workers shall do liberal hand washing to prevent infections. Seven points hand wash is recommended as an ideal method for hand washing.

II. PURPOSE:

Clean hands are the single most important factor in preventing the spread of pathogens and antibiotic resistance in healthcare settings. Hand hygiene reduces the incidence of healthcare associated infections.

III. SCOPE:

All hospital staff involved in direct or indirect patient care

IV. RESPONSIBILITY:

Doctors, Nurses, Technicians and Housekeeping staff

V. DISTRIBUTION:

Hospital wide

VI. DEFINITION:

Performing hand washing, antiseptic hand wash, alcohol-based hand rub, surgical hand hygiene/antisepsis.

VII. PROCEDURE:

Universal precautions are to be followed by all health care workers for all patients.

- Staff with abrasions and cuts not to attend patients, without use of water proof Band-Aids on the cuts. Use gloves whenever required.
- Wash hands before and after work.
- Use only disposable dressings and syringes.
- All linen of the infected patients to be soaked in 01% sodium hypochlorite solutions and to be washed in separate machine.

Personal Protective Equipment

1. Gloves:

Wear gloves (clean, non-sterile gloves are adequate) when touching blood, body fluids, secretions, excretions, and contaminated items. Put on clean gloves just before touching mucous membranes and non-intact skin. Change gloves between tasks and procedures on the same patients after contact with material that may contain a high concentration of microorganisms. Remove gloves promptly after use, before touching non contaminated items and environmental surfaces, and before going to other patient, and wash hands immediately to avoid transfer of microorganism to other patients or environments.

2. Mask, Eye Protection and Face Shield:

We are mask and eye protection or face shield to protect mucous membranes of the eyes, nose, and mouth during procedures and patient-care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.

3. Gowns:

Wear a gown (a clean, non-sterile gown is adequate) to protect skin and to prevent soiling of clothing during procedures and patient-care activities that are likely to generate splashes of blood, body fluids, secretions, or excretions. Select a gown that is appropriate for the activity and amount of fluid likely to be encountered. Remove a soiled gown as promptly as possible and wash hands to avoid transfer of microorganisms to other patients or environments.

Hand Hygiene

- Hand washing is the single most important procedure for preventing Nosocomial infection as hands are an important route of transmission of infection.

- Hand washing involves both mechanical and chemical action. The running water and friction used in cleaning is the **MECHANICAL** action. The soap will emulsify the fat and lower the surface tension of water to facilitate removal of the micro-organisms, dirt and oil. This is the **CHEMICAL** action.

Indications for routine hand washing and hand antisepsis:

- Before having direct contact with patients
- Before donning sterile gloves.
- Before and after any procedure
- After contact with blood and body fluid.
- After contact with inanimate objects (including medical equipment) in the immediate vicinity of the patients.

What to Use:

- When hands are visibly dirty or contaminated wash hands with soap and water
- If hands are not visibly soiled, health care worker may use an alcohol-based hand rub.
- Before eating and after using of rest room wash hands with soap and water.
- Before giving feed to patient.

Recommended hand washing agents:

- Liquid soap
- Alcoholic+ chlorhexidine /sterlium hand rubs

(Hand Washing Procedure- refer to Pictorial Chart)

VIII. REFERENCES:

- WHO & CDC Guidelines.

HIC 2- e Policy on Safe Injection Practices

I. POLICY

Injection safety, or safe injection practices, is a set of measures taken to perform injections in an optimally safe manner for patients, healthcare personnel, and others.

Reuse of syringes is a significant breach of aseptic technique which can lead to cross contamination and the potential transmission of blood borne infections. Needles, cannulae and syringes are sterile, single-use items; they should not be reused for another patient or reused to access a medication or solution that might be used for a subsequent patient.

II. Purpose

To prevent transmission of infectious diseases (i.e., human immunodeficiency virus (HIV), hepatitis C (HBV), and hepatitis C (HCV) etc

III. Responsibility

All nursing staff and technicians

IV. Distribution

All nursing stations

V. Process detail

Syringes shall be single-use or single-patient use. Do not administer medications from a syringe to multiple patients, even if the needles or cannula on the syringe is changed. Note: Exception - Multidosing System for Contrast Infusion in Medical Imaging – See procedure in Medical Imaging.[1]

1. Prefilled syringes shall be single-use or single-patient use.
2. A new, sterile syringe and needle/cannula shall be used for each patient when accessing intravenous tubing, stop cocks or access ports.
3. Fluid infusion and administration sets (i.e., intravenous bags, tubing and connectors) shall be used for one patient only and disposed appropriately after use.
4. Bags or bottles of intravenous solution shall not be used as a common source of supply for multiple patients.
5. Single-dose vials for parenteral medications shall be used whenever possible.
6. Medications from single-dose vials or ampoules shall not be administered to multiple patients or leftover contents combined for later use.
7. If multidose vials must be used, both the needle/cannula and syringe used to access the multidose vial must be sterile.
8. Multidose vials should not be kept in the immediate patient treatment area and will be stored in accordance with the manufacturer's recommendations; discard the vial if sterility is compromised or questionable. In situations where multidose vials must be kept in the immediate patient treatment area, they shall be kept secure to prevent tampering (either stored out of sight or supervised by a staff member) and care shall be taken to ensure aseptic access of the vial.

9. Use strict aseptic technique when administering inject able medication. If multidose vials are used, record the date the vial was first opened.
10. Refrigerate vials after opening as recommended by the manufacturer.
11. Clean the rubber diaphragm of the vial with alcohol before inserting a device into the vial.
12. Discard the vial when suspected or visible contamination occurs, one month after initial vial entry, when the vial has been entered and no "date opened" is apparent or when the manufacturer's expiration date is reached.
13. Never leave a needle in the septum of the vial, as this may encourage reuse of the syringe.
14. Store sterile supplies (syringes, needles, medications, IV delivery systems) in a clean area and in a manner which prevents contamination

VI. References:

CDC Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, 2007.

HIC 2- f Policy on Equipment Cleaning Sterilization Process

I. PURPOSE:

To ensure that staff follows proper evidence based practices for the Cleaning Disinfection and Sterilization, Equipment to minimize the risk of Infection to M.G.M Medical College and Hospital, Kamothe Hospital Staff and Patients.

II. SCOPE:

All patient care area

III. RESPONSIBILITY:

Nurses, and GREs, handling such equipment

IV. DISTRIBUTION:

Hospital wide

V. DEFINITION:

Cleaning Disinfection and Sterilization of equipment are meant to reduce the risk of transmission of infection both recognized and unrecognized sources.

VI. PROCEDURE:

Factors which Influence the Efficiency of Disinfectants

1. The type and level of microbial contamination.
2. The amount of organic load on the object and its prior cleaning.
3. The anti-microbial activity of the disinfectant and its concentration and pH.
4. The exposure time to the disinfectant and temperature

CLEANING OF MEDICAL EQUIPMENTS:

	Equipment	PPE/Standard Precautions	Cleaning, Disinfection, Sterilization	When to dispose/clean	Disposal
1.	▪ O2 Nasal Prong ▪ O2 Face mask with tube ▪ Ventury mask ▪ High Concentration Mask ▪ Nebulizer	▪ Hand Hygiene with Alcohol rub before and after use ▪ Wear Gloves if contaminated with respiratory secretions	▪ Disposable	▪ If grossly contaminated ▪ If malfunctioning ▪ When care is discontinued (Routine time bound change not necessary)	(Disposable Polyethylene) dispose into red Plastic bag
2.	▪ Metal outlet of Oxygen supply that connects to plastic tube of above	▪ Hand Hygiene with Alcohol rub before and after use	Wipe with Soap and water Solution	▪ When care is discontinued ▪ Once a day	Reusable
	Equipment	PPE/Standard Precautions	Cleaning, Disinfection, Sterilization	When to dispose/clean	Disposal
3.	Laryngoscope	▪ Hand hygiene ▪ Gloves	▪ Separate blade from handle. ▪ Remove bulb. Clean bulb and blade in detergent and water. ▪ Autoclave blade Or Place in Glutaraldehyde for 20 min /Cidex OPA for 12 min ▪ Wipe over handle with detergent	After patient use	Laryngoscope can be reused after proper sterilization.

			and water. ▪ In crash carts: Reusable after autoclaving, After checking, wipe with isopropyl/ethyl alcohol. ▪ Store till next patient use ▪ After patient use redo entire steps		

4.	BiPAP ▪ Mask ▪ Head strap	▪ Hand Hygiene with Alcohol rub before and after use ▪ Wear Gloves if contaminated with respiratory secretions	▪ Tubing: Clean with detergent and water and ETO sterilization ▪ Mask: Reusable for same patient/disposable ▪ Filter: by biomedical dept as per manufacturers instructions ▪ Filter : rinse & clean with soapy water once a week, dry before use.	Filter: ▪ Change filter as per manufacturer recommendations /malfunctioning Mask Tube ▪ If grossly contaminated ▪ If malfunctioning ▪ When care is discontinued or weekly ▪ Discolored after frequent sterilization Log of number of cycles of sterilization to be maintained on tubing Mask: reusable or single use	Mask reusable for same patient or dispose.

5.	Ambu Bag	▪ Hand	▪ Clean through with detergent and water open	▪ Between each	Reusable after proper

		hygiene ▪ Gloves	valve ▪ Autoclave ▪ Alternatively disposable bags can be used	patient use	sterilization.
6.	Oxygen Flow Meter	▪ Hand Hygiene with Alcohol rub before and after use	▪ Rinse in detergent and water, soak in 1% Hypochlorite solution for 20 minutes ▪ Rinse with running tap water, dried and fix back ▪ Keep 3/4th full with RO water ▪ When not in use, Keep dry	▪ When in continuous use for a patient : Clean once a day ▪ When care is discontinued	Reusable
7.	Nebulizer	▪ Hand Hygiene with Alcohol rub before and after use	▪ After each treatment, the residual fluid should be discarded & cleaned with detergent and disinfect ▪ Use only sterile liquid for nebulization and use gloves for dispensing	▪ Change every 24 hours for same patient? ▪ Use new chamber and mask for each new patient. ▪ When care is discontinued: same as nasal prongs	Reusable When disposed: cut and place in red bag
8.	Suction Equipment	▪ Hand hygiene ▪ Gloves	Bottle: ▪ When in use for same patient, add Sodium Dichlorosocyanurate solution, and discard into toilet drain. Wash bottle, and reconnect. ▪ In between patients, soak in 1% hypochlorite for 20 minutes, wash, dry ▪ Keep jar empty and dry	▪ After use, or at every shift change	Bottle: Reusable

			when not in use Cap of bottle & metal connecter ▪ Wipe over with sodium Dichlorosocyanurate solution, Tubing: Fresh tube for each use or maximum after 6 hours on same patient Use only sterile water for cleaning in between if required.	Cap of bottle & metal connecter ▪ When in continuous use for a patient : Clean once a day ▪ When care is discontinued Tubing Change after every 24 hours	dispose into red bag

Ventilator Disinfection guidelines

	Part	PPE/Standard Precautions	Cleaning, Disinfection, Sterilization	Comment	Caution
1.	Ventilator Exterior (including the touch screen and flex arm)	▪ Hand hygiene ▪ Gloves	Wipe clean with damp cloth and mild solution or with one of their equivalents. Use water to rinse off chemical residue as necessary. ▪ Mild dishwashing detergent ▪ Isopropyl alcohol (70% solution) ▪ Glutaraldehyde 3.4% solution ▪ Virkon 0.5%	▪ Do not allow liquid or sprays to penetrate the ventilator or cable connections. ▪ Do not attempt to sterilize the ventilator by exposing to ethylene oxide (ETO) gas. Do not use pressurized air clean or dry the ventilator, including the GUI vents	▪ To avoid damaging filter materials used on the back of the GUI, do not use hydrogen peroxide to clean the GUI. ▪ To prevent damage to the ventilator labeling and ventilator surfaces in general, use only the listed chemicals to clean the ventilator exterior

2.	Patient circuit tubing	▪ Hand hygiene ▪ gloves	▪ Disassemble and clean, then autoclave, pasteurize or chemically disinfect	▪ If submerged in liquid, use pressurized air to blow moisture from inside the tubing before use. Inspect for nicks and cuts, and replace if damaged. Run SST to check for leaks when a new circuit is installed.	▪ Steam sterilization method for ventilator patient circuits may shorten the tubing's life span. Discoloration and decreased tubing flexibility are expected side effects of steam sterilizing this tubing.
3.	In line water traps	▪ Hand hygiene ▪ Gloves	▪ Disassemble and clean, then autoclave, pasteurize or chemically disinfect.	▪ Inspect for cracks and replace if damaged.	
4.	Couplings and Connectors	▪ Hand hygiene ▪ Gloves	▪ Autoclave, pasteurize or chemically disinfect	▪ If submerged in liquid, use pressurized air to blow moisture from inside the part before use. Inspect for nicks and cuts and replace if damaged	
5.	Collector Vial	▪ Hand hygiene ▪ Gloves	▪ Reusable clean, then autoclave or chemically disinfect. ▪ Single patient use: Discard	▪ Inspect for cracks and replace if damaged	
6.	Expiratory And Inspiratory bacteria filters	▪ Hand hygiene ▪ Gloves	▪ Reusable: Autoclave, before discarding, disinfect or sterilize according to your institution's protocol. ▪ Single patient use: Discard	▪ Effective sterilization of Puritan Bennet Inspiratory and expiratory filters occurs by steam autoclaving at 132 degree celcius for 20 minutes for gravity displacement cycles. ▪ Do not chemically disinfect or	

				expose to ETO gas. Check filter resistance before reuse. Follow manufacturer's recommendations for reusability.	
7.	Compressor Inlet Filter	▪ Hand hygiene ▪ Gloves	▪ Every 250 hrs or as necessary: Wash in mild soap solution, rinse and dry	▪ Replace filter elements if torn or damaged	
8.	Drain bag, tubing and clamp	▪ Hand hygiene ▪ Gloves	▪ Discard bag when filled to capacity or circuit change. Clean and autoclave reusable tubing. Wipe clamp clean with alcohol or pasteurize	▪ Do not autoclave clamp. Replace clamp if visibly damaged.	
9.	Air Inlet filter bowl	▪ Hand hygiene ▪ Gloves	▪ Wash exterior with mild soap solution if needed.	▪ Avoid exposure to aromatic solvents, especially ketones. Replace if cracks or crazing are visible.	

1. Anesthesia machine	Follow Instruction manual provided by the manufacturer		
2. Pulmonary function testing	• Hand Hygiene	• Routine sterilization or disinfection not required • Change mouthpiece and filter of spirometer between each patient use	

DECONTAMINATION OF EQUIPMENT AND ENVIRONMENT

Equipment/Site	Routine/Preferred Method	Acceptable /Alternative/ Additional recommendation
Airways and End tracheal tubes	1) Single use 2) Heat (Autoclave, , Low temp	3) Chemical disinfection (Chlorine based/

For M-TB patients	steam,Boiling) Use single use/ Heat	Gluteraldehyde)
Baths	Baths Non infected patients Wipe with Disinfectant (Betadine) and rinse: chemical cleaning may be used for stain and scum removal Infected patients and patients with open wounds Chlorine compound with detergent.	Infected patients and patients with open wounds Chlorine compound with detergent.
Bed frames	Non infected patients Wash with detergent and dry	After infected patient Chlorine compound/ / Bacillocid/ virkon
Bed pans	Washer-disinfector /sodium dichloro isocyanurate	Patients with enteric infections : Heat disinfection after emptying and washing. Or chemical disinfection with Chlorine compounds/ Bacillocid
Bowls (surgical)	Autoclave	
Bowls (washing)	Wash and dry, Store inverted	For infected patients use Individual bowls and disinfect on discharge 1) Heat disinfection 2) Chlorine/ Bacillocid/virkon
Drains	Clean regularly with phenyl	Chemical disinfections is not advised

Floors (Dry cleaning)	1) Vacuum clean 2) Dust attracting dry mop	No brooms in patient areas
Floors (wet cleaning)	Wash with detergent solution; routine disinfection not required	Known contaminated area: Chlorine / Phenol/ Bacillocid
Furniture and Fittings and Locker tops	Damp dust with detergent solution	Known contaminated and special areas (ICU): Damp dust with chlorine/ Bacillocid
Instruments	Heat (autoclave)	
Mattresses and Pillows	Water impermeable cover: wash with detergent solution and dry	Contaminated: Disinfect with Chlorine/ Bacillocid
Mops (dry, dust attracting)	Do not use for more than 2 days without washing and drying	
Mops (wet) House keeping	Washing machine/ dry daily Manual: rinse after each use, wring and store dry. Heat disinfect periodically	Mops (wet) House keeping Washing machine/ dry daily Manual: rinse after each use, wring and store dry. Heat disinfect periodically If chemical disinfection required after usage on infected areas: rinse in water, soak in Chlorine (1000 ppm av Cl for 30 min) rinse and store dry
Nail Brush (Surgeon's hands)	Use only if essential	Sterile nail brush should be used
Razors (safety and open)	Disposable / autoclaved	Alcohol immersion for 10 min

Rooms (terminal cleaning/ disinfection)	Non infected patients Wash surfaces in detergent solution	Infected patients Wash surfaces in 500 ppm available Chlorine,/ Bacillocid. Fogging / Fumigation not recommended
Thermometers (Oral)	Individual thermometers: wipe with alcohol and store dry,digital thermometer	Terminal disinfections Disinfect with Alcohol for 10 min, wipe and store dry.
Thermometers (Electronic linical)	Single patient use Immerse probe in Alcohol for 10 minutes, dry	Do not use without sleeve for oral or rectal temperature for pt. With an infectious disease.
Toilet seats	Wash with detergent and dry	After use by infected patients or if grossly contaminated, Disinfect with Chlorine / Rinse and dry.
Trolley tops (Dressing)	Clean with detergent and dry at beginning of dressing round and at the end of it also	If contaminated: Clean first, then use Chlorine. Bacillocid and dry. Alcohol can also be used After cleaning it first.
Tubing (Anesthetic or ventilation)	Heat disinfection 1) Washer disinfector 2) Low temperature steam	For patients with tuberculosis 1) Use single0 use tubing OR 2) Heat (washer disinfector/ Low temp steam)
Urinals	Use washer with heat disinfection cycle	Use Chlorine/.
External circuit and Humidifiers	Washing and boil for 20 minutes	Rinsed in alcohol after cleaning

Humidifier should be cleaned, dried and refilled with sterile water every 28-72 hrs Nebuliser	Heat disinfection: Washing machine at temp of 80 degree C for 1 min OR Low temp steam at 73 degree C	
Wash basin	Clean with detergent. Use cream cleaner for stains, scums etc. Disinfection not normally required	Contaminated Use Chlorine detergent solution or non-abrasive chlorine powder.

VII. REFERENCES:

- COP 7 – CSSD Manual
- CDC Guidelines

HIC 2 -g ,h Policy on Antibiotic Policy

I. POLICY:

For monitoring drug susceptibility, selection of the patients that need to be treated, have all necessary antibiotics available and avoid unnecessary antibiotic use.

II. PURPOSE:

The aim of implementing this policy throughout the hospital is to ensure that antibiotics are used appropriately. This should result in more effective treatment of infections so that patient outcomes are optimized. In addition appropriate antibiotic use should minimize the risk of healthcare-associated infections occurring and this produces benefits for patients and staff and for service delivery and clinical outcomes.

III. SCOPE:

Pharmacy, All wards and critical areas

IV. RESPONSIBILITY:

Responsibilities of the Antibiotic Working Group

The terms of reference of the Antibiotic Working Group will be as follows:

1. The group shall be known as the Antibiotic Working Group. (Infection Control Committee)
2. The aims of the group are to ensure that antibiotics are utilized across the Hospital in a way which results in optimal treatment of infections with minimal risk of healthcare-associated infections.
3. The Antibiotic Working Group will report to the V.P.Medical.

Members: Lead consultant (from each department), Pharmacist, Microbiologist, Infection control manager.

V. DISTRIBUTION:

Pharmacy, All wards and critical areas

VI. PROCEDURE:

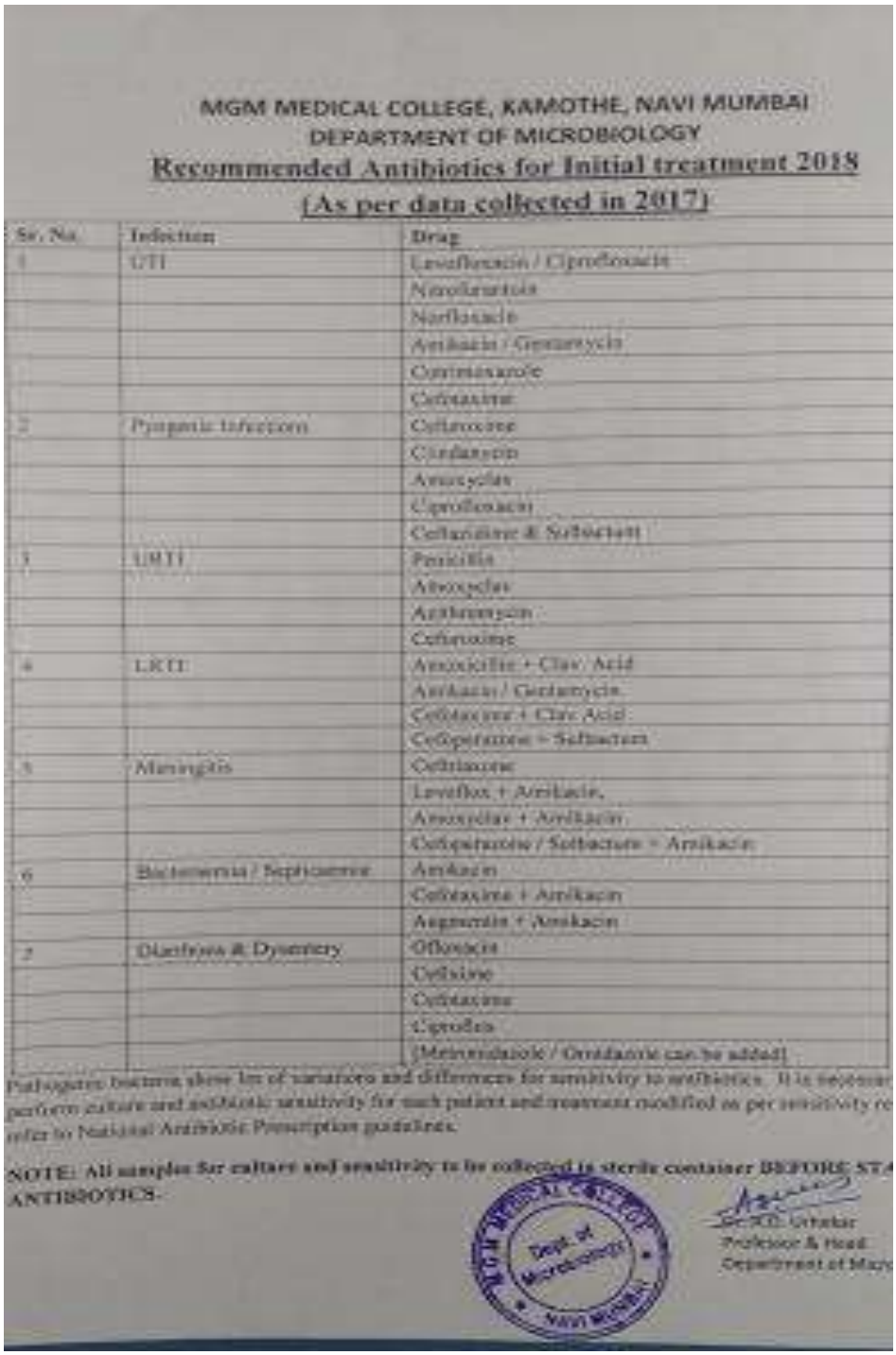
- To formulate and agree an annual action plan for monitoring the use of antibiotics across the hospital
- To formulate and agree an annual action plan for monitoring changes in healthcare-associated infections in clinical areas across the hospital.
- To formulate and agree an annual action plan for determining how adherence to the Drug Formulary Antibiotic Guidelines can be increased.
- To formulate and agree an annual action plan for educating all relevant clinical staff on antibiotic prescribing.
- To formulate and agree targeted action plans to influence antibiotic prescribing in specific clinical areas where there are significant problems with healthcare-associated infections. The measures taken to influence antibiotic prescribing may include education

of staff, feedback of prescribing data and healthcare-associated infection surveillance data and restriction of antibiotic availability.

- To ensure that the Drug Formulary Antibiotic Guidelines are reviewed annually and kept up-to-date.
- To monitor the use of antibiotics across the Hospital and any effects of this on healthcare-associated infections.

Refer to Antibiotic policy on next page

- **RESTRICTED ANTIBIOTICS AND THEIR INDICATIONS**
  Refer Hospital Antibiotic Policy-2018



MGM MEDICAL COLLEGE, KAMOTHE, NAVI MUMBAI
DEPARTMENT OF MICROBIOLOGY
Recommended Antibiotics for Initial treatment 2018
(As per data collected in 2017)

Sr. No	Infection	Drug
1	UTI	Levofloxacin / Ciprofloxacin
		Nitrofurantoin
		Norfloxacin
		Amikacin / Gentamycin
		Cotrimoxazole
		Cefixime
2	Pyogenic infections	Ceftriaxone
		Clindamycin
		Amoxyclav
		Ciprofloxacin
		Ceftazidime & Sulbactam
3	URTI	Penicillin
		Amoxyclav
		Azithromycin
		Ceftriaxone
4	LRTI	Amoxicillin + Clav. Acid
		Amikacin / Gentamycin
		Ceftriaxone + Clav. Acid
		Cefoperazone + Sulbactam
5	Meningitis	Ceftriaxone
		Levoflox + Amikacin
		Amoxyclav + Amikacin
		Cefoperazone / Sulbactam + Amikacin
6	Bacteremia / Septicemia	Amikacin
		Ceftriaxone + Amikacin
		Augmentin + Amikacin
7	Diarrhoea & Dysentery	Ofloxacin
		Ceftriaxone
		Ceftazidime
		Ciprofloxacin
		[Metronidazole / Ornidazole can be added]

Pathogenic bacteria show lot of variations and differences for sensitivity to antibiotics. It is necessary perform culture and antibiotic sensitivity for each patient and treatment modified as per sensitivity re refer to National Antibiotic Prescription guidelines.

NOTE: All samples for culture and sensitivity to be collected in sterile container BEFORE STA ANTIBIOTICS.

Dr. S.G. Gitakar
Professor & Head
Department of Micro

HIC 2- i Policy on Laundary & Linen Management

I. POLICY:

This applies to the management of hospital's linen ensuring adequate cleaning of the linen for better hygienic hospital environment and their proper accountability.

II. PURPOSE:

To provide process, instructions and methodology for Management of Laundry process in the hospital.

III. SCOPE:

Hospital Wide

IV. RESPONSIBILITY:

Manager-Linen and laundry

V. DISTRIBUTION:

Hospital Wide

VI. PROCEDURE:

The main laundering procedures in the hospital linen services shall include

- Dirty linen collection
- Sorting into soiled and unsoiled linen
- Sluicing
- Washing
- Hydro Extraction
- Calendering or pressing
- Folding
- Delivery of clean linen to wards
- Repair of linen if necessary and condemnation

1. DIRTY LINEN COLLECTION:

Collection of dirty linen from wards shall be the responsibility of the laundry. The laundry linen shall therefore be collected by laundry staff every day from all wards and user areas. The dirty linen in the wards will be kept in the sluicing rooms till such time it is sent for laundering. Ideally it shall be sorted as soiled and non soiled linen by ward staff. Accounting of clothes shall be done by the help of registers kept in wards and collection slips used by laundry staff.

2. SORTING:

The sorting of soiled and unsoiled linen will be done in ward itself which shall again be checked in laundry Further sorting of soiled linen will be done into small linen and large linen so

that the small linen is not washed away with water while draining the washing machine. The small size linen will be washed separately. Such sorting also helps in identifying linen for sluicing.

3. WASHING:

Sluiced clothes as well as the normal dirty linen shall be then sent for washing in washing machine. The standard inputs for this operation are steam for heating, the water and for every washing agent as per manufacturers requirements.

4. HYDRO-EXTRACTION:

The squeezing is done by centrifugal action, by putting the clothes in rotating drums which are driven by electrical motors. The critical parameters are, balanced loading of the linen in the drum and optimal rotation of the drum. When the water stops draining out of the drum, the linen is to be removed.

5. DRYING:

The clothes shall then be taken to drying tumblers for drying. Dryers are used as per manufacturer's instructions.

6. FOLDING:

Folding can be carried out manually. After folding the clothes are stored in the racks and are ready for distribution.

7. TAILOR:

The damaged/torn clothes will be segregated after drying operation and if repairable are repaired by tailors. Otherwise it is to be put up for condemnation.

8. DELIVERY OF CLEAN CLOTHES:

This operation will be carried out along with the process of collection of the linen by the staff of laundry.

9. CLEANING AND DUSTING:

- The Housekeeping department is responsible for preserving clean environment within the linen store.
- Regular cleaning and dusting of the department is done twice a day by the housekeeping staff.

10. DISINFECTION PROCEDURE:

1) :WASHING OF LINEN

Washing of the hospital linen is done in a washing machine. The washed linen is then transferred to dryer. This is supplied to various departments after folding. Soap used for linen is as decided by the Medical Superintendent in line with the manufacturers recommendations.

2) DISINFECTION OF USED (SOILED) LINEN WHICH NEED SPECIAL HANDLING BEFORE DISPATCH TO LAUNDRY.

1. Soiled linens - Soaked in 2% Sodium Hypochlorite

All wet linen is considered contaminated and is bagged in bags in the ward area and such linen should be handled using universal precautions.

3) LINEN CHANGE:

Linen of the patients shall be changed as follows

- Normally bed linen as well as patients' body linen shall be changed once daily in the morning at 7-8 am.
- Additionally linen shall be changed whenever needed in case the linen gets soiled with vomiting, faeces, blood spills, urine etc
- All wards shall be supplied with their required linen at specific time.
- All soiled linen of the patients shall be collected between 8:30-9:30 am. However uniform for the staff shall be collected by the staff themselves from the issue area of the linen department and submitted at the end of each shift.
- Aprons for the consultants shall be supplied to the consultant's room before the start of OPD
- Scrub suits for the OT shall be supplied and stored in the change area of the OT as per requirement and collected twice daily

Hypothetically in any single day 5 sets of linen will be kept ready which are

- One set which will be used
- One set ready for use kept in the ward
- One set being processed in the laundry
- One set in transit to be delivered or to be received in the ward
- One set for holidays and weekends

4) TRANSPORTATION OF THE LINEN

- Dirty linen is transported on a demarked stretcher
- Clean linen is transported on a demarked stretcher
- Distribution of linen is as per the requirement of each department

VII. RECORDS AND FORMATS:

1. A laundry stock register is maintained which contained details regarding the linen stock of the hospital.
2. Register containing details of the reagents and detergents stock in the laundry
3. A laundry receipt and issue register will be maintained with department wise categorization for easy operations, at the laundry reception.
4. A department issue a receipt register is maintained for accountability of the soiled linen received from the various department unit of the hospital and the delivery of the washed linen to the respective user departments.
5. 'Incidents' form to record any accidents or injuries to staff will also be maintained and appropriate action will be taken

HIC 2- j Policy on Kitchen Sanitation and food handling

I. POLICY:

The Dietary department ensures that food prepared and served to patients are received, stored assembled and served in a manner that avoids contamination.

II. PURPOSE:

To provide process, instructions and methodology for Management of Kitchen for providing good and safe food to the patients & staff of the hospital.

III. SCOPE:

Hospital Kitchen

IV. RESPONSIBILITY:

Manager Food & Beverages & Dieticians

V. DISTRIBUTION:

Kitchen

VI. PROCEDURE:

Standard Operating Procedure For Central Kitchen:-

1. Always wash our hand before entering kitchen or start of any work.
2. Use designated sink for hand wash do not use food preparation sink
3. Before preparing (while washing & cutting) vegetable check if any worms or clay/soil inside, In case of leafy vegetable open bunch check it, if anything found wrong please inform head chef & kitchen manager.
4. Before preparing (while washing & cutting) vegetable check if any worms or clay/soil inside, In case of leafy vegetable open bunch check it, if anything found wrong please inform head chef & kitchen manager.
5. Before using raw material check expiry date on packets, tin ,bags do not use dented tin, bags with hole/torn
6. Before starting food preparation make sure that your utensils, table top is clean & sanitized
7. Staff should always maintain personal hygiene.

8. **Employees Involved in the cooking/production of food must follow below instructions:-**

1) Cook hot foods to these minimum end point temperatures or recipe directions avoid over cooked. Use a thermometer to check product temperature in thickest part of the item .

2) Reduce holding time of foods before serving by using batch cooking . prepare batches of product to ensure quality and safety allow temperature of cooking equipment to return to required temperatures between batches.

3) Do not use hot holding equipment to cook or reheat foods. food ingredients should not be exposed to room than two hours during preparation...

4) Wash hands , use a thermometer to take the temperatures of all menu items that contain food ingredients that are temperature controlled for safety or potentially hazardous food products ..

5) Record the end point cooking temperature on the cooked food temperature log ,the kitchen manager will review logs daily to ensure that temperatures and corrective actions are being met take corrective action as necessary .

9. Always separate garbage food waste for wet garbage & paper & Plastic for dry garbage.

10. Clean vegetable under running water, scrubs the surface of firm vegetable . remove soil and damage . bruised area. Before preparing

11. As soon as vegetable received clean it & keep appropriate place.

12. Nothing should be on floor except your lags.

13. Always refrigerate food in small container height should be not more than 4 inlets. If it is more quantity divide into two.

14. Always keep your area clean & dry.

15. Use cleaning system wash, rinse & sanitizer

16. After cleaning pots, dabhas , vessels, trays etc, keep up side down.

17. Discard cooked food within 4 hours pass the time.

18. Use suitable utensils when working with ready to eat food, suitable utensils may hand gloves , tongs , spoon,

19. Record food temperature Before to serve ready to eat food.

20. Do not keep chemicals beside food

21. Refrigerate milk & dairy product as delivery arrives

22. Clean the exterior & interior surface of food containers.

23. Keep food covered as cooked.

24. Check expiry date before to use any products.

- All food is prepared and served into containers/trays in the main kitchen and then sent to the wards.

1. <u>PROCUREMENT & RECEIVING OF RAW MATERIAL:</u>

1) Only properly labeled raw materials are received from reputed suppliers with whom a rate contract is made each year.

2) All the materials are physically inspected for quality.

3) Fresh supplies, which include fruits, vegetables are procured on daily basis , milk and milk products, eggs are procured on a one day prior basis.

4) Provisions and other dry commodities are indented from the main stores on a daily basis.

5) Substandard materials, if any are rejected at the time of delivery.

2. <u>STORAGE</u>:

1) Provisions and other dry materials are stored on shelves above the floor at room temperature, which are segregated from the processed foods and are stored separately.

2) First in first out principle is followed for provisions and other dry material.

3) Milk packets are stored in refrigerator.

3. FOOD PREPARATION:

1) Pre – preparation and preparation of food shall be carried out in hygienic conditions.
2) Each meal is freshly prepared and consumed during the mealtime.
3) Leftover, if any, are discarded within 5 hours.

4. FOOD DISTRIBUTION:

1) Specified food delivery schedule is followed.
2) Food is served in trays in the wards. It is transported in trolleys.
3) Food handlers use apron, caps and gloves while serving the food to the patients.
4) Based on Consultant's prescription and dietician's advice, patients choose their menu.

5. CLEANING PROCESS:

1) Cleaning material and sanitizers are used to maintain high standards of cleanliness.
2) A cleaning schedule is followed for the cleaning of entire F & B areas as well as the equipment used in the dept.
3) Food handlers are routinely instructed about food handling techniques and personal hygiene.
4) Fruits and vegetables intended for raw consumption are washed in disinfectant solution.
5) Food handlers wear gloves while handling food that is ready for consumption.
6) Hands are washed frequently with soap and water in the designated hand washing areas.
7) Food handlers cover their head with a cap.
8) Eating and drinking are confined to designated areas.

6. EMPLOYEE HEALTH & HYGIENE:

1) Employees with respiratory infection, intestinal disease, or diarrhea, jaundice boils, or any skin infection, particularly on the fingers and hands are not allowed to work.
2) Food handlers are subjected to stool examination for pathogenic organisms and parasites once in six months & suitable treatment is provided whenever required.
3) All employees adhere to the departmental dress code.
- Hand washing – keep hands always neat & clean keep nails short.

4) Wash hands after – using toilet, contact with unclean equipment, soiled clothing etc.
5) Provide adequate hand washing and hand drying facilities at convenient places.

7. HEALTH HABITS'

1) Avoid coughing, sneezing in the vicinity of food, licking fingers before picking up an article of food and smoking on food premises.
2) Traffic of unauthorized persons through food preparation area should also be avoided.
3) Keep their clothing free from obvious dirt and food spills.
4) Use hair nets/cap (hair restraints) while on duty.
5) Use utensils to handle food whenever possible.
6) Do not consume food or drinks in the food, preparation or serving areas.
7) Do not use tobacco products in any form while engaged in the preparation or serving.
8) Food handlers will have regular checks once a year for staph, salmonella and cholera.

8. MINIMUM HANDLING OF FOOD

1) Avoid touching food directly with bare hands.

2) Use gloves to minimize much contamination.

3) Do not touch dirty thing with the glove hand while handling food.

9. CLOTHING

Wear clean designated uniforms.

10. FOOD MICROBIOLOGY:

1) Random sampling of food material is carried out in the microbiology lab. The following are subjected for sampling:

2) Cooked food material – Once in a month

11. FOOD TEMPERATURES:

Cold food items are maintained in refrigeration at a temperature of 39 – 43 degree F or below. Walk-in storage facilities are maintained at the following temperature. The temperatures are checked daily and a log is maintained of the temperature.

Vegetables and fruits - 0 – 4 degree C

Dry stores - Room temperature

1) Foods prepared to be served cold are cooled from their preparation temperature to 4 degrees C or below. The cooling period shall not exceed 4 hours.

2) Both hot and cold food items will be transported in such a manner that appropriate temperatures will be maintained during the transportation of the food.

- Dietary personnel shall also be taught to protect food consumers from the body substances of dietary personnel.
- Hand washing
- Personnel wash with soap and water their hands and exposed portions of their arms before starting work. Hand washing includes special attention to the fingernails and finger web.

12. DISPOSAL OF WASTE FROM THE DIETARY DEPARTMENT:

1) In food production area food waste and plastic waste are segregated in separate bins with green covers.

2) It is cleared every second day by outsourcing agency.

13. CONTACTS WITH OTHER DISCIPLINES:

When a food borne illness is suspected, the HICC is notified, specimens may be obtained by the Pathology department from the symptomatic individuals and from suspected food. The M.G.M Medical College Hospital, Kamothe will be responsible for obtaining significant histories and conducting the investigation of a suspected food borne illnes

HIC 2 k Policy on Engineering Controls

I. POLICY:

The preventive maintenance of all equipment will ensure efficiency of all staff and reduce chances of contamination of air and water. The proper care and maintenance of the entire physical structure will also reduce accumulation of dust and spores in the environment. Thus the engineering dept and its personnel are important links in the chain of activities towards hospital infection control.

All personnel should apply universal precautions when in contact with patients or blood and body fluids.

II. PURPOSE:

It is to ensure proper maintenance of all the equipments in the hospital such that at any given time they are efficiently working and apply to all standards and guidelines when in contact with the patients.

III. SCOPE:

All staff and patients coming in contact directly or indirectly to the equipments

IV. RESPONSIBILITY:

Engineering and the Biomedical Department

V. DISTRIBUTION:

Engineering and the Biomedical Department

VI. PROCEDURE:

The preventive maintenance of all equipment will ensure efficiency of all staff and reduce chances of contamination of air and water. The proper care and maintenance of the entire physical structure will also reduce accumulation of dust and spores in the environment.Thus the engineering dept and its personnel are important links in the chain of activities towards hospital infection control.

All personnel should apply universal precautions when in contact with patients or blood and body fluids.

1. GENERAL:

1) Engineering personnel shall report to the ward sister prior to commencing work in a patient's room or area, and follow her directions with regard to dressing, scrubbing etc. Engineering personnel shall check out with the ward sister upon completion of work.

2) Engineering employees shall maintain a neat, clean appearance at all times. Personnel hygiene such as washing after using toilet facilities etc will be observed. All engineering personnel must be aware of universal precautions.

3) Prior to entering areas requiring sterile attire such as the OR, engineering employees shall wear the prescribed clothing. Engineering personnel shall check in and out with the permission of the supervisor.

4) Hand washing shouldbe followed before and after leaving the patient care area.

2. PLUMBING JOB GUIDELINES:

1) Hospital water supply systems shall not be connected with any other piping system or fixtures that could allow contamination without the use of adequate air gaps or approved back flow preventers or vacuum breakers.

2) When using implements to unstop faulty drains, wear rubber gloves.

3) When robbing out main sewer lines, or when exposed to gross contaminated wastes, wear rubber boots and rubber gloves.

4) After exposure to sewer lines or gross contaminated waste, clean exposed areas of body with soap and water. Change uniform if necessary. Do not return to patient care areas before cleaning up.

3. PHYSICAL BARRIERS BETWEEN REPAIR AREA AND PATIENT CARE FACILITY:

1) When any construction or repair work is carried out in patient care areas the supervisors must inform the Medical Superintendent, who will inform the heads of the concerned departments so that patient may be shifted if required.

2) When work is carried out in areas where immune compromised patients or that requires a sterile atmosphere, adequate physical barriers must be present to prevent the spread of fungus and other such microbes, through dust and debris generated.

3) All areas that require a sterile atmosphere must be fumigated before use following construction work.

4. VENTILATION SYSTEMS:

1) Regular cleaning of all window AC filters must be carried out in a systematic manner throughout the hospital.

2) AC filters should be placed in formalin solution for at least an hour at each cleaning.

3) In areas such as the microbiology labs where handling of infected material is carried more frequent checks and cleaning of AC filters is required.

4) In situations where HEPA filters are used regularly checks must be carried out as the environmental dust load is very heavy in these areas and the filters get clogged quickly. When microbial load increases as evidenced by particle count test/ validation test to be replaced if necessary.

5) For OTs annual validation tests for HEPA FILTERS to be carried out and to be replaced if necessary..

6) In areas where central air-conditioning is used the moisture of the air and the ventilator air changes must be carefully monitored. All ducts must be washed thoroughly at regular intervals and fumigated.

HIC 2 l Policy on Housekeeping Procedure

I. POLICY:

Aside from the accident prevention benefits, good housekeeping can help in-

- Prevention and control of hospital infection
- Reducing average length of stay
- Reducing cost of medical care
- Reducing suffering of patients

II. PURPOSE:

To provide process, instructions and methodology for Management of House Keeping with the aim that

- Cleanliness is maintained,
- Infection is controlled, and
- Customer Satisfaction is enhanced.
- DRESS CODE FOR HOUSE KEEPING STAFF:

Ladies: -

- Hair should be neatly combed and worn in bun, or neatly tied back or cut short .
- Cut short nails.
- Uniform should be neat and clean
- No jewellery except watch and wedding Ring/Thalis
- Clean footwear

Gents:

- The hair should be worn short and neatly combed.
- Should be clean shaven
- Cut short nails
- Uniform should be neat and clean
- Clean footwear

III. SCOPE:

The scope of the housekeeping services is to ensure cleaning in all the patient as well as non patient areas.

The services also cover gardening and cleaning window panes and plumbing.

IV. RESPONSIBILITY:

Manager Housekeeping services is responsible for effective implementation of this process.

V. DISTRIBUTION:

Hospital Wide

VI. PROCEDURE:

EQUIPMENTS AND SUPPLIES

1. FOR FLOORS

- Dry mop, wet mop Hard and soft broom Treated dust mops
- Scrubbing machine
- Treated pads for buffers and scrubbing machine
- Mop handles and heads
- Mop pails and wringers buckets

2. FOR WALLS

- Wall brushes with treated disposable covers
- Wall washing machine
- Sprayers

3. FOR TRASH & GARBAGE

- Cans
- Sterilizers for can

4. FOR PLUMBING FIXTURES

- Toilet brushes
- Scrubbing brushes

5. FOR FURNITURE'S

- Whisk broom
- Draping pins, hooks and rods

6. FOR WINDOWS

- Safety equipments
- Ladders
- Squeegees

7. BASIC SUPPLIES

- Steel wool, sweeping compound
- Furniture polish, metal polish
- Disinfectants, toilet cleaner
- Floor striping cleaner

1) GERMICIDE

2) MECHANIZED CLEANING

- Use of various types of vacuum cleaners with good fitters and wet vacuuming

3) CLEANING PROCEDURE

a. ROOM CLEANING

- Check the maintenance requirement and report the same to the maintenance department.
- Empty all the waste paper basket in the room. Collect other loose trash on tables and floor and throw them in the waste paper basket.

Clean the entire surface in single circular motion with the damp cloth

- Use a hand dust pan to collect any unwanted matter on the surface without lifting dust in the air.
- Wipe the telephone with a damp cloth. Check phone for the dial tone.

Dry and Wet mop the floor and ensure it is dry.

- Arrange furniture if necessary

b. BATHROOM CLEANING

- Floors are cleaned from the wall farthest to the door to the exit.
- Collect all the trash in bathroom waste basket.
- Scrub the wash basin with Fresh & Liquid
- Scrub the toilet bowl with sanitizer(TLC). Inner rim shall be cleaned. Ensure it is dry and spotless and smell free.

c. DISPOSAL OF WASTE

- Three dustbins each containing yellow, red& black colored polythene to be kept in each ward
- Wear gloves and mask while clearance.
- The waste from small dustbin to be transferred in big bag of same color.
- Big bag to be tied with paper tap thread in front of security guard & Housekeeping Supervisor.
- Waste bags to be disposed in the area allocated for final disposition.
- Supervisor along with security staff to be physically present while bio-medical waste is handed over to authorized company.

d. SCRUBBING

- Mopping to be done before scrubbing.
- Solution to be spread on the floor
- Start the scrubbing machine.
- Scrub the floor as per the schedule.
- Wipe it off.

e. DEEP CLEANING

- To be done as per the schedule.
- All furniture to be removed.
- Dry mopping to be to be done.
- Scrubbing of floor to be done.
- Washing of floors to be done

Wipe off all the water & make it dry. Wet mop the floor.

- Door, curtain rod, bed, bed side locker, window curtain vacuuming& fan other electrical fittings
- Clean the bed with sodium hypochlorite
- Arrange the furniture accordingly after cleaning.

f. CLEANING OF VACANT ROOM

- All furniture to be removed.
- Wet mopping
- Thorough dusting of window, door, curtain rod, bed, bed side locker, window curtain & fan other electrical fittings, almirah,
- Washing of floor.
- Cleaning of toilet and washroom
- Scrubbing of washbasin, tiles, floor.

8. SPECIAL INSTRUCTIONS

- Wet moping of OTs and ICUs
- Brooms shall never be used for cleaning any area of the hospital. Wet mop to be used instead of dry booming and dusting

- No waxing of OT floors as they need to be highly conductive because of use of explosive gases
- Regular pest control measures to be adopted
- Proper management of pest infection cases
- Fixed timings and schedule for different activities

9. HOUSE KEEPING IN WARDS

A patient admitted to the hospital can develop infection due to bacteria that survive in the environment. Therefore, it is important to clean the environment thoroughly on a regular basis. This will reduce the bacterial load and make the environment unsuitable for growth of micro-organisms.

1) The floor is to be cleaned at least three times in 24 hours. Detergent and copious amounts of water shall be used during one cleaning.
2) The walls are to be washed with a brush, using detergent and water once a week
3) High dusting is to be done with a wet mop
4) Fans and lights are cleaned with soap and water once a month.

5) All work surfaces are to be disinfected by wiping with and then cleaned with detergent and water twice a day.

Highly touched hose keeping surfaces bed rails, door knobs, light switches and furnitures and equipments adjacent to patient bed are wiped with disinfectant atleast once a day.

6) Cupboards, shelves, beds, lockers, IV stands, stools and other fixtures are to be cleaned with detergent and water once a week.
7) Curtains are to be changed once a month or whenever soiled. These curtains are to be sent for regular laundering. In certain areas, eg. Transplant units and ICUs, more frequent changes are required.
8) Patient's bed is to be cleaned every week with detergent and water.

Sodium hypochlorite solution to be used when soiled with blood or body fluids. In the isolation ward, cleaning is done daily.

9) Store rooms are to be mopped once a day and high dusted once a week.

10) The floor of bathrooms is to be cleaned with a broom and detergent once a day and then disinfected.

11) Toilets are cleaned with a brush using a detergent twice a day (in the morning and evening).. Stain removal using Hydrochloric acid may be used.

12) Wash basins are to be cleaned with detergent powder every morning

13) Regular AC maintenance is required.

1) PATIENT LINEN

- Bed linen is to be changed daily and whenever soiled with blood or body fluids.
- Patient's gown is to be changed every day and whenever soiled with blood or body fluids.
- Linen soiled with blood or body fluids, and all linen used by patients diagnosed to have HIV, HBV, HCV and MRSA, is to be.decontaminated with Sodium hypochlorite solution on the soiled part and sent to laundry in double red bag with the label.

2) MISCELLANEOUS ITEMS

Kidney basins, basins, bed pans, urinals, etc to be cleaned with detergent and water and disinfected with Sodium hypochlorite solution when used for infected patients.

10. HOUSE KEEPING IN THE OPERATION THEATRE

- Theatre complex shall be absolutely clean at all items. Dust shall not be let to accumulate at any region in the theatre.
- Soap solution will be used for cleaning floors and other surfaces. Operating rooms are cleaned daily and the entire theatre complex is cleaned thoroughly once a week.

1) BEFORE THE START OF THE 1ST CASE

Wipe all equipment, furniture, room lights, suction points, OT table, surgical light reflectors, other light fittings, slabs etc with soap solution. This shall be completed at least one hour before the start of surgery.

a) Wipe all equipment, furniture, room lights, suction points, OT table, surgical light reflectors, other light fittings, slabs etc with soap solution. All the equipment should be disinfected with

b) This should be completed at least one hour before the start of surgery.

c) Use separate mop for each OR and separate mop for corridor.

d) First clean with a detergent and then with a disinfectant

e) Double bucket system for mopping (one bucket for water and the other, for the disinfectant solution). After each wipe, rinse the mop in water before dipping it in the disinfectant solution prior to mopping.

f) Floors in the OR must be cleaned after each case with the disinfectant. If mop used, a clean mophead and disinfectant solution should be used after each case.

g) For end of case cleaning, it is only necessary to clean a 3-4 feet perimeter around the operative site; extend this if greater contamination has occurred. Clean patient table, equipment trolley and OR lights also.

h) Double cleaning, if large spills of blood and body fluids have occurred. Before mopping up body fluid/blood spills, add Sodium dichlorosocyanurate(4 tab in 110 ml of water)dilution of to the spill to disinfect it.

i) Always clean from more clean to less clean area

j) Restrict personnel entry after cleaning

Cleaning After an Infected Case

1. Cleaning is same as for other cases.

2. Replace all the plasic and rubber tubing after surgery.

3. Change gown gloves, mask and all other protective equipment immediately and leave it inside the OR in appropriate containers for disposal

4. Waste disposal is the same as for noninfected cases.

5. HBsAg positive, HCV positive and HIV positive patient's linen should be double bagged to protect against leaks and send for autoclaving before sending to laundry.

2) AFTER EACH CASE:

- The furniture, equipment, lights, suction canisters, and other equipment used are wiped with a detergent germicide. Mattresses are wiped and bed is remade.
- Patient transport vehicles are wiped
- 3-4 feet area of the floor around the table should be cleaned. Wet mop, fresh for every patient is preferred or wet vacuum cleaner.
- Walls, doors, push plates and other areas that have come in contact with the patient's blood and body fluids are cleaned.

3) ENVIRONMENT

- During/immediately after the case:
- Linen & gloves
- Gather all soiled linen and towels in the receptacles provided. Take them to the service corridor (behind the theatre) and place them in trolleys to be taken for sorting. The dirty linen is then sent to the laundry. Use gloves while handling dirty linen.
- Instruments
- Used instruments are cleaned immediately by the scrub nurse and the attender. Reusable sharps are soaked in enzymatic rinsed in the room adjacent to the respective. They are then sent for sterilization in the CSSD.
- After septic cases the instruments are sent in the instrument tray for autoclaving. Once disinfected, they are taken back to the same instrument cleaning area for a manual wash described earlier. They are then sent to CSSD.
- Empty and clean suction bottles and tubing with disinfectant.

4) AFTER THE LAST CASE

The same procedures as mentioned above are followed and in addition the following are carried out.

- Wipe over head lights, cabinets, waste receptables, equipment, furniture with Wash floor and wet mop with liquid soap and then remove water and wet mop with Clean the storage shelves scrub & clean sluice room.

of the Operation Theatre shall be done once in the morning and once in the evening

5) WEEKLY CLEANING PROCEDURE

- Remove all portable equipment.
- Damp wipe lights and other fixtures with detergent.
- Clean doors, hinges, facings, glass inserts and rinse with a cloth moistened with detergent.
- Wipe down walls with clean cloth mop with detergent.
- Scrub floor using detergent and water..
- Stainless steel surfaces – clean with detergent, rinse & clean with warm water.
- Wash (clean) and dry all furniture and equipment (OT table, suction holders, foot & sitting stools, Mayo stands, IV poles, basin stands, X-ray view boxes, hamper stands, all tables in the room, holes to oxygen tank, kick buckets and holder, and wall cupboards)
- Refrigerator: defrosted & cleaned with soap solution.
- After washing floors, allow disinfectant solution to remain on the floor for 5 minutes then clean.
- Ventilation grills, OR shelves and cabinets etc should be cleaned on a routine basis including other horizontal surfaces and the tops of OR lights.
- Fogging done once a week.

CLEANING PROTOCOL FOR ICUs

1. Cleaning of walls, floors and furnishings

a. Walls – must be spot cleaned of spills and splashes and completely cleaned upto 6 feet once in a week or when they are soiled

b. Floor

Never use dry sweeping, as it causes dissemination of microorganisms into the air

Use wet mopping twice in each shift and as when required.

When a single bucket is used, the solution must be changed when dirty

Double bucket technique is the preferred one (ie, separate buckets contain disinfectant solution and rinse water)

The mop should always be rinsed and wrung out before it is dropped into detergent bucket (the efficacy of the germicide decreases with increased soil/microbial load)

Mop heads-daily laundering in hot water cycle/or bleach followed by through drying is needed.

Mops used in isolation rooms should not be shared for other areas

11. HOUSE KEEPING IN THE ISOLATION ROOMS

CLEANING PROCEDURE FOR ISOLATION ROOM:

- Linen shall be stripped from the bed with care taken not to shake the linen during this action. Linen shall be a sent to the laundry in red bag and if soiled decontaminate with Sodium dichloroisocyanur ate before sending.

All other articles like IV stands and furniture shall be cleaned with detergent and disinfected with

- .0.5% virkon /bacillocid
- Highly touched surfaces like door knob, switches should be cleaned with disinfectant.
- The bathrooms shall be cleaned with detergent and disinfected with. Sodium hypo

12.MANDATORY PRECAUTIONS

Safety procedures shall be followed by housekeeping aids while cleaning the following departments. Adequate Personal protective Equipments shall be worn to prevent exposure to radioactive substances

- Laboratory department
- Radiology and imaging department
- Cath lab

SPECIAL INSTRUCTIONS

1) Keep work areas and storage facilities clean, neat and orderly.
2) Keep all, stairways, passageways, exits and access ways to Hospital free from obstructions at all times. Remove all grease and water spills from traffic areas immediately.
3) Do not place supplies on top of lockers, hampers, boxes, or other moveable containers at a height where they are not visible from the floor.
4) When piling materials for storage, make sure the base is firm and level. Cross tie each layer. Keep piles level and do not stack piles too high. Keep aisles clear and maintain adequate space to work in them.
5) When storing materials suspended from racks or hooks, secure them from falling and route walkways a safe distance from the surface beneath.
6) Do not let materials and supplies that are no longer needed accumulate. if it is not needed, get rid of it !
7) Tools, equipment, machinery and work areas are to be maintained in a clean and safe manner. Defects and unsafe conditions must be reported to your supervisor.
8) Return tools and equipment to their proper place when not in use.
9) Lay out extension cords, air hoses, water hoses, ladders, pipes, tools, etc., in such a way as to minimize tripping hazards or obstructions to traffic.
10) Clean up spills immediately to avoid hazards. In the event the removal cannot be done immediately, the area must be appropriately guarded, signed or roped off.

11) Maintain adequate lighting in obscure areas for the protection of both employees and the public. Keep landscaping well manicured to minimize hiding places.

12) Employees are not to handle food, tobacco, etc., with residue from any lead-based product (such as leaded gasoline) on their hands. Consumption of food and beverages is prohibited in areas where hazardous substances are stored or used.

13) Employees whose hands are cut or scratched are not to handle any lead-based products.

14) All switches or drives on machinery must be shut down and locked out before cleaning, greasing, oiling, or making adjustments or repairs.

15) Machinery and equipment shall be checked, cleaned and repaired routinely

16) Urgent repairs shall be carried out at the end of the day's list

HIC 3 Policy on Surveillance Activities

I. POLICY:

Surveillance of Healthcare associated infection is the foundation for organizing and maintaining an infection control program. Information obtained from surveillance data is a useful tool in identifying areas of priority and allocating resources accordingly.

II. PURPOSE:

The purposes are as follows:

1. Reducing the infection rates within health care facilities.
2. Establishing endemic infection rates.
3. Identifying outbreaks.
4. Convincing medical personnel to adopt recommended preventive practices.
5. Evaluating control measures.

Targeted surveillance aimed at high risk areas is more effective and manageable .It can be Site specific, unit specific, rotating or outbreak associated surveillance.

III. SCOPE:

Hospital Wide

IV. RESPONSIBILITY:

Infection control Nurse, Infection Control Team & Infection Control Committee

V. DISTRIBUTION:

Hospital Wide

VI. PROCEDURE

1. METHOD OF SURVEILLANCE IN HIGH RISK AREAS OT, ICU

Area	Frequency of visit	Surveillance
ICU	Daily	Ensure monthly bacillocid cleaning Check waste segregation Check compliance to hand washing Check compliance to sterile techniques for procedures Check change of IV cannula and IV set Linen management – infection control practices Survey on HAI – corrective action
Dialysis	Daily	Ensure weekly bacillocid cleaning Ensure monthly surveillance of RO plant water Check waste segregation Check compliance to hand washing Check compliance to sterile techniques for procedures

		Linen management – infection control practices
Operating room	Weekly	Microbiologic sampling weekly Ensure bi monthly bacillocid cleaning Maintaining proper ventilation (humidity (<60%) & temp. Control 20-23oC Check waste segregation Linen management – infection control practices Check compliance on hand washing
CSSD	Weekly	Check expiry dates on sterile sets Check records on biological indicator Ensure monthly bacillocid cleaning
Laboratory	Daily	Check waste segregation Check PPE and sterile techniques Ensure safe waste disposal
Emergency	Daily	Ensure monthly bacillocid cleaning Check waste segregation Check compliance to hand washing Check compliance to sterile techniques for procedures Linen management – infection control practices
Waste storage room	Weekly	Check waste disposal Check records of waste collection Check disposal technique

Potable Water ;

Bacteriological surveillance – Monthly from various areas of the hospital in rotation

Special studies are conducted if needed. This may include-

- **a.** The investigation of clusters of infections above expected levels.
- **b.** The investigation of single cases of unusual or epidemiologically significant nosocomial infection.
- **c.** Incidence rates, collection of routine or special data as needed and sampling of personnel or the environment as needed.

Routine environmental-surface sampling (e.g.-surveillance cultures) , air and water are not recommended. Only as part of epidemiological investigation with prior approval it will be done if indicated.

Routine surveillance of HCW for MRSA is not indicated. Only target surveillance will be done with prior approval, when there is epidemiologic evidence implicating HCW as a source of ongoing transmission

MRSA screen is done for patients undergoing joint replacement surgeries.

2. SURVEILLANCE PROGRAMS:

S. No.	Area	Samples to be taken from	Frequency
1.	i. OT – All operating rooms ii. Cath lab		
		air sampling plates Water culture from scrub station	Once in a week after fogging Once a week
2.	i. ICUs (all)	Central line tips	On admission from outside
		ET tube secretion	On admission from outside
		Urine samples from catheterized patients	On admission from outside
3.	Dialysis	Water sample	Once a month
4.	Food handlers	stools samples of all food handlers	Once in 6 months
5.	CSSD	Plate exposure for 1 hr after terminal cleaning	Once in a week
6.	Food handlers	Stool R/e	Once in 6 months

3. EXECUTION

Based on above identified areas, samples and frequency of surveillance a surveillance calendar is to be charted every month by Infection control team. Infection control team shall bear the responsibility of conducting appropriate surveillance activities in timely manner.

4. VERIFICATION OF DATA

The data collected by surveillance activities shall be verified for authentication by infection control team. Few data shall be selected in random and shall be verified.

5. REPORTING AND RECORD KEEPING

The reports of samples tested for surveillance shall be compiled to present comprehensively a monthly report on surveillance result. These reports shall be reviewed by Infection control committee for necessary analysis and decision making.

The data collected through surveillance activities shall be used for tracking and analyzing infection risks, rates and trends

HIC 3 i Policy on Reporting of Notifiable Diseases

I. POLICY:

The hospital has a policy of reporting the notifiable diseases to the local health authorities.

II. PURPOSE:

To ensure proper submission of statistics of notifiable diseases to concerned Government Authorities.

III. SCOPE:

All notifiable diseases

IV. RESPONSIBILITY:

Infection Control Nurse (ICN)

V. DISTRIBUTION:

Emergency, MRD, All patient care areas, Administration

VI. DEFINITION:

Notifiable Disease: Notifiable disease is any disease that is required by law to be reported to government authorities. The collation of information allows the authorities to monitor the disease, and provides early warning of possible outbreaks.

VII. ABBREVIATION:

Abbreviations are as follows

MRD= Medical records Department

MOH= Medical officer Health

HIV= Human Immunodeficiency Virus

VIII. PROCEDURE:

1. Notifiable disease format is available in With Infection Control Nurse

2. Infection Control Nurse staff shall enter required information and take print on the Hospital Letterhead and submitted to Rural Hospital, panvel, primary health centre ,Wavanje Duplicate copy will be maintained in Infection Control Nurse.

3. Notifiable Disease Reporting File shall be maintained by Infection control nurse. If the information is sent to health authorities through E-mail and the copy of dispatch is maintained in the Infection control nurse.

4. Frequency of dispatching the information: All notifiable disease will be reported to Authority/ Daily/ weekly / once in a month., In case of SWINE FLUE the information is to sent to authority within 24 hours of disease detection.

5. The flow of information will be from the clinicians and microbiologists, to the Medical Superintendent's office and from where information is reported on a specific format to the Chief Medical Officer and then to the Infection control nurse..

Notifiable Diseases: Notifiable diseases shall vary from state to state. Yet following are some of the most common notifiable diseases

1. Cholera
2. Smallpox
3. Plague
4. Chickenpox
5. Tuberculosis
6. Leprosy
7. Enteric fever
8. Meningitis
9. Diphtheria
10. Dengue hemorrhagic fever
11. Acute flaccid paralysis
12. Polio
13. Yellow fever
14. Rabies
15. Chicken Gunya
16. SARS
17. Swine Flu
18. Leptospirosis
19. Malaria

IX. RECORDS AND FORMATS

- Register of Notifiable Disease
- Notifiable disease information form

HIC 4 a,b c d Policy on Prevention & Control of HAI

I. POLICY:

The organization takes actions to prevent & control Healthcare Associated Infections (HAI) in patients.

II. PURPOSE:

To prevent & control Healthcare Associated Infections (HAI) in patients

III. SCOPE:

Hospital wide

IV. RESPONSIBILITY:

Nurses, Infection Control Nurse, Infection Control Team & Infection Control Committee

V. DISTRIBUTION:

Hospital Wide

VI. DEFINITION:

CDC defines a Health care Associated infection (HAI) as a localized or systemic condition resulting from an adverse reaction to the presence of an infectious agent(s) or its toxin(s). There are must be no evidence that the infection was present or incubating at the time of admission to the acute care setting.

CDC uses the generic term 'health care associated infection (HaI)' instead of 'nsocomial infection'.

VII. ABBREVIATION:

Abbreviations are as follows:

HAI – Health careAssociated Infection
UTI – Urinary Tract Infections
RTI – Respiratory Tract Infections
BSI - Blood Stream Infections
SSI – Surgical Site Infections

VIII. PROCEDURE:

- **. URINARY TRACT INFECTIONS(UTI):**

1. DEFINITION:

It is an infection anywhere in the urinary tract. Normally the urine is sterile. It contains fluids, salts and waste products, but it is free of bacteria, viruses and fungi. An infection occurs when microorganisms, usually bacteria from the digestive tract cling to the urethra or opening to the urinary tract and begin to multiply.

2. RISK FACTORS:

- Elderly
- Neurogenic bladder
- Females—indwelling catheter
- Males—indwelling and condom
- Debilitation
- Immobility immunosuppression
- Gynaec and obstetric condition

3. CAUSES OF INFECTION:

- Poor aseptic insertion
- Immigration of bacteria from outer surface of catheter
- Open drainage
- Break in closed drainage system
- Poor perineal hygiene
- Cross contamination

4. SYMPTOMS:

- Burning on urination- ureteritis
- Cystitis- fever, low abdominal pain/ discomfort
- Colour/ appearance (cloudy, dark, blood tinged)
- Smell – funny odour

5. TYPES OF INFECTION:

- Endogenous- patients own flora
- Exogenous- due to contaminated hands of personnel

6. COMMON ORGANISMS:

- E.coli
- Enterococci
- Pseudomonas
- Klebsiella SP
- Enterobactor
- Proteus SP
- Fungi
- Serratiamarcescens

SYMPTOMATIC URINARY TRACT INFECTION;

DEFINITION: A Symptomatic urinary tract infection must meet at least one of the following criteria**:**

Criterion 1: patient has atleast one of the following signs or symptoms with no other recognized cause of fever (>38OC), Criteria and rates urgency, frequency, dysuria or suprapubic tenderness and Patients has a positive urine culture that is > 105 microorganisms per cm3 of urine with no more than two species of microorganisms.

Criterion 2: patients has at least two of the following signs or symptoms with no other recognised cause: fever (>38oc), urgency, frequency, dysuria or suprapubic tenderness and at least one of the following:

- Pyuria (urine specimen with > 10WBC mm3 or > WBC high power field of unspun urine)
- Organism seen on Gram stain of unspun urine.
- At least two urine culture with repeated isolation of the same uropathogen (gram-negative bacteria or
- S.saprophyticus) with > 102 colonies mL in non-voided specimens < 105 colonies mL of a single
- uropathogen (gram negative bacteria or S.saprophyticus) in a patient being treated with an effective
- antimicrobial agent for a urinary tract infection
- Physician diagnosis of a urinary tract infection.
- Physician institutes appropriate therapy for a urinary tract infection

Criterion 3: patient < 1 year of age has at least one of the following signs or symptoms with no other recognized cause:

- fever (>38oc), hypothermia (<37oc), apnea, bradycardia, dysuria, lethargy or vomiting and
- Patient has a positive urine culture, that is > 105 microorganisms per cm3 of urine with no more than two species of microorganisms.

Criterion 4: patient < 1 year of age has at least one of the following signs or symptoms with no other recognized cause: fever (>38oc), hypothermia (<37oc), apnea, bradycardia, dysuria, lethargy,or vomiting and

At least one of the following:

- Pyuria (urine specimen with > 10WBC / mm3 or > WBC / high power field of unspun urine)
- Organism seen on Gram stain of unspun urine
- At least two urine culture with repeated isolation of the same uropathogen (gram-negative bacteria or S.saprophyticus) with > 102 colonies mL in non-voided specimens.
- < 105 colonies mL of a single uropathogen (gram negative bacteria or S.saprophyticus) in a patient being treated with an effective antimicrobial agent for a urinary tract infection
- Physician diagnosis of a urinary tract infection
- Physician institutes appropriate therapy for a urinary tract infection

7. INDICATIONS FOR CATHETERISATION

- Acute obstruction/retentation, which cannot be treated with non traumatic intermittent catheterization
- Measuring urine production in critically ill patient
- Patient undergoing rapid diuresis
- Perioperative patients to need completely empty bladder

8. STRONG RECOMMENDATIONS:

- Educate personal in correct techniques of catheter insertion and care
- Catheterize only when necessary
- Emphasize hand washing
- Aseptic technique during catheterization

- Secure catheter properly
- Maintain closed sterile drainage
- Obtain urine samples aseptically

9. MODERATELY RECOMMENDED:

- Periodically reeducate personal in catheter care
- Avoid irrigation unless needed to prevent or relieve obstruction
- Avoid changing catheters at arbitrary fixed intervals

10. WEAKLY RECOMMENDED:

- Consider alternative techniques of urinary drainage before using an indwelling urethral catheter.
- Replace the collecting system when sterile closed drainage has been violated
- Spatially separate infected and uninfected patients with indwelling catheters
- Avoid routine bacteriologic monitoring

11. DRAINAGE SYSTEM

- Maintain sterile and continuous closed drainage system
- Catheters and drainage tube should not be disconnected unless for irrigation
- If disconnected/leakage/break in a septic technique the collecting system should be changed using asepsis.

12. IRRIGATION

- Before irrigation the catheter-tubing junction should be disinfected before disconnection
- Irrigation should not be performed as a routine measure for prevention of infection
- Follow strict asepsis
- If catheter becomes obstructed and needs to be frequently irrigated, changing the catheter is advisable.

13. COLLECTION OF SPECIMEN

- Urine for specimen should be aspirated from the distal end of the catheter after cleaning with a disinfectant with the help of a sterile syringe and needle.

14. URINARY FLOW

- Flow should be un obstructed unless for specimen collection/ diagnostic procedures which is temporary
- Prevent catheter and collecting tube from kinking
- Collecting bag should be emptied every shift
- The draining spigot and non sterile collecting container should never come in contact
- Collecting bags should always be kept at a lower level.

15. MEATAL CARE

- Perineal care every shift and prn
- Use soap and water when indicated

16. CATHETER CHANGE INTERVAL

- Indwelling catheter should be changed every 14 days
- If catheterization indicated for longer duration, silicon catheter should be preferred which has to be changed every third month
- The urobag has to be changed every 7th day

17. PRECAUTIONS

- Periurethral cleaning with a disinfectant
- Hand washing
- Secure catheter to avoid movement
- Closed drainage
- Collection with syringe and needle
- Do not allow the bag to stand on the floor
- Disinfectant in the urobag if infection rate is high
- User condom catheter when indicated with penile care
- Discontinue condom catheter at first sign of penile irritation / skin breakdown
- Avoid using condom catheter for 24 hours, other methods to be preferred / diapers / absorbent pads.

▪ RESPIRATORY TRACT INFECTIONS(RTI):

Health care associated pneumonia can be characterized by its onset hospitalisation– Early or Late.

Early onset pneumonia- occurs during the first 9hrs of hospitalization and is often caused by M.catarrhalis, H.influenzae and pneumoniae.

Late onset pneumonia- if pneumonia develoiveps after 96hrs of hospitalization. Causative agents include gram negative bacilli or .aureus including MRSA.Viruses (influenza A&b, RsV) causeearly or late onset pneumonia, whereas yeasts, fungi, legionellae and P.jiroveci are usually pathogens of late onset pneumonia.

There are 3 specific types of pneumonia

1. Clinically defined pneumonia
2. Pneumonia with specific laboratory findings
3. Pneumonia in imunocompromised patients

Ventilator associated pneumonia: is defined as pneumonia in persons who had a device to assist or cotrolled respiration continuously through a tracheostomy or by endotracheal intubation within 48hr period before the onset of infection, inclusie of weaning period.

1. PREVENTION IN MECHANICALLY VENTILATED PATIENTS:

- Staff Education and Infection Surveillance
- Interrupting Transmission of Microorganisms
- Sterilization and Disinfect ion of equipment and devices
- Interrupting person to person transmission of bacteria
- Modifying Host Risk for Infection.

2. SUCTIONING:

- Hand washing
- Wear gloves to prevent cross- contamination
- Use sterile fluids to remove secretions
- Gentle suctioning as dictated by the volume and character of secretions
- Suction patients to remove secretions collecting about the endotracheal tube cuff before removing the cuff.

3. MEDICATION NEBULIZERS:

- Use sterile medications and fluids for nebulization
- Dispense sterile medications aseptically and store according manufactures recommendations
- Do not use large volume nebulizers unless they can cleaned and reprocessed daily
- Small, hand held nebulizers
- Minimize unnecessary use
- Between uses for the same patient disinfectant, rinses with sterile water, or air dry and store in a clean, dry place.

4. ENTERAL FEEDING BIN MECHANICALLY VENTILATED PATIENTS:

- Verify placements of the feeding tube in the stomach or small intestine
- Elevate the head of the bed 30-45 degrees
- Monitor the adequacy of intestinal mobility.

5. STRATEGIES FOR PREVENTING ASPIRATION:

- Semi recumbent positioning of Patients
- Patients receiving mechanical ventilation should be placed in a semi recumbent position to reduce the occurrence of aspiration
- Measures to reduce unplanned extubation (e.g., appropriate use of physical) and chemical restraints and securing of the endotracheal tube to the patient) and the need for subsequent reintubation performed with the patient in the supine position may also be beneficial.
- Avoidance of Large Gastric Volumes:
- Gastric over distention should be avoided by
- Reducing the use of narcotics and anticholinergic agents,
- Monitoring gastric residual volumes after intragastric feedings,
- Using agents that increases gastrointestinal motility (e.g.,metoclopramide),

- Oral (Non-Nasal) Incubation:
- Prolonged nasal intubation (for more Than 48hrs) should be avoided because of the association between nosocomial sinusitis and ventilatator- associated pneumonia.
- Therefore the preferred route of intubation is the oropharynx.
- Continuous subglottic Suctioning:
- Secretions that pool above inflated endotracheal- tube cuffs may be a source of aspirated material and thus ventilator- associated pneumonia

- Thus pressure of the endotracheal- tube cuffs should be adequate to prevent the leakage of colonized subglottic secretions into the lower airway.

6. RE-PROCESS OF RESPIRATORY EQUIPMENT

- Clean all equipment
- Sterilize or use high level disinfectants for all items that come into direct or indirect contact with mucous membrane of the respiratory tract
- Rinse and dry items that have been chemically disinfected Rinsing to be done only with sterile water
- Packed and store items
- To prevent contamination
- Before use

7. GENERAL GUIDELINES FOR PREVENTION OF PNEUMONIA:

- Strict adherence to Infection Control protocols and Universal precautions is required
- Use aseptic technique while carrying out tracheostomy or endotracheal care chart and report any change in secretion colour and odour, elevated temperature, erythema, purulent stoma drainage
- Discard the endotracheal and tracheostomy suction catheter after use
- Breathing circuits:
- Do not change routinely, on the basis of duration of use, the breathing circuit (i.e., ventilator tubing and exhalation valve and the attached humidifier) that is in use on an individual patient.
- Change the circuit when it is visibly soiled or mechanically malfunctioning.
- Periodically drain and discard any condensate that collects in the tubing of mechanical ventilator, taking precautions not to allow condensate to drain toward the patient.

Wear gloves to perform the previous procedure and/or when handling the fluid.

- Use sterile water to fill humidifier. Change the water in the humidifier daily and label it with date and time o filling discard the water if the oxygen is discontinued
- Bacterial filtrate should not be used for more than 48 hrs. It is mandatory to label it with data and time
- Change the humidifier tubing (including any nasal prongs or mask) that is in use on one patient when it malfunctions becomes visibly contaminated
- Between treatment s on the same patient clean and dry small volume in line or hand held medications nebulizers
- Use only sterile fluid for nebulizatuion and dispense the fluid the nebulizer aseptically.
- Whenever possible use aerosolized medications in single dose vials If multidose medication vials are used, follow manufacturers instruction for handling storing and dispensing the medications.
- Reusable resuscitation bags should be sterilized before being used on different patients.

- **SURGICAL SITE INFECTIONS (SSI)**

DEFINITION: SSI can be classified into3 groups

(SUPERFICIAL INCISION)

DEFINITION: Infections occurs within 30 days after the operative procedure & involves skin & SC tissue of the incision.

CRITERIA 1: Patient has at least one of the following:

- Purulent drainage
- Organisms isolated form culture of fluid or tissue.
- Presence of one of the signs of infection
- Diagnosis of SSI by surgeon.

DEEP INCISIONAL SSI:

DEFINITION: Infections occurs within 30 days after the operative procedure if no implant is left in place or within one year if implant is in place and the infection appears to be related to the operative procedure. AND involves deep soft tissues (e.g., facial and muscle layers) of the incision.

CRITERIA: Patient has at least one of the following:

- Purulent drainage
- A deep incision deliberately opened by a surgeon when the patient has at least one of the following signs or symptoms:
- Fever (>38°C),
- Localized pain, or localized tenderness unless incision is culture –negative.
- An abscess or other evidence of infection involving the deep incision is found on
- direct examination, during reoperation, or by histopathologic or radiological examination
- Diagnosis of a Deep Incisional SSI by surgeon.

(ORGAN / SPACE Surgical site infection)

DEFINITION: An organ /space SSI involves any part of the body, excluding the skin incision, fascia, or muscle layer that is opened or manipulated during the operative procedure.

CRITERIA: Infections occurs within 30 days after the operative procedure if no implant is left in place or within one year if implant is in place and the infection appears to be related to the operative procedure. And infection involves any part of the body, excluding the skin incision, fascia, or muscle layers operative procedure.

- Patient has at least one of the following
- Purulent drainage from the organ/ space
- Organisms isolated form culture of fluid or tissue in the organ/space
- An abscess or other evidence of infection involving the organ/space is found on direct examination, during reoperation, or by histopathologic or radiological examination
- Diagnosis of an organ/space SSI by surgeon.

GUIDELINES TO PREVENT SSI

IX. PREOPERATIVE:

Preparation of the patient

- Whenever possible, identify and treat all infections remote to the surgical site before elective operation and postpone elective operations on patient with remote site infections until the
- infection has resolved
- Do not remove hair preoperatiately unless the hair at or around the incisions site will interfere with the operation
- If hair is removed, remove immediately before the operation, preferably with electric clippers
- Adequately control serum blood glucose levels in all diabetic patients and particularly avoid hyperglycemia preoperatively
- Encourage tobacco cessation at minimum, instruct patients to abstain for at least 30 days before elective operation from smoking cigarettes cigars pipes, or any other form of tobacco consumption (e.g., chewing/dipping)
- Do not withhold necessary blood products from surgical patient as a means to prevent SSI
- Require patient to shower new incisions or drain sites if necessary
- Keep preoperative preparation of the patient

Hand/forearm antisepsis for surgical team members:

- Keep nails short and do not wear artificial nails
- Perform a preoperative surgical scrub for at least 2 to 5 minutes using an appropriate
- antiseptic scrub the hand and forearms up to the elbow
- After performing the surgical scrub keep hands up and away from the body (elbows in flexed position) so that water runs from the tip of the finger towards the elbows .gown and gloves.
- Clean underneath each fingernail prior to performing first surgical scrub of day
- Do not wear hand or arm jewellery.

Management of infected or colonized surgical personnel.

- Educate and encourage surgical personnel who have signs and symptoms of a transmissible infectious illness to report conditions promptly to their supervisory and occupational health service personnel
- Develop well defined policies (to be enveloped) concerning patient care responsibilities when patient have potentially transmissible infectious conditions this policies should govern

a) Personnel responsibility in using the health service and reporting illnesses
b) Work restrictions, and
c) Clearance to resume work after an illness that required work restriction. The policies should also identify persons who have the authority to remove personnel from duty

- Obtain appropriate culture from, and exclude from duty, surgical personnel who have draining skin lesions until infection has been ruled out or personnel have received adequate therapy and infection has resolved

- Do not routinely exclude surgical personnel who are colonized with organisms such as S.aureus (nose, hands, or body site) or group a streptococcus, unless such personnel have been linked epidemiologically to dissemination of the organism in the health care settings.
- Administer a prophylactic antimicrobial agent only when indicated, and select it based on its efficacy against the most common pathogens causing SSI for a specific operation and published recommendations
- A single does with induction of anesthesia is recommended except in surgeries lasting for more than 3 hrs where second dose is recommended.
- Administer by the intravenous route the initial dose of prophylactic antimicrobial agent, timed such that a bactericidal concentration of the drug is established in serum and tissues when the incision is made
- Maintain therapeutic level of the agent in serum and tissues through out the operation and until, at most, a few hours after the incision is closed in the operating room. Before elective colorectal operations, mechanically prepare the colon by use of enemas and cathartic agents administer non absorbable oral antimicrobial agents in divided doses on the day before the operation
- For high risk cesarean section, administer the prophylactic antimicrobial agent immediately after the umbilical cord is clamped
- Do not routinely use vancomycin for antimicrobial prophylaxis.

X. INTRAOPERATIVE

Ventilation:

- Maintain positive –pressure ventilation in the operating room with respect to the corridors and adjacent areas.
- Maintain a minimum of 15 air changes per hour, at least 3 should be fresh air. In case of the Orthopedic theatre for joint replacement the air changes recommended are 30per hour with at least 5% fresh air During periods when the theatre is not in use the number of air changes required are 8 changes per hour
- Introduce all air at the ceiling and exhaust near the floor
- Do not use UV radiation in the operating room to prevent SSI
- Keep operating room doors closed except as needed for passage of equipment,
- personnel and the patient
- Consider performing orthopedic implant operations in operating rooms supplied with ultra clean air Limit the number of personnel entering the operating room not necessary personnel

Cleaning and disinfections of environmental surfaces:

- When visible soiling or contamination with blood or other body fluids of surfaces or equipment occurs during an operation, use an approved hospital disinfectant to clean the affected areas before the next operation
- Do not perform special cleaning or closing of operating rooms after contaminated or dirty operations.
- Do not use tacky mats at the entrance to the operating room suite or individual operation room for infection control

- Wet vacuum the operating room floor after the last operation of the day or night with an approved hospital disinfectant.

Sterilization of surgical instrument

- Sterilize all surgical instruments according to published guidelines. As per CSSD MANUAL
- Perform flash sterilization only for patient care items that will be used immediately (e.g., to reprocess an inadvertently dropped Instrument) Do not use flash sterilization for reason of convenience, as an alter native to purchasing additional instrument sets, or to save time.

Surgical attire and drapes:

Wear a surgical mask that fully covers the mouth and nose when entering the operating room if an operation is about to begin or already under way , or if sterile instruments are exposed Wear the mask throughout the operation . Wear a cap or hood to fully cover hair on the head and face when entering the operating room.. Do not shoe covers for the prevention of SSI. Wear sterile gloves, if scrubbed surgical team member put on gloves after donning a sterile gown. Use surgical gowns and drapes that are effective barriers when wet (i.e., materials that resist liquid penetration) Standards for the type of cloth and the weave are to be defined other potentially infectious materials

Asepsis and surgical technique

- Adhere to principles of the asepsis when placing intravascular devices (e.g., central venous catheters) Spinal or epidural anesthesia catheters or when dispensing and administering intravenous drugs
- Assemble sterile equipment and solutions immediately prior to use
- Handle tissue gently maintain effective homeostasis minimize devitalized tissue and foreign bodies (i.e., sutures, charred tissues necrotic debris) and eradicated dead space at a surgical site
- If drainage is necessary, use a closed suction drain Place a drain through a separate incision distant from the operative incision. Remove the drain as soon as possible.

Postoperative incision care

- Protect with a sterile dressing for 24 to 48 hours post operatively an incision that has been closed primarily
- Wash hands before and after dressing changes and any contact with surgical site
- When an incision dressing must be changed, use sterile technique
- Educate the patient and the family regarding proper incision care training symptoms of SSI and need to report such symptoms

Surveillance

- Use CDC definitions of SSI without modification for identifying SSI among surgical inpatients and outpatients
- For inpatient case finding (including readmissions) use direct prospective observation, indirect prospective observation or a combination of both direct and indirect method for duration of patient's hospitalization.

- When post discharge surveillance is performed for detecting SSI following certain operations (e.g., coronary artery bypass graft) use a method that accommodate available resources and data need
- For outpatient case finding, use a method that accommodate available resources and data need
- Assign the surgical wound classification upon completion of an operation A surgical team member should make the assignment
- For each patient undergoing an operation chosen for surveillance record those variables shown to be associated with increased SSI risk (e.g., surgical wound class, ASA class and duration of operation)
- Periodically calculate Operation specific SSI rate
- Report appropriately stratified, Operation specific SSI rate to surgical team members
- The optimum frequency and format for such rate computations will be determined by stratified caseload sizes (denominators) and the objectives of local, continuous quality improvement initiatives**.**

▪ BLOOD STREAM INFECTIONS (BSI):

1. Definition:

According to the definitions proposed by the CDC, health care associated BSI is defined in a patient with a clinically important blood culture positive for a bacterium or fungus that is obtained more than 48 hours after being admitted to the hospital.

2. CAUSES FOR BSI:

- From the local area
- Some adjacent areas (hematogenous seeding)
- Through catheter hub

3. RISK FACTORS:

- Agammaglobulinemia
- Immunosuppressive therapy
- Severe trauma
- COPD
- DM
- Resistant to microbes and antibiotic

4. SIGNS AND SYMPTOMS OF BSI

- Fever (>100.4°[>38ºc], chills, or hypo tension, and any skin contaminants
- Significant growth of a microorganism (>15 cfu) from the catheter tip, subcutaneous segment of the catheter, or catheter hub
- Exit site infection
- Erythemia or indurations with in 2 cm of the catheter exit site, in the absence of concomitant within bloodstream infection (BSI) and without concomitant purulence
- Clinical exit site infection (or tunnel infection)
- Tenderness, erythema or site indurations > 2 cm from the catheter site along the subcutaneous tract of a tunneled (e.g.<Hickman or broviac) catheter, in the absence of concomitant BSI

Pocket infection

Purulent fluid in the subcutaneous pocket of a totally implanted intravascular catheter that might or might not be associated with spontaneous rupture and drainage or necrosis of the overlaying skin , in the absence of contaminant BSI

5. TYPES OF BSI

- Laboratory- confirmed BSI
- Clinical Sepsis
- Catheter associated BSI

6. STEPS TO CONTROL:

Peripheral cannulae:

- Avoid their use if at all possible
- Document rationale for its insertion and continuation.
- Document date and site of insertion
- Review the need daily
- Change the cannula within 72 hours or earlier
- Avoid positioning a cannula near a joint Inspect the site each shift and report pain, redness or swelling to the doctor

Insertion of Cannula:

- An aseptic technique must always be used
- Follow Universal Precautions
- A good light is important
- Choose the correct size device for the patient's needs.
- Avoid touching any part of the cannula that will enter the body
- Disinfect the skin before insertion
- Secure the cannula to reduce movement
- Cover the insertion site with a sterile dressing

Central venous catheters

- Central venous catheter should be inserted using full aseptic technique. Sterile gowns, gloves and drapes should be used i.e.Universal Precautions should be followed.
- The insertion site should be disinfected with an antiseptic solution prior to insertion. (e.g. Alcoholic providence iodine in 70% alcohol). The antiseptic should be applied liberally and allowed to remain in contact with the skin for at least 30 seconds, then allowed to dry.
- A sterile dressing should be applied to cover the site, and changed according to patient needs or policy.
- All IV tubing should be changed every 72 hours or 24 hours in the case of Total Parental Nutrition
- Between changes of tubing and other components, IV system should be maintained as a closed system as much as possible. All entries in to the tubing for administration of drugs should be madethrough injection ports. These are to be disinfected prior to entry, with an alcohol wipe and allowed to dry

- If infection is suspected the catheter should be removed and the tip sent for culture. Peripheral blood cultures should also be carried out at the same time
- Central line should not be used for more than 14 days

7. GUIDELINES FOR PREVENTION OF HEALTHCARE ASSOCIATED BLOODSTREAM INFECTION:

Strict adherence to infection control protocols and Universal Precautions is required.

Properly dispose of all needles and syringes after procedure. Do not reuse disposable needles and syringes.

Do not recap, bend or break needles. Needle recapping may be accomplished by using a mechanical device or one-handed technique.

Place contaminated needles and syringes in a readily available puncture resistant container.

Intravenous sets:

Intravenous sets should be used not more than 72 hours after initiation of use.

Peripheral catheters:

- Scheduled replacement of intravascular catheters should be done to prevent Phlebitis and catheter related infections Peripheral catheters should be used for not more than 72 hours.
- Evaluate the catheter insertion site daily: for signs of phlebitis or infection
- The peripheral line should have proper labels mentoring the date of insertion and date of dressing ie. DOI and DOD respectively.
- Removal peripheral venous catheters if the patient develops signs of phlebitis (eg. Warmth, tenderness, erythemia, and palpable venous cord), infection or a malfunctioning catheter.
- Replace catheter-site dressing if the dressing becomes damp, loosened or visibly soiled

Central line Catheters:

- To be changed as and when oozing or inflammation or signs of infection is seen.
- Central line dressing should be done every day using aseptic technique when the dressing becomes damp, loosened or visibly soiled
- The central line dressing should have proper labels mentioning the date of insertion and of dressing i.e. DOI and DOD respectively
- Multiple dose vials should be limited to a single patient use. It should be secured and covered properly.
- Ampoules should be appropriately cleaned prior to opening. Their contents should be aspirated with a filter needle, which is removed prior to administration. Cleanse rubber stoppers of vials prior to each use. Only sterile access systems should be used for each penetration of the stopper.
- Do not reprocess for multiple uses any intravenous fluids, tubing or other intravascular infusions or connectors that are single-use disposable items. This includes transducers, tubing and other items that make contact with the vascular system or other body compartments.
- Stopcocks and injection ports are major sites of contamination. When administering medications intravenously, all access portals must be maintained aseptically
- Always before administration of fluids or medicines, injection point should be cleaned with spirit and allowed to dry.

8. SURVEILLANCE OF HEALTHCARE ASSOCIATED INFECTIONS

Surveillance of Healthcare associated infection is the foundation for organizing and maintaining an infection control programme. Information obtained from surveillance data is a useful tool in identifying areas of priority and allocating resources accordingly.

Objectives of surveillance:

- Reducing the infection rates within health care facilities.
- Establishing endemic infection rates.
- Identifying outbreaks.
- Convincing medical personnel to adopt recommended preventive practices.
- Evaluating control measures.

Targeted surveillance aimed at high risk areas is more effective and manageable .It can be Site specific, unit specific, rotating or outbreak associated surveillance.

XI. REFERENCES:

CDC & WHO Gridlines

HIC 5 a,b,c Policy on Isolation Policy

I. POLICY:

Isolation practices are meant to prevent transmission of pathogenic micro-organisms within the hospital.

II. PURPOSE:

1. To prevent the transmission of pathogenic micro-organisms within the hospital.
2. To recognize the importance of all body fluids, secretions and excretions in the transmission of nosocomial pathogens
3. To practice adequate precautions for infections transmitted by airborne droplet & contact.
4. Measures for reduction of transmission

III. SCOPE:

Hospital Wide

IV. RESPONSIBILITY:

Doctor, Nurses, Infection Control Nurse, Infection Control team & Infection Control Committee.

V. DEFINITION:

Isolation nursing - iscarried out by placing the patient in a single room or side room patient(s) is kept in a bay and extra precautions are implemented to prevent spread of the germ.

VI. DISTRIBUTION

Hospital Wide

VII. TRANSMISSION-BASED PRECAUTIONS

There are three categories of Transmission-Based Precautions:

Contact Precautions
Droplet Precautions
Airborne Precautions

Transmission-Based Precautions are used when the route(s) of transmission is (are) not completely interrupted using Standard Precautions alone. When Transmission-Based Precautions are indicated, efforts must be made to counteract possible adverse effects on patients. i.e., anxiety, depression and other mood disturbances, perceptions of stigma, reduced contact with clinical staff, and increases in preventable adverse events in order to improve acceptance by the patients and adherence by HCWs.

1. Contact Precautions

Contact Precautions are intended to prevent transmission of infectious agents, including epidemiologically important microorganisms, which are spread by direct or indirect contact with the patient or the patient's environment. Contact Precautions also apply where the presence of excessive wound drainage, fecal incontinence, or other discharges from the body suggest an increased potential for extensive environmental contamination and risk of transmission. A single patient room is preferred for patients who require Contact Precautions. When a single-patient room is not available, consultation with infection control personnel is recommended to assess the various risks associated with other patient placement options (e.g., cohor/ting, keeping the patient with an existing roommate). In multi-patient rooms, >3 feet spatial separation between beds is advised to reduce the opportunities for inadvertent sharing of items between the infected / colonized patient and other patients. Healthcare personnel caring for patients on Contact Precautions wear a gown and gloves forall interactions that may involve contact with the patient or potentially contaminated areas in the patient's environment.

Donning PPE upon room entry and discarding before exiting the patient room is done to prevent pathogens, especially those that have been implicated in transmission through environmental contamination.

Contact precaution conditions:

1. MRSA/ MDR Gram Negative Bacteria /VRE/Group A Streptococci in,

1) Wound swab culture/Tissue Culture - if the wound is a big one and there is oozing

2) Urine culture (if the patient is catheterized /incontinent)

3) ET Tube secretion culture (if the patient has ET tube/tracheotomy with excessive secretions)

4) Blood (if the patient has a central/arterial line which is frequently handled)

2. Scabies

3. Wounds or abscesses with uncontained drainage

Common enteric conditions:

1. Hepatitis A

2. Typhoid patient with diarrhea

3. Entero viral infections in infants and small children

4. Enteric infections with Clostridium difficile, Rotavirus, RSV, Para influenza virus.

5. Acute diarrhea with unknown etiology

3. Droplet Precautions:

Droplet Precautions are intended to prevent transmission of pathogens spread through close respiratory or mucous membrane contact with respiratory secretions.These pathogens do not remain infectious over long distances in a healthcare facility. When a single-patient room is not available, consultation with infection control personnel is recommended to assess the various risks associated with other patient placement options (e.g., cohorting, keeping the patient with an existing roommate). Spatial separation of > 3 feet and drawing the curtain between patient beds is especially important for patients in multi-bed rooms

with infections transmitted by the droplet route. Healthcare personnel wear a mask (a respirator is not necessary) for close contact with infectious patient; the mask is generally donned upon room entry. Patients on Droplet Precautions who must be transported outside the room should wear a mask if tolerated and follow Respiratory Hygiene/Cough Etiquette.

Common Conditions:

- Influenza
- Rubella
- Bordetella Pertussis
- Adenovirus
- Invasive menininngitis
- Gr.A Streptococcal phayngitis
- Mumps
- RSV

4. Airborne Precautions

Common conditions for Airborne contact precautions:

1. Chickenpox
2. Disseminated herpes zoster (shingles).
3. Localized zoster in immunocompromised individuals
4. Measles (Rubeola)

Common conditions for Airborne respirator precautions: Pulmpnary tuberculosis(Open)

H1N1 flu(aerosol generating procedure)

AIRBORNE RESPIRATOR PRECAUTIONS

Display sign outside the room. Remove sign after room is cleaned.

Family and Visitors may visit only if exposed and should wear mask. **Airborne Infection Isolation Room:**

Use airborne isolation room. Nurse to notify Infection control nurse and Facilities/ Engineering of room number when starting and stopping precautions.

Dishes/Utensils:

No special precautions. Kitchenware sanitized in dishwasher.

Equipment/Supplies:

- Use dedicated or disposable equipment when available.
- Clean & disinfect reusable equipment including IV pumps, cell phones or pagers(if used in room), other electronics, supplies & equipment prior to removing from patient's room.
- Ensure blood pressure cuff & stethoscope are cleaned and disinfected between patients.
- Only essential supplies in room.

Linen Management: Bag linen in the patient's room

Patient identification procedures: Use patient label for validation of patient identity and destroy in room after use and replace with new tag.

Personal protective equipment

Put **ON** this order	Take **OFF**& dispose in this order
1.Wash or gel hands 2. Fitted N-95 mask required	1. Fitted N-95 mask 2. Wash or gel hands(even if gloves used)

*(If wound exists: TB can be aerosolized by irrigation and inhaled, so masks and eye protection for wound care is required)***Room Cleaning:**

After patient is discharged, keep door closed for one hour, then routine cleaning procedures with addition of cubicle curtain changes as per hospital procedures.

Requirements for patient isolation:

1. Requirements for isolation: Provide the following,

Inside: Disposable non-sterile gloves
Antiseptic hand detergent and hand rub
Yellow & Red waste bag & waste bin
Gown
Designated medical equipment
Wash bowl and commode if no en-suite facilities.

Outside: Isolation card on the door

1) Alcohol rub

Additional supply of disposable non sterile gloves

2) Gown

In sluice or en suite toilet area:
Designated cleaning equipment

Red linen bag with water soluble liner

Protocol for screening Multidrug resistant organism- MRSA/VRE/ESBL

3) Screening

Screen all the patients with any of the following risk factors:

- Patients transferred from other hospitals or Nursing home. (Duration of stay >48HRS)
- Patients with open/discharging wounds.
- Patient with ventilator.
- Patients with central line / Foleys catheter or infected peripheral line.
- Patients with multiple i/v antibiotics in last 90 days
- Patient with TPN/RT feed

Place the patient on contact isolation till reports are available.

For diseases not mentioned in this list but for which there is a doubt please check with infection control nurse.

H1N1 droplet/airborne 7 days after onset of symptoms

Infection control measures for MRSA and VRE or Multi drug resistant cases.

a. Implement contact isolation precautions.
b. Investigate any outbreak:
i. Other patients.
ii. Staff.
c. Educate staff on hand washing, caring skin lesions, and anti-biotic use.
d. Screen hospital transfer patients, where the hospital of transfer carries a risk of MRSA infection

Administrative Considerations

4) Staff

a. Screening carried out on staff with infective dermatitis or other exfoliates skin conditions.
b. During outbreak situation

Procedure for screening patients in the "at risk" group

a. For MRSA: Sampling from anterior nares is sufficient.
b. For VRE: Stool, rectal or perirectal samples are collected.
c. For ESBL:Stool, rectal or perirectal samples. Sputum or endotracheal tube aspirates should be cultured if respiratory reservoir is suspected.

2. MRSA decolonization –

1) mplemented when appropriate

- Outbreaks,
- Preoperative decontamination
- High risk patients
- Special care units.

Treatment of MRSA Carriers

a. Colonization may be transient or may persist for weeks, or months.
b. Antibiotics should not be used, as local treatment includes use of skin preparation (soap or lotion) and shampoo containing chlorhexidine or hexachlorophene, or Triclosanevery day for 5days.
c. Nasal ointment or spray 1% chlorhexidine ointment thrice daily for 15days or 1% Mupirocin (Bactroban) thrice daily for 5 days.
d. Three consecutive swabs for culture, taken from all previously colonized sites at intervals of no less than 24 hours are necessary before clearance can be given.
e. Limit decolonisation of HCW if they are epidemiologically linked as a likely source of ongoing transmission to patients.

Antibiotics

a. If an MRSA colonized patient has to undergo a surgical procedure, then it is recommended that antibiotic prophylaxis peri-operative vancomycin (1 – 2 doses) should be used.

3. TYPE OF ISOLATION NEEDED

Any patient with MRSA from any specimen should be shifted to an isolation room as soon as the culture is positive. A Contact isolation tag should be put on the door specifying the precautions thatneed to be taken on entry..If the MRSA is isolated from wound, tissue, blood, body fluids or urine, only gown and gloves are needed to enter the room. If ET suction tip, or sputum is positive for MRSA, a mask is also needed in addition to gown and gloves to enter the room. During out breaks, if adequate numbers of isolation rooms are not available, cohorting (patients with the same strain of MRSA put together) can be done. The cubicle should be treated as an "isolation cubicle", and all the precautions should be followed for all the cohorted patients. MRSA 'tag' should be put outside the cubicle also.

5. PRECAUTIONS TO BE FOLLOWED

1) Hand washing

All HCWs including doctors should strictly do hand washing as soon as they come out of the isolation room before walking to the next patient.

If a washbasin is not available near the isolation room, a alcohol hand rub should be used for hand disinfection.

2) Gown

Is used to prevent contamination ofthe HCW's uniform and there bytransmission of MRSA to other patients. Gown should be kept inside the isolation room. Always use a gown to enter the MRSA isolation room if contact with the patient, or any of the surfaces in the patient's room is expected. Dispose before coming out of the room.

3) Gloves

For routine care, non-sterile gloves must be used while entering the isolation room. Gloves serve as extra means of preventing contamination of the HCW's hands. Discard the gloves inside the room after use, and wash hands immediately.

6. HANDLING THE PATIENT'S LINEN

The linen of MRSA patient should be double bagged to avoid contamination, labeled as 'infectious' before sending to laundry. Do not mix it with other patient's linen. Gown and gloves should be worn while handling the used linen also.

- Mask Is indicated if MRSA is isolated from respiratory secretions. It should be worn while doing suctioning. Mask will help to prevent nasal colonization of the HCW with MRSA.

7. RESTRICTION OF VISITORS AND STAFF

Limit the number of visitors. Frequent visits by visitors can cause transmission of MRSA. There can be transmission of MRSA by hospital personnel like dietary staff, social workers, physiotherapists etc. The dietary staff should be restricted from entry, and the concerned nursing staff can handle the patient's food. Social workers, physiotherapists, X-ray and ECG technicians etc, who must enter the room, should also be instructed to strictly follow the precautions.

8. CARE OF PATIENT'S ARTICLES

MRSA can be transmitted through fomites, i.e. through the articles and equipments used for the patient. Therefore use separate articles for the MRSA isolation room. Thoroughly disinfect or sterilize reusable articles prior to next use. All the patient care equipments should be cleaned with the hospital approved disinfectant every day, and as soon as soiling occurs, e.g. bed, side rails, locker, cardiac table, I/V stands, syringe pump, infusomat, monitor, urinal, bed pan and any other item in the room should be disinfected. Stethoscope should be cleaned with spirit. All critical items should be cleaned and sterilized. In addition, the contaminated surfaces of other equipments like X-ray machine, Echo machine, ECG machine, physiotherapy equipmentsetc should be disinfected before transport. Thorough cleaning of the surfaces should be done after shifting the patient back.

9. WASTE DISPOSAL

Same as for other patients, yellow and red types of waste bins should be made available inside the room.

DISCONTINUING ISOLATION

It can be done if,

1) Two repeat cultures done 24 hours apart from the same site show no growth for MRSA.

Make sure that other sites are not infected or colonized with MRSA. For MRSA wound infection, the wound should be clean and no more oozing should be present in addition to repeat culture negative.

2) If the patient is colonized or infected with MRSA until discharge, the isolation precautions should be followed as long as the patient remains in the room. A tag should be put on such patient's OP file so that the patient can be received in an isolation room on subsequent admission and the same precautions followed until repeat cultures become negative.

10. CLEANING

Daily Cleaning

Floor should be cleaned daily with Hypo .

Use separate mops for the isolation room. The mop head should be washed daily and treat it separately in the laundry.

Highly touched surfaces like door knobs, light switches, patient bed side table are cleaned with disinfectant twice daily.

Terminal Cleaning

On discharge, dispose of all the disposables. Take out all the items to be sterilized or disinfected. Remove the curtains and send to laundry labeled as infectious. Then wash the room thoroughly with soap and water. Later clean the entire room and articles with Hypo

11. PATIENT TRANSPORT TO OTHER AREAS

Notify the receiving department if transport is needed, for eg: to the Radiology, Echo room etc. cover the patient with a gown to avoid dispersal of the bacteria during transport. Thorough cleaning of the surfaces should be done after shifting the patient back.

Record file: Should be kept outside the room.

Although instructing and preparing visitors for patients in isolation is time consuming and often frustrating. Their presence is valuable to the emotional well being of the patient.

4. The ward sisters and the doctors concerned shall have the responsibility of informing the patients' relatives of the measures to be taken and the importance of restriction of visitors. This should be done at admission of the patient.
5. The patient and the relatives must be given health education about the cause, spread and prevention for the infection, in detail. The need for isolation and restriction of visitors should be discussed with them and information sheet should be handed over to the bystander.
6. Hand washing after all contact with the patient will have to be stressed.
7. No more than two adult visitors should be allowed 'at a time' during the hospital visiting hours and the 6 ft length of stay should be governed by the needs of the patient.
8. Children below 12 years are not allowed into the isolation areas.
9. Before entering the room, visitors must enquire at the nurses' station for instructions and for gown and mask if indicated. Visitor's footwear, bags etc., should be left outside the room. Only articles that can be discarded, disinfected or sterilized should be taken into the room.
10. Visitors are not allowed to sit on the patient's bed.

11. Visitors should wash their hands well with soap and water before entering and when leaving the room.
12. Active immunization of attendants and other follow up steps, where applicable must be advised by the physician in-charge.

IX. REFERENCES:

CDC Guideline

HIC 5 d Policy on Needle Stick Injury

I. POLICY:

Healthcare personnel are at risk for occupational exposure to blood borne pathogens, including HepatitisB Virus (HBV), HepatitisC Virus (HCV), and Human Immunodeficiency Virus (HIV). Exposures occur through needle sticks or cuts from other sharp instruments contaminated with an infected patient's blood or through contact of the eye, nose, mouth, or skin with a patient's blood. Important factors that influence the overall risk for occupational exposures to blood borne pathogens include the number of infected individuals in the patient population and the type and number of blood contacts. Most exposures do not result in infection.

II. PURPOSE:

To have in place a system for reporting exposures in order to quickly evaluate the risk of infection, inform about treatments available to help prevent infection, monitor for side effects of treatments, and determine if infection occurs. This may involve testing blood and offering appropriate post exposure treatment.

III. SCOPE:

Hospital Wide

IV. RESPONSIBILITY:

Doctors, Nurses, Infection Control Nurse, Infection Control Team, Infection Control Committee

V. DISTRIBUTION:

Hospital Wide

VI. PROCEDURE:

1. RISK OF INFECTION AFTER EXPOSURE

HBV

Healthcare personnel who have received Hepatitis B vaccine and developed immunity to the virus are at virtually no risk for infection. For a susceptible person, the risk from a single needle stick or cut exposure to HBV-infected blood ranges from 6-30% and depends on the Hepatitis B 'e' antigen (HBeAg) status of the source individual.

HCV

The average risk for infection after a needle stick or cut exposure to HCV infected blood is approximately 1.8%. The risk following a blood exposure to the eye, nose or mouth is unknown, but is believed to be very small. However, HCV infection from blood splash to the eye has been reported.

HIV

The average risk of HIV infection after a needle stick or cut exposure to HIV-infected blood is 0.3%. The risk after exposure of the eye, nose, or mouth to HIV-infected blood is estimated to be on average, 0.1%. The risk after exposure of non-intact skin to HIV-infected blood is estimated to be less than 0.1%.

2. MANAGEMENT OF BLOOD & BODY FLUID EXPOSURE

1) Immediately following an exposure to blood:

a. Wash needle sticks and cuts with soap and water

b. Flush splashes to the nose, mouth, or skin with water

c. Irrigate eyes with clean water, saline, or sterile irritants

No scientific evidence shows that using antiseptics or squeezing the wound will reduce the risk of transmission of a blood borne pathogen. Using a caustic agent such as bleach is not recommended.

2) Report the exposure to the immediate Supervisor/HOD & Infection control department within 24hrs of exposure. Prompt reporting is essential because, in some cases, post exposure treatment may be recommended and it should be started as soon as possible. If exposure occurs on:

a. Working days – 9.00 am to 5.30 pm, report to Infection Control nurse*.and report to casualty for further management.

b. Other times – report to Nursing Supervisor on *duty.*

and report to casuality for further management.

. *The Nursing* Supervisor should hand over the exposure details to Infection Control dept. on the next working day.

* While reporting, remember to bring the details of source patient.

3) Determine risk associated with exposure by

1. Type of fluid (e.g, blood, visibly bloody fluid, other potentially infectious fluid/tissue)
2. Type of exposure (i.e., percutaneous injury, mucous membrane or non-intact skin exposure)

4) Evaluate exposure source

1. Assess the risk of infection using available information
2. Test known sources for HBsAg, anti-HCV & HIV antibody (consider rapid testing)
3. For unknown sources, assess risk of exposure to HBV, HCV or HIV infection

5) Evaluate the exposed person

1. Assess immune status for HBV infection

6) Post-exposure management for HBV HCV HIV as per HIC Manual

4. PREVENTION OF OCCUPATIONAL INFECTIONS WITH HBV, HCV, HIV

Hepatitis B virus is largely preventable through vaccination. For HBV, HCV, and HIV, however, preventing occupational exposures to blood can prevent occupational infections with HBV, HCV, and HIV. This includes using appropriate barriers such as gown, gloves and eye protection as appropriate, safely handling needles and other sharp instruments, and using devices with safety features.

5. NEEDLE STICK INJURY PROTOCOL:

Needle stick injuries are as a result of following:

1) Unsafe injection practices
2) During mutilation
3) During recapping of needles
4) During suturing
5) Movement of patient
6) Collection & Transportation of Biomedical Waste or through accidental prick from needles fallen on floor

Steps to be followed after the prick

VII. PROTOCOL

The above-mentioned steps are to be followed for all the cases. Further if the needle was used for a patient inform immediately to Shift in charge and during emergency hours directly to ICN / Nursing Supervisor.

Infection control Nurse shall assess that needle stick injury is percutaneous or mucocutaneous

Kindly refer the attached procedural steps (reporting form) for the reporting of the needle stick injury.

Reporting of the all Needle stick injury data shall be done through infection control nurse on monthly basis to relevant committees.

POST EXPOSURE PROPHYLAXIS-SOP

If needle prick or splash of blood and body fluid

↓

DO NOT PANIC

↓

PRICK SITE: Wash with soap and running clean water. **Do not squeeze.**
Eye:Rinse with clean water

↓

Inform to co- workers/ Sr.ward nurse and on duty nurse supervisor → Nurse supervisor will find out source history for viral marker and same will be informed to CMO.

↓

Report to Emergency Department

↓

On duty CMO will take brief history as per needle stick injury form.

↓

CMO will send health care workers blood test(viral marker) for baseline data and will advice treatment as per needle stick injury form

↓

Needle stick injury reporting form and incident report will be send to infection control office within 24 hours.

VIII. REFERENCES:

CDC Guidelines

Immunisation for Health Care Workers (HCW):
Hepatitis B immunisation:
All health care workers including temporary workers should receive Hepatitis B vaccine.

Typhoid vaccine:
All staff from Dietry dept. should receive typhoid vaccine before joining the hospital.

Staff handling waste:
Hepatitis B vaccine

HIC 6 Policy on Control of Outbreaks of Infection MGM

I. POLICY:

Hospital needs to establish incidence of hospital-acquired infection so that it can identify abnormal levels or outbreaks when they occur. Clinical Departments and Infection Control Department shall identify investigations and handle outbreak of any infection in the hospital in accordance with good clinical practices.

II. PURPOSE:

To identify, control & prevent outbreak of infection.

III. SCOPE:

Concerned clinical department.

IV. RESPONSIBILITY:

Infection Control Committee, Infection Control Team and concerned clinical department.

V. DISTRIBUTION:

Hospital Wide

VI. DEFINITION:

An outbreak may be defined as an increase in the occurrence of a disease, timely notification of a possible outbreak that relies on the past experience of clinical and laboratory staff, and on them being alert to the condition of individual patients.

VII. PROCEDURE:

1. HANDLING OUTBREAK:

The initial problem in dealing with an outbreak is recognition that an outbreak is occurring. In some outbreaks this may be immediately obvious (for example, outbreaks of shigellosis or virus diarrhoea) but infection occurring in patients discharged after a short hospital stay (day surgery etc.) may go unrecognized for some time. This also applies to infections with long incubation times such as tuberculosis. It is vital therefore that medical and nursing staff report any suspicions to the ICD or ICN. It does not matter if investigation subsequently shows an outbreak is not occurring, but the implications of any delay in investigating a genuine outbreak may be grave.

Many outbreaks are first detected by the microbiology laboratory due to increased isolation of unusual pathogens. The laboratory must report suspicions to the ICD as soon as possible.

2. MANAGING OUTBREAKS:

1) Recognition of an outbreak

a. Preliminary Investigation:

i. Develop a case definition, which includes site, pathogen and affected population.

b. Verify diagnosis:

i. By reviewing each case with the definition.

c. Determine the magnitude of the problem:

i. Number of cases and the severity.

d. Confirm that an outbreak exists:

i. By comparing the present rate with endemic rate.

e. Take immediate relevant control measures:

i. Study the available information to identify relevant control measures.

ii. Review and strengthen the relevant infection control practices e.g. hand washing, isolation, environmental cleaning, aseptic procedures, disinfection and sterilization.

iii. Restrict visitors.

2) Notification of Outbreak

Notify the Infection Control Committee, hospital administration, relevant departments and epidemiological unit. Educate the staff, patients and visitors.

Outbreak Control Committee:

i. ICT may consider forming an Outbreak Control Committee depending on the nature and magnitude of the outbreak.

ii. This committee should

- Meet regularly until the outbreak is under control.
- Major decisions such as ward closure should be taken by this committee.
- Designate a person to work with media if necessary.

3) Active case Finding

Search for the additional cases by using clinical and microbiological records.

a. Microbiological Investigations:

i. Microbiological investigations should be done depending upon the suspected epidemiology of the causative organism. Consult the microbiologist or obtain off-site microbiologist's opinion to decide on appropriate specimens.

b. Epidemiological Typing:

i. Typing of the etiological agent could be done depending on the facilities available.

c. Line listing:

i. Prepare a data collection tool, e.g. Questionnaire.

ii. Record all the cases noting patient details, date and time of onset of symptoms in each case, date of admission, place infection details etc.

d. Data Analysis:

i. Analyze the data to identify common features of the cases. E.g. age, exposure to risk factors.

e. Formulating and testing hypotheses:

i. Formulate a hypothesis about suspected causes for the outbreak based on literature survey and common features of cases.

ii. Hypothesis is tested by a case control study, or microbiological study to delineate the problem and identify the source.

- Case control study – a group of uninfected patients (control group) is compared with infected patients (case group).
- Microbiological study – planned according to the known epidemiology of infection problem. This identifies possible sources and routes of transmission.

4) Control Measures

a. Strengthen specific control measures as soon as the cause of outbreak is identified.

b. These may include,

1. Identification and elimination of the contaminated product.
2. Modification of nursing procedures.
3. Identification and treatment of carriers.
4. Correction of lapses in technique or procedure.

- **Monitor:**

  Continue follow up of cases after the outbreak clinically as well as microbiologically.

- **Evaluate**:

Evaluate for the effectiveness of control measures. Cases should cease to occur or return to the endemic level.

- **Document the Outbreak:**

Prepare a report on the investigation and management of the outbreak and present to the infection control committee, departments involved and the administration

HIC 7 Policy on CSSD

Prepared by :	Designation : CSSD Incharge Name: Mr GauriShankar Singh
Approved By :	Designation : Medical Superintendent Name: Dr. K R Salgotra
Reviewed by & Responsibility of Updating	Designation : Chief Of Quality Name: Dr. Gauri Shivani

CONTROL COPY HOLDERS	
Chief Of Quality	Dr. Gauri Shivani

I. POLICY:

M.G.M Medical college and Hospital is committed to ensuring highest standard of sterilization of equipments, instruments and other articles so as to ensure maximum infection control possible.

II. PURPOSE:

To establish and maintain standardized procedures for sterilization of different articles used in the hospital.

III. SCOPE:

The scope of CSSD services is to provide sterilized instruments and linen to all user departments in time by means of autoclaving, ETO sterilizing.

IV. RESPONSIBILITY:

Manager – CSSD shall be responsible for the entire functioning of the CSSD department

V. DISTRIBUTION:

C.S.S.D

VI. ABBREVIATION:

C.S.S.D – Central Sterile Supply Department.

VII. PROCEDURE:

- **The CSSD department will have the following sections**

1) Washing & decontamination room
2) Linen Packing area
3) Instrument packing area
4) Gas sterilizer room
5) Steam sterilizer room
6) Sterile storage room
7) Steam generator room
8) Executive office
9) Clean storage room
10) Change room (male)
11) Change room (female)

VIII. ZONING

1. **CSSD will be divided into 3 major areas –**

- UNSTERILE AREA
- Normal AREA & CLEAN AREA
- STERILE AREA

2. UNSTERILE AREA will consist of

- Washing & Disinfecting room
- Receiving area

3. NORMAL AREA will consist of

- Executive Office
- Change rooms

4. CLEAN AREA will consist of

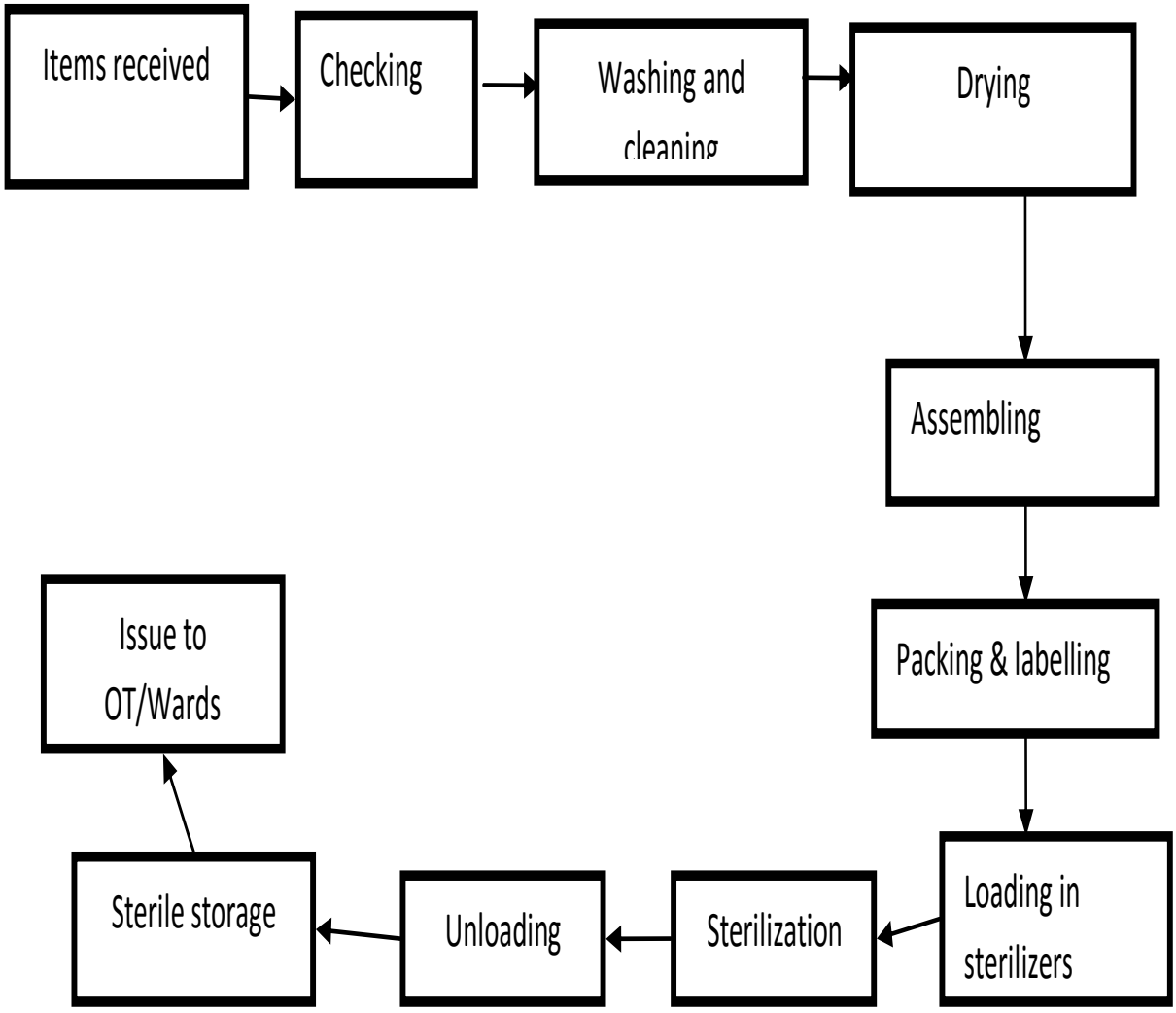
- Clean Storage
- Sterilizers
- Linen Packing Room
- Instrument Packing room

5. STERILE AREA will consist of

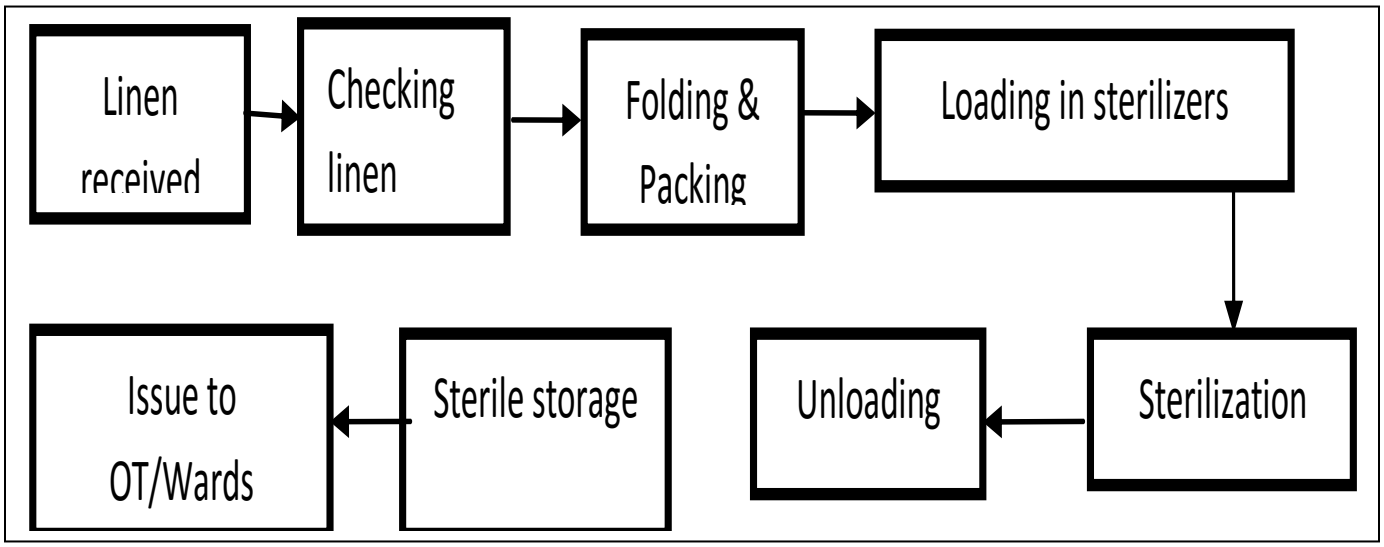
- Sterile Item Store

1. CSSD FUNCTIONAL FLOW

USED INSTRUMENTS FROM OT/ WARDS

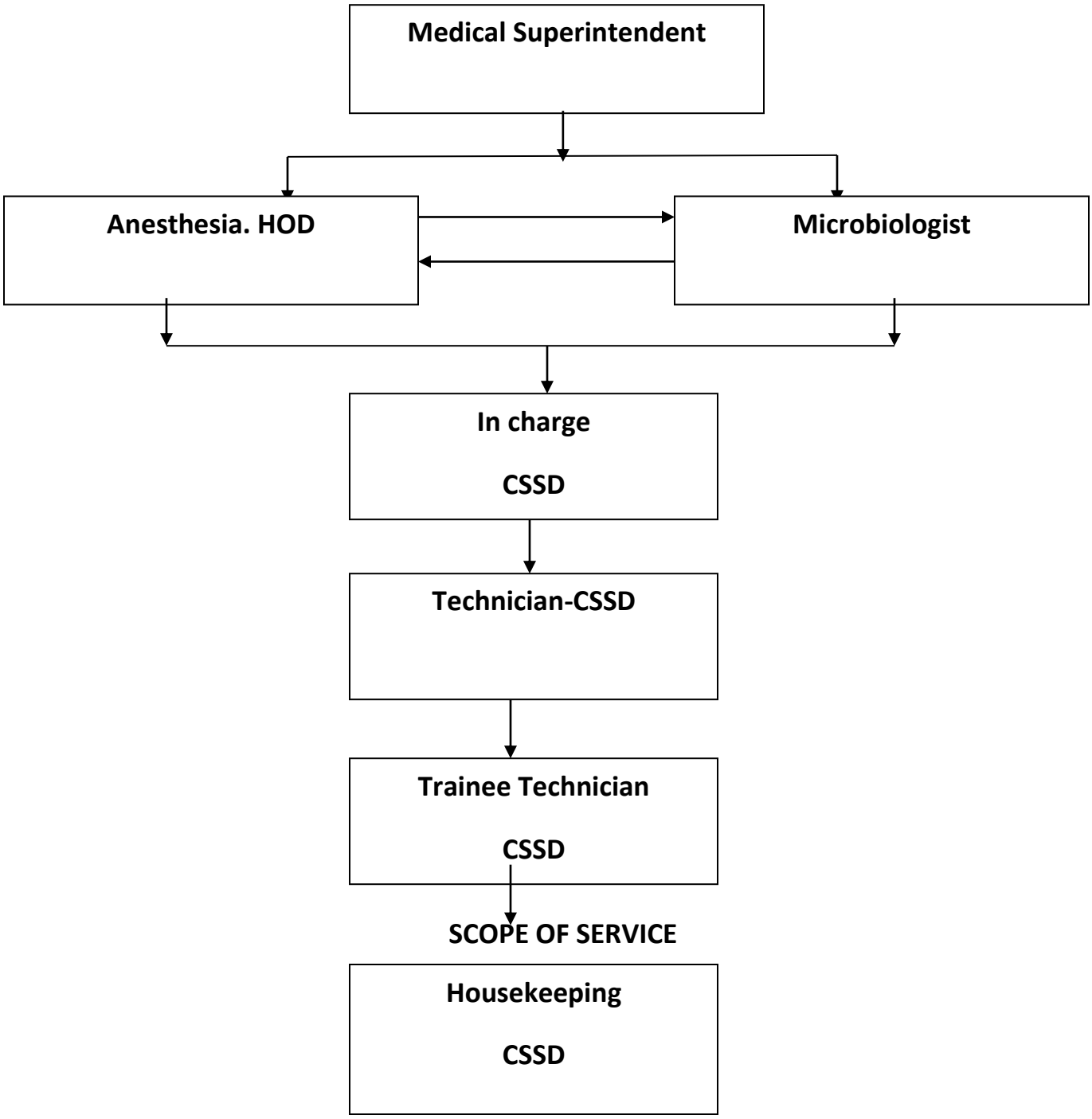


FOR CLEAN LINEN FROM LAUNDRY



7 Refer CSSD MANUAL from page 8 to 33

ORGANOGRAM CSSD



CENTRAL STERILE SUPPLY DEPARTMENT (CSSD)

The goal of the department	To ensure high standards of sterilization and disinfections so as to minimize the incidence infection in the Hospital.
The scope and complexity of services provided by this department is……	CSSD services requests can be scheduled/ planned on an emergency /urgent basis Wide range of departments including: • OT's (all OTs) • Cath lab, • ICU's (MICU, SICU, CVTS ICU,EMW PICU, EMS ICU) • Procedure Rooms, • Emergency • Wards (all Wards) • OPD (all) & etcdept • AKD Are serviced by the CSSD (30 users department)
The methods used in order to customized services are……..	Steam sterilization: The department has two steam sterilizers which are functional 24 hours a day.(depend on the load) Gas Sterilization: The department has one ETO sterilizers which are also functional 24 hours day (depend on load) The order of the process is: • Receiving the clean instruments • Packing • Labeling • Sterilizing • Storage • distribution
The extent to which the level of care/ service provided meets customer needs is……	Round the clock teams of technicians are posted as per monthly duty roster. For steam and gas sterilization, we use 3 types of indicators to ensure the sterility of the equipments: • Physical indicatiors (Mechanical indicators) • Chemical indicator • Biological indicators
Regulatory agencies relevant to this service……	None

Day and hours of operation of the Dept……..	8:00AM TO 8:00 AM ON Sunday 10:00PM TO 8:00 AM (24 HOURS)
Staffing plan is……	Incharge -1 Technician- 3 Trainee House keeping staff- 3

Objective: Receipt of instrument packs from OT for sterilization

Description: This SOP describes the system of receipt of clean packs from OTs for sterilization.

1. All the instruments will be decontaminated as per the SOP no. 4 and packed as per SOP No 6, within the OTs & CSSD
2. Then all the items\sets will be entered in the CSSD receiving register with proper signatures and employee id's. Same will be sent through the pass box.
3. Instrument packs will be received in CSSD close condition from user area in the decontamination area of CSSD and the CSSD register will be counter signed by the CSSD personnel.
4. Following information will be received by the CSSD staff through the receiving register.
    a) Method of sterilization required, steam or Ethylene oxide gas
    b) Date and time of dispatch for sterilization
    c) Signatures of the packer.
5. Packs received for sterilization will be checked for the above-mentioned information and the same information is entered in the CSSD register.
6. Packs will be loaded in the trolleys.
7. Trolley will be transported to the sterilizer area.

Objective: procedure for Receipt of Procedure Sets (from IPD, OPD,ER,ICUs& Radiology) after use in case of emergency.

Description: This SOP describes the system of receipt of clean packs from IPD, OPD, ER, ICU, & Radiology after use.

1. Procedure sets will be received at the receipt counter in CSSD at following timings:
   Morning 7:30am to 11:00 am
   Evening 3:00 pm to 5:00 pm
2. Procedure sets will be received only after the user has given a pre-wash to the instruments immediately after use.
3. The user will discard used consumables immediately after use.
4. Linen wrapper or any drapes inside the pack will send to laundry directly from the user department.
5. All the instruments will be checked for any blood or soil at the receipt counter by the CSSD personnel and will be handed over for ultrasonic cleaning.
6. Number of instruments in the pack will be counted while receiving the set according to the standard list available at the counter.
7. In case of any missing instruments, the set will not be received till the loss is confirmed by the concerned authority (nursing in charge / CSSD incharge)
8. Sets will be handed over for decontamination.

Objective : procedure for receipt of packs from cardiac Catheterization Lab for sterilization.

Description: This SOP describes the procedure for receipt of clean packs in CSSD form Cardiac Cath lab.

1. Instruments and reusable medical devices meant for sterilization will be received form cath lab duly packed and sealed at the receipt counter in CSSD.
2. Packs will be checked for following information:
    a) Name and contents of the pack
    b) Total number of the packs
    c) Mode of sterilization required
3. Check that all the devices for ETO sterilization should be packed in medical grade paper.
4. Check whether the packing is sealed at both the ends properly and is not torn form anywhere.
5. In case not packed properly, repack the item.
6. Items requiring steam steam sterilization will be packed in linen wrapper or medical grade paper.
7. In case linen is used as packing material. Check whether double wrapping has been done. If not, then double wrap it.
8. Segregate the items requiring steam sterilization and these requiring ETO sterilization.
9. Load them in a trolley
10. Transport them to the sterilizer area for sterilization.
11. Before sterilization, packs will be labeled for following information:
    a) Date of expiry
    b) Signatures of the packer
12. Hand over the packs for sterilization.

Objective: cleaning and decontamination of instruments.

Description: This SOP describes the process of cleaning and decontamination of instruments by manual method.

1. Manual cleaning will be done as a standby method in case of urgency
2. Table with sink will be used for manual cleaning.
3. Water reservoir will be filled with 10 liters of water.
4. Temperature of the water will be maintained in the range of 40-45◦c deg C.
5. Prescribed amount of enzymatic cleaner disinfectant will be added to the water. (e.g. to prepare 1% solution of multi Enzyme Cleaner, add 100ml in 10 liters of water)
6. Disassemble or unlock all the instruments.
7. Immerse and soak the instrument tray in disinfection for specified time.
8. Immerse only one instrument tray at a time to avoid mixing of instruments.
9. Clean the instruments with instruments tray at a time to avoid mixing of instruments.
10. Devices with lumen or holes will be cleaned with the brushes of appropriate diameter.
11. Cleaning will be done under water to proven aerosolization.
12. Instruments will be rinsed with abundant amount of free running tap water to remove the traces of disinfectant.
13. Dry the instruments with a clean sponge.
14. Hand over the set for packing.

Objective: Cleaning the instruments in ultrasonic cleaner.

Description: This SOP explains the various steps to be followed while cleaning the instruments in an ultrasonic cleaner

1. Fill the tank of the ultrasonic cleaner (one- two inch below from the top) with tap water.
2. Add the cleaning/ disinfectant to the water. (e.g. to prepare 1% solution of disinfectant Rapid Enzyme cleaner add 100ml in 10 liters of water)
3. Turn the power switch on.
4. Set the time and the cleaner will run automatically. Parameters for pre rinsed instruments
   Temperature -55 deg C Time – 10 minutes
   Parameters for heavily soiled instruments
   Temperature -55 deg C Time – 15 minutes
5. Place the instruments to be cleaned in a perforated tray.
6. Slowly lower the tray into the tank.
7. Press on/off once to activate ultrasonic. Do not stir.
8. When the items are clean, press on/off once to deactivate the ultrasonic.
9. Slowly remove the items from the cleaner.
10. Take the instruments out of the tray.
11. Rinse clean items with clean water.
12. Dry the instruments with lint free linen
13. HIV / infected instruments cleaning will be done in of ultrasonic separately.

Objective: procedure for making instrument packs in linen wrappers (for Radiology, SICU, PICU, MICU,ER, OPD, IPD,CVTS Ward ,CVTS ICU, etc)

Description: This SOP describes the procedure for making packs using linen wrappers.

1. Check all the instrument for proper cleaning. There should be no residues of blood, tissues or soil.
2. In case not cleaned properly, send the instruments back to the decontamination area for another cycle of decontamination.
3. Check whether the instruments are 100% dry . If not, dry them in to dryer.
4. Count the number of the instruments according to the standard list.
5. Check the instruments for their functionality (sharpness, movement etc.) or any other defects.
6. Replace the instruments in case not working properly.
7. Put chemical indicator& list of sets along with the signatures of the packer inside the packs.
8. Arrange the instruments and consumables in the tray according to the standard list.
9. Before packing the instrument tray, check the wrapper under light for any cuts and holes.
10. Wrap the instrument tray in linen wrapper.
11. Wrap the pack in second wrapper.
12. Put the plain abrotape / masking tape label for the name of the pack.
13. Hand over the set for sterilization.

Objective: procedure for making instrument packs in medical grade paper packing material.

Description: This SOP describes the procedure for preparing instrument packs in medical grade paper.

1. Check all the instruments for proper cleaning. There should be no residues of blood, tissues or soil.
2. In case not cleaned properly, send the instruments back to the decontamination area for another cycle of decontamination.
3. Check whether the instruments are completely dry. If not so, dry them with a clean sponge./ green napkin (skin towel)
4. Count the number of the instruments according to the standard list.
5. Check the instruments for their functionality (sharpness, movement etc)or any defects.
6. Replace the instruments if not working properly.
7. Arrange the instruments according to the standard list.
8. Wrap the instrument tray with medical grade paper /crape paper.
9. Always use double wrap.
10. Seal it with manual sealing machine if instrument are packed in peed pouches
11. Put the label for the name of the pack.
12. Hand over the pack for sterilization.

Objective: procedure for packing linen drapes.

Description: This SOP describes the steps to be followed for preparing linen packs.

1. Sort the laundered linen received form laundry.
2. Check the linen whether laundered properly. There should be no stains or dust. Om case not clean, reject the linen and send it back to laundry for washing once again.
3. Check the linen for any holes or any other repair work.
4. Fold the linen as per the OT technique.
5. Arrange the linen pieces according to the standard list of the needs
6. put appropriate label on pack
7. Wrap the contents in the linen wrapper or crepe paper using oblong method. Wrapper should not be too tight/loose.
8. Seal it with masking tape
9. Write the name of the pack over the masking tape for identification of the pack.
10. Limit the size of the pack to 12” × 12” × 20” maximum weight not to exceed 12 pounds (5.44.kg)
11. Provide double wrapping with a similar wrapper.
12. Put the chemical indicator over the pack .
13. Hand over the pack for steam sterilization.

Objective: procedure for sterilization of linen and instrument packs by the method of steam sterilization.

Description: This SOP describes the procedure of steam sterilization of linen and instrument packs

1. Instrument packs will be received in the sterilizer area from instrument packing area and linen packs will be received from the linen packing area.
2. Sterilizer operator will check the labels of the packs for the contents of the pack, whether linen or instruments.
3. Sterilizer operator will put the chemical indicator label over the pack.
4. Following information will be written over the chemical indicator.
    - Expiry date of the pack
5. Linen and instrument packs will preferably be sterilized separately.
6. Incase, instrument packs and linen packs are required to be sterilized in the same sterilizer at the same time, then place instrument packs on the bottom shelf and linen packs up.
7. Load the packs in vertical position into the loading trolley.
8. Arrange the packs in loose contact with each other so that the steam can easily pass through every corner of the load. There should be a gap of minimum 3 inches between the packs and the chamber walls .
9. After loading, place the trolley into the sterilizer chamber.
10. Close the sterilizer door.
11. Start the cycle.
12. Following parameters will be used for different loads

	Temperature	Pressure	Sterilization Time
Cycle I	134 deg C	2.1 bar	7 minutes
Cycle II	121 deg C	1.2 bar	20 inutes

13. After completion of the cycle manually open the sterilizer door in sterile area then unload the sterile packs.
14. Check the color change in the chemical indicator. The color should change from cream to back. In case. The color has not changed after the cycle completion, reject the load and inform the supervisor /HOD
15. Check the temperature-pressure record of the sterilization cycle printed by the sterilizer. In case the above- mentioned parameters are not met reject the load and inform the supervisor / HOD (only one machine have printer)
16. Above-mentioned information will be kept for future record.

Objective: Loading the steam sterilizer.

Description: the SOP describes various steps and precautions to be followed while loading the steam sterilizer.

1. Linen and instrument packs will preferably be loaded and sterilized separately.
2. In case, instrument packs and linen packs are required to be sterilized in the same sterilizer at the same time, then place instrument packs on the bottom shelf and linen packs up.
3. In the loading car, place linen packs in vertical position, on edges rather than the flat side up to permit seam to pass form the top of the chamber though multiple folds in the packs towards bottom.
4. Place instrument packs flat on the loading car shift.
5. Arrange the packs in loose contact with each other so that the steam can easily pass through every corner of the load. There should be a gap of minimum 3 inches between the packs and the chamber walls.
6. Do not allow wrapped instrument packs to came in contact with the chamber ceiling.
7. Do not place the packs on the floor of the sterilizer chamber.
8. Place the lading car on the trolley.
9. Transfer the loading car into thesterilizer chamber.
10. Lock the door of the sterilizer.
11. Start the cycle.

Subject: unloading the steam sterilizer

Description: This SOP describes various steps to be followed while unloading the steam sterilizer.

1. After the completion of the sterilization cycle, open the door of the sterilizer in sterile area
2. Unload the sterilizer only when steam has escaped form the chamber and sterilized packs have undergone initial cooling.
3. Visually check the outside wrappers for dryness. Reject the packs in case there are water droplets or visible moisture on the exterior of the pack.
4. To prevent entry of moisture and micro-organisms into the packs, do not handle sterilized items before they are entirely cool.
5. Do not place the sterilized items during cooling on cold metal surfaces as moisture will condense onto the items and contaminate them.
6. Sterile load to be kept on wire mesh racks till it cools down.

Objective: ethylene oxide (ETO) gas sterilization.

Description: This SOP describes the process of sterilizing the articles by the method of ethylene oxide gas sterilization.

1. Following items will be sterilized in ethylene oxide gas sterilizer:

   Plastic goods :cathers, nebulization kit, rubbings.

   Rubber goods: ventilator tubing's catheters, ambubag.
   Instruments and Equipment: cutlery leads, eye knives, scalpels, blades.
   Specula etc.
2. Check the packing of the items to be loaded for ETO sterilization items should be packed in the following wrapping materials only.
   - Paper / polypropylene – polyester laminate
3. Check the packing of the items to be sterilized. It should be sealed properly and should not be torn from anywhere
4. Open the sterilizer door.
5. Insert the ETO gas cartridge.
6. Lad the sterilizer chamber.
7. Close the sterilizer door.
8. Select the high (55deg C) or low (37 deg C) temperature cycle displayed on the screen.
9. Run the cycle.
10. In case of errors, the load will be rejected and re- sterilized.
11. Monitor the cycle, check for the errors. If no errors reported then unload the packs.
12. In case of errors, the load will be rejected and re-sterilized.

Objective: Loading the ethylene oxide gas sterilizer:

Description: this SOP describes various steps and precautions to be followed while loading the ETO sterilizer.

1. Open the door of the ETO sterilizer. The door opens manually.
2. Packs in the loading basket will be arranged in such a manner that the gas can circulate freely.
3. Paper / plastic peel pouch type packages will be placed on edges with the plastic side of one facing the paper side of the next.
4. Packs should not be allowed to touch the walls of the chamber.
5. Minimum of ¼" to ¼" space will be provided between the chamber ceiling the topmost packages of the load to allow ETO circulation.
6. Insert the ETO gas cartridge.
7. Load the basket and close the door of the sterilizer.
8. Close and lock the sterilizer door form open position through manually.

Objective: Unloading the Ethylene oxide gas sterilizer

Description: This SOP describes various steps and precautions to be followed while unloading the ETP sterilizer

1. Wear gloves before unloading.
2. Check for completion of the cycle. The machine will display the sign of “cycle completion” by indicator or alarm.
3. Open the sterilizer door. To open the door from latched position rotate handle counterclockwise (operating end) or clockwise (non operatingend) as far as it will go and swing the door open by hand.
4. Remove an empty cartridge.
5. Check the color change in the chemical indicator.
6. Unload the packs and handover for sterile storage.

Objective: Distribution of sterile packs to cardiac and GOTs.

Description: This SOP describes the procedure for the distribution / transportation of sterile packs to the OTs.

1. Sterile instrument and linen packs will be transported from CSSD to OT through pass box located in the sterile area of CSSD.
2. Request for the sterile packs will be received in CSSD through phone.
3. Following information will be received from the OT nursing I/C:
   Name of the packs required.
   Quantity of the packs required.
   Priority, whether required immediately or for the next day,
4. Following will Be checked before dispatching the packs for use in the OT:
   Name and quantity of the packs
   Expiry Date of the pack (Expired packs not to be distributed. They will be sent to the packing area for reprocessing.)
   Chemical indicator in place (color change green after sterilization)

Objective: Distribution of sterile packs to SICU, MICU, CCU,ER,OPD,IPD& Radiology.

Description: This SOP describes the process of distribution transportation of the sterile packs to SICU, MICU, CCU,ER, OPD,IPD,& Radiology.

1. Sterile instrument and linen packs will be distributed through the issue counter located in the sterile area in CSSD.
2. The responsibility of transportation of sterile goods will lie with the user department.
3. Instrument packs will be issued on exchange basis.
4. Linen packs will be issued on requisition basis,
5. The sterile packs will be issued once a day at following timings:
   Morning 7:30 am to 11:00am
   Evening 3:00pm to 5.00 pm
6. Request for the sterile packs will be received in CSSD through phone.
7. Following information will be received form the nursing I/C of the respective areas.
   - Name of the packs
   - Quantity of the packs required
   - When required for use
8. Following will be checked before dispatching the packs for use in the OT:
   - Name and quantity of the packs
   - Expiry Date of the pack (Expired packs not to be distributed. They will be sent to the packing area for reprocessing.)
9. The will be issued on the basis of First in – First out. The items sterilized first will be issued first.

Objective: Emergency action plan in case of a leak or a spill of Ethylene oxide.

Description: This SOP describes the steps to be taken in case of any leakage or spill taking place while handling Ethylene oxide gas

1. Immediately evacuate the area where the leak or spill has taken place
2. Ventilate the area by increasing the local exhaust in order to decrease the concentration of ETO by dilution with air.
3. In case, the area must be entered before high concentrations are reduced inform to responsible authority.
   following protective clothing and equipment will be used.
   - ETO impermeable clothing providing complete body coverage to prevent skin contact.
   - Splash proof safety goggles and face shield
   - Work shoes impermeable to ETO. Leather shoes will not be used.
   - Butyl/Nitrile rubber gloves will be used.
   - An air supplied positive pressure, full-face piece with a respirator.

Objective: Storage and Handling of ETO cartridges.

Description: This SOP describes the precautions to be observed while storing and Ethylene oxide cartridges.

1. ETO cartridges will be stored at a temperature less than 38 deg C
2. All sources of ignition, such as matches, cigarettes, spark and static discharge will be kept away.
3. Only one day supply or a maximum of 24 ETO cartridges in the immediate sterilizer area having a minimum of 10 air changes per hour.
4. Unused cartridges, older than the expiration date printed on the container will not be used.
5. Never use the ETO cartridge under following conditions:
    a. ETO cartridge is below normal weight (weight
    b. ETO cartridge when handled is cartridge.
    c. Liquid ETO is leaking from the cartridge.
6. Never puncture or incinerate cartridges.

Objective: Statement for first aid / treatment in case of ethylene oxide exposure.

Description: This SOP describes the steps to be taken in case of exposure of ethylene oxide gas, as it is a toxic and carcinogenic chemical.

a. **In case of eye contact:**
    - Immediately flush with plenty of water for at least 15 minutes, lifting upper and lower lids intermittently.
    - Arrange for medical aid.
b. **In case swallowed.**
    - drink egg whites or gelatin solution
    - if, these things are not available, drink plenty of water.
c. **In case of skin contact:**
    - Immediately flush skin with plenty of water for at least 15 minutes.
    - Remove and wash all contaminated clothing before reuse.
d. **In case inhaled:**
    - Take the person to fresh air area.
    - If not breathing, give artificial respiration and oxygen.
    - Provide immediate medical aid.

Objective: Procedure for entry in the sterile area:

Description: This SOP describes the precautions to be taken for the entry of the personnel in sterile storage area.

1. Only the person on duty in sterile area will be authorized to enter the area.
2. Wash your hands with soap and water.
3. Change your clothes and wear the scrub suite.
4. Wear slippers.
5. Wear head cap and mask.
6. Enter the sterile area

Objective: procedure for maintenance of sterile area:

Description: This SOP describes the procedure / precautions to be observed to maintain the sterile environment in the sterile storage area.

1. Following temperature and humidity conditions will be maintained in the sterile area.
    a) Temperature – 18-24 deg C
    b) Relative Humidity – 35-70%
2. The person on duty in the sterile area will check air pressure every morning.
3. All the surfaces (storage racks, work counter, issue counter, dumb waiter) will be disinfected every morning with 2% solution of incidure in water.
4. Only one glass door will be door will be opened at a time for the issue of material.
5. Person on duty in the sterile area will maintain the principle of minimum movement and no talking.

Objective: procedure of disinfection of surfaces.

Description: This SOP describes the process of disinfection of the wark surfaces through the method of disinfection.

1. The housekeeping person on duty in the respective areas will be responsible for the disinfection of that area.
2. Prepare a 2% solution of incidur in water
3. Use a clean sponge for wiping the surfaces with this solution.
4. All the work surfaces will be disinfected every morning by the person on duty in the respective areas.
5. All the outside surface of the sterilizers and trolleys will be disinfection every morning.
6. Technician will monitor the process.

Subject: POLICY OF EXPIRED STERILIZED ITEM.

A. Description:

This SOP describes the system of receipt of expired item from concerned dept.

The linen wrapped item expiry limit of 7 days, and medical grade paper wrapped (packed) item expiry limit of 3 months. ETO sterilized packed items 6 months expiryAll concerned dept sent expired item to CSSD same day of the expiry date CSSD received expired item and reprocess for sterilization.

B. Policy:

This policy informs staff the procedures to follow in the event there is a contaminated sterilization load.

GENERAL INFORMATION AND DESIRED OUTCOME

1. ALL sterile items processed by this hospital will have a load control sticker.
2. All items processed will have an external chemical indicator indication it has been processed

C. Procedure:

1. All sterilization Cycle shall be inspected after completion of cycles.
   Sterilizer printout shall be checked to ensure all parameters ware met.
   1) Exposure time and dry time were met.
      (Ensured that the sterilizing)
   2) Cycle was completed.
   3) Chemical indicator turned.
   4) Employee initials the strip.

5) Match the printout load number with the load control sticker- items and log.

2. In the event the above parameters were not the following shall occur
   1) Determine the reason
   2) If exposure and dry times were incorrect, load must be rewrapped and processed again.
   3) If steam chemical indicator are not turned green-determine reason;
      a) Load did not complete?
      b) Load was never started?
      c) Is there a printout strip?
      d) Sterilizer mechanical failure?

3. In the event a proper inspection of a load was not performed and it is determined that there are unsterile items outside the department, the following shall occur:
   1) Determine if there is a load control sticker on the unsterile item.
   2) If Yes-get the number immediately look for load contents it the following shall occur:
   3) Make a list, notify the OR Charge Nurse of items in order that they can locate items.
   4) Workload permitting assist the OR Charge Nurse and /or designee with locating all the items.
   5) If there are items on the list are from other units other than the OR, notify the unit in charge immediately.
   6) Notify OT / CSSD manager.

4. Items marked as single use or disposable or items opened but not used shall be reprocessed if they are included in the Hospital's reuse policy.

5. Wet packs
In the Event wet packs are found after sterilization process has to be replaced.
   1) A recall shall be initiated.
   2) Determine load contents utilizing the load control sticker.
   3) Notify unit in charges affected.

D. RESPONSIBILITY

1. It is the responsibility of the sterile processing technician to notify the following in the event of a recall.
   a) All affected unit managers
   b) Infection control
   c) Manager OT and CSSD

2. It is the responsibility of the unit in charges to notify physicians in the event if unsterilized items have been used on patients.

3. The CSSD in charge has the authority to initiate a recall based on the above information.

4. The "Recall of Contaminated Form" report will be initiated by the CSSD in charge to the following staff members. The report shall state what initiated the recall: kind and quantity of items found or not found.
   a) MS
   b) OT manager

c) Microbiologist
d) Infection Control

POLICY OF RECALL OF STERILE ITEMS FROM DIFFERENT NURSING STATIONS IN CASE OF FAILURE OF BIOLOGICAL INDICATORS

1. Biological indicator is put on every load of ETO.
2. Biological indicator is put on once a week in steam sterilizer.
3. Steam biological indicator incubation done by rapid auto reader in presence of Lab Medicine Technician for validation of sterilization
   Process
4. ETO Biological indicator sent for Lab Medicine for incubation of validation of sterilization process.
5. The result is released after 48 hrs of the incubation.
6. In case of a failure of biological indicator, the said load shall be recalled from the respective nursing station immediately.
7. The patient's on whom items of the load were used shall be contacted and put on surveillance.

HIC 8 Policy on Biomedical Waste Management

I. POLICY:

All Biomedical waste shall be treated destroyed or disposed of as per the provisions of Bio Medical Waste (Management & Handling) Rule 1998 (Revised rule-2016).It is a statutory requirement and compliance is must.

II. PURPOSE:

To define and document the instructions and methodology of Waste Management Process with the aim to

1. Ensure the compliance to Statutory Requirements
2. Prevent Infection to staff, patient and attendants objective
3. Safety of the Environment

III. SCOPE:

This applies to all types of wastes generated in the Hospital

IV. RESPONSIBILITY:

Housekeeping Department, Nurses, Doctors, Paramedical staffs for effective implementation of this process

V. DISTRIBUTION:

Hospital Wide

VI. ABBREVIATION:

BMW – Bio - Medical Waste Management

VII. PROCEDURE:

1. LEGAL COMPLIANCES

Preamble

Hospitals are meant to ensure community health. Presently a lot of attention is being paid to the disposal of medical waste the problem of medical waste disposal has acquired a serious proportion in urban areas of India. Infectious waste can transmit numerous diseases in the community and put those who handle waste, and live in its proximity, at risk

1) Handling waste can be a potential health hazard (epidemic) to public at large especially health care workers, municipal employees and rag pickers. Comprehensive solutions to waste management lie solely in implementing systems of waste segregation, disinfection and treatment through the cooperation of hospital staff, and the medical personnel.

2) Proper waste disposal, water treatment, disinfection, and sterilization of equipment can reduce the risk of infection among patients, health care workers and community. To minimize

the spread of infection, it is important that hospitals / health caterers and the surroundings are kept clean and no waste is spilled anywhere outside or inside the hospital premises .A clean hospital has positive effects on its patients and its personnel.

Legislation & Gazette

- The Biomedical Waste (Management and Handling rules) 1998 (Revised rule-2016).enacted through legislation and gazette bind us to follow the rules and
- regulations of segregation, collection and disposal of the
- Bio medical waste.

Objectives

1. To prevent infection by maintaining good hygiene and sanitation.

2. To protect the patient, patient attendants and all health care personnel from avoidable exposure to infection.

3. To prevent environmental pollution.

4. To manage waste in a clean, healthy, economical and safe manner.

5. To minimize waste

Process Summary

Sl. no	Activity	Responsibility
1.	**Types of waste generated**	
1)	All general and biomedical waste from the hospital is handled as per the protocols set by the Biomedical waste management rules (modified in 2016), Ministry of Environment and Forests.	
2)	General Waste 1. Paper. 2. Cardboard and packing materials. 3. Aluminium Foil. 4. Tea Bags. 5. Disposable plates, glasses, bottles. 6. Used polythene bags. 7. Vegetable, fruit peels and left over food.	

3)	Bio Medical Waste 1. Soiled cotton, dressings, bandages, plaster casts, amputated body parts, pathological specimens, pathology laboratory waste, microbiology laboratory waste 2. Plastics, disposable syringes, tubing's, catheters and bags 3. Sharps consisting of needles, blades, broken vials, ampoules, thermometers 4. Blood bags tested positive for HIV and Hepatitis B, C, VDRL & MP 5. Human parts, foetus, placenta, etc. 6. Category of waste are defined in enclosure"1"	Nursing
2.	**Operational guidelines**	
1)	An operational and maintenance protocol is drawn up and filed as guidelines / requirement for day-to-day operations; also the exact description of methodology practiced under each activity such as segregation, internal and external transportation, pre-treatment, storage, post treatment and final disposal	Nursing
2)	The different levels of waste disposal at all levels of processes, and hospital areas are identified and responsibilities are assigned – as an organizational structure from management, supervision / monitoring, collection, treatment and disposal.	Nursing
3)	Daily collection loads by category, treatment and disposal data records maintained	Housekeeping supervisor
4)	Segregation of Waste	
5)	Black bags are segregated as per classification above for general waste	
6)	Bio Medical Waste *is segregated as* 1) Red bags for plastic disposable waste 2) Yellow bags for incinerable waste. The red and Yellow bags have the Bio-hazard Emblem printed on them. All trolleys used for collecting and transporting BMW have the Bio-hazard symbols on them and are adequately covered. Puncture proof specific containers are used for collection and transportation of sharps.	Housekeeping attendant

3.	**Collection of Waste**	
1)	A specific allotted area of the ward – the same place in each ward identified as waste disposal corner – but easily identified and accessible by nursing and Housekeeping staff	Nurse-in-charge / Housekeeping attendant
2)	The general waste is collected from wards and transported to the garbage collection bin in every shift i.e. three times a day – All waste handlers wear thick impervious gloves and immunized for Hepatitis B	Housekeeping attendant
3)	Two rounds are made per day- one for collecting incinerable waste and second for plastic (disinfected) waste and sharps.	Housekeeping attendant
4)	The BMW is collected and transported in a covered garbage trolley, displaying the Bio-Hazard Symbol.	Housekeeping attendant
5)	A duty roster is made monthly for general and biomedical waste collection	Nurse In Charge/Housekeeping supervisor
6)	Daily time table and roster drawn up and signed at the end of every shift to indicate each category of waste collected	Housekeeping supervisor / Housekeeping attendant
4.	**Treatment of Waste**	
1)	Biomedical waste is segregated at the point of generation.	Housekeeping attendant
2)	Sharps are disinfected by chemical disinfection in Sodium dichloroisocyanurate Solution	Ward nurse / Housekeeping attendant
3)	Microbiology and biotechnology (laboratory) waste is discarded in the yellow bags	Housekeeping attendant in lab
4)	Liquid waste from laboratories is treated chemically before being let into the common municipal drains	Housekeeping attendant in lab
5)	Disposal of Waste	
6)	Disposable of sharps – chemically disinfected in Sodium dichloro isocyanurate solution, collected in puncture proof containers and handed over to agency for disposal	Housekeeping attendant

7)	All general waste in black bags is carried away by the local municipal authority	Housekeeping attendant / municipal workers
8)	All categories of waste are weighed each day and noted. This is common practice as weight limits are present for autoclave, etc. – to keep a record of and monitor different categories and total biomedical waste by the hospital.	Housekeeping attendant/ supervisor
5.	**Emergency response plan**	
1)	The emergency can include ▪ Needle prick , cut, or injury to the handler ▪ An accidental spill of biomedical waste inside or outside the hospital building There should be an emergency response protocol to handle each of these incidents adequately and quickly.	Medical superintendent /Housekeeping supervisor
6.	**Monitoring of Waste Management**	
1)	Report Generation & Submission to Regulatory Authority - A report of compliance to regulatory requirements are taken and submitted annually to Government by 31ST January in format placed at Exhibit –II	Chief administrative officer
7.	**Biomedical waste management training for 'good practices'**	
1)	Waste management training of all categories of staff of all departments handling biomedical waste, adequate treatment, and disposal, is necessary at least one in six months	Infection control nurse
2)	Records Generated 1. Waste Management daily operations and maintenance protocol 2. Monthly duty roster 3. Waste Management Record including – Categories and amount of daily waste – Daily comments by waste supervisor – Noting defaults – Noting incidents	
8.	**Other Associated processes** 1. Infection control process	

Classification:

Categorization and classification of waste is important for the purpose of safe waste disposal. At Hospital the waste generated has been broadly' classified into the following categories:

Non – Infectious Waste

1. General office waste comprising of wrapping paper, office paper, cartons packaging
2. materials including plastic sheets, news papers & bouquets
3. Kitchen waste includes leftover food, peels & dirty water generated from the hospital kitchen

Kitchen waste is further divided into two categories

a) Bio-degradable, waste. This waste includes peels of fruit and vegetable skins, left over food, tea dregs & other natural kitchen waste.

b) General Waste as wrapping paper, aluminium foils and disposables

Infectious Waste

The Schedule I for Biomedical waste handling Rules 1998(revised rule-2016) divides the biomedical waste into the following categories

2 . CATEGORIES OF BIO-MEDICAL WASTE

Option	Waste Category	**Treatment & Disposal**
Category No. 1	Human Anatomical Waste (human tissues, organs, body parts)	incineration @/deep burial*
Category No. 2	Animal Waste (animal tissues, organs, body parts carcasses, bleeding parts, fluid, blood and experimental animals used in research, waste generated by veterinary hospitals, colleges, discharge from hospitals, animal houses)	incineration@/deep burial*
Category No. 3	Microbiology & Biotechnology Waste (Wastes from laboratory cultures, stocks or micro-organisms live or vaccines, human and animal cell culture used in research and infectious agents from research and industrial laboratories, wastes from	local autoclaving /micro-waving/incineration

	production of biologicals, toxins, dishes and devices used for transfer of cultures)	
Category No. 4	Waste Sharps (needles, syringes, scalpels, blade, glass, etc. that may cause punture and cuts. This includes both used and unused sharps)	disinfection (chemical treatment /auto claving/microwaving and mutilation / shredding
Category No. 5	Discarded Medicines and Cytotoxic drugs (Waste comprising of outdated, contaminated and discarded medicines)	incineration@/destruction and drugs disposal in secured landfills
Category No. 6	Soiled Waste (items contaminated with blood, and body fluids including cotton, dressings, soiled plaster casts, lines, bedding, other material contaminated with blood)	Incineration and autoclaving/microwaving
Category No. 7	Solid Waste (Waste generated from disposal items other than the sharps such a tubings, catheters, intravenous sets etc.)	disinfection by chemical treatment autoclaving / microwaving and mutilation/shredding
Category No. 8	Liquid Waste (Waste generated from laboratory and washing, cleaning, housekeeping and disinfecting activities)	disinfection by chemical treatment and discharge into drains
Category No. 9	Incineration Ash Ash from incineration of any bio-medical waste)	disposal in municipal landfill
Category No. 10	Chemical Waste (Chemicals used in production of biologicals, chemicals used in production of biologicals, chemicals used in disinfection, as insectricides, etc.)	chemical treatment and discharge into drains for liquids and secured landfill for solids

2. <u>Sources of Waste in the Hospital</u>

1) Emergency Department
2) Pharmacy
3) Laboratory Department
4) Day Care

5) Operation Theatre
6) Minor OT
7) Dialysis Department

8) Radiology Department
9) Kitchen.
10) OP waiting areas
11) OPD Consultation Rooms
12) OPD Treatment Rooms
13) Nursing Stations
14) Wards- ICU, General wards, Neonatal ICU, Paediatric ICU, Obs & Gynae, Labour Rooms etc

Segregation of Waste

1) Segregation shall be carried out at the point of generation itself to keep general wastes away from becoming infectious.
2) For this different colour coded bins shall be placed at all the areas of generation of waste
3) The bins should be labelled(according to the waste) and lined with plastic bags (non-chlorinated/ puncture proof) with colours matching that of the bins as per recommendations.

Schedule II of Biomedical Waste Handling Rules 1998 defines the colour coding for the waste generated as follows

COLOUR CODING AND THE TYPE OF CONTAINER FOR DISPOSAL OF BIO MEDICAL WASTES

Color Coding	Type of Container	Waste Category	Treatment options as per Schedule-I
Yellow	Plastic bag	Category 1, 2 and Category 3,5, 6	Incineration/deep burial
Red	Disinfected container/Plastic bag	Category 3, 6, 7	Autoclaving/Microwaving/ Chemical Treatment
Blue/White translucent	Plastic bag/punture proof container	Category 4, 7	Autoclaving/Microwaving Chemical Treatment and destruction/shredding

Note :

1) Color coding of waste categories with multiple treatment options as defined in Schedule-I shall be selected depending on treatment option chosen, which shall be as specified in Schedule-I.
2) Waste collection bags for waste types needing incineration shall not be made of chlorinated plastics.
3) Categories 8 and 10 (liquid) do not require containers/bags.
4) Category 3 if disinfected locally need not be put in containers/bags.

5) dressings generated from the patients be carried to the infectious waste bin in a tray From the point of generation.

4. Procedure of segregation on Intensive Procedure of Segregation in In– Patient Area

1) The in-patients departments generate all types of waste, which has to be segregated at the point of **generation itself for an effective waste management practice in the hospital. Therefore bins for both** infectious and non-infectious waste are placed in all the wards.
2) The bedside of each patient shall have a bin meant for carrying only non-infectious waste like fruit peels, papers etc., unless the patient is classified as infectious.

Bins for the infectious wastes shall be kept in a specific location *(for example* the nursing station) so that it is easy to carry them to the patient where the dressing is being done or the soiled care Unit

a) Patients of Intensive Care units (ICU) are in a critical state and require support of vital functions until the disease process is arrested. Such patients are likely to have poor resistance to infection and are often unable to do things on their own and have full time nursing attendants.
b) To prevent the spreading of infection further it shall be ensured that the waste generated in the ICU is not contained near the patients. The bins for infectious and non-infectious waste shall be located near the nurses' duty room in the ICU to prevent the spread of infection amongst the patients.
c) The IV tubing's and catheters and used syringes shall be kept separately in a container from where they can be disinfected chemically before their final disposal.
d) All the sharps and glass ampoules shall also be placed in separate puncture proof containers. The syringes and the needles should be destroyed by needle destroyers / cutters.
e) All these bins shall be cleaned after every shift or the moment these bins become % full. The number of bins should be distinct and their numbers and size should be proportional. to the density of the wards and the medical procedures in the ward.

5. Procedure of Segregation in Operation Theatre

1 . The waste management strategy for the O.T. shall be designed in such a way so as not to impede an operation but to ensure that the waste reaches the main bin after being decontaminated and disposables properly disinfected and destroyed.

2. As in all other areas waste disposal program shall be initiated after meetings with the staff. Management strategies based on these meetings shall be formulated so that the O. T staff can work smoothly without feeling any extra burden. Bins for infectious waste shall be lined with yellow bags and these bins will contain contaminated swabs, soiled bandages and amputated body parts.

3. The bags with waste shall be sealed and stored outside the O.T to prevent liberation of bacteria during handling.

4. Used instruments and sharps shall be

- Counted after surgery
- Washed under running tap water
- Placed in a tray, sealed in bags and sent for autoclaving

5. A separate container for IV sets, tubing's catheters gloves and syringes shall be provided in the O.T. After shredding these disposables shall be treated with a chemical disinfectant for at least an hour and then sent for their final disposal. As lots of medical kits are opened prior to the operation there is a lot of general waste generated. Hence a bin for general waste is kept in the O.T. in which all the packaging material shall be collected. In the changing room contaminated laundry shall be placed in the laundry bag which shall be sealed in waterproof bags and sent to the laundry for cleaning.

6.Procedure of segregation in Out Patient Department

1) The OPD may also include a casualty/emergency ward. Each room in the OPD should have three bins. The bins are for the infectious waste which includes soiled bandages. The other bin is for general waste arid the third bin for the disposable items and used gloves which can be mutilated and disinfected at regular intervals by a nursing-aid attendant
2) The used needles and syringes should be placed separately and destroyed by the needle cutter/destroyer, which is to be provided in each ward and department.
3) The casualty should have bins for infectious waste general waste and plastic waste the number of bins for the infectious waste will depend on the number of beds in the room.
4) Preferably each bed should have these bins. Bins for plastic waste and general waste should also be installed in each emergency. The plastic waste should be mutilated and chemically disinfected. There should be a tray for needles and other sharps. A needle cutter should also be installed. While treating a patient in the emergency the hospital staff should always wear protective clothing and gloves as the patient could be a carrier of any infectious disease
5) The waste disposal scheme in this area is as follows
    a. Segregation of the waste into different categories
    b. Provide specific collection and disinfection systems for each type of waste generated.
    c. There should be distinct containers for different types of waste

d. The design of containers should depend on the type of waste and disinfection method

e. The number of bins should be proportional to the waste generated in the casualty

7. Transportation of Waste

All waste containers shall be tied when they are 3/4^{ths} full

1) Procedure – On Site Transport of Waste

Segregated wastes have to be transported within the facility from the point of generation to the final waste disposal site .All bags should be fastened, small trolleys can be used or the bin themselves be carried. Care must be taken to avoid spills. Non-infectious waste should not be transported with infectious waste.

Guidelines for Transport of Waste

a) When waste is collected, from a particular area, it will be wheeled downstairs to the basement where it will be weighed and transferred to the appropriate colored bin in the waste holding room. This will be done each shift.

b) A large plastic bag will be used to line the wheel-able bin to prevent any liquid leaks

c) from the waste bags from soiling the bin.

d) This plastic bag is to be replaced each shift.

e) The wheel-able bin will be cleaned and disinfected with Sodium hypochlorite solution once in 24 hrs. This will keep the bin sterile and odourless.

f) While transferring waste to storage bins in the basement, housekeeping staff will wear a protective mask, heavy duty gloves, and rubber boots.

2) Storage of Waste

a) Blue box, Red and Yellow waste will be held in permanent waste holding room. Sufficient no. of bins will be kept to store waste for a period of 24 hrs.

b) Kitchen waste will be placed in designated bins and will be stored for a maximum of 48 hrs.

c) All plastic bags are to be tied securely and the lid of the bin is to be firmly shut.

3) Handling of Waste

- **Infectious Waste**

Infectious waste has to be kept separately in bins with lid and lined with **Yellow Colored** polythene bags wherever needed. The following special precautions are to be adopted with respect to infectious wastes

a) Proper labelling of waste containers minimize confusion in handling and disposal of waste

b) Under no circumstances should the infectious waste be mixed with the non-infectious waste

c) The bag lining the bin should be only 3/4th full to ensure that the waste does not spilt out

d) While carrying the bag containing infectious waste it has to be seated / tied.

e) The bags containing infectious waste should be collected at the centralized infectious waste been located near the incinerator and disposed of by incineration.

- **Precaution in Handling Sharps**

As most injuries are caused by sharps, their proper handling need not be over emphasized

a) All the employees working inside the hospital must be vaccinated against Hepatitis B

b) All the workers should put on gloves while dealing with infectious waste especially sharps.

c) Sharps should not be left casually on countertops, food trays, on beds as grievous injuries can result

- **Safe Disposal of Waste**

Waste will be handed over to the Waste Treating Unit in the following manner:

a) All waste held in the storage bins will be wheeled up to the garbage truck itself. This will be done by the

b) Hospitals housekeeping staff.

c) Waste plastic bags, whether Red, Blue, Yellow or Black will not be opened in the collecting truck, but will be stored and transported out of the hospital premises directly.

d) The contractors' garbage handlers will wear heavy duty gloves, mask, and rubber boots while transferring waste from the hospitals bins to the truck.

e) Transfer of waste to the truck will be overseen by security.

f) Security staff will maintain a log book which will document, the date, and weight of the waste collected by the contractor.

g) Waste will be disposed of every 48 hrs.

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

M.G.M Medical College and Hospital, Kamothe	Human Resource Management		
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CONTENTS

Sr.No	Standards
HRM 1	The organization has a documented system of human resource planning
HRM 2	The organization has a documented procedure for recruiting staff and orienting them to the organisation's environment.
HRM 3	There is an ongoing program for professional training and development of the staff
HRM 4	Staff are adequately trained on various safety-related aspects.
HRM 5	An appraisal system for evaluating the performance of an employee exists as an integral part of the human resource management process.
HRM 6	The organization has documented disciplinary and grievance handling policies and procedures.
HRM 7	The organization addresses the health needs of the employees
HRM 8	There is documented personal information for each staff member.
HRM 9	There is a process for credentialing and privileging of medical professionals, permitted to provide patient care without supervision.
HRM 10	There is a process for credentialing and privileging of nursing professionals, permitted to provide patient care without supervision.

HRM 1 The organization has a documented system of human resource planning

I. SHORT TITLE

This policy shall be called '**Revised Manpower Planning, Recruitment & Selection Policy'**.

II. OBJECTIVES

The objectives of manpower planning are very wide and varied.

The most important objectives are as follows:

1. Ensuring maximum utilization of personnel/employees.
2. Assessing future requirement of the organization.
3. Determining requirement sources.
4. Determining training requirement for employee development, management development and organization development.

III. POLICY

Manpower planning is defined as a technique for the procurement, development, allocation and utilization of human resource in a Hospital/organization.

Manpower planning/management is basically concerned with having the right type of personnel for right job at the right time

- Gender, caste discrimination will not be tolerated in MGM Medical College Hospital, Kamothe. Best available talent would be absorbed without giving any consideration to region, religion and race.
- While merit would be the main criteria for filling up a vacant position, seniority and past performance shall be kept in mind.

IV. PROCEDURE

MANPOWER PLANNING

- Manpower requirements of each department / section of the Hospital shall be determined by implementing efficient manpower ratios, conducting work-studies etc.
- The manpower requirements so arrived, after approval of the Medical Director, shall constitute the approved strength of the department/ section and shall form the basis of manpower planning of the department/section. All recruitments shall be as per the approved strength of each department/section.
- Any department desirous of filling an approved vacancy shall send a requisition to the Medical superintendent. Medical superintendent will attempt to locate a person from the HRD database. In case of non-availability of a suitable person from the internal sources, outside sources like advertisements, recruitment agencies, websites, educational institutions, personal contacts etc shall be used.

V. RECRUITMENT

Hospital had framed a recruitment policy for the guidance of the human resource department. The following points should be kept in mind for the recruitment and selection of employees.

Internal vs. external recruitment

Internal recruitment implies the promotion and transfer of employees within a Hospital to fill a vacancy.

External recruitment implies recruitment of an employee from the outside the Hospital.

JOB SPECIFICATIONS:

Sr. No	Department (s)	Category(s)	Qualification (s)	Experience required (years)	Skill required
1	Administration	Medical Superintendent	MBBS,MS,MD	10 years as Professor	Medical Administration
		Medical Administrator	MBBS, DCH	5 years	Medical Administration
		Chief of Quality	BDS/MBBS	5 years	Medical Administration
		Chief Administrative Officer/ Deputy Administrative Officer/ Asstt. Administrative Officer	Graduate with MBA (HR)/PGDHA	5years/3 years	Administration
		Department In-charge	Graduate with MBA	3 years	As per Department
		Medical Social Worker	Graduate with MSW	2 years	Experience in Medical Social Worker
		House Keeping Supervisor	SSC/HSC/Graduation	2 years	Supervisory
		MRD Incharge	Graduation/MSCIT	2 years	Experience in Medical Record Department
		Dietician	Graduate with Nutricians & Diet	Fresher/ 2 years	Experience in Dietary Services
		Time Keeper	HSC/Graduation	Fresher/ 2	Experience in Time

			MSCIT, Typing	years	Keeping
		Clerk	Graduation/ MSCIT	Fresher/ 2 years	Clerical Experience
		Accountant	Commerce Graduate/Post Graduate/ MBA (Finance)	2 years	Accounts Experience
		Store Keeper	Graduate with diploma in Store management	2 years	Experience in Store
		Tailor	SSC/ Diploma in Tailoring	Fresher/ 2 years	Tailoring Experience
		Barber	SSC	Fresher/ 2 years	Experience as Barber
2	Nursing	Nursing Superintendent	M.Sc / PHD in Nursing	15years	Nursing Administration
		Deputy Nursing Superintendent	M.Sc / PHD in Nursing	12 years	Nursing Administration
		Assistant Nursing Superintendent	M.Sc / PHD in Nursing	10 years	Nursing Administration
		Nursing Supervisor	GNM./ B.Sc./ M.Sc / Diploma/Degree in Nursing Administration.	10 years	Nursing Administration and supervision
		Ward Incharge	GNM./ B.Sc./ M.Sc / Diploma/Degree in Nursing Administration.	10 years	Nursing Administration, management and supervision
		Senior Staff Nurse	GNM./ B.Sc./ M.Sc / Diploma/Degree in Nursing Administration.	8 years	Nursing Expertise
		Staff Nurse	GNM./ B.Sc./ M.Sc.	Fresher/ 2 years	Nursing Expertise
		Nursing Asstt.	Certification Course of Nursing Aid	Fresher/ 2 years	Nursing Aid
3	Technical Services	Bio-medical Engineer	Diploma/ Degree in Bio-medical Engineering/ Electronics & Telecommunication	Fresher/ 2 years	Technical Skill for maintenance of Hospital Equipments

		Hospital Maintenance Supervisor	Diploma/Degree in Civil Eng.	5 years/ 2 years	Technical Skill for handling Civil maintenance jobs
		Fire & Safety Supervisor	Diploma/Degree in Safety	5 years/ 2 years	Technical Skill for handling Fire & safety functions
		HVAC & Electrical Supervisor	Diploma/ Degree in HVAC/Electronics & Telecommunications	5 years/ 2 years	Technical Skill for handling HVAC functions
		Pharmacist	D. Pharm /B.Pharm/M.Pharm	Fresher/ 2 years	Experience in Pharmacy
		Blood Bank	Graduate with DMLT	Fresher/ 2 years	Technical Skill for handling Blood Bank equipments
		Central Pathology Labrotary	Graduate/ DMLT	Fresher/ 2 years	Technical Skill for handling Lab. equipments
		Radiology	Diploma in Radiology Technology/B.Sc.MIT & MCVC/HSC & Certificate in EEG & PFT	Fresher/ 2 years	Technical Skill for handling diagnostic equipments
		CSSD	Graduate/Diploma/Degree in CSSD	Fresher/ 2 years	Technical Skill for handling CSSD equipments
		Cath Lab.	Graduate with Degree in Cath lab	Fresher/ 2 years	Technical Skill for handling Cath Lab. equipments
		Dialysis	Graduate with Certificate course in Dialysis	Fresher/ 2 years	Technical Skill for handling Dialysis equipments
		HVAC	ITI in HVAC/ Air Conditioning.	Fresher/ 2 years	Technical Skill for maintenance HVAC Plant
		Anaesthesia	Graduate/ Diploma/Degree in Anaesthesia	Fresher/ 2 years	Experience in Anaesthesia
		Operation Theater	Diploma in Operation Theater	Fresher/ 2 years	Co-ordination
		Driver	SSC/HSC/Driving Licence/ Bus Badge	5 years	Driving
		Telephone Operator	Graduate/ Telephone Operator Course/MSCIT	Fresher/ 2 years	Telecommunication

4	Maintenance Services	Electrician/ Wireman	ITI in Electrician/ Wireman Trade	Fresher/ 2 years	Technical Skill in Electrician/ Wireman Trade
		Plumber	ITI in Plumber Trade	Fresher/ 2 years	Technical Skill in Plumber Trade
		Carpenter	ITI in Carpenter Trade	Fresher/ 2 years	Technical Skill in Carpentry Trade
		Welder	ITI in Welder Trade	Fresher/ 2 years	Technical Skill in Welder Trade
		Lift Operator	SSC/HSC/ITI	Fresher/ 2 years	Technical Skill in operating Lifts
		Telephone Mechanic	Diploma in Telecommunication	2 years	Technical Skill for handling Telecommunication System

VI. CATEGORIES OF THE EMPLOYEES:

- **Administration**:
  Medical Superintendent, Medical Administrator, Administrative Officer, Medical Social Worker, House Keeping Supervisor, MRD Incharge, Dietician, Dept. Incharge, Time Keeper, Clerk, Accountant, , Store Keeper, Tailor, Barber.

- **Nursing**:
  Nursing Superintendent, Deputy Nursing Superintendent, Assistant Nursing Superintendent, Supervisor, Ward In-charge, Senior Staff Nurse, Staff Nurse, Nursing Assistant.

- **Technical Services:**
  Bio-medical Engineer, Supervisor Hospital Maintenance/Fire & Safety /HVAC & Electrical, P&O, Pharmacist, Technicians of Blood Bank/Pathology Laboratory/Radiology Dept/CSSD/Cath Lab/Dialysis/HVAC/Anaesthesia/Operation theatre, Driver, Telephone Operator

- **Maintenance Services:**
  1. Electrician/Wireman
  2. Plumber
  3. Carpenter
  4. Welder
  5. Lift operator
  6. Telephone Mechanic

- **PAY SCALES:**

  All appointments are made based on the approval of the Medical Director, on consolidated salary/Minimum wages and in the following pay Scales:

  1. Rs.9300-34800
  2. Rs. 5200-20200
  3. Rs.4440-7440

CREATION/ABOLITION OF POSTS

The Competent Authority is empowered to create or abolish any post in the Hospital depending upon the requirement/circumstances.

SELECTION COMMITTEE:

Category	Composition of Selection Committee	Approving Authority
Medical Superintendent	Medical Director Vice-Chancellor Dean	Medical Director
Nursing Superintendent/ Deputy Nursing Superintendent/ Assistant Nursing Superintendent	Medical Director Dean Nursing Director Medical Superintendent	Medical Director
Medical Administrator Chief of Quality Head Quality Head	Medical Director Dean Medical Superintendent	Medical Director
Chief Administrative Officer/ Deputy Administrative Officer/ Asstt. Administrative Officer	Medical Director Dean Medical Superintendent	Medical Director
Department In-charges	Medical Director Dean Medical Superintendent	Medical Director
Medical/ Paramedical Staff	Medical Superintendent Respective HOD Chief Administrative Officer Asstt. Admin. Officer-HR	Medical Director
Nursing Staff	Medical Superintendent Nursing superintendent Chief Administrative Officer Asstt. Admin. Officer-HR	Medical Director

STEPS OF SELECTION

The steps which constitute the employee selection process are as follows:

1. Verification of the documents of the candidates by HR.
2. Pre-employment tests – written/oral/practical.

   For Nursing Staff Written Test.

Drivers, driving test.

3. Interview by selection Committee
4. Medical examination
5. Check of reference (where ever applicable).
6. The recommendations of the selection committee to be submitted to the Medical Director for approval
7. Issue of appointment letter stipulating detailed terms & conditions.

JOINING FORMALITIES (Within Scheduled time)

- Every employee on joining would be required to fill up the statutory and administrative forms.
- Following certificates/documents are to be collected from the incumbent at the time of joining:-
    1. All academic mark sheets/ certificates (High school onward).
    2. Date of birth certificate.
    3. Three passport size photographs.
    4. Experience and salary certificate/slip & Relieving letter from previous employer (if any).
    5. Pan card, and Adhar Card.
    6. Medical Council of India registration certificate for doctors.
    7. Nursing Council of India registration certificate for nurses.

ANNEXURES

1. **Job Requisition letter/form.**
2. **Interview assessment sheet.**
3. **Reference check letter (format)**
4. **Employees Health Checkup Record (Pre/Annual Employment Health checkup form.)**

1) PROBATION AND CONFIRMATION:

In the terms of appointment the following Rules will govern the probation and confirmation of employees :

- On the basis of new appointment, the employee shall be placed on probation for a period of one/two years, during which period the performance will be watched carefully with a view to determine the confirmation against the regular posts.
- The period of probation may be extended at the discretion of the competent authority.
- Every employee appointed in the Hospital's service will be issued with formal order of confirmation on satisfactory completion of probation period or the extended period of probation, as the case may be. The employee will be considered to be continuing on probation until so confirmed in writing.

If during the probation period or extended period of probation, the performance, progress and general conduct of employee are not found satisfactory or upto the standard required for the post, his/her services are liable to be terminated at any time without notice and without assigning any reason therefor.

2) ANNUAL HEALTH CHECKUPS :

- All employees are required to undergo the annual health checkups.
- Similarly, all canteen employees are required to undergo the annual health checkups.

3) REFERENCE CHECK

Reference check-ups shall be made for employees recruited at senior levels and also for those employees who are recruited for sensitive jobs.

4) ANTECEDENT POLICY:

Verification of Character and Antecedents: Appointment to any post in the Hospital shall be subject to the satisfactory verification of character and Antecedents, through the following documents:

1. Police verification
2. Passport
3. Driving Licence
4. Pan Card
5. Aadhar Card
6. Ration Card

5) LEAVE:

The Leave Rules issued by MGM Institute of Health Sciences will be followed. (A copy of the MGMIHS Rule is attached)

6) HOURS OF WORK :

Every employee of the Hospital shall be required to work as per working hours notified by the Hospital, from time to time, in the form of circular and office order.

7) CHANGE OF NAME:

The employee must notify to the Management, immediately, of any change in the name & residential address as recorded at the time of initial appointment. (with a copy of Government Gazette is attached for ready reference).

8) CHANGE OF ADDRESS:

The employee must notify to the Management, immediately, of any change in the residential address as recorded at the time of initial appointment.

9) TRANSFERS:

a) The employees shall be liable to be transferred at the discretion of the Management from one work/ department /section or station to another.

b) The employees shall also be liable to be transferred to any of the institutions run by the MGM in or outside the state of Maharashtra.

10) ISSUE OF CERTIFICATES :

A Service Certificate (i.e. Still Working Certificate, No Objection Certificate) shall be issued on request to an employee at the time of leaving or termination of his/her service, resignation or retirement.

11) TREATMENT OF UNAUTHORISED ABSENCE:

An employee, who is unauthorised absent from duty, shall not be entitled to pay and allowances during the period of such absence besides disciplinary action. The unauthorised absence in a year will reflect on the privilege/ Earned Leave for the next year.

12) CONSEQUENCES OF UNAUTHORISED ABSENCE :

The consequences of unauthorised absence from duty, which is not condoned in any manner, would be as follows :

1. **PAY AND ALLOWANCES:**

   No pay and allowances are admissible during the period of unauthorised absence.

2. **INCREMENT:**

   The period of such unauthorised absence, would not be counted for increment.

3. **EARNED LEAVE :**

   The period of unauthorised absence, would not be counted for Earned leave.

4. **TERMINATION OF SERVICES:**

   If an employee remains absent without any intimation or prior permission for a continuous period of one month, he/she will be deemed to have abandoned his/her job and his/her services will be terminated by following due process of law.

RETIREMENT AGE:

1. The retirement age of the employees will be 58 years.
2. No provident fund deductions will be made from the salary, from the date of retirement.
3. The employees can be appointed on approval of Competent Authority on yearly basis, if required by the Mahatma Gandhi Mission Management. (A copy of Office Order of the Retirement is attached for ready reference)

HRM 2 The organization has a documented procedure for recruiting staff and orienting them to the organisation's environment

I. SHORT TITLE

This policy shall be called '**Revised Induction/Orientation Program Policy'**.

II. OBJECTIVES

The objectives of policy are as follows: -

1. To develop realistic job expectations, positive attitudes and job satisfaction.
2. To reduce anxiety and employee turnover.
3. To reduce time of supervision of supervisor.
4. To develop a sense of belongingness, and
5. To adopt the culture of the Hospital.

III. SCOPE

Induction has widened in scope so that new employees feel comfortable in the new surroundings, overcome the feeling of strangeness and adopt themselves fast according to the policy, culture, environment and working techniques of the Hospital.

IV. PROCEDURE

INDUCTION BY HUMAN RESOURCE

All new employees on the Rolls of the Hospital shall attend a New Employee Induction Training (NEIT) within 15 days of joining the Hospital.

This covers

- A brief history of the Hospital.
- It's aims and objectives.
- The terms and conditions of the employment, amenities and welfare facilities available
- Hospital policies.
- An explanation of service available to the employee in the Hospital.
- The attitudes expectation from him/her with regards to patients and visitors.
- The names of key officials.
- The Orientation of all the departments of the Hospital.
- Fire precautions and safety regulations.
- Hospital Infection control.
- Accreditation standards,
- Patients' Rights & Responsibilities'
- Employees' Rights & Responsibilities'
- Disposal of Bio-medical Waste,
- Duties of the individuals in writing, and
- General discussion

1. INDUCTION BY DEPARTMENT HEAD

This covers

- An introduction to the department.
- The location of the changing room, rest room , toilet etc.
- The use of lifts , telephones.
- An explanation of the job description of others.
- An explanation of his/her own job description.
- An introduction to all the supervisors in the department and other staff.
- A visit to the department, and
- General discussion

2. DESCRIPTION OF THE PROCEDURE

On the first day of the joining, employee has to report to the HR Department for following process:

- Bank Formalities
- Submission of Documents/Forms

3. ACTIVITY AND RESPONSIBILITY

Sr. No	Activity	Responsibility
1.	Joining formalities	Assistant Administrative officer - HRD
2.	Handing over of documents and it's explanation. • Appointment letter • Joining report • Employee hand book • Job description • Code of conduct	Assistant Administrative officer - HRD
3.	Human resource induction :- • Introduction to Hospital • Vision, Mission and values of Hospital • Hospital Round for Orientation of the all the Departments • Introduction of Key Responsible personnel of Hospital. • Scope of services. • Emp. Rights & Responsibilities. • Probation period. • Leave Rules & attendance compliance. • Patient Rights & responsibilities. • Annual Performance Appraisal	Assistant Administrative officer - HRD

	• Pre emp. & Annual Health Checkup and Vaccination, • Grievance Policy and • Hospital's Committees.	
4	Introduction to accreditation standards	**NABH – Coordinator**
5	Hospital Infection control • IC Team • BMW Management • Hand Hygiene • Needle stick injury • HAZMAT • Quality Indicator of HIC • Audit of HIC	**Infection control Nurse / Infection control officer**
6	Hospital Disaster & safety	**Fire& Safety Officer/Supervisor/**
7	Basic Life support	**Fire& Safety Officer/Supervisor/**

4. DOCUMENTATION

All Induction records are kept in the personal files of the employees, which are maintained by Assistant Administrative Officer – HRD

ANNEXURE

1. Induction Form

HRM 3 There is an ongoing program for professional training and development of the staff

I. SHORT TITLE

This policy shall be called '**Revised Employees' Training and Development Policy'**

II. OBJECTIVES

The objectives of policy are clearly defined and communicated.

The training policy indicates how the training will be carried out?, who will be responsible for its administration?, who will bear the cost?, etc.

Main objectives of training and development are as follows:-

1. Rendering better service to patients.
2. Reducing waste of time
3. Filling higher posts.
4. Promoting safety measures.
5. Teaching employees to efficiently operate new machines which are installed or are likely to be installed in department.
6. Constantly developing manpower to meet the current as well as future needs of the Hospital.
7. Ensuring effective utilization of human resources.
8. Increasing the performance level of employees and developing them in such a manner that they can rise to the positions of higher responsibilities.
9. Integrating individual goals with the Hospital goals for creating a climate so that an individual employee can best achieve his goals by attaining the goals of the Hospital.
10. Updating knowledge of employees.
11. Developing human skills of employees for overall better performance, and
12. Stabilizing workforce.

III. ABBREVIATIONS (IF ANY)

L&D**:-**Learning and Development

IV. SCOPE

Hospital wide

V. PROCEDURE

Hospital is made aware the employees on the Occupations Safety aspects of the possible risks involved and the preventive actions to avoid risks. For example: needle stick injury, Blood/Body Fluid Exposure, Radiation exposure, Bio-medical waste management, Fire and safety. In Hospital, 4 types of training programs are provided. These are provided by the management according to employees requirement.

1. **Entry Training**

   It refers to the initial training provided to employees at the time of joining the Hospital known as Induction program (HRM/002)

2. **Job training**

   It is provided to the employees with the object of increasing their knowledge about their jobs, and also to enhance their efficiency. It enables employees to know the correct methods of handling the machines and materials at their jobs. Skills are taught through a mixture of demonstration, explanation and practice. The teaching is geared to the job. There is a continual process of correction of errors made, and checking that the trainee understands what is taking place.

3. **Refresher training**

   It is arranged through short term courses for the old employees to keep abreast of the latest development in their fields.

VI. DETERMINING TRAINING NEEDS

It is the duty of Head of the department to determine the training needs of employees. The first step in determining training needs is to obtain evidence of needs. This evidence is gathered from various sources such as training need analysis form, Annual Performance Appraisal Form, exit interviews, complaints from supervisors and managers, staff turnover rate, complaints from patients and visitors , etc.

As soon as the training needs are identified, suitable training programs are arranged by Human resource department.

VII. EVALUATION OF TRAINING

A contents check are done to see that whether the objectives and contents of training Programs are consistent with the aims and current needs of the Hospital , and whether the objectives are being achieved economically.

ACTIVITY AND RESPONSIBILITY

Activity	Responsibility
• Actively commit to L&D across the organization. • Recognize the benefits of investing in L&D activities for all employees. Model and facilitate the concept of investment in the development of hospital employees to improve the performance of the Hospital. • Encourage research into existing L&D best practices both internal as well as external to hospital. • Monitor learning effectiveness in hospital using quality and reliable data from a variety of sources. Endorses monitoring and evaluation at different levels.	Medical superintendent /Admin Assistant administrative officer - HRD
• Identify and plan L&D opportunities that involve all parts of the Hospital for employees at all levels. • Identify quality and consistent L&D approaches that align with departmental plans and Hospital agreements. • Incorporate best practice concepts, standards and frameworks into L&D policy development and strategies hospital. Support the development of L&D practitioners. • Model and promote the use of evaluation as a core component of any L&D strategy. In collaboration with the HR, review available data and analyze reports related to L&D activities	HOD's of the Department

DOCUMENTATION

1. Training needs analysis form.
2. Training schedule.
3. Training attendance sheet.
4. Training feedback form.
5. Pre/Post – test (if any).

HRM 5 Appraisal System For Evaluating the Performance of an employee

I. SHORT TITLE

This policy shall be called '**Revised Annual Performance Appraisal Policy'**

II. OBJECTIVES

The objectives of the Performance Appraisal Policy are as follows:

1. To assess work performance as well as monitor the work progress of employees.
2. To facilitate placement of employees in accordance with their suitability for different types of assignments.
3. To provide an objective basis for determination of merit, efficiency and suitability for purposes of promotion.
4. To identify areas requiring exposure for Training/ Development.
5. To plan the career growth of employees.

III. EVALUATION

The Performance Appraisal Policy seeks to evaluate :

1. The work performance of an employee on the present job in relation to the expected levels of performance, both qualitative and quantitative.
2. The extent of development achieved by the employee during the period under review.
3. To evaluate behavioral attributes, attitudes and abilities.
4. To evaluate potential for assuming higher responsibilities.

IV. SCOPE:

The Performance Appraisal Policy shall cover:

1. All regular employees of the Hospital.
2. Performance during the calendar year i.e. for the twelve months period from 1st January to 31st December
3. Appraisal year and coverage
    a) The Appraisal Reports are required to be filled in, in respect of all the employees who have served for a period of at least three months in a year.
    b) The Appraisal System will be on a five-point scale, i.e.
        - Excellent
        - Very Good
        - Good
        - Satisfactory
        - Unsatisfactory

V. RESPONSIBILITY

- The Medical superintendent,
- Concerned HODs / Incharges / Supervisors.
- Human Resource Department,

VI. PROCEDURE

- HR Department will issue Blank Annual Performance Appraisal form to all the employees for the period from January to December, on or before 15th January of the following year.
- The employees will fill up their portion and submit to HR Department.
- HR Department will forward the same to the concerned HODs for giving their ratings.
- The concerned HODs will forward it (duly signed) back to the HR Department.
- HR Department will forward the same to the Medical Superintendent for his perusal and signature.
- The Annual Performance Appraisal forms duly completed will be filed in the personal files of the employees.

ANNEXURE: Annual Performance Appraisal Form.

HRM 6 Grievance Handling

I. OBJECTIVE:

The objective of grievance redressal policy is to provide easily accessible machinery for settlement of grievances and to adopt measures as would ensure expeditious settlement of grievances of all regular employees leading to increased satisfaction on the job and resulting in improved productivity and efficiency of the Hospital.

II. APPLICABILITY

The policy will cover all regular employees of the Hospital.

III. DEFINITION

'Grievance' for the purpose of the policy will only mean a grievance relating to any individual employee arising out of the implementation of Hospital's policies, rules or Management's decision. It can include matters relating to wage payments, overtime, leave, transfer, promotion, seniority, work assignment, working conditions, increment, extension of benefits under Rules, interpretation of Service Rules/Agreements etc. of an individual.

IV. SCOPE

The grievances pertaining to or arising out of the following shall not come under the purview of the grievance procedure :

a) Annual Performance Appraisal/Confidential Reports
b) Matters relating to collective dispute/bargaining such as wage and allowances, hours of work and other benefits.
c) Cases relating to disciplinary matters (since such grievances Will be dealt with in terms of Standing orders).
d) Where the points are of general applicability or of considerable Magnitude.

If the grievance arises out of an order issued by the Management, the such order shall first be complied with before an employee takes recourse to the grievance procedure. If there is a long time lag between the issue of order and date of enforcement the grievance procedure may be invoked but orders must nevertheless be complied within the date of enforcement.

Grievance in case of Heads of Department will not however fall within the purview of the Grievance Redressal Committee. In their cases, the individual grievance may be taken up with the Medical Director.

V. PROCEDURE

Subject to the provisions herein contained, individual grievance of the employee shall be processed and dealt with in the following manner:

Stage - 1

An aggrieved employee may in the first instance meet his/her immediate superior and present the grievance orally/written to him within 3 days of the occurrence of

the grievance. The immediate superior will give a personal hearing and try to resolve the grievance at his level within 5 days.

In case the employee is not satisfied or he/she does not get an audience with his/her superior within the prescribed time, he/She can present the grievance in the prescribed form to HR Department within5 days. The HR shall give a personal hearing to the aggrieved employee and discuss with him/them the grievance in detail and give a reply within 5 days of the receipt of the grievance.

Stage - 2

In case the employee is not satisfied with the decision communicated to him at Stage - 1 or fails to receive any reply within the stipulated period, he may submit his grievance within a period of 7 days to the Medical Superintendent in the prescribed form. The Medical Superintendent may if he so desires personally discuss the grievance with the Head of the Department and the aggrieved employee before giving his final decision.

The aggrieved employee will be replied within 15 days of his grievance at Stage -2.

Stage - 3

If the employee is not satisfied or fails to get a reply within the stipulated period at Stage - 2 he may present his grievance in the prescribed proforma within a period of 7 days. At this stage the grievance will be referred to the Grievance RedressalCommittee constituted by the Management as under :

Chairperson: Dr (Lt. Gen) K. R. Salgotra- Medical Superintendent

Member Secretary: Mrs. KulwantKaur- Assistant AdministrativeOfficer (HRD)

Members:

- Dr. Ujwala Maheshwari-Director Pathology Lab.
- Dr. Shaileja –Associate Professor, Dermatology Department
- Mrs. Padmaja Dhawale- Nursing Superintendent
- Mrs. Swati Madhavi-Dy. Admin. Officer

  Aggrieved employee if he so desires to attend

The said Committee will meet at regular intervals to deliberate upon all such grievances as are addressed to it.

Any grievance referred to the said Committee will be processed and the decision(regarding punishment according to the severity of the incident)of the Committee will be communicated to the aggrieved employee within 30 days.

Stage – 4 <u>APPEAL</u>

In case the employee still remains dissatisfied with the decision of the Grievance Redressal Committee he may appeal to the Medical Director within a period of 7 days from the date of receipt of the decision of the Grievance Redressal Committee. The decision of the Medical Director will be communicated to the aggrieved employee within 15 days from the receipt of his appeal and his decision regarding punishment will be final and binding on the aggrieved employee and the Management.

VI. RECORDS AND FORMS:

- File (Filled form , incident report if any , investigation report if any)
- Complete set of forms (Grievance form, incident report, investigation report, memos, note) in Grievant & Respondent personal file.
- Meeting attendance sheet &Minutes of the Grievance Redressal committee.

HRM 6 Disciplinary handling policies and procedures.

I. OBJECTIVES:

- To maintain discipline in the organization for improving the employees morals as well as to increase the productivity which is the ultimate goal of any organisation.
- The discipline is of utmost importance for the harmonious working with a view to achieve Hospitals objectives.
- To follow the principles of natural justice.

II. SCOPE:

This policy applies to all employees of the Hospital (including probationers) with the exception of those staff covered by virtue of their terms and conditions of employment.

III. RESPONSIBILITY:

- All disciplinary action(s) to be initiated by Medical Superintendent.
- It is the responsibility of the concerned in-charges/Supervisors/Department Heads to ensure that the incident is reported to Medical Superintendent &HRD within 24 hours from the date of the incident.
- The gravity of the misconduct is to be judged by Medical Superintendent in consultation withthe Medical Director.
- HRD will investigate the matter in co-ordination with Administrative officer and Concerned Department Heads.

IV. GENERAL CONDUCT:

- Every employee shall confirm to and abide by the rules made applicable to him from time to time and shall comply with and obey the orders and directions, given to him. in the course of his official duties, by any person under whose jurisdiction, supervision or control he may, for the time being, be placed.
- Every employee shall, at all times, maintain absolute integrity and devotion to duty and shall conduct himself at all times in a manner which shall not bring bad name to the Hospital.
- Every employee, employed to supervise the work of other employees, shall take all possible steps to ensure absolute integrity and devotion to duty of all employees for the time being under his control and authority.

V. MISCONDUCTS:

The following acts and commissions on the part of the employeesshall amount to misconduct,as per Model Standing Orders provided under the Industrial Employment Standing Orders Act,1946.

1. Willful insubordination or disobedience, whether or not in combination with another or others, of any lawful and reasonable order of a superior;
2. Going on illegal strike or abetting, inciting, instigating or acting in furtherance thereof;
3. Willful slowing down in performance of work, or abetment or instigation thereof;
4. Theft, fraud, or dishonesty in connection with the employers' business or property or the theft or property of another workman within the premises of the establishment ;
5. Taking or giving bribes or any illegal gratification;
6. Habitual absence without leave, or absence without leave for more than tenconsecutive days or overstaying the sanctioned leave without sufficient ground or proper or satisfactory explanation;
7. Late attendance on not less than four occasions within a month;
8. Habitual breach of any Standing Order or any law applicable to the establishment or any rule made thereunder;
9. Collection without the permission of the Manager of any money within the premises of the establishment except as sanctioned by any law for the time being in force;
10. Engaging in trade within the premises of the establishment;
11. Drunkenness, riotous, disorderly or indecent behavior on the premises of the establishment;
12. Commission of any act subversive of discipline or good behavior on the premises of the establishment;
13. Habitual neglect of work, gross or habitual negligence;
14. Habitual breach of any rules or instruction for the maintenance and running of any department, or the maintenance of the cleanliness of any portion of the establishment;
15. Habitual commission of any act or omission for which a fine may be imposed under the Payment of Wages Act, 1936;
16. Canvassing of union membership, or the collection of union dues within the premises of the establishment except in accordance with any law or with the permission of the Manager;
17. Willful damage to work in process or to any property of the establishment;
18. Holding meeting inside the premises of the establishment without the previous permission of the Manager or except in accordance with the provision in the course of his work;
19. Disclosing of any unauthorised person any information in regards to the processes of the establishment which may come into the possession of the workman in the course of his work;

20. Gambling within the premises of the establishment;

21. Smoking or spitting on the premises of the establishment where it is prohibited by the employer;

22. Failure to observe safety instructions notified by the employer or interference with any safety device or equipment installed within the establishment;

23. Distributing or exhibiting within the premises of the establishment hand-bills, pamphlets, and such other things or causing to be displayed by means of signs or writing or other visible representation or any matter without previous sanction of the Manager;

24. Refusal to accept a charge-sheet, order or other communication served in accordance with these Standing Orders;

25. Unauthorised possession of any lethal weapon in the establishment;

[(z) Sexual harassment which includes such unwelcome sexual determined behavior(whether directly or by implication) such as:-

a) Physical contact and advances; or

b) a demand or request for sexual favours; or

c) sexually coloured remarks; or

d) showing pornography; or

e) any other unwelcome physical, verbal or non-verbal conduct of sexual nature.]

VI. SUSPENSION

1. What is suspension?

Suspension from duty means keeping an employee away from work-place temporarily for reasons of discipline. Suspension order does not mean removal from service. If a person is suspended, he continues to be in service but is in a state as it were of suspended animation.

2. When to suspend?

The suspension of an employee from duty often arises under the following three different types of situations.

3. Suspension pending domestic enquiry

If an employee has committed serious acts of misconduct such as assault, sabotage etc. and his presence inside the work premises poses a threat to the safety of the man and material, he may be kept under suspension immediately, pending investigations. This is called **Suspension Pending Domestic Enquiry.** At this stage, a suspension cannot be called a punishment. The charge-sheet must follow within 10 days of issue of suspension order.

4. Suspension Pending Courts Order

The Disciplinary Authority has the right to keep an employee under suspension, if he/she is accused in a court of law for any criminal offence, until the disposal of trial.

5. Suspension as Punishment

Even though an employee is not suspended pending enquiry, if it is decided to punish him by way of suspension for the acts of misconduct committed by him.the Disciplinary Authority may do so after the conclusion of enquiry in which case the suspended employee will not be entitled to any payment for the period of suspension since it is punishment imposed on him.

6. Status of Suspended Employee

a) During the period of suspension, the suspended employee shall not enter thework premises without the permission of the Disciplinary Authority or any other Authority competent to do so.

b) The suspended employee shall not leave the station without the written permission of the competent Authority.

c) The employee suspended pending enquiry shall be paid subsistence allowance as admissible to him under Standing Orders which will increase or decrease depending upon the merits of the case if the period of suspension get prolonged.

d) No leave shall be granted to the suspended employee during the period of suspension.

e) The suspended employee will not be paid subsistence allowance if he is engaged in any other employment.

f) If any employee suspended pending enquiry submits resignation, it is normally not accepted unless it is in the Hospital's interest.

7. Subsistence Allowance

The rate of subsistence allowance payable to the employee suspended pending investigation or inquiry into complaints or charge of misconduct against him/her is:

a. For the first 90 days of the 50 % of basic wages and dearness suspension periodallowance

b. For 90 days to 180 days of the 75 % of basic wages and dearness suspension period allowance

c. For the remaining days of the 100% of basic wages and dearness suspension period allowance

The payment of the above subsistence allowance will be subject to a written declaration by the employee concerned that he is not engaged in other employment.

If the suspended employee is found not guilty of the misconduct, he shall be paid the difference between the subsistence allowance already paid and the emoluments consisting of pay and allowances which he would have received if he had not been suspended.

VII. PRINCIPALS OF NATURAL JUSTICE:

1. The procedure for taking disciplinary action against any delinquent employee must be based on the principles of "natural justice" which again are in conformity with the principles of a Welfare State.

2. To hold an enquiry in conformity with the natural justice, the following conditions are to be met with :

a. The employee against whom enquiry is proceeded has been informed clearly of the charges levelled against him,

b. The witnesses are examined ordinarily in the presence of the employee in respect of the charges,

c. The employee is given a fair opportunity to cross-examine the witnesses,

d. The employee is given fair opportunity to examine his witness, including himself in his defence, if he so wishes;

e. e. The Enquiry Officer records his findings with reasons for the same in his report.

VIII. GUIDELINES FOR DISCIPLINARY PROCEDURE

1. DISCIPLINE AND INDISCIPLINE

i) Discipline means orderly behaviour--It means voluntary and willing compliance of Rule and Regulations and instructions and also development of right and habits of conduct in work with others at the work-place.

ii) Why do we want Discipline: Discipline is a must in any organisation for improving the employee's morals as well as to increase the productivity which is the ultimate goal of any organisation.

a) Discipline is of utmost importance for the harmonious working with a view to achieve Hospital's objectives.

b) It is the moral responsibility of the employer not to allow the minority of employees, who are in-disciplined to affect the life of the majority.

iii) How does Indiscipline arise?

In most of the cases, the indiscipline of a worker is the expression of his reaction to his environment.

Usually the causes of indiscipline are :

a) Lack of awareness of Hospital's Rules.
b) False promises made by superiors,
c) Absence of any procedures to handle grievances;
d) Action not taken when required;
e) Personal frustrations and misunderstandings.

There could be many other different reasons for indiscipline, depending upon individual differences.

iv) Corrective and punitive action

- Any case of indiscipline is basically a behavioral problem. It is, therefore, necessary that before taking punitive action, all efforts should be made to improve the behavior of the employee by correcting him through education. Counseling, persuasion and cautioning. However, if all the efforts to improve the employee fail, the Officer/Manager should never hesitate to reprimand the employee and if the misconduct is serious or has been repeated, he should report the matter to the superiors for appropriate disciplinary action.

IX. STEPS FOR TAKING DISPLINARY ACTION:

Step - 1

- All complaints arising, including those relating to unfair treatment or wrongful exacting of money on the part of the management, should preferably be referred to head of the department in which the employee is working.
- HOD will investigate and try to resolve the matter.
- Council the employee accordingly.
- If misconduct is minor and do not need further action Medical Superintendent can issue a warning letter.
  (HOD should submit the incident form along with action taken report, route cause analysis report if any and counseling form to HRD through Medical superintendent for record keeping.)
- In the event that the employee is not satisfied with the department head's decision and If HOD find the misconduct is major, the complaint should be referred to the Medical superintendent.
- Medical superintendent will assign an officer or committee to investigate an incident/complaint after the formal enquiry by the HRD.
- Medical Superintendent will take a decision of disciplinary action after taking feedback from investigating team/officer.
- Director will be informed accordingly.

STEP - 2

- The delinquent employee may be issued a letter through Medical Superintendent by the HRD mentioning the entire incident and asking for a written explanation within stipulated period of time.
- If the reply of the delinquent employee is found to be satisfactory, the matter may be closed by issuing a caution letter, warning him/her of dire consequences if the same is repeated again in the future.

STEP -3

- If the reply of the delinquent employee is found to be un-satisfactory, the delinquent employee may be issued a Charge-Sheet (Memo) by the Medical Superintendent in the capacity of Displinary Authority, keeping in view the principles of natural justice.

Hospital should also conduct a Domestic Enquiry to investigate the matter. An Enquiry Officer and Presenting Officer will be nominated by the Medical Superintendent.

- Based upon the enquiry proceedings and the final recommendation of the Enquiry Officer, the final decision should be taken by Medical Superintendent in the capacity of Displinary Authority.

STEP- 4

- If the nature of the misconduct is grave, the delinquent employee may be suspended with immediate effect prior to disciplinary action.
- Post enquiry an appropriate punishment to be awarded based upon findings of the enquiry proceedings and the same will be recorded in the Employee's personal records also.

X. PUNISHMENTS :

On the basis of the conclusions arrived at in the domestic enquiry, if it is found that the charges leveled against the employee are not proved, he/she may be exonerated and a letter to that effect may be issued. If any of the charges or all the charges are proved, then the appropriate punishment may be given to the employee. The minor and major punishments are given as under:

Minor Punishments :

a) Warning
b) Censure :
c) Fine
d) Stoppage of increment with or without cumulative effect
e) Suspension without pay up to 4 days

Major Punishments:

a. Demotion to junior post or lower grade
b. Discharge/ termination
c. Dismissal.

XI. APPEAL:

An employee may appeal against an order of punishment awarded by the Displinary Authority. An appeal shall be preferred within one month from the date of communication of the order appealed against. The appeal shall be addressed to the Appellate Authority. The appellate Authority shall consider whether the findings are justified or whether the punishment is excessive or inadequate and pass appropriate orders within one month from the date of the appeal. The Appellate authority may pass an order confirming, enhancing, reducing or setting aside the punishment awarded to employee by the Displinary Authority. For this purpose, the Medical Director will be the Appellate Authority.

HRM 7 Organization address health need of employee

I. SHORT TITLE

This policy shall be called '**Employees' Welfare Policy'**.

II. SCOPE

This Policy applies to all regular employees of the Hospital.

III. OBJECTIVES

The objectives of Employees' Welfare Policy are to provide the facilities to all employees working in Hospital.

WELFARE FACILITIES:

The following welfare facilities are provided to the regular employees of the Hospital

1. Diwali Gifts
2. Advance against Salary.
3. Crèche for the Children of the employees.
4. Annual Picnic.
5. Celebration of Cultural & other programs.
6. Conduct of Annual Health check-up at concessional rate.
7. Celebration of Foundation day of the Hospital.
8. Concessional Food.
9. The Employees and their families are getting treatment at concessional rate.
10. All employees get concession in fees of their children studying in the schools & colleges run by the MGM Institutes.
11. Eligible children of the employees are given preference in admission in the schools & colleges run by the MGM Institutes.
12. Hospital has its Staff Quarters for the essential employees.
13. Skill Development & Training Programs:

- Employees are encouraged to do higher studies while in service for their betterment on concessional fees.
- Fire fighting/BLS trainings are imparted to all employees periodically.

14. Uniforms/Aprons are provided to the following categories of the staff:
    a. Nursing
    b. Fire & Safety Supervisor
    c. Drivers
    d. Lift Operators
    e. Plumber
    f. Carpenters
    g. Electricians
    h. HVAC Technicians
    i. Technicians of Radiology, Blood Bank, Pathology Lab & Pharmacists.

Safety shoes are provided to the Maintenance services staff.

HRM 8 There is documented personal information for each staff member.

I. SHORT TITLE

This policy shall be called '**Revised Personal File Management Policy'.**

II. OBJECTIVES

To maintain the uniform personal record of all the employees, who joins the Hospital.

III. SCOPE

This policy is applicable to all permanent, temporary, trainees, apprentices and contract appointments.

IV. RESPONSIBILITY

Assistant Administrative officer – HRD

V. PROCEDURE

- The Personal File of each employee will be created from the date of his/her selection and will be maintained by HR Department.
- **The personal files of the employees will contain the following:**
    - Personnel information (Resume)
    - Reports pertaining to pre Employment Health Check-up
    - Credentials (attested copies)
    - Relieving Letter from earlier Employer
    - Experience Certificate from earlier Employer
    - Photo I.D and Address Proof
    - Training / Professional courses records
    - Reports pertaining to Annual Health Check-up
    - Passport size photograph
    - Job Description
    - Documents pertaining to disciplinary action
    - Annual Performance Appraisal Form
    - Counseling Forms
    - Increment, promotion letters
    - Resignation Letter
    - Relieving Letter
    - Experience/Still Working/ No Objection Certificate
    - No Dues Clearance Form
    - Employees Verification

VI. DOCUMENTATION

1. Personal files of the Employees.
2. List of Employees (hard copy & soft copy)

ANNEXURE

1. Check list of the documents.
2. Bio-data form.
3. Interview assessment sheet.
4. Joining report.
5. Reference check (format).
6. Medical examination record (pre – employment & Annual).
7. Job description (format).
8. Induction record.
9. Training record.
10. Annual Performance Appraisal form.
11. Counseling form.
12. Grievance handling form.
13. Leave record.
14. No Dues Clearance Form.
15. Employees Verification.

HRM 9&10 Credentialing and privileging Medical & Nurse

I. POLICY:

MGM Hospital Credentialing &privileging process shall be initiated to all Medical, paramedical and Nursing Staff to authorize them to admit, treat patient and provide other clinical services consistent with the requalification and experience.

II. PURPOSE:

To authorize the individual to admit and care for patients. To provide clinical services consistent with qualifications.

III. DEFINITION:

a. Clinical Privileging:

The term clinical privileging is defined as the process by which a licensed practitioner is permitted by laws and the facility to practice independently, to provide medical or other patient care services within the scope of their license, based on the individual 's clinical competences the determined by peer references, professional experience, health status, education, training, and licensure.

b. Independent Practitioner:

The term independent practitioner is any individual permitted bylaw and the facility to provide patient care services independently; i.e., without supervision or direction, within the scope of the individual's license and in accordance with individually granted clinical privileges.

c. Submission of Credentials by Candidate:

The medical professionals at the time of appointment shall be provided with the credentials form. He/she shall fill the form her/himself giving all information regarding his professional qualifications and past experience.

d. Credentialing:

It is the process of obtaining, verifying and assessing the qualification of a healthcare provider.

e. Privileging:

It is the process for authorizing all medical professionals to admit and treat patients and provide other clinical services commensurate with their qualifications and skills.

IV. SCOPE:

All doctors and nurses

V. RESPONSIBILITY:

Credentialing and Privileging Committee

VI. PROCEDURE

Credentialing, Privileging and Verifications

Introduction

The MGM hospital has defined prerequisite qualification for each and every position to be filled. The criteria includes the basic educational qualification required for each and every position, experience if any required, registration with professional bodies (such as MCI, NCI etc), special qualification in terms of training etc.

It is mandatory to follow the credentialing policy for filling any vacant post either by external recruitment or by internal recruitment. The policy also identifies the need for verifying the credentials so as to ascertain their gentility and there by avoid any fraudulent practices. Usually every employee is required to submit attested copy of the credentials as per the policy.

Clinical privileges:

- Clinical privileges result from the permission granted to a practitioner to provide medical and other patient care services within defined limits in a healthcare facility. They represent the range and scope of clinical responsibility that a practitioner may exercise in the facility. Clinical privileges are specific to the individual, usually in a single healthcare facility, and relate to the resources, equipment and staff available. Privileges granted are not automatically transferable to another facility.
- Privileges may be general (or core) in nature such as those in general practice involving family practice, or quite specific in defining complex areas of procedural medicine in which only a few highly qualified and skilled practitioners may be competent to practice.
- Clinical privileges may relate to admission and treatment of in-patients, treatment of outpatients, areas of clinical practice, use of facilities such as operating theatres and procedure rooms, use of specialized equipment and technologies, including diagnostic facilities, performance of specific operations or interventional procedures.

Assessment of credentials and delineation of clinical privileges:

The process of assessing the credentials of an applicant and recommending clinical privileges is one undertaken by medical practitioners who form a credentials and clinical privileges committee. Thus it is a peer process. The committee reviews the credentials of applicants, having regard to the needs and resources of the healthcare facility.

Recruitment and selection/appointment process:

The process of recruitment and selection/appointment is a formal mechanism, separate from the credentials and clinical privileges process, which grants a medical practitioner and Nursing staff the right to practice medicine within a health facility. It involves recommending a preferred candidate on merit from among competing applicants, taking into account the recommendations of the credentials and clinical privileges committee.

- Where it cannot be confidently established that an applicant has the necessary knowledge, skills and experience in the area of medicine, for which they are applying, based on curriculum vitae and referee reports, the applicant must undergo a period of supervision by a specialist in the area/s of medicine before being granted clinical privileges. The supervisor will be required to provide a written report in relation to the applicant's knowledge and skills.
- It is well recognized that Physicians frequently acquire skills and competencies that are outside their broad specializations, OR they may have a special interest for gaining expertise in a focused area within their specialty.
- At MGM, the policy will be to accept these special skills of Physicians as part of the credentialing process. It will **be the responsibility of each Physician** to be forth right in declaring his skills, based on evidence of additional training or experience and this will be approved by the Clinical Head.

- Further, it is expected that the Physician will exercise his clinical responsibilities **within the limits** of his competence except under extreme emergency situations in which case the Medical Superintendent will be involved.
- Further, when a Physician has acquired higher skills; say of a super specialty, he/she should restrict his clinical work to the domain of the super specialty and refer other treatment/procedures to his colleagues who are more familiar and have expertise in these.
- The privileges applied for should take into consideration the scope and support services provided by the hospital.

- In granting privileges, the training, qualifications and experience will be taken into consideration. For specialized procedures, or for privileges that are outside of the professional category, or not a normal part of the Physicians training, proof of additional training or experience maybe required.
- The clinical and institutional setting in which the training occurs, the case mix, available to trainees performing the procedures, and the number of procedures performed under supervision must all be considered when privileges are granted.

- **Quality assurance**:

  The Director Medical will have a list of clinical privileges of all the Physicians working in the facility and matching of work done versus privileges will be periodically audited as a part of the quality assurance activities.

Credentialing process

Activity and Responsibility

S.No.	Activities	Responsibilities
1	Credential form is filled by the employee and submitted to HR department	Employee
2	Inform Coordinator Privileging Committee, the number of staff whose clinical privileges need to be defined.	HR Manager
3	Meeting of the committee shall be called.	Secretary Privileging Committee
4	The privileges are approved after verifying the documents of the staff.	Credentialing and privileging Committee
5	The duly filled privilege form approved by the committee shall be signed by the concerned person and kept in personal file.	HR Head
6	Privileges of Nursing Staff shall be defined by the Nursing Superintendent	Nursing Superintendent
7	Privileges of Physicians shall be defined by Director Medical	Director Medical

M.G.M Medical College and Hospital, Kamothe	Information management system		
	Doc. No. NABH/MGMH/KAM/IMS	Effective Date: 01/01/2018	Revision No: 001
	NABH OE	Revision Date: 01/01/2018	Pages: 38

Prepared by :	Designation : IT Manager Name: MR. Rajesh Makhijani
Approved By :	Designation : Medical Superintendent Name: Dr. K. R. Salgotra
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CONTROL COPY HOLDERS	
Chief Of Quality	Dr. Gauri Shivani

CONTENTS

Sr.No	Standards
IMS 1.	Documented policies and procedures exist to meet information needs of the care providers, management of the organization as well as other agencies that require data and information from the organization.
IMS 2.	The organization has processes in place for effective control and management of data.
IMS 3.	The organization has a complete and accurate medical record for every patient.
IMS 4.	The medical record reflects continuity of care.
IMS 5.	Documented policies and procedures are in place for in place for maintaining confidentially, integrity and security of records, data and information.
IMS 6.	Documented policies and procedure exist for retention time or records, data and information.
IMS 7.	The organization regularly carries out review of medical records.

IMS 1. Documented policies and procedures exist to meet information needs of the care providers, management of the organization as well as other agencies that require data and information from the organization

.

I. POLICY:

All information pertinent to patient care and hospital administration must be well maintained both electronically and manually As Per Maintenance of Clinical Records Act in Maharashtra

II. PURPOSE:

To maintain the information related to patient care and hospital administration well across the hospital. The designated staff or individual must manage all the information properly.

III. SCOPE:

All data available in hospital

IV. RESPONSIBILITY:

All Hospital information

V. DISTRIBUTION:

Medical Records Department, IT department, All Nursing stations, All support service departments, All Patient care departments.

VI. ABBREVIATION:

Abbreviations are as follows:

1. HMS= Hospital Management System
2. IT= Information Technology
3. PNDT= Pre natal diagnosis Test
4. RTI= Right to information
5. LIC= Life Insurance Corporation
6. DHS= Department of Health Secretariat
7. CMO= Chief Medical Officer
8. OP=Outpatient
9. IP= Inpatient
10. M.R.D= Medical Records Department
11. I.C.D= International Classification of Diseases
12. MRN= Medical registration number
13. MLC= Medico Legal Case
14. EMRD= Electronic medical records digitization
15. UHID= Unique Hospital Identity
16. MRO= Medical Record Officer

17. ER= Emergency
18. MO= Medical Officer
19. MRN= Medical Registration Number
20. EMO= Emergency Medical Officer
21. CT= Computerized Tomography
22. MRI= Magnetic Resonance Imaging
23. EEG= Electroencephalography
24. EMG= Electromyography
25. MTP= Medical Termination of Pregnancy
26. PTCA= Percutaneous Transluminal Coronary Angioplasty
27. TPI= Total number of temporary pacemaker implantation
28. PPI= Total number of permanent pacemaker implantation
29. CABG= Coronary Artery Bypass Graft.
30. GRN= Good Receipt Note
31. PO= Purchase Order
32. MHO= Municipal Health Worker
33. HIV= Human Immunodeficiency Virus
34. GI= Gastro Intestinal

This information shall be kept in following

1. Electronic - Hospital Management System (HMS)
2. Medical records
3. Registers
4. Files

VII. PROCEDURE:

1. **Following guidelines shall be followed for effective management of information and data.**

1) The Hospital Software shall be able to incorporate, modify, add or delete the existing information in the System

2) There shall be a provision in the Software to update and retrieve the information as and when the need demands

3) The electronic information shall be stored such that only authorized personnel can gain access to it.

4) The Staff and other hospital personnel in general shall have access to the online information on HMIS after written/confirmed approval from their respective Departmental Heads.

5) The electronic system shall be subject to change as per the requirements of the personnel if the need arises

6) The information shall be kept appropriately secured by using passwords and online security systems effectively

7) The confidential information (esp., online policy documents, hospital statistics etc) shall be kept under strict security of limited personnel and on limited systems to prevent its misuse.

8) In case of power failure/system failure, there shall be provision of back up such that there is no risk of data loss from the electronic data storage system

9) Special cases, like patients and/or their relatives, third parties shall be allowed to see records (e.g.; medical records) only after a documented procedure has been adhered to

10) In case of breakdown of software system, keeping records in registers shall use manual system. These data shall be updated in software as soon as software starts functioning.

11) The departmental head shall mention corrective actions during faulty use by unauthorized personnel and the same shall be documented.

Following laws that are applicable for information management shall be abided

1. IT act 2000

2. PNDT act

3. Code of Medical Ethics

4. RTI act 2005

All information and data that are required to be contributed to external databases shall be maintained and communicated to appropriate authorities. This includes, sending birth and death statistics and notifiable diseases.

2. <u>REGISTRATION OF DEATHS</u>:

1) Death disposable certificate: to be issued in case of death in levels or ER

a) A provisional death certificate shall be issued to the patient's attendant

b) Hospital Death Disposal form shall be filled by the MO / consultant with signature and seal.

c) IPD Staff shall fill the Death Information form (Form No. 2, 4 issued by the registrar of births and deaths)..

d) In case a Patient does not collect the Death Disposal form from the hospital, it shall be retained in the MRD.

e) Death Information Dispatch Register shall be maintained in MRD (with received signature and seal of the registrar of births and deaths on the book).

f) The Attendant is responsible for collecting the Death Certificate from the municipal Corporation.

2) Brought dead certificate

a) No MRN shall be allocated for the brought dead patient.

b) All the Brought Dead cases are considered as Medico Legal Case and the police will be informed.

c) Hospital Death Certificate with required information shall be filled by the EMO(Emergency Medical Officer) and the “brought dead” seal will be placed in all copies.

d) Emergency department Staff shall fill the Death Information form (Form No. 2, 4 A, issued by the registrar of births and deaths). “Brought dead” seal with signature and seal of the Medical Records Officer will be placed where required and sent to the Registrar of births and deaths.

e) Emergency department shall be responsible for sending the Death information form (Form 2, 4 A) to Corporation.

f) Copy of Brought Dead information form shall be maintained in MRD (with received signature and seal of the registrar of births and deaths on the book).

g) The Attendant is responsible for collecting the Death Certificate from the MCGM.

In MRD (with received signature and seal of the registrar of births and deaths on the book).

Daily Deaths Cases shall be maintained in the register with the following entries:--

- Serial Number
- Date
- Admission Number
- Name of the Patient
- Age / Sex
- Date of Admission
- Type of Death (Institutional Death - occurring more than 48 hrs. & Non Institutional Death – occurring less than 48 hrs.

MODIFICATION OF PATIENT INFORMATION IN MEDICAL RECORD:

1. Any modifications to the patient's medical records will be done only in the MRD.

2. Patient / an authorized representative should be physically present for any such requests. No requests will be entertained over the phone.

3. Patient's / authorized representative's signature is required in the application before the request is processed along with the valid Identity proof.

4. For all such requests a valid proof of identification (passport, affidavit, ration card etc) should be produced in original with one photocopy to the medical records department.

5. The original document will be returned to the patient on completion of verification.

6. Any modification required in case of birth or death, will be processed and the MRD Staff shall send the details to the Department of Births and Deaths, Municipal Corporation through the patient / attendant Form to be filled: Name correction form printed on the Hospital's Letter head with Seal & Signature of the Medical Records Coordinator.

7. Approved corrections will be done in the MRD module and in manual records.

8. MRD Staff will scan the Name correction form and the required information for the correction, into the patient record.

3. MEDICO LEGAL CASES:

1) Cases to be considered medico legal are:

- Accidents
- Attempted suicides
- Homicides
- Death occurring under suspicious conditions
- Rape
- Assault
- Burns
- Snake bites
- BID

2) Medico legal cases are recorded in the register and intimation to the police is done and copy of same is handed over.

3) All investigation reports and evidential materials are to be preserved.

4) Details of the MLC will be documented in medical records by the medical officer.

5) Brought in dead cases are medico legal and intimation to the police is done by Emergency department.

6) MLC on admission, discharge to home, transfer to another hospital or death will be documented and the police will be intimated.

4. CERTIFICATE ISSUED FROM EMERGENCY DEPARTMENT:

a. Police intimation for Medico Legal Cases

MLC are recorded in the register and handed over to Local police and his PC number is recorded in MLC register maintained in Emergency department doctor and duly signed also on the print taken and in register.

b. Wound Certificate after discharge

- Police will bring the Request letter to MRD for Wound Certificate.
- Wound Certificate shall be processed as under:
- Emergency Department shall inform the MLC consultant who will fill and sign the wound certificate.
- Emergency Department shall affix the Hospital Seal in the required Place.
- When a Summons or Police Station sends a requirement for injury certificate it is prepared by the MRD and is issued to the Police and a Copy of the same is attached in the Case File.
- MRD Staff shall hand over the Wound Certificate to Police after obtaining their Signature

c. Life Insurance Claims

- Patient Attendant shall bring the Claim form and hand over to the Administration.
- Administration staff will fill the same by pencil and after approval by Consultant ,it is filled by pen including the patient's demographic information.
- The Original copy will be handed over to the Patient's attendant after obtaining the signature of the attendant on a Photocopy of the completed document.

Note: These records are generated based on the patient case history /and other documents received from various wings and department of the hospital

VIII. HOSPITAL PERFORMANCE STATISTICAL INFORMATION:

. The above Information can be obtained from the following Services on daily and monthly basis:

1. Out Patient Services

The following information is achieved through system (IT based data ,can be provided on request)

- Number with detail of outpatient Department and special clinics functioning in a hospital.

- Total Number of New Cases
- Total Number of Repeat Cases
- Total number of New & Repeat Cases.
- Specialty and Consultant wise Distribution of outpatients both New & Repeat Cases.

2. <u>In Patient Services</u>

1) Bed Complements

- Total No. of Beds
- Specialty wise breakup of beds.

2) <u>Admissions & Discharges</u>

- Total No. of Admissions
- Total No. of Discharges
- Sex-wise, Admissions & Discharges
- Specialty / Consultant wise Distribution of ADMISSIONS AND DISCHARGES.
- Hospital Days.

The above information is obtained through Computer and Manual Admission & discharge register, maintained at admission office.

3) <u>Deaths</u>

- Specialty – wise / Consultant wise, Sex wise DEATHS through Computer & Manual Register of Admission & Discharge Register.

5) <u>Operations / Operative Procedures</u>

On the basis of Operation Theatre register and annually compiled Monthly Report.

- Total Number of Operations performed
- Distribution of Major and Minor operations and their types (through Computer).
- Specialty / Consultant wise Operations performed.

6) <u>Laboratory Investigations / Test</u>

- Total number of investigations / test conducted.
- Types of investigations done.
- Total number of investigations conducted in the Departments of
  - Histopathology
  - Haematology
  - Microbiology
  - Biochemistry

7) <u>Imaging Department</u>

- Total Number of X-Ray examination
- Total Number of C.T.Scan

- Total Number of Ultra Sounds & Total no of PNDT
- Total Number of M.R.I. done
- Total Number of Mammography's done.

8) Department Of Gastro Enterology

Total Number of Endoscopies done

- Upper GI
- Lower GI
- Other Therapeutic Procedures.

9) Department Of Neurology

- Total Number of E.E.G. done
- Total Number of E.M.G. etc. Done

10) Blood Bank Services

- Blood donation done
- Blood transfusion given
- Blood grouping done
- Other related Blood Bank services done

11) Audiometry Services

- Number of Audiometry done
- Number of other Procedures.

14) Department Of Physiotherapy

- Total Number of Physiotherapy done of different types.

15) Department Of Nephrology

- Total Number of Dialysis done

16) Department Of Accident / Emergency Department

- Total Number of cases attended in the department.
- Total Number of Medico Legal Cases Registered.
- Total Number of Deaths.
- Total Number of cases admitted through Accident & emergency Department.

17) Department of Invasive Cardiac Lab

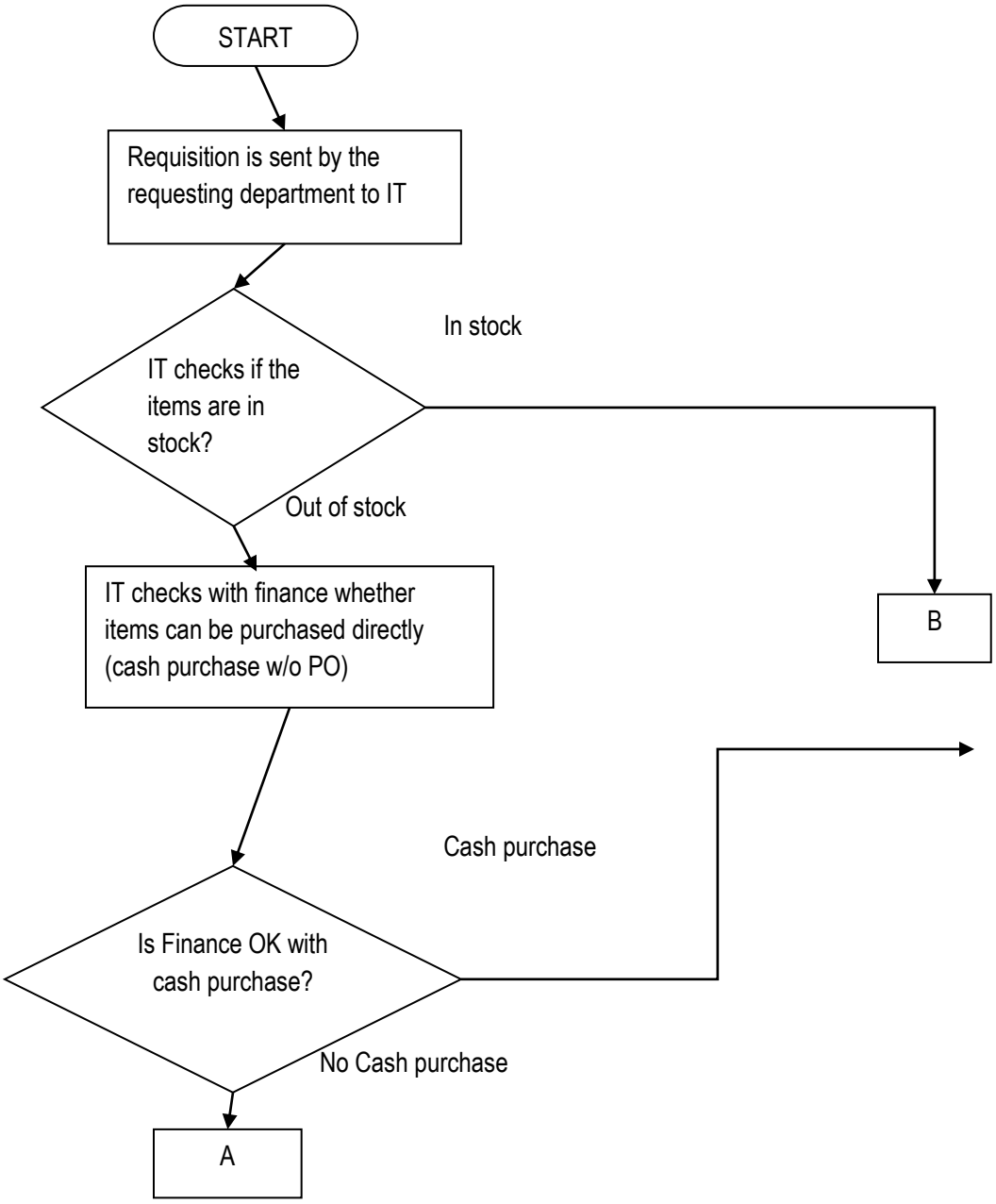
- Total Number of Coronary Angiographies.
- Total Number of Angioplasties (PTCA).
- Other Procedures.

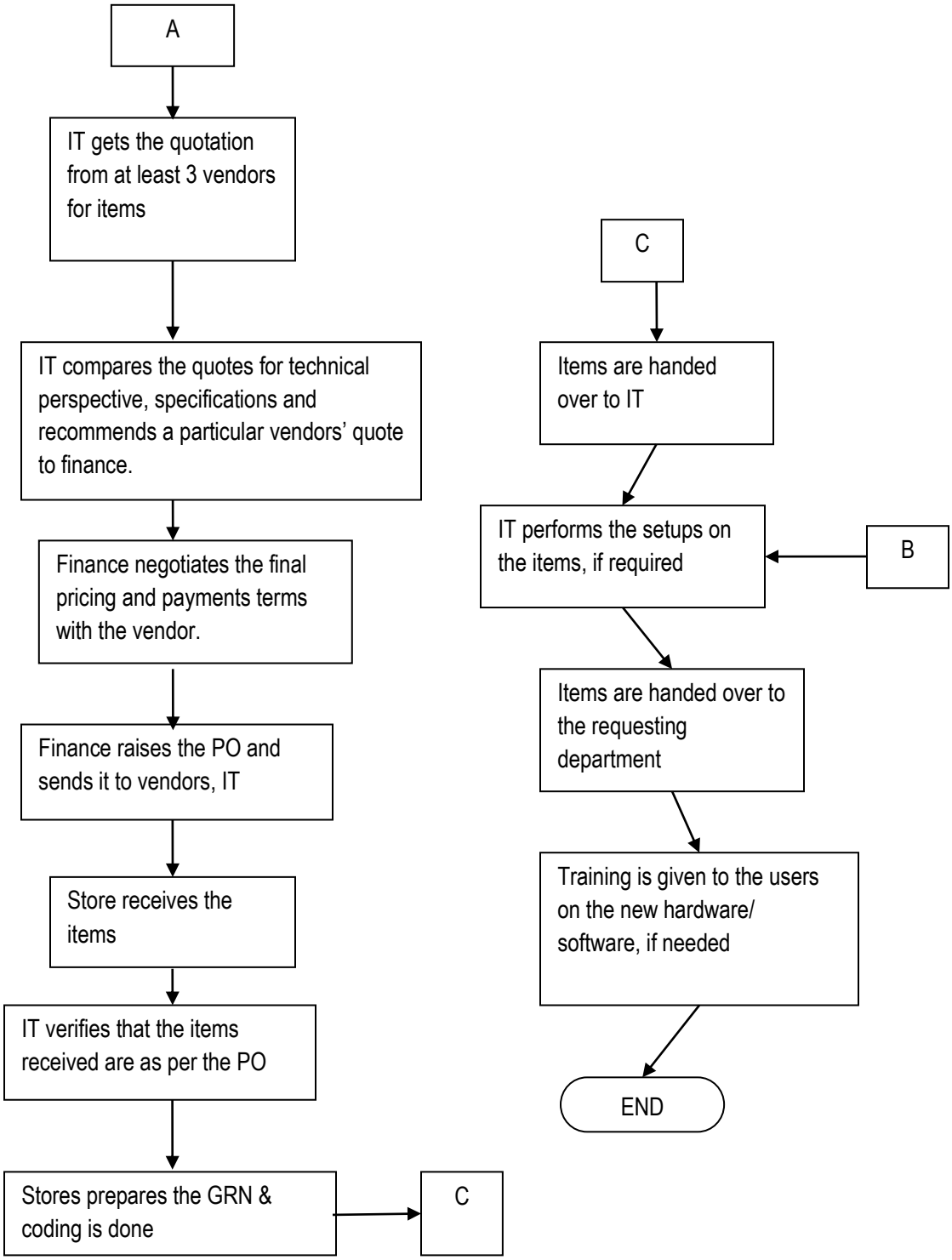
18) Department Of C.T.V.S.

- Total Number of C.A.B.G.
- Other Cardiac Surgeries

IX. NEW HARDWARE AND SOFTWARE ACQUISITION:

The process for the new hardware and software acquisition is given below




A
IT gets the quotation from at least 3 vendors for items
IT compares the quotes for technical perspective, specifications and recommends a particular vendors' quote to finance.
Finance negotiates the final pricing and payments terms with the vendor.
Finance raises the PO and sends it to vendors, IT
Store receives the items
IT verifies that the items received are as per the PO
Stores prepares the GRN & coding is done
C
C
Items are handed over to IT
IT performs the setups on the items, if required
B
Items are handed over to the requesting department
Training is given to the users on the new hardware/ software, if needed
END

RECORDS AND FORMATS:

1. **Forms**

1) Certificate Cause of Death
2) Medico Legal Cases
3) Brought Death Certificate File
4) I P diagnostic Index file (in computer)

2. **Registers**

1) Death Register
2) Death Intimation Register
3) Brought Dead intimation Register
4) Court Register

IMS 1-e Documented policies and procedures exist to meet information needs of the care providers, management of the organization as well as other agencies that require data and information from the organization.

I. POLICY:

The hospital has a policy of reporting the notifiable diseases to the local health authorities.

II. PURPOSE:

To ensure proper submission of statistics of notifiable diseases to concerned Government Authorities.

III. SCOPE:

All notifiable diseases

IV. RESPONSIBILITY:

MRD In charge

V. DISTRIBUTION:

. Emergency, MRD, All patient care areas, Administration

VI. DEFINITION:

Notifiable Disease: Notifiable disease is any disease that is required by law to be reported to government authorities. The collation of information allows the authorities to monitor the disease, and provides early warning of possible outbreaks.

VII. ABBREVIATION:

Abbreviations are as follows
MRD= Medical records Department
MOH= Medical officer Health
HIV= Human Immunodeficiency Virus

POLICY: NOTIFICATION OF NOTIFIABLE DISEASES

Policy type: Global
Scope: Hospital wide
Policy: The hospital has a policy of reporting the notifiable diseases to the local health authorities.

VII. PROCEDURE:

1. Notifiable disease format is available with infection control nurse.
2. Infection control Nurse shall enter required information and take print on the Hospital Letterhead and dispatch to Health Authority, duplicate copy of report will be maintained Quality Department, and details are available with infection control nurse.
3. Notifiable diseases are reported through mail by infection control nurse on regular basis.
4. Notifiable Disease Dispatch Register shall be maintained in MRD (with receiver's signature and the seal of the Health authority). If the information is sent to health authorities / in person through hardcopy (H1N1), the proof of dispatch is maintained in the Infection control nurse.
5. The flow of information will be from the clinicians and microbiologists, to ICN to the Medical Superintendent's office ICN shall report on a specific format to the Municipal Health Officer (MHO).

Notifiable Diseases: Notifiable diseases shall vary from state to state. Yet following are some of the most common notifiable diseases

1. Smallpox
2. Tuberculosis
3. Polio
4. Cholera
5. Diphtheria
6. Leprosy
7. Typhoid
8. Dengue
9. Malaria
10. Chickenpox
11. Leptospirosis
12. Measles

13. Pertusis
14. Jaundice
15. HIV
16. Swine Flu
17. Chickguniya
18. Herpes
19. Puerperal Fever
20. Scarlet Fever
21. Viral Encephalitis/Japnese encephalitis
22. Influenza
23. Plague
24. H1N1
25. Shigella Dysentery
26. Hepatitis A & E
27. Rabies
28. Kala – azar
29. Filariasis

VIII. RECORDS AND FORMATS

Register of Notifiable Disease
Notifiable disease information form

IMS 2 The organization has processes in place for effective control and management of data.

I. POLICY:

All information and data generated in the hospital shall be kept in the specified formats as provided by the hospital, manually and electronically in Medipro (HMIS).

II. PURPOSE:

To maintain all the documents of In-patients and Out-patients medical record in accordance with the defined guidelines.

III. SCOPE:

All data available in the hospital

IV. RESPONSIBILITY:

Departmental HOD's

V. DISTRIBUTION:

Medical records Department, All patient care areas, IT department, Administration

VI. ABBREVIATION:

Abbreviations are as follows:

HOD= Head of the department

HMIS= Hospital Management System

IT= Information Technology

VII. PROCEDURE:

Different Departments, as per their role in the Organization, shall incorporate the Hospital data in (HMIS) software for use. There exists a standardized format for effective functioning of departments and for easy maintenance, storage, access and retrieval of data. These formats shall be used wherever applicable in the hospital.

MAINTENANCE OF DATA OF HOSPITAL STATISTICAL PERFORMANCE

The information is available in Medipro as on when required, the department HODs shall request to IT department to generate the appropriate data. The above Information can be obtained from the following Services on daily and monthly basis:

1. Out Patient Services

The following information is achieved through system (IT based data ,can be provided on request)

- Number with detail of outpatient Department and special clinics functioning in a hospital.
- Total Number of New Cases
- Total Number of Repeat Cases
- Total number of New & Repeat Cases.
- Specialty and Consultant wise Distribution of out Patients both New & Repeat Cases.

2. In Patient Services

1) Bed Complements

- Total No. of Beds
- Specialty wise breakup of beds.

2) Admissions & Discharges

- Total No. of Admissions
- Total No. of Discharges
- Sex-wise, Admissions & Discharges
- Specialty / Consultant wise Distribution of ADMISSIONS AND DISCHARGES.
- Hospital Days.

The above information is obtained through Computer and Manual Admission & discharge register, maintained at admission office.

3) Deaths

- Specialty – wise / Consultant wise, Sex wise DEATHS through Computer & Manual Register of Admission & Discharge Register.

4) Operations / Operative Procedures

On the basis of Operation Theatre register and annually compiled Monthly Report.

- Total Number of Operations performed
- Distribution of Major and Minor operations and their types (through Computer).
- Specialty / Consultant wise Operations performed.

5) Laboratory Investigations / Test

- Total number of investigations / test conducted.
- Types of investigations done.
- Total number of investigations conducted in the Departments of
  - Histopathology
  - Haematology
  - Microbiology

- Biochemistry

6) <u>Imaging Department</u>

- Total Number of X-Ray examination
- Total Number of C.T.Scan
- Total Number of Ultra Sounds & Total no of PNDT
- Total Number of M.R.I. done
- Total Number of Mammography's done.

7) <u>Department Of Gastro Enterology</u>

Total Number of Endoscopies done

- Upper GI
- Lower GI
- Other Therapeutic Procedures.

8) <u>Department Of Neurology</u>

- Total Number of E.E.G. done
- Total Number of E.M.G. etc. done

9) <u>Blood Bank Services</u>

- Blood donation done
- Blood transfusion given
- Blood grouping done
- Other related Blood Bank services done

10) <u>Audiometry Services</u>

- Number of Audiometry done
- Number of other Procedures.

11) <u>Department Of Physiotherapy</u>

- Total Number of Physiotherapy done of different types.

12) <u>Department Of Nephrology</u>

- Total Number of Dialysis done

13) <u>Department Of Accident / Emergency Department</u>

- Total Number of cases attended in the department.
- Total Number of Medico Legal Cases Registered.
- Total Number of Deaths.
- Total Number of cases admitted through Accident & emergency Department.

14) Department of Invasive Cardiac Lab

- Total Number of Coronary Angiographies.
- Total Number of Angioplasties (PTCA).
- Other Procedures.

15) Department Of C.T.V.S.

- Total Number of C.A.B.G.
- Other Cardiac Surgeries

VIII. The hospital HMS software comprises of following different modules:

Different departments shall be given access to the required module and the system shall be secured by assigning individual password.

Medical records shall be kept under supervision of authorized personnel so as to ensure security and confidentiality.

Policy and procedure documents, if stored electronically shall be subject to security, confidentiality and integrity of information.

Procedure:

Sr.No	Activity	Responsibility
1	Specified format must be followed for the generation of information related to the hospital.	As per the department the formats are intended for
2	Policies and procedures that are electronically saved shall be kept safe & secured.	IT Team
3	A standardized format for easy maintenance, storage, access and retrieval of data must be followed by all the staff.	All Hospital Staff

PROCEDURE FOR DISSEMINATION OF DATA

The privileges are given on basis of the employee job profile.

Non clinical staff is not allowed to browse the Clinical data. And also the clinical staff is limited to view the patient's data until unless the patient is assigned against them.

Following hospital reports shall be generated and will be accessible to the users who are having the privileges.

- Department Summary
- Revenue Summary
- OPD MIS
- Inpatient MIS
- OT MIS
- Diagnostics MIS
- Inventory MIS
- Average Length of Stay
- Patient Statistics

IMS 3. The organization has a complete and accurate medical record for every patient.
IMS 4. The medical record reflects continuity of care.

I. POLICY:

Complete and accurate Medical record for IP, Emergency and OP patients shall be maintained and it shall reflect the continuity of care provided in the hospital.

II. PURPOSE:

To establish standardized Policies and procedures for use of Medical Records of the patient and smooth functioning of the department of Medical records without violating the basic patients rights of confidentiality of information.

III. SCOPE:

Patients, Consultants, Medical Record staff, Medical Superintendent, IT department, Quality Department

IV. RESPONSIBILITY:

MRD in charge

V. DISTRIBUTION:

Medical Records department, IT department

VI. ABBREVIATION:

Abbreviations are as follows:
IP= Inpatient
OP=Outpatient
MRD= Medical Record Department
UHID= Unique Hospital Identity Number

Identification of medical records

A unique no. UHID No is allotted to each patient.

VII. PROCEDURE:

1. Medical records data entry is done in two ways

Electronically and for each patient UHID and IP number is generated

1) An inpatient's medical record is complete when the following criteria are met:

a. Its contents reflect the patient's condition on arrival, diagnosis, test results, therapy, procedure performed and in-hospital progress and condition at the time of discharge; and advice on discharge.

2) Entry of Medical record: The medical records can be entered by

- Treating consultants and Cross referred consultants (Professors/Associate and Assistant Professors)
- Clinical associates
- Registrars
- Physiotherapists
- Dieticians
- Nurse (only in nursing records)

The recorded history and physical examination must be authenticated by a practitioner privileged to do so.

2. Contents of the medical record for Inpatients:

Following documents are to be kept in hard copy in the file of the patient

1) Patient Admission Form
2) Registration Form
3) Letter of Undertakings
4) Personal: History & History of Past Illness
5) Blood Cross Matching Report
6) Feedback form for blood transfusion reaction
7) Anesthetic Record Form
8) All Consents

• General Informed consent
• Surgery Consent form
• Blood transfusion consent
• Amputation consent
• Lab procedure consent
• Consent form for Cardiac catheterization /coronary catheterization /catheter intervention
• Anesthesia consent
• High risk consent
• Dialysis consent
• Magnetic resonance and Procedure screening and consent

• HIV counseling form
• DAMA Consent form
• Restraint form
• Consent for X Ray/CT contrast material injection
• Image guided interventions: Patient information and consent
• General informed consent (DEPARTMENT OF PREVENTIVE & REHABILITATION MEDICINE)
• Informed Consent for IVF / ICSI Program
• Apheresis consent form

9) Time-out Document
10) Site Marking
11) Investigation Reports
12) Pre-operative checklist
13) Pressure-sore tracking checklist
14) I.V Therapy Check List
15) Critical care flow sheet
16) Discharge check list
17) Discharge/Death Summary
18) Medical Certification of cause of death both original & duplicate copies (in case of death)
19) Restraint form
20) Medication chart- printout of scheduled drugs duly signed by the doctor

Entered By Consultant /Nurse
Patient Registration Form with his/her personal and Demographic Details

1) General Consent for admission
2) History and Physical Examination Sheet
3) Progress Notes
4) Nursing Assessment
5) Referral sheets
6) Nutritional Assessment
7) Pain assessment
8) Nursing Medical Record
- Treatment Chart
- Intake Output Chart
- Graphic Chart
- Investigations Chart
- Nursing Kardex

9) Operating Room records
- Surgery and Anesthesia consent
- High Risk Consent
- Intra-operative nursing notes
- Anesthesia record Forms maintained manually
- Operation Notes

- Recovery room notes

10) Discharge Summary/Death Summary
11) Consent forms as applicable
12) Any other as per the requirement

The content of the medical record must be sufficiently detailed, legible and organized to enable:

a) The consultant responsible for the patient to identify the patient, provide continuing care, determine the patient's condition at a specific time, review the diagnosis and therapeutic procedures performed and the patient's response to treatment;
b) Another consultant to assume patient care at any time;
c) Both internal and external transfers shall be documented.

3. **The medical records are readily available for all the health care providers of the respective patients.**

4. **All medical records shall be updated and maintained in a chronological order.**

VIII. RECORDS AND FORMATS:

- Case Files

IMS 5. Documented policies and procedures are in place for in place for maintaining confidentially, integrity and security of records, data and information.

I. POLICY:

All the patient and non patient related data and information generated, provided or contained in the hospital to be kept confidential and secured.

II. PURPOSE:

To maintain the confidentiality, integrity and security of information.

III. SCOPE:

All the information generated in the hospital. This policy is applicable to following Patient Information:

- Data and information in HMS regarding various use of hospital management and analysis
- Information in Medical records.
- Information kept in manual registers, forms and files
- Hospital Personnel's information in their personnel files

IV. RESPONSIBILITY:

All hospital staff

V. ABBREVIATION:

Abbreviations are as follows:

EDP= Electronic Data processing
MRD= Medical record department
HMS= Hospital Management System
IT= Information Technology

VI. PROCEDURE:

1. All patient and non-patient related data and information generated, provided or contained in the hospital shall be kept appropriately confidential, integrated and secured.

1) All information concerning a user, including information relating to his / her health status, treatment or stay in the hospital shall be kept confidential.

2) No person may disclose any information contemplated in above mentioned point unless,

- The user consents to that disclosure in writing
- A court order or any law requires such disclosure; or
- Non-disclosure of the information represents a serious threat to public health

Without prejudice to the generality of this section, special precautions for the maintenance of confidentiality shall be taken, with respect to

- Persons affected with HIV / AIDS and
- Persons with mental health problems

Patient records shall be kept confidential, complete and secure both in manual and in electronic form.

This shall be in accordance with *Indian Evidence Act, Indian Penal code, Code of Medical ethics*.

These records shall be safe guarded against loss, destruction and tampering. Adequate space, cleanliness and storage furniture shall be maintained in Medical records department

Privileged health information shall be used for the purposes of medico legal cases only.

Patient /physician and other public agency requesting for access to medical records shall be done as per policy "Access to Medical record"

2. Electronic records:

These records are kept in HMIS and include patient related information, administrative information and various reports.

Following shall be done to keep the confidentiality, integrity and security of this information.1. Access shall be restricted and only through User ID and password

1) User ID and Password shall be provided to identify personnel depending on the type of information required by him for his job.

2) The IT department shall provide the right to access only after clearance from head of the department

3) Right to access shall be provided only after proper justification

4) Any external person request for specific information from HMS shall be allowed only after written permission from Medical Superintendent

5) Any drive for connecting external hard disk shall restrictively provided in CPUs in hospital. Internet facility shall also be restricted, to prevent data or information stealing.

6) Electronic data shall be protected from virus / Trojans and other computer bugs. Any software, if required to be used on computers with hospital information shall be validated and authenticated by IT department.

3. Medical records:

1) Access to be provided as per document 'Response to request for access to information in medical records'.

2) Medical records shall be stored in MRD after patient discharge and shall be kept under security.

3) Medical records for admitted patient shall be kept under custody of nursing staff and shall not be accessible to people not involved in the patient care.

4) A proper track of medical records shall be kept in case these records are transferred from one place to another.

5) It shall be ensured by health care staff and medical records department that all pages and contents in the medical records and appropriately kept and are prevented from loss, tampering or destructions. No loose paper shall be allowed in medical records.

4. Activity and Procedure:

S. No	Activity	Responsibility
1	All patient and non-patient related data and information generated, provided or contained in the hospital should be kept appropriately confidential, integrated and secured.	All hospital Staff
2	All the protocols for electronic records and medical records must be followed.	Medical record department & EDP.

VII. RECORDS AND FORMATS:

Case Files

IMS 5-c Safeguarding of Data from lost

I. POLICY:

MRD and IT dept. shall apply various methods and tools to prevent any damage /tampering to the medical records occurring due misplacement, pests, fire or any other factor.

II. PURPOSE:

It is to ensure that the protection of data / records from any damage, tamper or loss.

III. SCOPE:

This document is applicable to Medical records department and IT department

IV. RESPONSIBILITY:

MRD In charge and IT In charge

V. DISTRIBUTION:

Hospital Wide

VI. ABBREVIATIONS:

Abbreviations are as follows:

IT= Information Technology

MRD= Medical record department

VII. PROCEDURE:

The MRD and IT Department shall apply various methods and tools to prevent any damage /tampering to the medical records occurring due misplacement, pests, fire or any other factor.

- **Instructions**:

Safeguarding the data and records in computer software: Refer document storage and retrieval of data

Safeguarding the data and records in Medical records (Physical form):

1. No files will be taken out of department without permission.
2. A place is allocated to each case file
3. A retrieval process is in place to take care of files issued.
    1) In case of emergency, a medical record note book shall be filled by the person taking out the file which includes the purpose as well as the expected date of return along with the signature
    2) Telephone call shall be made to the person on the expected date of return and a request is made to return the file.
    3) If any extension is to be made, the same shall be noted down on the same medical record note book.
    4) In case the file is still not returned and no extension has been sought, the medical record technician shall go to the person to collect the documents.
4. MRD shall be a restricted area.
5. Fire extinguishers shall be placed near to MRD.
6. The staffs shall be trained in handling of all types of fire extinguisher.
7. Pest control shall be done on a predetermined schedule and housekeeping that it is followed also makes a check.
8. The MLC records shall be kept under lock and key.
9. Restrict the amount of information released in response to calls about current inpatients.
10. Adhere to and incorporate into its policies and procedures existing laws that require a specific degree of confidentiality for specialized patient information, including mental health, and drug/alcohol-related records regarding diagnosis and treatment.
11. Provide training on privacy and security policies and practices to all members of the workforce.
12. All staff transporting medical records must ensure the privacy of patient-identifiable information during the transport process. Medical records and/or carts loaded with medical records shall not be left unattended during the transport process.
13. The primary medical record and any secondary records (diagnosis and procedure cross indexes, etc) are stored in areas directly controlled and monitored by the VP Medical .

Safeguarding the data related to medical records in HMIS

1. Backup Schedule is prepared for each application running on site and following are main schedule backups such as database
2. IT Team will be responsible for taking up the backups on schedule time

3. IT Team does the audit of backups on regular basis
4. No hardware will be altered (add / remove) without informing to IT Team
5. No Software / Antivirus / Patches will be installed / downloaded or Removed by the users. Failure to this may result in your access being removed.

Activity and Responsibility

S.No	Activity	Responsibility
1	Various methods and tools to prevent any damage /tampering to the medical records occurring due misplacement, pests, fire or any other factor shall be followed.	MRD & IT
2	All the instructions for safeguarding of data both in computer software & medical records shall be followed.	MRD & IT

VIII. RECORDS AND FORMATS:

Folder maintained in the system of Medical records manager

IMS 5-f Response to request for access to information in the medical record

I. POLICY:

Medical records shall be kept confidential. Any request for access to information in medical records shall be duly scrutinized and authorized by Medical Superintendent

II. PURPOSE:

To ensure that confidentiality of information sharing with all stake holders of hospital in response to request for access to information in the MRD department.

III. SCOPE:

Medical record Department staff, Medical Superintendent

IV. RESPONSIBILITY:

MRD In charge/Officer

V. DISTRIBUTION:

Hospital Wide

VI. ABBREVIATIONS:

Abbreviations are as follows:

MRD= Medical record department

TPA= Third party Administrator

VII. PROCEDURE:

. The medical record is the property of the hospital and the information contained within it is the property of patient. Information in the medical record shall be accessible only to following as per law

1. To the patient
2. To the healthcare provider who are directly involved in provision of care to the patient
3. To the court of law if asked for
4. To third party payer (Insurance agencies)
5. To any other person only after valid consent from the patient
6. Police Authority

Following protocols shall be followed in case of request for access to information in the medical record.

1. Request from patient/ authorized Representatives of patient

1) The patient/patient attendant shall fill the "medical record retrieval form" indicating which medical records are needed, reason for retrieval.
2) If patient representative is seeking the Information related to Medical record, than written authority letter and duly signed by patient and authorized person shall be submitted to the medical record officer along with the Medical record retrieval form approved by Medical Superintendent
3) The Medical record retrieval form must be attached with the photo identity with address proof(e.g. Passport, Driving License,Adhar Card) and will be submitted to Medical record officer
4) Medical Record officer shall get an approval from Medical Superintendent on the Medical record retrieval form after detail scrutiny of the application.
5) Only the Photo copies attested by medical superintendent/equivalent authority will be made available to the applicant(Patients/patient attendants)
6) The Medical record retrieval forms shall recorded in the separate files.

2. Request from TPA and Insurance Agencies

1) TPA personnel (with consent of the patient) shall submit medical record retrieval form to Medical record officer on duty with authority letter from patient for access to medical records.
2) Medical Record officer shall get an approval from Medical Superintendent after detail scrutiny of the application/Medical record retrieval form
3) The attendants/ TPA concerned shall deposit specified amount at billing counter (MRD charges) for the same and then refunded back to Patient when the TPA approval comes.

4) Only the Photo copies attested by medical superintendent/equivalent authority will be made available to the TPA Personal

3. Request from Government organization (Court of Law/Police)

1) They shall be allowed to access only for specified purpose as stated by state authorities.
2) Medical record retrieval form shall be filled and submitted to medical record officer
3) After approval from Medical superintendent/equivalent authority following the check of written evidence of permission from govt. authorities access will be provided in presence of Medical record officer
4) The access shall be made available within same working day or next day of application
5) This Process shall follow for retrieval of all medico legal cases and medical cases challenged in courts.

Do not provide access if,

1) Identification of the person cannot be established satisfactorily.
2) Any person or organization, other than those mentioned above asks for access.
3) In case of discrepancies contact Medical Superintendent.

VIII. RECORDS AND FORMATS:

Back Up record Sheets, Retrieval Register

IMS 5-g Storage Retrieval of Data

I. POLICY:

All the data shall be stored either electronically or physically. Whenever the electronic storage is done, it shall be ensured that there are adequate safeguards for protection of data.

II. PURPOSE:

To ensure that all the data related to patient and the hospital administration has to be stored in a proper and adequate manner, and also a proper policy laid down for the retrieval of the data.

III. SCOPE:

All information in the hospital

IV. RESPONSIBILITY:

MRD Staff

V. DISTRIBUTION:

MRD department, IT department, Administration, All Patient care areas, Reception

VI. DEFINITION:

Backup Policy

Definition: To back up data is to copy them to another medium so that, if the active data are lost, they can be recovered in a recent if not completely current version. Backup is primarily intended for disaster recovery. The server shall be backed up on regular basis to protect against data loss due to malfunction or human error.

VII. ABBREVIATIONS:

. Abbreviations are as follows:

EDP= Electronic Data processing
MRD= Medical record department
IT= Information Management
IP= Inpatient
UHID= Unique Hospital Identity number
MLC= Medico Legal Case
EMRD= Electronic medical records digitization

VIII. PROCEDURE:

1. STORAGE OF THE MEDICAL RECORDS:

- Data stored physically (e.g. Medical Records) shall be kept secured to prevent risk of loss or theft
- The physical data storage shall be maintained under the supervision of an authorized personnel designated to manage the same.All physical records shall be maintained and stored by the MRD.
- Data stored physically shall be stored such that it is protected from rodents, pests and such other harmful environment
- Corrective actions shall be taken against faulty use and shall be documented and implemented in the Organization.
- The electronic data shall be stored and updated in specific modules subject to access only by authorized personnel, either medical and/or non medical staff.
- A system shall be in place to trace unauthorized use by the Staff
- The Hospital must emphasize that only appropriate clinical and managerial staff shall participate in selection, integration and usage of data.
- The numbering system of Medical records file shall start with IP No./Month/Year. The files shall be arranged and stored in medical records room. The MRN shall reflect on the file.
- Only authorized users can view / retrieve the medical records.

- It is available to EMRD users in inquiry (Patients history) under two different heads
    a. OP for patient visit (Outpatient)
    b. IP for Patient admission (In patient)
- All Case files are filed in individual Folders. The files are stored in racks provided.
- All MLC cases are stored in Lockers provided.

2. RETRIEVAL OF MEDICAL RECORDS

Request for Retrieval of the case file can from following quarters:

- Request for retrieval of MLC Case files from the Office of Medical Superintendent
- Request from the Consultants for study purpose
- Request from Billing Department
- Request from Patients/relatives
- Request from any other individual/organization by order of Court

Process of Request

- Requests from internal sources-Medical Superintendent, Consultants, etc requires no verification.
- Patients requesting for Case files must forward a written request to the Medical Superintendent, mentioning the IP no. The patient/attendant should produce a copy of Discharge Summary will be issued only to the spouse or to the close relative with identity proof .
- In other cases an authorized letter should be submitted

Process of Retrieval for patients/others:

- Prints are taken form respective source of Medipro
- Only a photocopy of Case files should be handed over to the patients and others
- Hospital has a hanger system in which all the records are kept in the medical record
- After the Photocopy is done, replace the original file back and issue the photocopy of the case file to the patient

Process of Retrieval of case file for submission to court

- Take out the photocopy of the case file before issuing the original Case file.
- Maintain a log book/in excel sheet print from the system and filed containing following information
    - Name and IP no of the patients
    - Year of admission
    - Name of the requesting authority
    - Date and time of issue
    - Signature of the requesting authority
    - Signature of MRD staff while issuing the case file

Billing Section and Consultants

- Case files issued to Medical Superintendent, Billing department and Consultants should be entered in separate internal issue Log book containing following details
    - Name and IP no of the patients
    - Year of admission
    - Name of the requesting authority
    - Date and time of issue
    - Signature of the requesting authority
    - Signature of MRD staff while issuing the case file
    - Due date of return
    - Actual Date of return
    - Signature of MRD staff of receiving the case file back
    -

3. PROCEDURE FOR THE BACK UP OF DATA

- Backup Schedule is prepared for each application running on site.
  For Hospital following are main schedule backups
  a) Database : Twice in a Day
  b) Tally Data : Daily
- IT Team will be responsible for taking up the backups on schedule time.
- IT Team does the audit of backups on daily basis at Night shifts.
- The Daily Backups will be maintained for 3 days and later it is Replaced.
- Data and mailbox backup of resigned employees are taken up on the request of HR Dept / HOD.

There are different types of Back up data as mentioned below:

Sr. No	Type of Back Up	Responsibility
1	**Full backups** - This is a complete set of all of the data you want to back up. You'll want to keep a current backup of your entire system around, but you don't need to do these daily, as most of your files don't change every day and full backups are time-consuming.	IT Executive –Support and User
2	**Differential backups** - This is the set of any files that have changed since the last full backup. These backups take less time and space than a full backup, but more than an incremental backup.	IT Executive –Support and User

3	**Incremental backups** - This is the set of files that have changed since the previous backup (whether it is a differential, incremental, or full backup). These backups take the least time and space, but in the event of data loss you'll need to restore data from several backups (the last full backup, the last differential, and all the incremental backups since the last differential) and restore them in precisely the correct order.	IT Executive –Support and User
4	**Database Server Backup** – There is every day backup schedule in morning & evening which takes full & incremental backup	IT Executive –Support and User
5	**Mail server backup** – There is every day backup schedule in evening	IT Executive –Support
6	**Departmental PCs Backup** – There is weekly Incremental backups which backup data of shared 'DATA' folder from departmental machines.	IT Executive –Support

IX. RECORDS AND FORMATS:

Medipro

IMS 6 Documented policies and procedure exist for retention time or records, data and information

I. POLICY:

Patient's clinical records data and information shall be retained for the time frame as per Government guidelines and regulations.

II. PURPOSE:

All in patient medical records will be retained or destroyed as per laid down procedures.

III. SCOPE:

Medical Record Department

IV. RESPONSIBILITY:

. Medical Record officer, Medical Superintendent and medical Audit committee and IT department .

V. DISTRIBUTION:

. Medical record Department, Administration, Information Technology

VI. ABBREVIATION:

. Abbreviations are as follows:

MRD= Medical records Department
HOD= Head of the Department
MLC= Medico Legal Case
PNDT= Pre natal diagnostic test
ANC= Anti Natal Check Up
TPA= Third party administration

VII. PROCEDURE:

. Retention Period of department wise various records is listed below:

MEDICAL RECORDS

1. All Out – patient records will be retained be for 5 years
2. Manual In-patient records (other than medico-legal) will be retained for 7 years.
3. MLC the Death records shall be maintained 25 years
4. All electronic in-patient records will be maintained permanently as per I.T.Act.2006
5. The other records and registers, detailed below, are retained for the period mentioned against each:
6. Death Register - 25 years

Destruction of all forms shall be done as under

Medical records / registers etc shall be disposed off after a request is put up by the department head. Approval status will be as follows:

- Approval from the condemnation committee in record in writing.
- Advertisement in Marathi & English news paper about destroying the Outpatient/Inpatient papers giving one month notice.
- Those who wish to collect and do so papers will be handed over after verification and signature taken.
- Shredding of papers done in the hospital premises in the present of two persons one from MRD and One can be a security person.
- After this shredding papers are loaded in the bunch and discarded general waste.

IMS 7The organization regularly carries out review of medical records

I. POLICY:

1. The medical records shall be reviewed and audited periodically and used as a tool for quality improvement of clinical services.
2. Appropriate sample of the medical records shall be selected for audit. The sample shall be based on statistical principles and representative of all records. Adequate mix of active and discharge cases shall be kept in sample.
3. The medical audit findings shall be kept confidential and circulated only to the care providers.
4. Patients and staff anonymity shall be maintained in medical audits.
5. Based on the findings in medical audit, Medical Audit Committee shall suggest appropriate corrective and preventive actions.

II. PURPOSE:

To retrospectively evaluate clinician's conformance to the norms and standards of the modern medical practice To aid in improving quality of clinical care by highlighting opportunities for improvement

III. SCOPE:

. Medical Files of IPD patients of all specialties mentioned in scope of services of the hospital

IV. RESPONSIBILITY:

. Chairperson, MRD Executive and members of Medical Audit Committee

V. DISTRIBUTION:

. Medical record department

VI. ABBREVIATION:

. Abbreviations are as follows:

MRD= Medical record department
IPD= Inpatient department
MAC= Medical audit committee

VII. PROCEDURE:

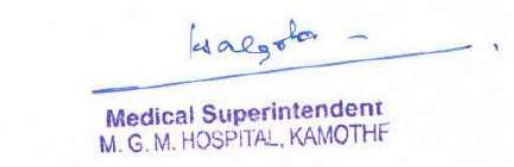
. Activities and Responsibility**:**

Sr. No.	Activity	Responsibilities
1.	To conduct the medical record audit in alternate months	MRD In-charge
2.	To decide the number of files to be audited (Sample size) based upon following statistical process • Population size = Total discharges during the time period • Sample size = 10% of the population size or 20 whichever is less. • Simple random sampling	Chairperson MRD In-charge
3.	No. of files in sample size shall be randomly selected and retrieved from MRD, and from inpatient areas in case of active files.	MRD In-charge
4.	The files to be audited as per the checklist	Members
5.	Medical audit checklist shall be duly filled and remarks shall be written.	Members of MAC
6.	Analysis of these checklists shall be presented in committee meetings and based on this committee shall discuss and decide preventive actions or quality improvement actions.	Members of MAC Chairperson MRD In-charge
7.	The minutes of meeting shall be reviewed and approved by chairperson before circulation.	MRD, In-charge Chairperson
8.	Minutes shall be circulated to all the consultants and to Medical Superintendent.	All members
9.	Completed checklist and a copy of the minutes shall be kept in medical audit committee file as record.	MRD In-charge/Quality Department
10.	In clinical audits the cases shall be presented in the committee meetings and thoroughly discussed for its clinical course.	All members
11.	Major findings of the audits of each case, brief description of the discussions and decision taken shall be recorded in minutes of meeting.	MRD In-charge/Quality Department

12.	Anonymity of the Consultants shall be maintained while discussing the cases.	All members
13.	In case of any discrepancy, the Medical Superintendent shall discuss the case with concerned Consultant	Medical Superintendent

VIII. RECORDS AND FORMATS:

Record of Medical Audit Committee meetings, Medical record audit checklist



M.G.M Medical College and Hospital, Kamothe	Management of Medication		
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CONTENTS

S.No	Standards
MOM 1	Documented Policies & procedures Guide the organization of pharmacy services and usage of medication
MOM 2	There is a hospital formulary
MOM 3	Documented Policies & Procedures guide the storage of Medication
MOM 4	Documented Policies & Procedures Guide the safe and Rational prescription of medications
MOM 5	Documented Policies & Procedures Guide the safe dispensing of medications
MOM 6	There are documented Policies & procedures for Medication Administration
MOM 7	Patients are monitored after medication Administration
MOM 8	Near misses , Medication Errors, and Adverse drug events are reported and analyzed
MOM 9	Documented procedures guide use of narcotic drugs and psychotropic substances
MOM 10	Documented Procedures Guide the usage of chemotherapeutic agents
MOM 11	Documented Policies and procedures govern the use of radioactive drugs
MOM 12	Documented Policies and Procedures Guide the use of implantable prosthesis and Medical devices
MOM 13	Documented Policies and Procedures Guide the use of medical supplies and consumables

MOM 1 DOCUMENTED POLICIES & PROCEDURES GUIDE THE ORGANIZATION OF PHARMACY SERVICES AND USAGE OF MEDICATION

I. PURPOSE:

To provide guidelines for the organization for pharmacy services, management and usage of medication

II. SCOPE:

Hospital wide

III. RESPONSIBILITY:

Medical superintendent, Pharmacy Incharge, Pharmacists, Departmental Heads.

IV. POLICY:

1. Pharmacy services will cater all categories of patients24 hours
2. Pharmacy services will be patient centered & cost Effective
3. Pharmacy services will meet All Legal requirements
4. All medicines will be handled safely and at the specified temperature
5. Only trained and qualified pharmacist will be responsible to handle and dispense drugs. Approved prescriptions of drugs are listed in hospital formulary. Formulary is prepared by a multidisciplinary committee.
6. All staffs involved in administering medications are trained .

V. PROCEDURE

1. ORDER:

1) The order is placed in the first week of every month.
2) The quantity is decided based on the average consumption of a particular item in the past 3 months and available stock.
3) This order is placed with a particular supplier from whom it was procured the last time.
4) Purchase order is created for the material according to the current reorder level.
5) Vendor selection & vendor evaluation is done by the Department of Pharmacy on basis of availability, organizational structure of vendors, efficiency in terms of delivery time, quantity, quality, reputation in the market, etc.

2. Receipt of goods:

1) The material when received is entered in computer where a GRN is created mentioning the quantity received along with rates, Expiry, Batch No. and available stock in house.
2) If the rates of the items received are changed (whether lower or higher) that particular item is highlighted in GRN displaying the previous rate.
3) A thorough physical verification of the goods brought by the vendor is carried out in accordance with the purchase order made.

4) A report is generated with party name, challan, bill no, gate entry no., date, purchase order no, description, item code, quantity accepted.

5) The items received are sent to indoor pharmacy where they are stacked and stored in storages meant for them.

6) Any item which is to be kept in low temperatures is stored inside the refrigerator which is placed inside the pharmacy.

3. Indent

1) For the medicine to be dispensed, indent is raised on the IPD of the concerned patient by the Doctor.

2) After getting the requisition medicines are taken out and dispensed.

3) The medicines are directly indented in the patients account and billed at discharge as per hospital policy.

4) The OPD medicines are dispensed from a separate counter meant for outdoor patients on cash payment. Any medicine, if is not available in the stock, it's substitute is asked from the doctor in writing.

4. Security

1) Controlled drugs are under locked storage cupboard

2) Bulk storage areas will be locked after Normal working hours

3) Employees will be oriented with safety policy , Fire /Non Fire Emergencies, Handling of cyto toxic Drugs, Chemical spills, emergency codes

4) Clean up spills, inflammable items shall be stocked in fire proof storage cabinets

5. Disaster management

1) In case of mass casuality additional personnel may be called to pharmacy

2) Pharmacist will assemble all; medical supplies for transport to emergency department and maintain the record of additional supplies.

MOM 2 THERE IS A HOSPITAL FORMULARY

I. PURPOSE: To have a closed formulary system that helps in assuring the quality of drug used and controls the cost. The hospital formulary shall be a continually revised compilation of pharmaceuticals which reflects the current clinical judgment of the Pharmacy and Therapeutic Committee

II. SCOPE: Pharmacy & Pharmacy Stores.

III. RESPONSIBILITY : Pharmacy Incharge ,senior Pharmacist & Pharmacist

IV. POLICY & PROCEDURE

1. Formulary System–

1) A system of periodically evaluating and selecting medications for healthcare organization, through its clinicians and other healthcare professionals. Pharmacy and Therapeutic Committee designs formulary system that ensure patients have access to rational, clinically appropriate, safe and cost-effective medications.

2) Formulary drugs shall be listed in the Hospital Formulary and shall be stocked in the Hospital Pharmacy.

3) All the physicians should prescribe drugs from the formulary & Hospital Pharmacy should ensure availability of the listed drug at all the times. In rare event, if a drug is not available from supplier, a suitable alternative should be made available & informed to all physicians.

4) Any HOD/ Senior Medical Officer / Consultant may initiate a request for addition/ deletion/ replacement of a drug to the formulary.

5) The form shall be completed and sent to the Clinical Pharmacologist. Incomplete forms shall be returned to the requestor.

6) The request for addition of a drug shall be placed on the agenda for the next Pharmacy and Therapeutic Committee meeting. Pertinent information may be distributed to all committee members with the agenda, prior to the meeting.

7) The physician requesting the addition/ deletion/ replacement in formulary medication shall present an overview of the drug to the Pharmacy and Therapeutic Committee and answer questions related to its use.

8) The action of the committee shall be to either accept or deny formulary approval.

9) Subsequent to the meeting, the requesting physician shall be informed of the committee's decision by the secretary of the Pharmacy and Therapeutic Committee.

10) If approved, the drug shall be ordered. Selection shall be based on considerations such as safety, efficacy, availability and cost.

2. Formulary Changes:

1) Any changes in the formulary shall be reviewed by the Pharmacy and Therapeutic Committee.
2) All formulary changes shall be disseminated to the medical staff and pharmacy staff.
3) A yearly review will be done.

3. Generic Prescribing

1) The Pharmacy and Therapeutic Committee shall endorse in principle the policy of prescribing, dispensing, and administering drugs from M.G.M Hospital drug formulary.
2) Orders for drugs written for brands other than those stocked shall be filled with the generically equivalent brand available. The consent of the physician will be taken for the substitution.

4. PROCEDURE FOR OBTAINING MEDICATIONS NOT LISTED IN THE FORMULARY

Whenever there is a demand for any medication that is not listed in the formulary, the medication is provided as detailed below-

1) Nurse-in-charge of the concerned department/ward puts an indent or requisition against that particular patient.
2) A prescribed Local Purchase form has to be filled and signed by the treating HOD/Consultant / RMO and forwarded to the pharmacy.
3) The Purchase head is responsible to procure non-formulary drug on credit from the listed retail outlet. If it is not available with it, then it is to be purchased from the other nearby identified chemist.
4) The medicines which are not listed in the formulary, if needed in emergency are bought in cash and dispensed to the patient.
5) Later on that item is created in the list and a GRN is made.
6) Time frame for local purchase is 4 hours from the time of receipt of the indent form.
7) Maintain a register of all requests for non-formulary drugs. In this register drug name (generic as well as brand name), dosage form, strength, quantity and indication shall be enlisted.
8) These drugs will be reviewed frequently and will be discussed in Pharmacy &

Refer to TOR Drug Therapeutic Committee

MOM 3 DOCUMENTED POLICIES & PROCEDURES GUIDE THE STORAGE OF MEDICATION

I. PURPOSE:

All policies and procedures pertaining to storage of medications should be followed.

II. SCOPE: Hospital wide

III. RESPONSIBILITY: Pharmacy Incharge, senior Pharmacist & Pharmacist, Nurses

IV. POLICY

1. Medications are stored in the pharmacy according to the manufacturer's recommendation.
2. All medications are stored in designated areas, which ensure proper sanitation, temperature, light, ventilation, moisture control, segregation, and security.
3. Proper consideration is also given to the safety of employees as well as patients. Special storage requirements are listed below.
4. Regular audit of stock holding will be conducted
5. Adequate amount of emergency drugs will be stocked at all times and replenished timely.
6. Crash carts will be available in all clinical areas, stocked with medications and equipment needed for immediate emergency interventions.

V. PROCEDURE FOR STORAGE OF MEDICATIONS

All medications are stored according to their storage conditions as per instructions on their packing.

1. **General Medication Storage**- All medications are stored in designated area, which ensures proper sanitation, temperature, light, ventilation etc.

1) Medication storage areas are locked when not in use. Keys to medication cupboards are the responsibility of the person assigned with the keys. The medication cupboard is fully secured and is inaccessible to unauthorized staff.
2) **Pharmacy Level** - Medications are stored in racks, cabinets, etc. which are properly labelled as per the trade/ generic name, strength of medication. All the medicines are stocked in an orderly fashion.
3) **Ward level** - Medications are stored in the locker at the bedside of the patient. There is no storage of medication in the wards. Medications are indented as and when needed from the IP Pharmacy. However, a stock of emergency medications is maintained in the wards to handle any emergency and the inventory for the same is maintained by the respective shift-in-charge. In addition Crash Cart is also maintained in the wards and ICUs and inventory for the same is also maintained separately.

4) No expired medications are kept in the racks/ cupboard as a physical check is made every month and every time the medications are received and the short expiry are noted and used accordingly.

5) All the drugs in the pharmacy are stored as per the earliest expiry date. The concerned person checks the expiry date prior to dispensing of the drugs.

6) Medications to be stored below 25^0C are stored in refrigerator.

2. Narcotics & controlled Drugs-

These Drugs are kept under double lock. Keys are with two different authorized staff.

3. External use medications-

Disinfectants and drugs for external use are stored separately in different column in the racks/ cupboard from internal and inject able medications.

4. Refrigerated products-

Items requiring refrigeration are stored appropriately.

1) All refrigerated medicines are stored in the refrigerator as per the temperature specifications given on the packing of the drugs.
2) A check is maintained and the temperature is recorded on daily basis and noted in the book named Refrigerator Temperature Check Book.
3) The items are kept as per the temperature profile pasted on the refrigerator.

5. Light Protection-

Light sensitive drugs are kept away from the direct light. All drugs, which require light protection while in storage, remain in the original package, in the racks, which are kept a little interior in the pharmacy away from the direct light until the time of patient administration.

6. Look Alike/ Sound Alike Medications-

Medications which have the potential for confusion due to look-alike or sound-alike drug names or packaging are identified and treated with extra precautions to prevent error.

7. Unused Drugs/ Nonconformity Drugs:

The pharmacy store and the ward sub-store are monthly inspected for outdated, defective or deteriorated drugs and containers with worn, illegible, or missing labels. These drugs are returned to the pharmacy store where they are kept in a segregated area for return or destruction. The unused drugs with short expiry are indented to other user department if required otherwise returned to the pharmacy and disposed off centrally.

8. Crash Cart

1) Crash cart should be kept locked/ sealed unless in use. If opened and/or used, the cart should be checked and replenished.

2) The crash cart will be locked/ sealed with a plastic lock unless used within 1hour of the opening as far as possible after replenishing the contents

3) The Shift-in-Charge of the respective area will be responsible for replenishing drugs, checking them with the help of crash cart checklist and locking/ sealing crash cart once used.

4) All **carts will be opened** and checked for contents every three months and following each use.

5) Sterile items will be checked for package integrity, quantity and expiration date on daily basis. Items with near expiry dates will be replaced.

6) Defibrillator will be checked on daily basis and records will be maintained.

7) **Laryngoscopes** will be checked prior to placement on the cart

8) Drugs reaching the expiry date will be replaced from the stock held in the ward. It will be ensured that no drug reaching expiry date is kept in the crash cart.

Effective pest control practices are carried out on daily basis to prevent entry of rodents/ pests and worms.

Annexure

1. List of LASA DRUGS

2. List of Items in CRASH CART

MOM 4 : DOCUMENTED POLICIES & PROCEDURES GUIDE THE SAFE AND RATIONAL PRESCRIPTION OF MEDICATIONS

I. PURPOSE

To establish policy and procedure for prescription of medications

II. SCOPE: Hospital wide

III. RESPONSIBILITY: All DOCTORS

IV. POLICY

1. Prescription

1) Medicines must be authorized in writing.
2) The treating Physician/Surgeon can only prescribe medication for the patient
3) While prescribing the doctors must write the name of the drug in capital letters
4) Orders are to be written in a uniform location in the medical records of inpatients
5) Allergy history is taken by the prescribing doctor/treating doctor

2. Verbal orders

1) Verbal orders are not allowed except in case of emergency.
2) Verbal orders shall follow the "read back" procedure. It is to be signed by the Duty Doctor/Consultant within 24 hours.
3) Verbal orders between doctors are allowed. The receiving doctor shall document the order in the Progress Sheet.

3. High Risk Medication

A medication double check or second provider verification will be required prior to administration of selected high-risk medications and at time of shift report or any transfer of care.

4. Controlled Medications

1) The Head of Pharmacy is responsible for the storage of controlled substances as governed by hospital policy and procedure.

2) The Shift-in-charge / Nursing supervisor of each patient unit are responsible for ensuring support and assistance in the execution of the policy outlined in the document.

3) Strict accounting for all narcotics and psychotropic substances is performed in the hospital.

4) All narcotic drugs and psychotropic substances will be dispensed on a physician order only which is verified by HOD Anesthesia and then by Medical Superintendent. (20 Apr 2018)
5) A proper record is kept for the usage and administration of the narcotic drugs.
6) Policy violation results in disciplinary action.

7) **Medications bearing an expiration date will not be dispensed or distributed beyond the expiration date.**
8) **Expired, discolored, damaged, or inappropriately labelled controlled substances shall be returned to the Pharmacy for proper credit and/or disposal.**

5. Medication Audit

Medication audit be done at least once a month

It could be done by a clinical Pharmacist / by multidisciplinary committee.

V. PROCEDURE

1. Prescription

1) **All medication orders shall be in writing and signed by the physician.**
2) **Medication orders must be clear, legible, dated, named and signed with the Registration Number of the prescribing doctor . Use space between drug name, dose and unit of measurement.**
3) **The route, dosage, strength, time, and frequency of administration of the drug must be clearly indicated.**
4) **Abbreviations other than internationally accepted should not be used. While giving medication orders the terms like BD, TDS, OD, SOS, HS, QID should be avoided and full forms should be written.**
5) **At the time of withholding drug the doctor should cut the name of the drug by drawing a line over the drug and put his signature in front of it.**
6) **An existing order may not be corrected, altered added to, or modified in any way.**
7) **If change is necessary, the order must be discontinued and a new order written by the authorized prescriber.**
8) **When discontinuing a medication, the prescriber should write the name of the drug being discontinued or write new medication order.**
9) **Don't use a trailing zero after a decimal point like 1.0 mg; it may be misread 10 mg.**
10) **Blanket orders: Medication orders such as "continue medications from home" or "continue medications as previously ordered" are not acceptable. In the event that the physician writes such orders, the nurse must call the prescribing physician and obtain written orders for each individual medication ordered.**
11) **When the patient is shifted from one care unit to another the doctor will prescribe medications on a fresh medication chart.**

2. Verbal Orders

1) **Nurses shall follow only orders written in the Progress Sheet.**
2) **Situations where verbal order to nurses are allowed:**

- **Code blue situation.**
- **Serious nature of patient condition such that if medication is not administered, it may lead to permanent harm or even death.**

- **Insulin orders where a patient is on sliding scale and the nurse has requested confirmation before administration.**
- **Inotropes that have been written as "continuous infusion and titrate against BP" and nurse has requested confirmation before changing the infusion rate.**

3) Read back procedure

- **The receiver shall write the order on paper.**
- **The receiver shall read back the complete order.**
- **The doctor giving the order shall clearly state whether the order is correct or not.**
- **Only after confirmation of the order, shall the receiver write the order in the Progress Sheet, clearly documenting the name of the consultant with date and time, reconfirming the patient's full name. In case there are 2 patients with same name, M.G.M Hospital Regn No. must be confirmed.**

3. <u>High Risk Medications</u> :

1) High risk or high alert medications are the medicines, which are involved, in a high percentage of medication errors, leading to significant damage to patient, cause sentinel events and medications that carry a high risk for abuse.

2) A provider licensed to order, dispense, or administer medications may conduct the second check. This includes physicians and nurses

3) Documentation of the double check will be on the Medication Administration Record (MAR).

4) The minimum requirement for the medication double check or second provider verification will be double checks occurring:

a. At the time of initiation of therapy.
b. At the time of concentration change
c. As part of the Nursing Bedside Safety Check at the change of each shift or any transfer of care.
d. With any dose change for selected medications noted in the list of "Medication Requiring double Check"
e. With any bag (bottle) change for selected medications noted in the list of "Medication requiring double check".

5) For initial dose or initiation of new infusions:

6) The patient's nurse preparing to administer medication will prepare the medication and prepare/retain the following items for use by second nurse who will double check the medication preparation:

a. The original medication package with label intact or vial from which the medication was drawn.
b. The Medication Administration Record (MAR).
c. The prepared medication ready for administration with label intact.

7) A second nurse will assure the following:

a. The medication is prepared according to the order (using the MAR).

b. The medication prepared for administration matches the Six Rights:

- Right patient
- Right medication
- Right dose
- Right time
- Right route
- Right Documentation

c. Once the second nurse performs the double check and both nurses are satisfied that the medication is accurate, they will each document on the MAR by writing their initials next to the administration for that dose in MAR. The second nurse should write "checked by" or similar wording next to his/her initials to indicate that he/she performed this check.

8) For Nursing Bedside Safety Check, shift change or any transfer of care:

a. A second nurse will assure the following:

- The medication currently being administered matches the six rights as determined by the MAR.

b. Once the Nursing Bedside Safety Check is complete and both nurses are satisfied that the medication(s) is/are accurate they will document on the MAR by writing their initials and the time in the space provided on the MAR by drawing a slant line in the column for initials by both.

4. CONTROLLED DRUGS :

1) Definition: A controlled (scheduled) drug is one whose use and distribution is tightly controlled because of its abuse potential or risk. Narcotic Drugs and Psychotropic Substances Act (NDPS) 1985 is operational in India that limits the use of these agents for medicinal purposes.

2) On pharmacy level –

a) A narcotics register is maintained in the pharmacy for controlled substances like Narcotics where all ward wise entries are regularly updated and maintained.

b) When the narcotic drugs reach the reorder level, a transport permit is obtained from the Drug Controller through District Drug Inspector; on the basis of transport permit the dealer issues the new supply.

c) The narcotics and psychotropic substances are dispensed from the pharmacy according to physician's order for a specific patient.

3) On wards level- The supply of these drugs maintained in each patient care area is based on the characteristics of the patient population.

4) Storage and security

a) The narcotic drugs are stored under double lock and key until needed for the patient.

b) The keys will be kept with different responsible persons in the same shift.

c) Both the persons will be present at the time of opening the locks.

d) The nurses or pharmacists responsible for the drug sign the register.

e) A separate narcotic register is maintained where the usage and administration of such drugs is mentioned.

f) Storage areas will be secured and shall be accessible only to designated and authorized personnel.

g) The proper environmental control (i.e., proper temperature, light, and humidity, conditions of sanitation, ventilation, and segregation) will be maintained wherever controlled substances and supplies are stored in patient care areas.

5. Ordering and receiving narcotic drugs and psychotropic substances

1) Patient care areas daily orders for stock narcotics are filled out by the nurse according to the following procedure:

a. The quantity on hand is checked against the quantity used from the documentation records.

b. The Indent form is completed and sent to the appropriate pharmacy area making sure it contains the following:

- Medications and quantity required
- Date
- Department Name
- Signature of person making the request

2) The narcotic drugs are issued to the user department and the nurse responsible does receiving sign.

3) The original copy of the indent form is kept with the pharmacy and the duplicate copy is with the user department.

6. Disposal of narcotic drugs and psychotropic substances

1) The entire amount of narcotic drugs and psychotropic substances obtained is accounted for.

2) The smallest ampule available to be handed over to satisfy dosage is used.

3) When the dose administered is less than the total dose contained in the ampoule, the left over portion is disposed of by pouring down the drain under running water in the presence of ward shift-in-charge and record maintained by the responsible nurse.

7. Maintaining Record of Controlled Drugs:

The record in the register must record the following details

- Date, Time, Patients Name,IP Number, Amount administered, Amount discarded (if part of ampule is resigned), Balance remaining, signature of person making entry, signature of person checking, Name of the Prescriber.
- A separate page must be used for each drug.

8. Medication Audit :

The scope of the audit includes :

- Legibility, use of capitals in written orders
- Appropriateness of the drug , dose , frequency and route of administration
- Presence of therapeutic duplication
- Possibility of drug interaction and measures taken to avoid the same
- Requirements to ensure completeness of entries in medication charts
- Completeness of medication orders to ensure that they contain the name, route of administration, dose to be administered and frequency /time of administration.

Annexure:

1) List Of Drugs which can be given ordered verbally
2) List of Controlled Medications
3) Medication Prescription audit form

MOM 5 DOCUMENTED POLICIES & PROCEDURES GUIDE THE SAFE DISPENSING OF MEDICATIONS

I. PURPOSE: To establish policies and Procedures for drug dispensing in all inpatient, outpatient areas.

II. SCOPE: Pharmacy Department

III. RESPONSIBILITY: Pharmacy Incharge and staffs

IV. POLICY:

1. The order shall be screened for appropriateness of drug, dose and frequency, route of administration
2. Expiry dates shall be checked prior to dispensing
3. In case of contaminations, short expiry drugs, expired drugs, drugs shall be recalled .
4. All drugs shall be verified by departmental head at the time of receipt of goods and the same shall be checked for damages and contaminations.
5. Expiry dates are considered while issuing.
6. The issuance is scheduled in a way that all the consumer departments / wards are distributed indents regularly
7. After approval of indent by the Medical superintendent goods are issued. A copy of the indent is retained with the pharmacy
8. Only medication of highest quality dispensed from the Pharmacy. Any drug of compromised or questionable quality shall be immediately removed from inventory with proper documentation, and the pharmacy software will be updated to reflect such removal.

V. PROCEDURE

Computerized indent or manual indents are generated in duplicate from various departments duly authorized by the department head or the person authorized.

1. Orders for drug written by physician will be checked for clear medication orders, and confirmed using generic names from the hospital formulary.

Types of Requisition

1) Bulk Indent

- Bulk indent is usually made based on consumption pattern of the department..Requisition is made to the main store weekly/biweekly.
- Quantity is analyzed manually.

2) Routine Patient Indent

- Routine indent is raised as and when required by the authorized nursing staff from the respective areas.
- Indents are issued from the IP Pharmacy and distributed.

3) Emergency

- A separate indent is made for items required in an emergency situation.
- some stock is reserved as buffer in sub stores which can be utilized.
- Ward Staff will bring the indent personally from pharmacy.

4) Expensive

- Patient details are mentioned in the requisition form.
- Items indented are patient specific.
- Quantity is analyzed manually.

5) Narcotics & spirits

- Separate indent is made.
- A register is maintained in the main store for audit purpose..

2. <u>Medication Recall</u>

1) If regulatory authorities or company recalls a drug, it shall be reported to the relevant Committee (PTC) and then alerts to be circulated among all the user departments.

2) Pharmacy department via intra-mail or telephone or in person may notify the product recall and date of start recall to all the head of departments (Respective Clinical Areas).

3) The medication recall form shall be given to respective departments with complete information of the product (to be recalled) by the pharmacy department.

4) Completed forms and drugs shall be submitted to the department of pharmacy. 5.2.5 The Pharmacy department will then contact the suitable (regulatory or company) authorities for dispatch of drug back to the company.

5) If a medical officer or senior consultant receives or reads a notice of product recall or product modification directly from the manufacturer, or personally detects a product defect or problem (which is being used in hospital), that information shall be communicated to the Clinical Pharmacologist, which will be discussed in coming Pharmacy & Therapeutic Committee meeting.

6) In case of damaged/contaminated medicines, the contaminated batch of medication should be replaced by the vendor or destroyed after the information to the vendor.

7) The pharmacy checks the vendor, date of receipt, places issued to, matches the consumption and stock of that particular batch and medication is replaced by suitable alternative, if any.

8) Medications are even recalled when there is extra stock kept with the ward. Medications are recalled and quantity is received back by pharmacy and entry is made in the system and the quantity is raised.

3. <u>Procedure for Expiry And Near Expiry dates:</u>

1) Expiry dates of drugs being dispensed by the pharmacist prior to dispensing and rechecked by the staff administering the medicines.

2) In case of short Expiry drugs (within 3 months) & Expired drugs, the same shall be recalled to the pharmacy and informed about the status in written to pharmacy Incharge .

4. <u>Labeling requirements:</u>

In case of cut strips

Or from bulk containers the same shall be issued in drug packets / Pill boxes which should be duly labeled containing in the name of the drug, strength along with expiry date of the drug and frequency of administration in the language patient understand.

MOM 6. THERE ARE DOCUMENTED POLICIES AND PROCEDURES FOR MEDICATION ADMINISTRATION.

I. PURPOSE: To provide uniform guidelines for administering and charting of medications and treatments.

II. SCOPE: OPD and IPD Services

III. RESPONSIBILITY: Treating Doctors and Nurses.

IV. POLICY:

1. Medications are administered by doctors and nurses permitted by law to do so.
2. It is mandatory for the nurse to check two patient identifiers prior to administration of the medication.
3. Medications will be given as per the prescribing physicians orders.
4. The nurse shall record on the MAR (Medication Administration Record) sheet that the medicine has been administered and taken, by signing in the space provided.

V. PROCEDURE:

1. Medicine Verification , Preparation and Labeling

1) The medication is checked for proper condition prior to administration by the nurse
2) The medications are verified by the nurses from the order for correct drug name, dosage, route of administration, strength and time prior to administration.
3) Any medication which has to be given by parenteral route (Intravenous, intramuscular and subcutaneous) or any medication which requires dilutions, medication has to be prepared and labeled prior to preparation of the second drug.
4) If a nurse prepares more than one syringe at the time for administration; each syringe shall be labeled before preparation of the next syringe.
5) Any syringe that is prepared and not administered immediately shall be labeled with the name of the medication, quality, date and time. The label will be attached to the syringe barrel, not the needle cap.
6) Medications administered in droppers (e.g. ophthalmic medicines) are to be dated (When opened signed) and discarded as per the expiry dates or 30 days after opening or when the patient is discharged whichever is earlier.

When nursing staff reconstitutes multi-dose vials of drugs, the container is labelled with the drug name, drug concentration, and name of patient, bed number, date and time of opening and is stored in drawer at the bedside. Once the patient is discharged the vial is discarded.

2. Discarding Open Medications:

1) All vials or ampoules that contain no preservative or are single use containers shall be discarded after each use regardless of the amount not used.
2) Medications shall be discarded according to manufacturer recommendations. Medications that require reconstitution shall be timed and dated when opened. (Note: Insulin, when kept refrigerated, shall be discarded every 30 days. Non-refrigerated insulin shall be discarded every 14 days.)
3) All vials shall be discarded immediately upon expiration, possible contamination or improper storage, such as incorrect temperature or exposure to light. All outdated drugs, and those with worn containers or

3. Unused Medications

1) Company patient- Nurses are responsible for returning unused medications to the pharmacy for patient credit along with the bill mentioning the patient name, issue date and quantity returned. Only full strips will be returned to Pharmacy.
2) Unused (loose) and discontinued medicines are not to be handed over to the patient at the time of discharge.

4. Patient Identifying procedures:

1) The admitting desk will confirm patient identification through two identifiers - Name and registration No. on the admission request form. A non-transferable identification band shall be prepared and affixed to the patient's wrist by the nursing staff.
2) The identification band shall show the patient's name, registration No. and IP No., age, sex and date of admission**.**
3) Initially, the identification band shall be checked by the ward nurse/ nurse in-charge to ensure that it is legible and contains the correct information when the patient is admitted.
4) Identify the patient (once admitted) with the help of two patient identifiers- Full Name and Registration No. The staff should double check verbally and physically the details of the patient, asking the patient to speak their full name and registration number against the Patient wristband particularly for the following.
- Prior to administration of any test, treatment
- Prior to each Medication Administration
- Prior to signing Informed consent
- Prior to any Procedure

a. In case the patient is unconscious the nurses should themselves verify the name and registration no of the patient with the file and the wristband on the patient.
b. No patient will be identified with the Bed No.
c. If the identification band is illegible, missing, or contains information that is incorrect the test, treatment, medication, or procedures will not be done until the patient is properly identified.
d. In the event that an identification band is illegible, missing, or contains incorrect information, Nursing staff is responsible for ensuring that a new band is obtained from the IPD reception.

5. Dosage Verification

The dosage should be double checked by the nurse from the treatment orders before preparation and before administration and documented in the medication chart.

6. Route Verification

The route of administering the medication shall be double checked by the nurse from the treatment orders before preparation and before administration and documented in the medication chart

7. Timing verification

The timing must be double checked by the nurse from the treatment orders before preparation and before administration and documented in the medication chart

8. Documentation

1) Medication administration time shall be entered in the record (MAR).
2) All entries shall have name of medication , Dosage, route, timing, signature of the person administering the medication
3) Controlled Drug administration must be recorded on the Controlled Drugs Register as well, and signed for.
4) Record and report to treating physician at the earliest opportunity if medicine is not taken for any reason.
5) If the wrong medicine is given, report this immediately to the senior staff member on duty, who will inform the doctor. Complete Medication Error form and proceed as per hospital policy on medication errors.
6) Staff have one hour within the prescribed medication time to give medications. Example: If the medication is to be given at 8:00 p.m., the medication may be given between 7:30 p.m. and 8:30 p.m. If the medication is not given within this time frame, it will be considered a medication error unless an omission note is documented in the patient record and the staff shall follow the policy for medication errors.

9. Patient/ Family Education

1) Patient and family are educated at their level of understanding by the doctors and the nurses regarding the following aspects of the patient's medication therapy at the time of discharge.

- Rationale for use
- Mechanism of action or expected results
- Administration Schedule
- Potential Side Effects
- Precautions and
- Circumstances under which to notify the health care provider.

2) The doctors educate the patient and the family members about the food-drug and drug-drug interactions.

3) The dietician takes the counseling sessions for the patient and the family explaining about the various food habits and their impact on recovery/ ailment.

10. Self Medication & medication brought from outside

1) The hospital does not allow any kind of self-medication by the patients.

2) The patient shall disclose to his/ her physician the medications being taken by him / her before the treatment started.

3) Patients on own oral medications brought in by the patients who are on chronic therapy shall be known to the treating physician and will be allowed to administer to the patient under the supervision of the treating consultant.

4) Drugs brought by the patient shall be verified with bill, label, Dose, expiry date before administering the Drug.

5) The patient shall be educated on self-administration of medicine by the nurse before they are discharged from the hospital.

6) Patient and family are educated about food-drug interactions and drug-drug interactions at the time of discharge.

MOM7 PATIENTS ARE MONITORED AFTER MEDICATION ADMINISTRATION

I. PURPOSE:

To guide the medical staff regarding monitoring of patients after administering of medications.

II. SCOPE:

IPD & OPD Departments

III. RESPONSIBILITY:

Doctors & Nurses

IV. POLICY:

1. Patients should be monitored after administration of medications for desired and adverse effects.
2. High risk medications will be identified and close monitoring of the patient will be carried out after administration of high risk medication.
3. Critical care areas such as ICU shall require close monitoring of the patient every hour or earlier as per the treatment required.
4. The monitoring shall be done through collaborative means involving RMO & Nurses. Medications and doses shall be adjusted if required based on the observation.

V. PROCEDURE:

1. The medication administered is noted in the medication chart by the nursing staff.
2. The clinician & Nurse will be aware of the intended effect of the drug .eg. Pain, relief, sedative etc and will monitor the patient after administration of the drug for the desired effect.
3. Any medication error, near misses and adverse drug effects will be intimated to the treating doctor immediately and recorded as event for reporting.
4. On administration of High risk drugs the patients will be closely monitored including recording of vital parameters and level of consciousness and observing for other side and adverse effects as relevant.

MOM 8: NEAR MISSES, MEDICATION ERRORS AND ADVERSE DRUG EVENTS ARE REPORTED AND ANALYZED.

I. PURPOSE:

To identify & Report Medication Errors and to provide documentation to prevent reoccurrence of the same and to identify training need if any.

II. SCOPE:

Pharmacy, IPD &OPD Departments

III. RESPONSIBILITY:

Pharmacist, Doctors & Nurses

IV. DEFINITION:

1. Near Miss:

A near miss is a unplanned events that did not result in injury, illness, all damage but had the potential to do so. Errors that did not result in patient harm but could have caused harm are categorized as near misses.

2. Medication Error:

1) A medication error is any preventable event that may cause or lead to inappropriate
2) Medication use or harm to a patient (FDA)
3) A medication error is any preventable event that may cause or lead to in appropriate medication use or patient harm while the medication is in the control of the healthcare professional patient, or consumer. Such events may be related to professional practice, healthcare products, procedures, and systems, including prescribing, order communication, product labeling, packaging, and nomenclature, compounding, dispensing, distribution, administration, education, monitoring, and use.

4) Types of Error

a. Order error:

Types of ordering errors include: inappropriate medication selected, inappropriate dose, illegible order, duplicate order, order not dated/timed, wrong patient/chart selected, contraindications, verbal order misunderstood, verbal order not written in the drug chart, wrong frequency, route,illegible writing, therapy duration, alert information bypassed or use of nonstandard nomenclature or abbreviations.

b. Transcription error –Transcription involves both the orders that are manually transcribed onto manual record (e.g. Drug chart). **Types of transcription**

errors include: wrong medication, time, dose, frequency, duration, rate patient/chart, verbal order misunderstanding, verbal orders not entered into patient case sheet.

c. **Preparation/Dispensing Error** – Types of preparation and dispensing errors include: Inaccurate Labeling, wrong quantity, medication, dose, diluents, formulation, expired medication and delay in medication delivery.

d. **Administration Error** – **Types of administration errors include:** Wrong patient, dose, time, Medication, route, rate, extravasations (may be an ADR) and unauthorized dose given

3. **Adverse Drug Reaction:** A Response to a Drug which id noxious and unintended and which occurs at dosed normally used in man for prophylaxis, diagnosis or therapy of disease or for the modification of physiologic function.

V. POLICY

1. When an error is identified, it shall be reported on a "Medication Error/ Adverse Drug Reaction form" to nurse in charge and the doctor on duty immediately.
2. An error shall be reported to the concerned consultant immediately.
3. Continuous monitoring and frequent assessments shall be done for the patient.
4. A Medication Error/ Adverse Drug Reaction form shall be signed by the person reporting. The Nurse in charge / Nursing Supervisor shall ensure the same.
5. The medication error/ADR form shall be submitted to the Quality Cell.
6. The Pharmacy and Therapeutic Committee will do a root cause analysis (RCA) for all major reactions and will provide recommendations for preventing reoccurrence.

Annexure :

1) Medication Error analyses Form
2) Adverse Drug Reaction analysis Form

MOM 9: DOCUMENTED PROCEDURES GUIDE THE USE OF NARCOTIC DRUGS AND PSYCHO THERAPUTIC SUBSTANCES

I. POLICY:

This policy reviews the general procedures for the security, handling and dispensing of controlled substances throughout the Hospital.

II. PURPOSE:

To maintain a system for the safe use & storage of Narcotic drugs and psychotropic substances.

III. SCOPE:

All nursing stations, IP pharmacy, medical store.

IV. RESPONSIBILITY:

Nursing Staff ,Pharmacy Staffa and Doctors

V. DISTRIBUTION:

All Nursing stations, Patient care areas, OT, ICU, Day Care, Pharmacy, Medical store

VI. ABBREVIATION

Abbreviations are as follows:

IP= Inpatient

OT= Operation Theatre

ICU= Intensive Care Unit

VII. PROCEDURE:

- Narcotic drugs and psychotropic substances shall be used as per Narcotic drugs and psychotropic substances Act.
- A proper record of its uses, administration and disposal shall be maintained. Only care providers shall handle these drugs.
- The controlled drugs shall be maintained in a separate cabinet with proper double lock& key under the control of license holder.
- The pharmacists shall maintain the necessary documents with regard to the above authority and the issue and stock registers with the doctors' requisitions and patient details.

- The pharmacists in pharmacy store and OT pharmacy will maintain the necessary documents with regard to the above authority and the issue and stock registers with the doctors' requisitions and patient details.
- Whatever controlled drugs drawn, shall be properly regulated for issue to patient concerned as per the doctor's advice.
- All prescriptions with copy of patient billing for controlled drugs shall be maintained in a separate file for future reference.
- Morphine tablets are stored in the pharmacy store and Pharmacist shall maintain the issue and stock registers with doctor's prescription and the bill copy.
- Documented procedure shall be followed for the proper use of these drugs.

S. No.	**Activities**	**Responsibility**
1	Pharmacist shall ensure compliance to the Narcotic and Psychotropic rules for narcotic and psychotic medicines	Pharmacist
2	All Narcotic drugs and Psychotropic substance will be dispensed on a physician order only which is verified by HOD Anaesthesia and then by Medical Superintendent.	HOD Anaesthesia / Medical Superintendent
3	While dispensing these medicines, thorough check shall be done for prescription and all necessary information as well as consultant's signature with registration number asper Narcotic drugs Act.	Consultant , Pharmacist
4	Narcotic drugs are arranged separately and kept under lock & key at their respective areas.	Pharmacist, Nurse
5	Proper care for narcotic drugs and the doses formed is taken and is checked during pharmacy audit round.	Pharmacist
6	Separate record for fentanyl is maintained.	Pharmacist
7	Records of fentanyl are submitted in excise office as & when required.	Pharmacist
8	While administration of medicine, the form must be completely filled up duly and signed along with doctor's registration number.	Consultant/Anesthesiologist

GUIDE LINES FOR NARCOTIC MAINTENANCE

- Narcotic Drugs will be kept under double lock & key & the key should only be with pharmacists in the pharmacy store and OT pharmacy
- Each drug should be kept separately in manufacturer privided container
- Labeling should include the name of drug, dose, strength
- Empty Ampoules should be preserved separately in container with label as 'Used ampoules'.
- Each Narcotic stock register of each dosage form should contain the Name of the department, trade name with dosage form, strength, expiry date and batch number, quantity and concerned nursing staff's signature and pharmacist's signature,
- There should be no cutting or over writing, if so should be signed by the Nursing Supervisor at nursing station and pharmacist in store.
- Narcotic Stock register & Narcotic log register should be maintained & kept along with the Narcotics in the Cupboard.

Procurement of Narcotic Drugs

a. Appropriate license is obtained and renewed every year before procuring Narcotic drugs
b. The quantity of drug to be procured ever year is approved by the Drug Inspector

VIII. Administration & Accountability

1. Safety and Security:

- All Narcotics and Psychotropic Drugs shall be stored under Secured Locks both in pharmacy and in OT pharmacy
- Accessibility limited to approved personnel shall be maintained for such Lockers
- The Pharmacists shall be the key holder and ultimately responsible for maintenance of the Lockers and inventory
- Documentation of Receipt: Records for Receipt.- Separate Records shall be maintained for Receipt of different Narcotic Drug.
- These records shall indicate the following information:
    1) Date of Receipt of Goods from the manufacturer
    2) Batch No. Name of the Drug
    3) Name of the manufacturer
    4) Date of Manufacturing
    5) Expiry date
    6) Quantity of good received
    7) Wide Invoice no.

2. <u>Documentation of issue:</u>

Separate Records shall be maintained for issue of different Narcotic drugs Records for distribution. These records shall indicate the following information

- Date of distribution (part of daily log sheet),
- Name of the drug
- Date of Issue
- Patient name and IP no.
- Ordering physician's name,
- Quantity of units distributed,
- Signature of distributing pharmacy personnel

- All records for controlled substances shall be maintained in a readily retrievable manner for five years.

Documentation at User department will contain name of the drug, quantity, date, Name of the patient etc**.**

- No outpatient issue of any Narcotic Drugs will be done only by pharmacist with proper format of prescriptions same as inpatient issue.
- The Prescription shall contain name and signature of the prescribing physician.
- Two copies of the prescription will be obtained from the Physician. One copyis retained by the pharmacy for record purpose
- *(Annexure shows list of narcotics and psychotropic substances used in the hospital)*

Unused substances may be returned to stock for future disposition if the following conditions will be met;

Written documentation shall be clearly legible with all applicable information provided.

- Shall be in the manufacturer's original container,
- There is no evidence of suspected tampering or adulteration, and
- The container is clean and free of contaminants.

Unused containers will be returned to stock and documented as follows:

- Date of return (part of daily log sheet),
- Name of controlled substance,
- Quantity of units returned, and
- Initials of the receiving pharmacy personnel.

IX. RECORDS AND FORMATS:

Narcotics Register

ANNEXURE

Narcotics

Sr. No.	Generic name	Formulation
1.	Fentanyl citrate	Fentanyl citrate inj 2 ml,
2.	Fentanyl	DURAGESIC PATCH 25/50/100MCG
3.	Morphine Tab	Tablets

MOM 12 DOCUMENTED POLICIES AND PROCEDURES GUIDE THE USE OF IMPLANTABLE PROSTHESIS AND MEDICAL DEVICES

I. PURPOSE :

To establish policy and procedure for procurement and usage of Implantable Prosthesis.

II. SCOPE

Hospital wide

III. RESPONSIBILITY: Cardiac Surgeon/Orthopedic surgeon/treating surgeon under supervision of HOD

IV. POLICY

- **The selection of implantable prosthesis is as prescribed by the consultant**.
  1) The hospital pharmacy procures implants as and when required. However, the demand should reach pharmacy at least a day prior to the procedure.
  2) Stock of implants with inventory control will be done by the Pharmacy Incharge or at the department concerned.
  3) The serial number of the implantable prosthesis used on the patient is recorded in the patient's medical record and the master logbook and Discharge Summary

V. PROCEDURES:

1. Implants which are required for patients in general ward is prescribed to the patients by the treating surgeon.
2. The implants are procured from local dealers and stockists, who keep implants manufactured by standard and reputed companies.
3. For patients in the empanelment category, The implants are procured by the hospital through its Central stores department and the billing and payment for these implants is done by the hospital through the Central stores department
4. In case of Cardiac stents the implants is stocked by stockists in the department of Cardiology under supervision of the staff incharge of cardiology dept, the document control including supply order ,billing and payment order is initiated by Central stores on requisitions initiated by treating surgeons
5. Selection of implants is done on scientific criteria, and approved by treating consultant/user
6. The batch number and serial number of implants used for surgery done including select items like total joint replacement are entered in the patient's medical record.
   High end implants (artificial joint replacements) and customized prosthesis are procured directly from the manufacturing company.

The prosier for implant procurement below

S. No.	Activities	Responsibility
5.	Each entry of the batch number of the prosthesis used is signed in the log book	OT sister

MOM 13. DOCUMENTED POLICIES PROCEDURE GUIDE THE USE OF MEDICAL SUPPLIES AND CONSUMABLES

I. PURPOSE:

To define process for acquisition of medical supplies and consumables

II. SCOPE:

Central store

III. RESPONSIBILITY:

Central Store Incharge

IV. POLICY:

1. Medical supplies and consumables will be procured from approved and registered vendors
2. Stores will be kept in clean safe and secure environment
3. Sound inventory control practice will be followed

V. PROCEDURES:

1. ORDER:

1) The order is placed in the first week of every month.
2) The quantity is decided based on the average consumption of a particular item in the past 3 months and available stock.
3) This order is placed with a particular supplier from whom it was procured the last time.
4) Purchase order is created for the material according to the current reorder level.
5) Vendor selection & vendor evaluation is done by the Department of Pharmacy on basis of availability, organizational structure of vendors, efficiency in terms of delivery time, quantity, quality, reputation in the market, etc.

2. Receipt of goods:

1) The material when received is entered in computer where a GRN is created mentioning the quantity received along with rates, Expiry, Batch No. and available stock in house.
2) If the rates of the items received are changed (whether lower or higher) that particular item is highlighted in GRN displaying the previous rate.
3) A thorough physical verification of the goods brought by the vendor is carried out in accordance with the purchase order made.
4) A report is generated with party name, challan, bill no, gate entry no., date, purchase order no, description, item code, quantity accepted.

5) The items received are sent to indoor pharmacy where they are stacked and stored in storages meant for them.

6) Any item which is to be kept in low temperatures is stored inside the refrigerator which is placed inside the pharmacy.

3. Indent

1) For the medical supplies and consumables to be dispensed, indent is raised on the IPD of the concerned patient by the Doctor.

2) After getting the requisition medical supplies and consumables are taken out and dispensed.

3) The medical supplies and consumableless are directly indented in the patients account and billed at discharge as per hospital policy.

4) The OPD medical supplies and consumableless are dispensed from a separate counter meant for outdoor patients on cash payment. Any medical supplies and consumables, if is not available in the stock, it's substitute is asked from the doctor in writing.

5) Medical Supplies and consumables are present in care areas i.e ward, ICU's and Departments. A stock register is maintained for the record keeping of the consumables.

6) All medical supplies and consumables s are stored according to their storage conditions as per instructions on their packing.

4. General Medical supplies and consumables Storage-

All medical supplies and consumables are stored in designated area, which ensures proper sanitation, temperature, light, ventilation etc.

1) Medical supplies and consumables storage areas are locked when not in use. Keys to medical supplies and consumables cupboards are the responsibility of the person assigned with the keys. The medical supplies and consumables cupboard is fully secured and is inaccessible to unauthorized staff.

2) Pharmacy Level - Medical supplies and consumables are stored in racks, cabinets, etc. which are properly labeled as per the trade/ generic name, strength of medical supplies and consumables . All the medical supplies and consumables are stocked in an orderly fashion.

3) Ward level - Medical supplies and consumables are stored in the locker at the bedside of the patient. There is no storage of medical supplies and consumables in the wards. Medical supplies and consumables s are indented as and when needed from the IP Pharmacy. However, a stock of emergency medical supplies and consumables s is maintained in the wards to handle any emergency and the inventory for the same is maintained by the respective shift-in-charge. In addition Crash Cart is also maintained in the wards and ICUs and inventory for the same is also maintained separately.

4) No expired medical supplies and consumables s are kept in the racks/ cupboard as a physical check is made every month and every time the medical supplies and consumables s are received and the short expiry are noted and used accordingly.

5) All the drugs in the pharmacy are stored as per the earliest expiry date. The concerned person checks the expiry date prior to dispensing of the drugs.

6) Medical supplies and consumables s to be stored below 25^0C are stored in refrigerator.

5. <u>Security</u>

1) Bulk storage areas will be locked after Normal working hours

2) Employees are oriented with safety policy, Fire /Non Fire Emergencies, , emergency codes

3) Inflammable items shall be stocked in fire proof storage cabinets

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

M.G.M Medical College and Hospital, Kamothe	Patient Rights & Education		
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CONTENTS

S.No	Standards
PRE 1	The organization protects patient and family rights and informs them about their responsibilities during care
PRE 2	Patient and family rights support individual beliefs , values and involve the patient and family in decision making processes
PRE 3	The patient and /or family members are educated to make informed decisions and are involved in the care planning and delivery process
PRE 4	A documented procedure for obtaining patient and / or family's consent exist for informed decision making about their care
PRE 5	Patient and families have a right to information and education about their health care needs.
PRE 6	Patient and families have a right to information on expected costs
PRE 7	The organization has a mechanism to capture patients feedback and redressal of complaints
PRE 8	The organization has a system for effective communication with patients

PRE1 THE ORGANIZATION PROTECTS PATIENT AND FAMILY RIGHTS AND INFORMS THEM ABOUT THEIR RESPONSIBILITIES DURING CARE

I. PURPOSE:

To describe the rights and responsibilities of patients and their family members

II. SCOPE:

All patients attending OPD and IPD cases must be informed

III. REPONSIBILITY:

All staffs

IV. POLICY :

1. The rights of the patient and families are protected
2. Patients and families will be informed of their rights and responsibilities in the language they understand.
3. Staff is given training and periodic sensitization carried out to create awareness of their responsibilities in protecting patient and family rights.

v. PROCEDURE:

1. Patient and family rights are as given in document as appendixes
   Patient's rights and responsibilities are displayed at convenient places in hospital.
2. Information of patients rights is communicated to them and their families at various stages of treatment in the Healthcare Organization.
3. Violation of patient rights is recorded, reviewed and corrective /preventive measures taken by the designated official.

ANNEXURE :

1. **Citizens Charter**
2. **Patients Rights' Hand book**

PRE 2 PATIENT AND FAMILY RIGHTS SUPPORT INDIVIDUAL BELIEFS, VALUES AND INVOLVE THE PATIENT AND FAMILY IN DECISION MAKING PROCESSES

I. POLICY

All Medical / departmental records and information related to patients' treatment shall be kept confidential.

II. PURPOSE:

The purpose of this policy is to ensure that:

1. Patients experience care in an environment that actively encompasses respect for individual values, beliefs and personal relationships.
2. Patients feel valued by the organisation and do not experience negative or offensive behaviour.
3. Staff's attitudes, behaviour, non-verbal communication and body language are promoted keeping expressed and implied needs of patients in mind.

III. SCOPE:

The policies and procedures cover privacy and dignity issues of all patients to be followed by all the member and staff of the Hospital.

IV. RESPONSIBILITY:

All members of the M.G.M Medical College and Hospital, Kamothe team

The Medical Superintendent has responsibility for ensuring the privacy and dignity of patients and this function is delegated to Clinical Heads.

Department in charge shall be responsible for monitoring their environment/areas in relation to privacy and dignity issues.

Every member of staff has a duty however, to ensure that the privacy and dignity of all service users is respected.

V. DISTRIBUTION:

Hospital Wide

VI. ABBREVIATION:

. Abbreviations are as follows:

USG= Ultra Sonography IP= Inpatient

VII. PROCEDURE:

1. Guidelines

1) At all times, staff will treat patients, their relatives or attendants, in a manner that makes them feel that they are valued and respected.

2) Patients will receive care in a manner which recognizes their individual values, beliefs and personal relationships. The personal space of patients and their relatives will be respected at all times and likewise staff may ask patients and their relatives to grant them the same courtesy.

3) Communication with patients shall take place in a manner that respects their individual knowledge, abilities and preferences.

4) Patients shall be cared for in an environment that actively promotes their privacy and where their dignity is protected when they are unable to do this for themselves.

5) Information about their diagnosis and care will be shared with patients in the first instance and their relatives where the patient agrees or is unable, by virtue of their physical or mental illness, to make a reasoned and informed decision.

2. Attitudes and Behavior

1) Staff shall ensure that patients feel that they matter and do not experience negative or offensive attitudes or behaviour.

2) Staff ensure good attitudes and behaviour are promoted including consideration of non-verbal behaviour and body language and the needs of minority groups.

3) Patients shall experience care in an environment that actively encompasses respect for individual values, beliefs and personal relationships.

4) Individual needs will be ascertained and continuously reviewed.

5) As much as possible patient of similar sex shall be posted in the clinical areas where single sex accommodation is not available, signs shall be available to indicate designated male or female facilities. Patients will always be adequately dressed or covered prior to leaving a clinical area for any reason, so that their privacy is maintained and they are warm and comfortable.

6) Patients incapable of helping themselves shall never be left without a covering to maintain their decency, even during bed bathing and changing of bed linen/night attire.

7) Every effort will be made to ensure patients who continually expose themselves are shielded from the view of others. This can be done in following ways:

- **i.** All glass doors of patient room shall be translucent
- **ii.** Curtains shall be always pulled in sharing wards between the patients.
- **iii.** Doors shall be closed during procedures/investigation in Diagnostic area
- **iv.** Curtains shall be pulled while change of dress or undressing of patient at every location including USG rooms
- **v.** Patients shall be covered with drawsheets/ blankets during transfer from one department to other.

8) Patients, who are incapable of helping themselves, will be offered assistance to put on appropriate clothing, spectacles, insert hearing aids and dentures as required.

9) Staff shall avoid displaying patient's personal health information in wards or in ICUs unless this information is required for maintaining and promoting patient safety such as display of Patient's UHID, IP Number, Doctor's name

3. Personal Boundaries and Space

1) Patients' personal space shall be actively promoted by all staff. Personal space is respected and protected - patients shall be not be disturbed or interrupted e.g. knocking or making your presence known before entering the clinical area.

2) The name by which the patient wishes to be called shall be determined.

3) The acceptability of personal contact (touch) and personal boundaries shall be identified and communicated to others in the care team.

4) Patient dignity shall be ensured, at times when the presence of others is required, e.g. by seeking their permission in advance

4. Communicating with Staff and Patients

1) Communication between staff and patients shall take place in a manner that respects their individuality.

2) Patients shall be listened to and their views and needs recorded and taken into account.

3) Proper communication with patient/ relatives shall be ensured. Staff shall always be ready to alter speed, check and repeat or explain information in a different way to ensure understanding.

4) Translation services shall be used where required, rather than simply relying on family members.

5) All communications shall be recorded in the patients' notes.

6) Staff will ensure that they include the patient in all conversations held in front of them especially during personal care and intimate procedures.

5. Confidentiality of patient information

Patients' information shall be shared only with their consent.

Staff will not discuss any patient or visitor within the hearing of another patient or visitor.

1) Patients may read their own care plans, but visitors may only read them at the discretion of the patient.

2) Taking pictures or videos of patient in mobile phone will be prohibited.

3) Patient Case files will not be left open on the nursing station counters.

4) The staff will take precautions of eavesdropping and overheard telephonic conversation while talking on phone.

5) Handing over, taking over procedure books and other records and registers containing patient personal and clinical details shall be accessible only to concerned staff. Every effort shall be made to ensure that these records are not disclosed to unauthorized staff/person
6) Verbal Handing over and taking over shall be done softly without raising voice. It shall be ensured that these conversations are not overheard.
7) It will be ensured that all communication made to the patient will be in such a way that they are not overheard. This can be done by interacting the patient in closed doors without making him/her uncomfortable

6. Privacy, Dignity and Modesty

1) Patients' care actively promotes their privacy and dignity and protects their modesty.
2) Patients will be protected from unwanted public view (including that of the clinician) including using curtains, screens, blankets, screens etc.
3) Outpatient consultation will be conducted in closed rooms.
4) Patients should have access to their own clothes whenever possible.
5) Arrangements will be made so that patients can have private telephone conversations.
6) Patients shall asked if they require an attendant for any intimate procedures. Female hospital staff mandatory for female patient examination by male doctor.
7) With the patient permission a family member or friend may act as a company for any procedures.
8) In the Outpatient care setting, where a clinician may usually practice alone, patients shall be offered chaperonage

7. Equality and Diversity- uniform care

1) The Hospital believes that it is important to promote and confirms its commitment to equality and diversity in its services.
2) The Hospital will ensure that barriers to access of services and employment are identified and removed, and that no person is treated less favourably on the grounds of their race, ethnic group, religion/belief, impairment, age, gender, sexual orientation, mental health status & categories of wards.
3) Staff will work with patients and their families in ways which, wherever possible, take into account that they may have different attitudes, values and beliefs about health and healthcare. Where it is not possible to take this into account, clear information and explanations will be given.
4) Barriers to services will be identified and removed and where they cannot be removed, adjustments will be made.
5) Auxiliary aids and services (such as use of appropriate interpreters and communication aids) will be provided where these will facilitate access to services.

Patients have the right to complete confidentiality. Medical / departmental records and information regarding patients are legally protected for privacy.

1) Patient physical assessments are conducted in a location that has reasonable privacy and it should be in the presence of an attendant/female nurse (in case of female patients).

2) In the course of performing work responsibilities, information is considered confidential with regard to patients, their families, their physicians, As a condition of employment, personnel are cautioned not to discuss any such information of patients with others.

3) M.G.M Medical College and Hospital, Kamothe personnel will extend their ethical responsibility of patient confidentiality, by not disclosing any patient related information

4) Personnel shall NOT release any general information such as verification that a patient has visited the hospital, the general nature of the injuries, and the degree of seriousness of his/her condition, such as "critical" "satisfactory" or "not serious'; NOR disclose detailed information to the press without the signed authorization of the patient or legally authorized.

5) Any such enquiries shall be directed to the M.G.M Medical College and Hospital, Kamothe personnel will prevent the disclosure of any personal or medical information obtained during the course of their professional duties, with anyone except other health professionals directly involved in the care. The patient right to privacy extends beyond their discharge from hospital, and beyond their death.

6) Personnel shall not discuss patients in common areas or outside of the facility.

7) Medical records are accessed only by staffs who are involved with the patient's care. Medical records are protected from unauthorized access by storing in protected areas when outside of the Medical Records Department.

8) The computer system requires access codes to obtain information from sensitive areas, i.e., business office, medical records, and laboratory results.

9) In case the patients reports are issued for academic purpose the identity of patient should be concealed.

Patient and family can refuse for treatment. Consent is taken by the treating doctor/team member after explaining the risks associated with refusal of treatment. LAMA form is filled by the patient/ relative.

8. **<u>Patient and family can seek a second opinion</u>** if they wish, from within or outside the organization.

1) Any patient requesting for second opinion is permitted to do so. The patient has to apply on plain paper giving reason and requirement for second opinion.
Patient is issued comprehensive summary, investigation results, hard copies of X–ray etc.

2) Patient is counseled and given option to go to any other medical facility wherever desired.
3) In case the patient is stable, patient is permitted to go out after due permission from Medical Superintendent.
4) Outside doctors are permitted through Medical Superintendent and the treating Doctor.
5) Credentials of the outside doctors have to be submitted along with the letter of "Request of Second Opinion".

9. <u>Patient and family have right to complaint</u>

1) The patient and family can drop written complaint in the suggestion box.
2) The patient and family can take a feedback form and submit in the Medical Superintendent Office.
3) The patient and family can directly address their complaint to the Medical Superintendent.

PRE 3 THE PATIENT AND /OR FAMILY MEMBERS ARE EDUCATED TO MAKE INFORMED DECISIONS AND ARE INVOLVED IN THE CARE PLANNING AND DELIVERY PROCESS:

I. PURPOSE:

To involve the patient in decision making process by taking into account the patients individual belief, values and needs in all stages of planning of patient's care.

II. SCOPE:

All patients

III. RESPONSIBILITY:

All staffs

IV. POLICY:

1 Patient's information will be treated as confidential.

2 Patient and Family will be involved in decision making process

3 Patient and family preferences will be considered.

4 Proper and relevant information regarding expected cost of treatment shall be provided to the patient and /or his /her attendant

v. PROCEDURE:

1 The patient's right to personal dignity and privacy will be respected during examination, performing of procedures and during treatment.

2 All information provided by patients will be including verbal and documented will be treated as confidential.

3 Patients rights include refusal of treatment for which written consent will be taken including for LAMA and DAMA .

4 Treating Doctor will explain about all available options for Medical / surgical treatment including the risk, alternatives and benefits.

5 The patient can make choices of treatment.

6 The patient and family members are explained about the expected results.

7 The patient and Family members are explained about the possible complications

8 The treatment care plan is prepared in consultation with patient and family members, the dietary concerns, spiritual and cultural needs and requests will be considered.

9 The patient and Family members will be kept informed about the results of diagnostic test and the diagnosis

PRE 4 A DOCUMENTED PROCEDURE FOR OBTAINING PATIENT AND / OR FAMILY'S CONSENT EXIST FOR INFORMED DECISION MAKING ABOUT THEIR CARE

I. PURPOSE:

To ascertain general policies and procedures for the facilitation of patients and/or their attendants in making informed decision about the care.

II. SCOPE:

Hospital wide (All diagnostic examination, therapeutic procedures, blood transfusion and all major and minor invasive procedures)

III. RESPONSIBILITY:

Treating Doctors & Nurses

IV. POLICY

1 All patients undergoing operative and invasive procedures are allowed to participate in care decision.

2 All patients with planned or emergency operative/invasive procedures will be provided with adequate information related to the planned procedure, risks, benefits, alternatives and potential complications (All these clauses are included in the consent form).

3 An informed consent will be obtained from the patient and/or his/her attendant after adequate information has been provided.

V. DEFINITIONS

1 Voluntary Informed Consent-

A patient's consent is informed: When the patient has been given sufficient information so that he / she understands the nature of his/her condition, the nature and purpose of the proposed treatment, the risks and consequences of the procedure or treatment, the feasible alternative procedure or treatment and the prognosis if the procedure is not performed nor any treatment given.

2 General Consent - When the nature and probable risks of the procedure or treatment are of such a common and ordinary nature so as to be within the patient's understanding and knowledge (e.g. x-rays, etc.)

3 Implied Consent in a Medical Emergency - Consent in emergencies may be implied if the condition of the patient precludes his/her ability to make a decision regarding treatment or procedures.

4 A medical emergency is a situation where delay for the purposes of obtaining consent may reasonably be anticipated as endangering the life of the patient or significantly increasing the harm to the patient's health

5. **Surrogate Decision Maker** - The priority order of surrogate decision makers is: Spouse, Adult Children, Parents, Adult Brothers or Sisters, Adult Grandchildren, significant other (close friend). A close friend may sign the consent form only in an emergency.

VI. PROCEDURE

1. As per the existing laws and norms defined by the hospital, the informed consent will be taken prior to the procedure/treatment.
2. Staff members will clearly explain the proposed treatment or procedure to the patient or his legal guardian (in case of minors i.e. under 18 years of age).
3. In case if a medical emergency the consent is also taken telephonically from the patient's family and recorded.
4. The explanation should include and not limited the following:

1) Potential drawbacks, outcomes and benefits.
2) Potential problems related to recuperation.
3) The likelihood of success.
4) Possible results of non-treatment.
5) Alternatives if any.
6) Adult patient (conscious, sound of mind) will give the consent him/herself.

5. In case the patient is unconscious/delirious, a minor or mentally incapable of making the decision by himself or if the patient indicates that she/he would prefer to have someone else give consent the signature of designated person will be taken.
6. In case of mentally challenged patients signature will be taken from legal guardian.

- **Methods of Obtaining Consent**

1. A separate authorization form is placed at the admission desk and with the counselor.
2. The patient is explained about the authorization for his/her treatment by the admission desk prior taking the signature from him/her on the authorization form.
3. The patient is then sent for counseling where financial counseling is done for the procedure or package, tariff and various other inclusions and exclusions before admission or any procedure.
4. The HOD/Consultant or his designee shall discuss in lay terms the procedure, its risks, benefits and alternatives with the patient or the patient's surrogate decision maker.
5. The Consultant or his designee shall document the discussion by obtaining the patient's or his surrogate decision maker's written informed consent on the appropriate form.
6. The patient shall sign the consent form. A surrogate decision maker may sign the consent on behalf of the patient if:

- The patient is a minor (less than 18 years of age)
- The patient desires the surrogate to sign on his/her behalf.
- The patient is mentally incapable of making an informed consent.
- Unconscious
- Has received sedation within 3 hours
- The patient is physically incapable of signing the form.

7. The priority order of surrogate decision makers is:

- Spouse
- Adult Children
- Parents
- Adult Brothers or Sisters
- Adult Grandchildren
- Significant other (close friend). A close friend may sign the consent form only in an emergency.

8. The order of preference of surrogate shall be as above, but may be modified as per the patient's wish or availability of the surrogate.

9. In a life-threatening emergency, HOD/consent shall be implied; therefore the patient's signature is not required.

10. In such situations, the HOD/Consultant shall document in the patient's medical record both the nature of the emergency and the inability of the patient or surrogate decision maker to consent.

11. It is the responsibility of the person obtaining the consent to ensure that the consent form shall be properly filled prior to signing. All entries shall be in ink.

12. Any available adult who shall be identified on the form by title or relationship to the patient shall be witness to the patient's signature or the signature of the surrogate decision maker.

13. The date and time of signing shall be clearly indicated

14. The consent form must be signed by the HOD/Consultant or his designee, Anesthesiologist, Patient or his/her decision maker and the witness prior to entry into the surgical suite and before any pre-medication and at least three hours after the administration of sedatives.

15. If the HOD/Consultant or the Anesthetist's signature is not on the consent form, the procedure shall be postponed or cancelled.

16. The decision regarding the patient's ability to make an informed consent shall be the ultimate responsibility of the Consultant.

17. A patient or the surrogate decision maker may revoke the consent for the procedure at any time before it is carried out.

18. In such an event, the HOD/Consultant or his designee shall discuss the procedure again and if the patient or the decision maker still wishes to revoke the consent, then the procedure shall not be carried out.

19. The patient or decision maker shall sign a note to the effect on the signed consent form.

20. The HOD/Consultant or his designee shall document this in the progress notes.

21. Consent is taken every time (especially for procedures which the patient has to undergo lifelong.

22. Fresh consent is taken in case the procedure has to changed midway.

23. Prior communication and consent is taken before initiation of protocol for patients who are being considered as subjects for research projects.

- **List Of Informed Consents**

1	GENERAL CONSENT	MGMH/KAM/CONS/GEN/001-1/2018
2	RECEIVING BLOOD & BLOOD PRODUCTS TRANSFUSION	MGMH/KAM/CONS/BT/002-1/2018
3	OPERATIVE TREATMENT	MGMH/KAM/CONS/OT/003-1/2018
4	ANEASTHESIA	MGMH/KAM/CONS/ANAE/004-1/2018
5	PROCEDURE	MGMH/KAM/CONS/PRO/005-1/2018
6	HIGH RISK	MGMH/KAM/CONS/HR/006-1/2018
7	POOR PROGNOSIS	MGMH/KAM/CONS/PP/007-1/2018
8	CHOICES FOR IMPLANTS/DEVICES	MGMH/KAM/CONS/IMP-D/008-1/2018
9	MATERIAL USED DURING PROCEDURE	MGMH/KAM/CONS/RE/009-1/2018
10	DIALYSIS	MGMH/KAM/CONS/DIA/010-1/2018
11	HIV & HEPATITIS TESTING	MGMH/KAM/CONS/HH/011-1/2018
12	CYCLOPHOSPHAMIDE THERAPY	MGMH/KAM/CONS/CT/012-1/2018
13	CHEMOTHERAPY	MGMH/KAM/CONS/CHEMO/013-1/2018
14	DAMA	MGMH/KAM/CONS/DAMA/014-1/2018
15	CONSENT FORM FOR RESEARCH STUDY	MGMH/KAM/CONS/RESH/015-1/2018

PRE 5 PATIENT AND FAMILIES HAVE A RIGHT TO INFORMATION AND EDUCATION ABOUT THEIR HEALTH CARE NEEDS.

I. PURPOSE:

To ensure that patients and families have the right to information regarding their healthcare needs and the expected costs involved.

II. SCOPE:

All OPD & IPD patients

III. RESPONSIBILTY:

Hospital wide – all staff's (Reception, Office, All medical oriented departments, Nursing and paramedical staff involved in direct patient care.

IV. POLICY

Relevant education specific to the patient's health care needs will be delivered via methods understandable to the patient and family.

V. PROCEDURE

1. The treating physicians, nursing staff, patient educator and dieticians ensure that the patients and /or families are educated in a language they understand about the following:

- Personal Hygiene
  - Washing Hands
  - Disposal of excreta

2. Medication including safe and effective use of medicines and their potential side effects.

3. Dietary and nutritional requirement especially for pregnant women, children, elderly and diabetic.

4. Immunization, especially for Pediatric patients, in adult for Influenza, Streptococcus, Pneumonia, Typhoid, Cholera, Hepatitis B and Neisseria Meningitis.

5. If the patient is suffering for any of these diseases, is appropriately treated and vaccination. PEP is given to patients not suffering from the disease but has been exposed to these infections.

6. Information about any discharge instructions given to the patient and family will also be provided.

7. Education shall be provided in a manner that:

1) Facilitates the patient's and family's understanding of the patient's condition, illness and treatment options.

2) Facilitates participation in decision-making about health care options.

3) Enhances the patient/family(s) role in continuing care and promoting a healthy lifestyle.

4) Resources shall be selected based on needs and shall include, brochures and printed materials, use of classes and groups, videotapes, and a variety of other resources. Education is delivered in a timely, efficient, caring and respectful manner

PRE 6 PATIENTS AND FAMILIES HAVE A RIGHT TO INFORMATION ON EXPECTED COSTS

I. PURPOSE

To provide patient and families information about expected cost of treatment at M.G.M. Hospital, Kamothe.

II. SCOPE:

IPD & OPD Departments

III. RESPONSIBILITY:

Reception & billing counter, Counselor, Doctors& Nurses

IV. POLICY :

Relevant information regarding expected cost of treatment shall be provided to the patient and/or his/her attendants.

V. PROCEDURE:

1. The tariff list for rooms & charges for investigations, procedures, Operation Theatre & other services is updated periodically and as and when need arises.
2. Any additional charge is also enumerated in the tariff and the same is communicated to the patients/attendants.
3. The patients and / or family members are explained about the expected costs.
4. The patient / family members are given an approx estimate for the proposed treatment by the doctor with the help of counselor / admission staff.
5. The estimate given is an approximate as the plan of treatment might vary sometimes.
6. The patient, at his / her own request and expenses, has the right to consult with any HOD / consultant
7. Regardless of the source of payment of his/her care, the patient has the right to request and receive on itemized and detailed explanation of his/her finalized bill for services rendered in the hospital.
8. The patient shall be informed of eligibility for reimbursement by any third party coverage during the admission or pre-admission financial counseling.
9. Patient and family are informed about the financial implications when there is a change in the patient condition or treatment setting.
10. Depending upon the condition of the patient and assessment by the consultant or the duty doctor, the patient may have to be shifted to another setting for treatment which may cost higher than the current setting.
11. The reason and the financial implications for the same are explained to the patient and / or his / her attendants and necessary consent is obtained before shifting the patient.
12. Patients and / or their attendants may be referred to counselor for details of financial implications.

13. Details of Insurance policies for cashless treatment including Government schemes empanelled for treatment of RGJAY patients is communicated to the patient by deputed doctors .

Annexure :

- **Hospital Tariff Sheet**

PRE 7 THE ORGANIZATION HAS AMECHANISM TO CAPTURE PATIENT'S FEEDBACK AND REDRESSAL OF COMPLAINTS

I. POLICY:

To ensure that the Hospital receives the Feedback and Complaints for the services provided to its patients and takes corrective and preventive actions to provide quality patient care in the Hospital.

II. PURPOSE:

To establish a system which the hospital will use to scrutinize the services and clinical practices it offers, and to ensure that a superior level of care is provided to all the patients coming to the hospital.

III. SCOPE:

All employees of Seven Hills Hospital, Patients, Relatives and Visitors coming to the hospital.

IV. RESPONSIBILITY:

All employees of MGM Medical College & Hospital.

V. DISTRIBUTION:

All employees of Seven Hills Hospital

VI. DEFINITION:

Complaint Redressal Procedures- Sequence of activities carried out to address the complaints of patients, visitors or relatives.

VII. Process Details:

1. When a patient's complaint is received by any employee, He/she shall listen to the complaint with patience and if they are unable to resolve the same, the employee will immediately inform the Department Head, who will speak with the complainant either on phone or in person.
2. If the complainant is still dissatisfied, he/she will be referred to the Deputy admin Officer/ Medical Social worker
3. If the complainant is not satisfied with the disposal of his complaints he/she will be directed Medical superintendent according to nature of complaint.
4. If Required Patient must be provided with a complaints/compliment form to record his complaint. This will be forwarded to the Department Head, for recording the Root Cause Analysis and Corrective Action and Preventive Action.

5. All these forms must be returned to the Deputy Admin Officer for responding to complainant, and for filing.
6. By the 10th of each month Deputy Admin Officer will compile data of all Complaints and compliments received along with the Root Cause Analysis and Corrective Action and Preventive Action as received from the Department Head.

This is presented in the Quality Core Committee meeting and Medical Director is upraised.

PRE 8 THE ORGANIZATION HAS A SYSTEM FOR EFFECTIVE COMMUNICATION WITH PATIENTS AND /OR FAMILIES

I. PURPOSE:

TO FORMULATE A MECHANISM TO CAPTUTRE PATIENT FEEDBACK AND REDRESSAL OF COMPLAINTS

II. SCOPE:

ALL OPD & IPD patients

III. RESPONSIBILITY:

All Hospital staffs

IV. POLICY:

1. Patient Feedback is captures and analyzed
2. Complaint redressal procedure exists and corrective action is taken

V. PROCEDURE

1. All patient feedback, complaints, written or verbal (including telephone complaints), and regardless of point or origin, the medical and treatment related complaints shall be forwarded to the Medical social worker.
2. The Medical social worker takes daily rounds in the hospital and the report of the same is projected to Medical Superintendent and Administrator on daily basis.
3. The IPD feedback and suggestions are collected and analyzed department wise and forwarded to the concerned department Head and Quality Head.
4. For medical complaints, the MS shall investigate and finalize outcome.
5. By the 10th of each month Deputy Admin Officer will compile data of all Complaints and compliments received along with the Root Cause Analysis and Corrective Action and Preventive Action as received from the Department Head. This is presented in the Quality Core Committee meeting and Medical Director is upraised.

Medical Superintendent
M. G. M. HOSPITAL, KAMOTHE

M.G.M Medical College and Hospital, Kamothe	Responsibilities of Management		
	Doc.No.NABH/MGMH/KAM/ROM	Effective Date: 01/01/2018	Revision No: 001
	NABH Std-	Revision Date: 01/01/2018	Pages: 51

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Chief Of Quality	Dr. Gauri Shivani

CONTENTS

Sr.No	Standards
ROM 1	The responsibilities of those responsible for governance are defined.
ROM 2	The organisation is responsible for and complies with the laid-down and applicable legislations, regulations and notifications.
ROM 3	The services provided by each department are documented.
ROM 4	The organization is managed by the leaders in an ethical manner.
ROM 5	The organization displays professionalism in management of affairs.
ROM 6	Management ensures that patient-safety aspects and risk-management issues are an integral part of patient care and hospital management.

ROM1 a, The responsibilities of those responsible for governance are defined

I. POLICY:

The policy defines the vision and mission of the hospital. This is the correct sequence.

II. PURPOSE:

The policy is established to define the mission and vision statement of the hospital.

III. SCOPE:

Hospital wide

IV. RESPONSIBILITY:

Top management, Administration

V. DISTRIBUTION:

Hospital wide

VI. DEFINITION:

The definition of Vision and Mission are as follows:

A vision statement is sometimes called a picture of the Hospital in the future but it's so much more than that. Your vision statement is your inspiration, the framework for all your strategic planning.

A vision statement may apply to an entire Hospital or to a single division of that Hospital. Whether for all or part of an organization, the vision statement answers the question, "Where do we want to go?"

A mission statement is a brief description of a Hospital fundamental purpose. A mission statement answers the question, "Why do we exist?"

The mission statement articulates the Hospital's purpose, both, for those in the organization and for the public.

Vision statement

By the year 2020, MGM Institute of Health Sciences aims to be a top ranking Center of Excellence in Medical Education and Research. Students graduating from the Institute will have the required skills to deliver quality healthcare to all sections of the society with, compassion and benevolence, without prejudice or discrimination, at an affordable cost. As a Research Centre, it shall focus on finding better, safer and affordable ways of diagnosing, treating and preventing diseases.In doing so, it will maintain highest ethical standards.

Mission statement

Improve the quality of life, both at individual and community levels imparting quality medical education to tomorrow's doctors and medical scientists and by advancing knowledge in all fields of health sciences through meaningful and ethicalresearch.

VII. PROCESS DETAILS:

DESCRIPTION OF THE PROCESS Vision:

Mission Statement

- In keeping with its role, the Mission of the Hospital Authority is:

1. To ensure accessible and affordable quality healthcare to all, by compassionate medical professionals.
2. To be the center of excellence for medical research and academics.
3. To cultivate an environment of trust, honesty, mutual respect, equality and ethics.

- The Quality Policy of the hospital is as follows:

"To provide value added innovative consistent and continuously improving health and medical care to sustain and further improve clinical outcomes, patient safety and patient satisfaction."

- The Hospital Authority works on the following Values:

1) Patient Centric Services
2) Integrity
3) Respect for the individual
4) Excellent infrastructure with an updated Technology.

Strategies of the Institute

- To realize its mission, the Hospital Authority has developed the following Vision:

"We are committed to provide world class ethical and quality healthcare services with clinical excellence at affordable cost and charity for the under privileged."

The Authority aims to achieve this corporate vision by adopting the following five Corporate Strategies:

1) Developing Outcome-focused Healthcare to maximize health benefits and meet community expectations
2) Creating Seamless Healthcare by restructuring and reorganizing medical services in collaboration with other providers and careers in the community
3) Involving the Community as Partners in Health in the decision-making and caring process
4) Cultivating Organization Transformation and Development through a multi-disciplinary team approach to holistic patient care and continuous quality improvement
5) Promoting Corporate Infrastructure Development and Innovation to support service improvement

ROM1 b,c,d,Policy on Organagram

I. POLICY:

The policy defines the vision and mission of the hospital. This is the correct sequence.

II. PURPOSE:

The policy is established to define the mission and vision statement of the hospital.

III. SCOPE:

Hospital wide

IV. RESPONSIBILITY:

Top management, Administration

V. DISTRIBUTION:

Hospitalwide

1) POLICY:

The policy includes the hierarchy of organization (small / large) from top management to bottom management.

2) PURPOSE:

The policy is established to define the responsibilities to be given to person holding the designation.

3) SCOPE:

Hospital wide

4) RESPONSIBILITY:

Top management (HOD of respective department)

5) DISTRIBUTION:

Hospital wide

6) DEFINITION:

Organogram:-

A drawing or plan that gives the job titles of all the staff in an organization or department, showing how they are connected to each other.

7) PROCESS DETAILS:

- DESCRIPTION OF THE PROCESS

ORGANIZATION STRUCTURE OF MGM MEDICAL COLLEGE & HOSPITAL, MUMBAI

Referred in Annexure

Organogram.pdf

- **RECORDS AND FORMATS**:

Job Descriptions of all Employees.

ROM 5 I Service Standards

I. POLICY:

The hospital has defined policies documenting its service standards

II. PURPOSE:

Purpose of this policy is to develop benchmarks for different services being provided.

III. SCOPE:

Hospital wide

IV. RESPONSIBILITY:

Management, Human Resource Department, HODs

V. DISTRIBUTION:

Hospital wide

VI. PROCESS DETAILS:

DESCRIPTION OF PROCESS:
Service Standards

1) **CONFORMITY TO RULES AND REGULATIONS**
   It shall be the duty of every employee to thoroughly familiarize themselves with their Job Description, Department and Hospital Policies and Procedures. They shall conform and abide by all rules and regulations of the Hospital and render their services to the Hospital with enthusiasm, courage, discretion, and loyalty befitting a professional enforcement organization.

PREPARED BY
REVIEWED BY
APPROVED BY

EFFICIENCY

In carrying out the functions of the department, the employee shall direct and coordinate their efforts in such a manner as to establish and maintain the highest standards of efficiency and harmony between each other and all associated agencies and departments of the hospital.

2) **WEAR EMPLOYEE ID CARD ALL THE TIME**
   The Employee is required to wear his/her employee card during the office hours.

3) **PERFORMANCE OF DUTY**

An employee has to perform his/her duties to the best of his/her ability, knowledge and experience.
Any member of the Hospital who displays reluctance to perform officially assigned duties or whose actions bring discredit upon themselves or the department or who fails in the performance of his/her duties may be considered insubordinate or unfit for duty.

4) HOURS OF DUTY

Members of the Hospital shall have regular hours assigned for them for active duty each day and when not so engaged, will be considered "off duty." They shall, however, always be subject to active duty if needed. The fact that they may be technically off duty shall not be held as relieving them from the responsibility of taking positive action relative to their obligations as employees of the Department.

5) PUNCTUALITY

Employee should arrive from staff entry gate and Punch in and out Employee shall be punctual in reporting for duty at the time and place designated by their immediate supervisor. Repeated failure to report promptly at the time directed shall be deemed neglect of duty and will result in disciplinary action. No employee shall go off duty before the change of shifts, or until properly relieved.

6) ABSENCE WITHOUT PROPER LEAVE

No employee shall be absent from duty without proper leave or be absent from duty without permission, except when unable to report for duty at the prescribed time because of sickness, injury to him/herself, or grave emergency at which time the department will be notified as soon as possible.

7) POSITIVE PERSONAL CONTACTS

Hospital cooperation and support can best be generated through satisfactory hospital employee and public relations. The employee shall be responsive to the needs of the hospital's employees and public by rendering prompt and courteous service, and consistently conducting themselves in a manner that encourages public respect. Personal prejudices or attitudes which may influence impartiality shall be suppressed.

Employees shall be respectful, courteous, and civil with hospital patients and employees, and the public, and shall not use coarse, profane, or insolent language or behave in an insubordinate manner toward any patients, employees, or others with whom they have official dealings.

No employee shall be party to any malicious gossip, report, or activity which would tend to disrupt department morale or bring discredit to the department, the hospital, or an employee. Threats, violence, or other forms of abuse, coercion, or duress against any patient or employee by another shall be cause for disciplinary action.

8) TELEPHONE COURTESY

Much of the employee's business is conducted by telephone. Employee shall maintain courteous and professional telephone demeanour whether dealing with the hospital employees, the public, or with other agencies.

9) MAINTAIN THE ENVIRONMENT NEAT AND CLEAN

The employee should keep his/ her department and Hospital neat and clean. The employee is expected to follow waste management guidelines.

10) FALSE INFORMATION IN RECORDS

No Employee shall make false reports or knowingly or willfully enter or cause to be entered into any department books, records, or reports any inaccurate, false, or improper information.

11) PERSONAL APPEARANCE

It shall be the duty of all Employees to use good personal hygiene.
Personnel are not allowed to perform their duties with an unkempt, dirty, shoddy, or dishevelled appearance. The following shall be a guideline for an acceptable Employee
Hair--A male Employee shall keep his hair neatly cut, not excessive in length. The hair may fall in the back to a
Point just above, but not touching, the collar. A female Employee shall keep her hair neatly cut and well groomed. The length and fullness of the hair of either gender shall not interfere with their duties.
Moustaches and Goatees--worn by Employees shall be well kept when reporting for duty. A short and neatly trimmed moustache or goatee of natural colour may be worn. Full and bushy styles are not acceptable.
Beard--shall not be displayed by Employees of any department except on the approval of the chief of security. Male personnel are expected to be clean-shaven at all times while on duty.
Make-up--shall be in good taste. Female Employees shall not use make-up which lends itself to an excessively gaudy appearance or use odorous perfumes.
Fingernails--shall be kept neat and trimmed at a length that won't interfere with their duties. Female personnel may wear fingernail polish. If fingernail polish is used, it must be in good taste and in colors compatible with their attire.
Shoes--leather/metal shoes shall be polished and maintained at all times.
Clothing-- Follow dresses if applicable to the post. The uniform should be cleaned and look tidy.
Earrings--male Employees are not allowed to wear earrings. Female Employees are only allowed to wear studded earrings.
Plain clothes detail-all Employees assigned to plain clothes details will be dressed neatly and in good taste in keeping with the standards the requirements of the Employee's specific assignments.
Uniforms--when wearing the security uniform, it will be complete. All Employees are required to wear their full uniform while on duty. Each Employee of the Hospital will be held personally responsible for all equipment, materials, and supplies issued to him/her. Employees will be required to maintain such equipment and supplies in good condition at all times.
Wear aprons, caps, masks and Gloves as per instruction
Exceptions--any exceptions to the above must be approved by the HR Department

Each Employee shall be personally responsible for any items issued to him or her by the department.
Employees shall not permit any person to borrow or use the items of identification issued to him or her by this department. Loss of any of these items shall be immediately reported to their supervisor in a written report describing the circumstances leading to such a loss. Each Employee shall be personally responsible for the loss of property.

12) MISAPPROPRIATION OF PROPERTY

Employees shall not destroy, loan, sell, give away, or appropriate to their own use any lost, found, stolen, or recovered property of any kind.

Employees of the department promptly notify their immediate supervisor of any accident with department equipment operated by them or in their charge. They will complete a Equipment Accident Report that the immediate supervisor shall investigate, and then forwards to biomedical Engineer and sentinel Event Committee.

A supervisor shall investigate the cause of the accident and if negligence or violation of the law or the rules and regulations is evident on the part of the Employee, the supervisor will take appropriate personnel action.

13) USE OF DEPARTMENTAL TELEPHONES

The telephones provided by the hospital for the department are for use in conducting department business. The use of these telephones for personal calls shall not be allowed.

SMOKING, ALCOHOL AND GAMBLING IS NOT ALLOWED IN THE HOSPITAL PREMISES

ROM 2 The organisation is responsible for and complies with the laid-down and applicable legislations, regulations and notifications

I. POLICY:

To list out various licenses & permits and acts & laws applicable in hospital.

II. PURPOSE:

The policy is established to list out all the licenses, permits, acts & laws that are important for hospital organization

III. SCOPE:

Hospital wide

IV. RESPONSIBILITY:

Administration/Human Resource department

V. DISTRIBUTION:

Administration

VI. DEFINITION:

1) Legislation: The act of making or forming law, or the laws and/or statutes formed by the legislative process

2) Permit: Legal authorization to conduct an activity; written, verbal, or other permission to perform an action.

3) Acts: Decision by a legislative body that results in a law. It is a statement of the law that governs a particular topic e.g. health. It begins as a Bill in Parliament and is approved as an Act by Parliament. It may be reprinted and significantly amended.

4) Laws: A uniform or constant fact or principle.

5) License: License is a formal permission from the proper authorities to perform certain acts or to carry on a certain business, which without such permission would be illegal.

VII. ABBREVIATIONS:

Abbreviations are as follows:

BARC- Bhabha Atomic Research Centre AERB- Atomic Energy Regulatory Board NOC- No Objection Certificate MCI- Medical Council of India NCI- Nursing Council of India MTP- Medical Termination of Pregnancy PNDT- Pre Natal Diagnostic Technique PPF- Personal Provident Fund

1. PROCESS DETAILS:

The management of the hospital shall undertake the following activities:

a) Satisfy all statutory requirements as required by the law of the land.

b) Preserve the required acts and licenses in a safe manner facilitating easy retrieval of same incase demanded by an appropriate authority or for internal reference.

c) Display the same for the perusal of the general public incase so required by law.

d) Keep a track of any amendment/changes in the prevailing law and update the same as per the law.

e) Ensure initiation of timely efforts for the renewal **of licenses / registrations / certifications as and when** needed.

f) The list of applicable licenses are as follows

g) Custodian of Acts and Licenses:

- All the acts will be stored in the custody of the respective Headscopy will be displayed in the concerned department. Copy is maintained by Chief Administrative officer.
- Audit of Licenses is done twice a year.
- Hospital staff members will have an access to the acts for any reference after obtaining permission from the Medical Superintendent.
- A copy of the relevant licenses will be stored by the individual department under the custody of the Departmental Head.

h) Mechanism to update licenses, registrations, certificates

- Chief Administrative Officerwill keep a watch on update/renewal of licenses required for the hospital. He /she shall coordinate with various government agencies to comply the requirement of licenses and acts.
- Photo copy of all the license will be kept in the quality department to ensure the requirement of various accreditation agencies
- Renewal shall be applied at least3 months before the renewal date.

VIII. RECORDS AND FORMATS:

Legal Compliance File and Annexure attached of list of licenses (applicable to Hospital)

MGM MEDICAL COLLEGE HOSPITAL, KAMOTHE

LIST OF STATUTORY REGISTRATIONS, GOVERNMENT APPROVALS AND LICENCES AS ON 20/06/2018

Sr. No.	Issuing Authority	Registration/ License No.	Nature of Registration/ Licence	Date of Issue/ Effective Date	Valid date	Status
1	Sales Tax Officer, Registration Branch, Mumbai	27AAATM4256 EEZC	GST(Trust Hospital)	4/4/ 2018	--	

2	Dy. Commissioner of Labour, Govt. of Maharashtra, Labour Dept.	151030071000 1167	Issue of Registration Certificate to the Principal Employer under Contract Labour Act	1/6/ 2016	31/12/2017	Matter is under litigation
3	Office of the Regional Commissioner, Employees' Provident Fund Organisation, Kandivali, Mumbai	THVSH0027859 00E	Registration with Provident Fund Commissioner	--	--	
4	Profession Tax Officer, Registration Branch, Mumbai	27365265589P	Hospital Prof. Tax Registration Certificate	21/8/ 2013	--	
5	Mumbai Waste Management Limited	PAN-1069	Letter of Bio Medical Waste Authorization	--	31/12/2018	
6	Government of India, Ministry of Environment & Forests (I.A. Division)	SEIAA-2018/CR-12/EST	Environmental Clearance for Construction of Hospital	7/3/ 2018	--	
7	Maharshtra Pollution Control Board	4717	Consent to Operate under Section 26 of the Water (Protection & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Prevention of Pollution) Act, 1981 and Authorisation/Renewal of Authorisation under Rule of the Hazardous Wastes (Management, Handling &Transboundary Movement) Rules, 2008	24/04/ 2015	30/06/2016	Renewal is Pending with MPCB
8	Food & Drugs Administration MS	NDPS-2/R/161/2012	Licence for Narcotic Drugs	1/1/20 17	31/12/2018	
	Ground Floor Pharmacy					

9	Food & Drugs Administration MS	RAG-380	Intimation Letter/Licence(Form -20)	13/08/2015	13/12/2019	
		RAG-380	Licence Form-20	14/12/2009	13/12/2014	
		RAG-380	Licence Renewal (Form-21C)	12/8/2015	13/12/2019	
		Raigad-363	Licence (Form-20C)	14/12/2009	13/12/2014	
			Licence Renewal Form -20E	12/8/2015	13/12/2019	
		Raigad-380	Licence Form 021	14/12/2009	13/12/2014	
		Raigad-380	Licence Renewal Form -21C	12/8/2015	13/12/2019	
		RAG/X/0027	Intimation Letter	25/08/2015	9/11/2019	
		RAG/X/0027	Licence Form -20F	14/12/2009	13/12/2014	
		RAG/X/0027	Licence Renewal Form -21C	25/08/2015	9/11/2019	
	Basement Pharmacy					
10	Food & Drugs Administration MS	MH-RAI-273392	Intimation Letter	25/03/2018	24/03/2023	
	do	MH-RAI-273392	Licence Form -20	25/03/2018	24/03/2023	
	do	MH-RAI-273394	Licence Form-20 C	25/03/2018	24/03/2023	
	do	MH-RAI-273393	Licence Form-21	24/03/2018	24/03/2023	
11	Atomic Energy Regulatory Board, Radiological Safety Division	Equipment ID	All			
		G-XL-80360	Licence	22/01/2018	22/01/2023	CT Scan (16 Slice)
		G-XL-53707	Licence	20/07/2016	20/07/2021	CT Scan (Single Slice)
		G-XR-53017	Licence	4/7/2016	4/07/2021	800mA X-Ray Machine
		G-XR-40534	Licence	27/10/2015	27/10/2020	600mA X-Ray Machine
		G-XR-12734	Licence	1/8/2017	1/8/2022	800mA X-Ray Machine
		G-XR-12736	Licence	1/8/2017	1/8/2022	600mA X-Ray Machine
		G-XR-12724	Licence	23/08/2017	23/08/2022	300mA X-Ray Machine

		G-XR-35125	Licence	13/07/ 2015	13/07/2020	Mammograph y Machine
		G-XR-58317	Licence	22/10/ 2016	22/10/2021	60mAX-Ray Machine
		G-XR-64044	Licence	22/03/ 2017	22/03/2022	100mA X- Ray Machine
		G-XR-52987	Licence	4/7/ 2016	4/7/2021	100mA X- Ray Machine
		G-XR-50231	Licence	24/05/ 2016	24/05/2021	100mA X- Ray Machine
		G-XR-50230	Licence	24/05/ 2016	24/05/2021	100mA X- Ray Machine
		G-XR-12737	Licence	27/08/ 2017	27/08/2022	C-Arm
		G-XR-52830	Licence	4/7/ 2016	4/7/2021	C-Arm
		G-XR-77479	Licence	31/01/ 2018	31/01/2023	C-Arm
		G-XL-12741	Licence	28/11/ 2016	28/11/2021	Cath Lab Machine
		G-XR-24201	Licence	23/06/ 2017	30/06/2022	C-Arm (the Machine is non-functional ,the action for condomnation is under process)
	Atomic Energy Regulatory Board, Radiological Safety Division	17-RSO-238015	Approval of Radiological Safety Officer	20/12/2 017	20/12/2020	
12	Zonal Transplant Co-ordination Centre	MC-1266 (In lieu of M-0555)	Registration for carrying out renal transplant or others	28/09/2 015	27/09/2020	
13	Appropriate Authority PNDT Act Governement of Maharashtra	RGD/PAN/250	Registration for carrying out Genetic Counselling/ Prenatal Diagnostic Procedures & Tests (Ultrasound)	27/12/2 016	26/12/2021	
14	Municipal Corporation of Greater Mumbai	241	Certificate of Registration under Section 5 of Maharashtra (Bombay) Nursing Homes Registration	31/12/2 016	31/03/2019	

			Act, 1949			
15	Office of The Chief Fire Officer Mumbai Fire Brigade	No/PMC/Fire/3253/2018	NOC from fire safety point for Part Occupation of Hospital Building 1	20/03/2018	--	
	Office of The Chief Fire Officer Mumbai Fire Brigade	No/PMC/Fire/3253/2018	NOC for full occupation and use of the High rise Hospital building	20/03/2018	--	
16	Office of The Chief Fire Officer, PanvelMuncopal Corporation	Under process	NOC - Kitchen, Food Court and Staff Dining Room (Eating House)			Fire Audit Report of Canteen submitted to Chief Fire Officer, PanvelMuncipal Corporation, on 26/04/2018
17	Office of The Chief Fire Officer Mumbai Fire Brigade	Under process	NOC - Storage Plant of Liquified Medical Oxygen.			Under process
	Municipal Corporation of Greater Mumbai	Under process	Storage Licence U/s 394 of the MMC Act for LPG, Oxygen Cylinders, Nitrous Oxide, Carbon Dioxide and HSD.			Under process
	Government of India Ministry of Commerce and Industry, Petroleum and Explosives safety Organization	Under process	Storage of Medical Oxygen gas in pressure vessel			Under process
	Government of India Ministry of Commerce and Industry, Petroleum and	Under process	Grant of approval of Layout and site plan for the storage of Medical Oxygen Gas in pressure vessel			Under process

	Explosives safety Organization					
18	Municipal Corporation of Greater Mumbai	EE(BP)ATPO/1096	Occupation Certificate of the Hospital Building	6/2/1998		
		CIDCO/BP/ATPO/1086		23/01/2002		
		CIDCO/BP/ATPO/668		27/05/2004		
19	Municipal Corporation of Greater Mumbai	1510300310048353	Registration Certficate of Establishment under the Bombay Shops and Establishments Act 1948	8/1/2016	31/12/2019	
20	Office of the Chief Engineer (Electrical), Industry, Energy and Labour department Government of Maharashtra	145545	Licence for Working of the Lift Hospital Building	18/12/2014	--	
		95646		4/12/2010	--	
		85648		4/12/2010	--	
21	Food & Drugs Administration MS	Licence Form-26G	Licence to Operate a Blood Bank for collection, storage and processing of whole blood and/or its components for sale or distribution	4/5/2006	31/12/2019	
	State Blood Transfusion Council	63	Registration of Blood Bank	7/10/1999	--	
	Government of India, Ministry of Health and Family Welfare, DGHS, CDSCO	--	Approval of plan of the Blood Bank	19/03/2012	--	

ROM 3a,c,d,e,fScope of Service of each specialty

I. POLICY:

To define the scope of services of each specialty provided in Hospital

II. PURPOSE:

The policy is established to identify & define the services that are to be provided by the organization in each specialty.

III. SCOPE:

Hospital wide

IV. RESPONSIBILITY:

Hospital Management

V. DISTRIBUTION:

Front office, Outpatient department

VI. ABBREVIATIONS:

OPD- Outpatient Department

VII. PROCESS DETAILS:

1. DESCRIPTION OF THE PROCESS

The scope of service of the following is available as brochures. The hospital provides following services :

AVAILABILITY OF SERVICES:

The above services are provided on both Indoor and Outdoor basis as per the timings fixed by the Hospital.

1) Emergency Services for basic specialties are available round the clock all 369 days to all patients irrespective of their place of residence, paying capacity etc.
2) Medico legal cases are accepted round the clock and post mortem examination performed as and when necessary.
3) Cases requiring higher institutional setup are referred to higher institution after stabilization.

2. Supplementary Services

1) Central sterile and supplies department
2) Hospital Laundry
3) Stores (general, medical)
4) Medical gases (Cylinders and piped medical gases)

5) Security
6) Ambulance services(out sourced)
7) Medical record department
8) Administrative office
9) Hospital Management Information System

QUALITY ASSURANCE AND CONTINUOUS QUALITY IMPROVEMENT : INDICATORS

Following indicators shall be measured and monitored by quality assurance committee to assure quality and continuously improvement it.

S. No		INDICATOR	CALCULATION FORMULA	REMARKS
		BLOOD BANK		
1.	CQI 3f (23)	Percentage of transfusion reactions	Number of transfusion reactions ---------- x 100 Number of transfusions	Includes blood & its components.
2.	CQI 3f (24)	Percentage of blood & blood products wastage	Number of blood and blood products used ---------- x 100 Number of Blood and Blood products issued from Blood Bank	Includes blood & products found unfit for use. Include blood & its products. Number of transfusions not included.
3.	CQI 3f (25)	Percentage of bloc component usage	Number of components used ---------- -- x 100 Number of blood & Blood products used	
4.	CQI 3f (26)	Turnaround time for issue of blood and blood components	Sum of total time taken ---------- x 100 Total number of blood & components issued	Time order is raised to time it reaches clinical unit.
		BIO MEDICAL ENGINEERING		

5.	CQI 4c (49)	Critical Equipment Down Time (Period Equipment fails to perform its function)	Sum of down time for all critical equipments	Critical equipment Life saving equipment Standby NA Spares/Repairs take long period of time Cost > 3 Lacs.
		DIAGNOSTICS (**Hospital Lab & Radiology**)		
6.	CQI 3b (5)	Number of reporting errors per 1000 investigations	Number of Reporting Errors ---------- x 1000 Number of Tests performed	Reported every month Includes errors picked up before & after dispatch of report & transcription errors.
7.	CQI 3b (6)	Percentage of Re-Do (includes repeats prior t release of report to confirr finding).	Number of Re-Dos ---------- x 100 Number of tests performed	
8.	CQI 3b (7)	Percentage of reports co-relating with clinical diagnosis.	Number of reports correlating with clinical diagnosis ---------- ---------- x 100 Number of tests performed	Includes both clinical diagnosis & differential diagnosis
9.	CQI 3b (8)	Percentage of adherence to safety precautions by employees working in diagnostics	Number of employees adhering to safety norms ---------- ---------- x 100 No of employees sampled	Even a single non compliance will be considered as non-adherence
10.	CQI 4d (53)	Waiting time for diagnostic tests(time requisition presented at diagnostic counter to initiation of test procedure).	Sum of every patient time at diagnostic counter ---------- ---------- Total number of patients reported at diagnostic	

		DIETETICS		
11.	CQI 3a (3)	Percentage of cases (in-patients) screened for nutritional needs.	Number of In-Oatient records with Nutrition assessment ---------- ---------- x 100 Total number of patients (Sample Size)	Sample consists of patients who are still in the hospital.
		EMERGENCY (**CASUALTY**)		
12.	CQI 3h (33)	Return to emergency dept. within 72 hrs with similar presenting complaints	Number of return to emergency within 72hrs with similar presenting complaints ---------- x 100 Number of patients who came to emergency.	
		HUMAN RESOURCE DEPT		
13.	CQI 4b(46)	Percentage of employees provided pre-exposure prophylaxis	Number of Employees provided pre exposure prophylaxis ---------- ---------- x 100 Number of employees due for pre exposure Prophylaxis	Will include all new and old employees. Will include at least Hepatitis-'B' vaccine.
14.	CQI 4 e(56)	Employee satisfaction index	Score achieved on Measuring Instrument ---------- ----- x 100 Maximum possible score	Every 6 months. Will include all staff categories.
15.	CQI 4 e(57)	Employee attrition rate	Number of Employees who left ---------- x 100 No of employees at the beginning of month & new joiners	Every month end
16.	CQI 4 e(58)	Employee absenteeism rate.	Number of employees on unauthorized absence ---------- ---------- x 100 Total number of Employees	
17.	CQI 4 e(59)	Percentage of employees who are aware of employee right, responsibilities & welfare schemes	Number of Employees aware of rights, responsibility & welfare schemes. ---------- ---------- x 100 Number of employees interviewed	
		INFECTION CONTROL		
18.	CQI 3 g (28)	Bloodstream infection rate	Number of central line associated blood stream infections ---------- ---------- x 1000	Every month

			Number of central line days in the month	
19.	CQI 4 f (61)	Incidence of blood/body fluid exposure	Number of blood & body fluid exposure ---------- -- x 100 Number of In Patient days	Contact of staff's eye, mucosa, abraided skin or mouth.
20.	CQI 4 f (62)	Incidences of needle stick injuries.	Number of par-enteral exposures ---------- x 100 Number of In Patient days	Includes injuries due to any sharps.
21.	CQI 3g (28)	Pneumonia Rate	Number of ventilator associated Pneumonias ---------- --------- x 100 Number of ventilator days in the month	Every month
22.	CQI3g (30)	Surgical site Infection Rate	Number of surgical site Infections ---------- x 100 Number of surgeries performed in the month	Every month
23.	CQI 3 g (27)	Urinary tract Infection rate	Number of urinary catheter associated UTIs ---------- -------- x 100 Number of urinary catheter days in the month	Every month
		IN PATIENTS (IPD)		
24.	CQI 3a & b(1)	Time for Initial assessment (indoor & emergency patients)	Sum of time taken for initial assessment ---------- -- = Average time Total number of patients (sample size)	±20% will be outliers
25.	CQI 3 (2)	Percentage of cases (in-patients) wherein care plan with desired outcomes is documented and counter signed by the clinician	Number of inpatient records with documented desired outcomes ---------- --------- x 100 Total number of Inpatients	Sample will include inpatients undergoing treatment.
26.	CQI 4c (47)	Bed occupancy rate. (Available bed days is number of official beds x number of days in the month)	Number of inpatient days in the month ---------- - x 100 Number of available bed days in the month	Patient formally admitted & discharged or death after any unit of time is counted as one bed day.
27.	CQI 4 c	Average Length of Stay.	Number of inpatient days in the month	

	(47)		---------- - = Average days Number of discharges & deaths in the month	
28.	CQI 4 d (54)	Time taken for discharge.(starts when consultant approves discharge and ends when process is completed)	Sum of time taken for every discharge ---------- = Average time Number of patients discharged	Patient's request for additional time is not counted.
		INTENSIVE CARE UNIT (ICU)		
29.	CQI 3h (32)	Return to ICU within 48 hours.	Number of returns to ICU within 48 hours ---------- ---- x 100 Number of discharges/transfers/deaths in ICU	Every month
30.	CQI 3 h (34)	Re-intubation Rate	Number of Re–intubations within 48 hours of extubation ---------- ---------- x 100 Number of Intubations	Every month
31.	CQI 4c (48)	ICU Equipment Utilisation (equipment days = number of equipments x number of days in the month)	Number of equipment utilised days ---------- x 100 Number of equipment days available	
32.	CQI 4 c (48)	ICU Beds Utilisation (available bed days = number of beds in ICU x number of days in the month)	Number of days ICU beds utilised ---------- x 100 Number of ICU bed days available	
		MEDICAL RECORDS DEPT (MRD)		
33.	CQI 3h (31)	Mortality Rate	Number of Deaths ---------- x 100 Number of discharges & deaths	
34.	CQI 4 g (63)	Percentage of medical records not having discharge summary	Medical records without discharge summary ---------- ------ x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.
35.	CQI 4 g (64)	Percentage of medical records not having codification as per International	Number of medical records not codified as per ICD ---------- ---------- x 100	Daily record of deaths and discharges received at

		Classification of Diseases (ICD)	Number of discharge & deaths	MRD.
36.	CQI 4 g (65)	Percentage of medical records with incomplete or improper consent	Percentage of medical records with incomplete or improper consent ---------- x 100 Number of discharge & deaths	Daily record of deaths and discharges received at MRD.
37.	CQI 3 c (11)	Percentage of medication charts with error prone abbreviations	Percentage of medication charts with error prone abbreviations ---------- x 100 Number of medication charts reviewed	Monitoring can be concurrent or for past 3 months admissions.
38.	CQI 4 g (66)	Percentage of missing medical records	No of missing medical records ---------- x 100 Total number of records	
39.		NURSING CARE		
40.	CQI 3 a (4)	Percentage of Cases wherein nursing care plan is documented	Number of Inpatient records with documented nursing assessment (Nursing care plan) ---------- x 100 Total number of patients (sample size)	Sample will include patients admitted in past 24 hours.
41.	CQI 3 c (9)	Incidence of medication errors (includes errors in prescribing, transcribing, dispensing, administering. Also wrong patient, drug, strength & dose and so on)	Total number of medication errors ---------- x 100 Number of patient days (as per sample size)	Monitoring can be concurrent or for past 3 months admissions.
42.	CQI 3 c (10)	Percentage of admissions with adverse drug reaction(s)	Number of adverse drug reactions ---------- x 100 Number of discharges & deaths	
43.	CQI 3 c (12)	Percentage of patients on high risk medication developing adverse drug reaction	Number of patients on high risk medication who developed adverse drug reaction ---------- x 100 Total number of patients on high risk medication	
44.	CQI 4 b (45)	Incidences of bedsores after admission	Number of patients who develop bed sore/bed sores deteriorate ---------- x 100	Use National Pressure Ulcer Advisory Panel staging system

			Number of discharges & deaths	for deteriorating ulcer.
45.	CQI 4 b (44)	Incidence of falls (includes falls from bed, chair, staircase, slip, trippin, stumble, shove, push, collision, into an open hole, ditch and so on)	Number of falls ---------- x 100 Number of discharges & deaths	
46.	CQI 4 c (50)	Nurse-patients ratio for ICUs and wards (in ICU calculate separately for Ventilated & Non ventilated patients)	Total number of Nurses for the facility ÷ Number of Shifts ---------- Total number of beds in the facility	Exclude nurse incharge/ supervisor from the count of nurses.
		OPERATION THEATRE (OT)		
		ANAESTHESIA		
47.	CQI 3d (13)	Percentage of modification of anesthesia plan. (Deviation from plan after pre anaesthesia assessment)	Number of patients in whom planned anaesthesia was changed ---------- x 100 Number of patients who underwent anaesthesia	Data captured prior to shifting patient from OT.
48.	CQI 3d (14)	Percentage of unplanned ventilation following anesthesia. (Post anaesthesia ventilation will be mentioned in anaesthesia plan)	Number of patients put on unplanned ventilator after anaesthesia ---------- x 100 Number of patients who underwent anaesthesia	
49.	CQI 3d (15)	Percentage of adverse anesthesia events. (untoward medical event due to anaesthetic agent without any causal relation to treatment)	Number of patients with adverse anaesthesia event ---------- x 100 Number of patients who underwent anaesthesia	
50.	CQI 3d (16)	Anesthesia related mortality rate.	Number of deaths due to anaesthesia -------- x 100 Number of patients who underwent anaesthesia	

		SURGERY		
51.	CQI 3 e (17)	Percentage of Unplanned return to OT	Number of unplanned return to OT ---------- x 100 Number of patients operated	
52.	CQI 3 e (17)	Percentage of rescheduling of surgeries	Number of cases rescheduled ---------- x 100 Number of surgeries performed	
53.	CQI 3e (19)	Percentage of cases where hospital's safety procedures have been adhered. (to correctly identify patient, site and surgery)	Number of cases where procedure was followed ---------- ---------- x 100 Number of surgeries performed	To be checked in recovery room.
54.	CQI 3 e (20)	Percentage of cases who received appropriate prophylactic antibiotics within the specified time frame.	Number of patients who received prophylactic antibiotics ---------- --------- x 100 Number of surgeries performed	Antibiotic administered within 2 hours prior to surgical incision.
55.	CQI 4c (48)	OT Utilisation Rate	OT utilisation time (in hours) ---------- x 100 Resource hours	Resource hours = (Number of OTs x Number of hours every OT is available for surgery).
56.	CQI 3e (21)	Percentage of cases in which the planned surgery is changed intraoperatively	No. of cases in which the planned surgery is changed intraoperatively_____ Total no. of surgeries performed x 100	Monthy
		PATIENT SATISFA((PATIENT SERVICES)		
57.	CQI 4c (50)	Out Patient Satisfaction Index.	Score achieved on measuring instrument ---------- ---- x 100 Maximum score on measuring instrument	Sample will be randomly taken from repeat patients.
58.	CQI 4d (52)	In Patient Satisfaction Index.	Score achieved on measuring instrument ---------- ---- x 100 Maximum score on measuring instrument	
		PHARMACY		

59.	CQI 4a (39)	Percentage of drug and consumables procured by local purchase.	Number of items purchased by local purchase ---------- -------- x 100 Number of drugs in hospital formulary and consumables list	Includes drugs patient was taking prior to admission & needs to continue.
60.	CQI 4a (40)	Percentage stock outs including emergency drugs.	Number of Stock outs ---------- -------- x 100 Number of drugs in hospital formulary and consumables list	
61.	CQI 4a (41)	Percentage of drug and consumables rejected before preparation of Goods Receipts Note (GRN)	Total quantity rejected ---------- x 100 Total quantity received before GRN	It means quantity of every item. Does not mean number of items.
62.	CQI 4a (42)	Percentage of variations from the procurement process. (Variation from SOP to procure from authorised licensed vendors)	Number of variations from usual procurement process ---------- ---------- x 100 Total number of items procured	
63.	CQI 4 f (60)	Percentage of near misses.	Number of near misses reported ---------- x 100 Number of Incidents reported	
64.	CQI 4f (59)	Number of sentinel events reported, collected & analyzed within the defined timeframe.	Number of sentinel events reported, collected & analyzed within the defined timeframe ---------- ---------- x 100 Number of sentinel events reported, collected & analyzed	
65.	CQI 4b ((43)	Number of variation observed in mock drill.	Total number of variation in mock drill. (Absolute Number)	
		RESEARCH		
66.	CQI 3 I (35)	Percentage of research activities approved by ethics committee.	Number of research projects approved by ethics committee ---------- ---------- x 100	Quarterly

			Number of research protocols submitted to ethics committee	
67.	CQI 3I (36)	Percentage of patients withdrawing from the study.	Number of patients withdrew from all ongoing projects ---------- ---------- x 100 Number of patients in all ongoing projects	Quarterly
68.	CQI 3I (37)	Percentage of protocol violations/ deviations reported.	Number of protocol violations/ deviations reported ---------- ---------- x 100 Number of protocol violations/deviations occurred	Quarterly
69.	CQI 3I (38)	Percentage of serious adverse events reported to ethics committee within defined time frame.	Percentage of serious adverse events reported within defined time frame. ---------- ---------- x 100 Total number of serious adverse events reported	Quarterly
70.	CQI 3J (68.)	Compliance to hand hygiene practice	Total no. of actions performed _____ Total no. of hand hygiene opportunities x 100	monthly
71.	CQI 3J (70)	Compliance rate to medication prescription in capital letters	Total no. of prescriptions in capital letters_____ total no. of prescriptions x 100	Monthly
72.	CQI3j (67)	Appropriate handovers during shift change(to be done separately for nurses and doctors)	Total no. of handovers done appropriately _____ Total no. of handover opportunities x100	Monthly

ROM 3b, Administrative Policies & Procedures

I. POLICY:

The hospital has written administrative policies & procedures for each department. The administrative procedures of the hospital include but are not limited to attendance, leave, conduct, replacement etc.

II. PURPOSE:

The purpose is as follows:

- To enable integrated delivery of quality healthcare services through progressive human resource management and development practices supported by right organizational culture.
- To recruit people who have a positive attitude towards customers, themselves and other employees and who are able to give quality service.
- To ensure that employees are selected, trained, promoted and treated on the basis of their relevant skills, talents and performance without any discrimination.
- To provide a clean, safe, healthy, fearless and enjoyable working environment.
- To motivate employees through performance appraisal and reward system.
- To provide training and development for all the employees to enable them to achieve the highest level of skills possible.
- To provide career opportunities which allow employees to develop their potential.
- To provide challenging and rewarding work.
- To pay for performance.
- To inculcate transparency in work and communicate effectively with all the employees.

III. SCOPE:

The policy covers the following administrative areas such as attendance, leave, conduct, replacement etc.

IV. RESPONSIBILITY:

Human Resources Department, Respective HODs

V. DISTRIBUTION:

Hospital wide

VI. PROCESSDETAILS:

DESCRIPTIONOFTHEPROCESS

M.G.M Medical College and Hospital kamothe Hospital, Mumbai management reserves right, to add, delete, amend, modify, change or suspend the operation of any of these procedures without assigning any reason thereof

The hospital reserves the right to interpret the meaning of these rules and any supplementary rules or orders issued therein and such interpretation shall be final and binding upon all the employees. Clarification on the contents of this policy can be sought from the HR Department.

For the purpose of administrative convenience and effective management, the total personnel structure bases, in the organization, have been categorized in five broad categories. Each category consists different grades of employees depending upon posts, designation, organizational requirement, educational & professional qualification and experience etc.

1) Causing disturbance to the contentment and or comfort of others at work.

2) Drunkenness or drug addiction being under the influence of drug or alcohol.

3) Fighting, riotous or disorderly or unruly or indecent behavior or conduct or committing any act which is likely to cause breach of peace.

4) Threatening, intimidating, coercing other employees or interfering with the work of other employees or conduct which endangers or likely to endanger the life or safety of another person, and any act involving moral turpitude or conduct which violates common decency or morality.

5) Commission of any acts subversive of discipline while on duty or off duty within the Hospital premises or precincts.

6) Quarrelling with any person in the premises, engaging in fights, scuffles or altercation with fellow employees of the Hospital / Company.

7) Intimidating or threatening or assaulting any employee or employees whether within the duty hours or outside duty hours whether inside the hospital or company premises or outside the establishment whether such act relates to the employment or working of the establishment.

8) Demanding, taking offering or giving bribes or any illegal gratification.

9) Absence from duty without leave or absence from duty without leaves for more than seven consecutive days without sufficient cause or overstaying the sanctioned leave without sufficient grounds or proper satisfactory explanation.

10) Engaging in other employment or business or profession while in services of the hospital /Company.

11) Entering another section or department otherwise than in the course of duty.

12) Habitual late attendance.

13) Habitual absences without leave i.e., absence on more than 3 occasions within a period of 12 calendar months.

14) Habitual absence without leaves on the day preceding or the day succeeding a national and festival holiday or a weekly holiday.

15) Soliciting and or accepting any tips from the patients and their relatives

16) Using unparliamentarily, abusive or filthy or foul language orally or in writing against any other employee or employees or superiors or patients / guests.

17) Soliciting or collection or promoting contributions or pledges for any purpose or function at any time in the hospital premises without the prior written permission of the Management.

18) Frequent repetition of any act or omission of any acts for which a fine may be imposed under the payment of Wages Act 1936.

19) Obtaining or attempting to obtain leave of absence by false pretence, or abuse of leave facilities or by false representation.

20) Gross negligence of work or habitual negligence or neglect of work.

Breach or violation of service rule or rules or any other rule or rules or instructions of the Hospital / Company.

21) Organizing, holding or attending any meeting within the Hospital / Company premises without prior permission in writing of the Head of HRD.

22) Writing / sticking notices, posters on the walls or any portion of the premises of the Hospital / Company or wearing badges with words or slogans tending to incriminate co-employees or Management while on duty.

23) Sleeping or dozing in any posture while on duty.

24) Gambling or betting within the Hospital premises or canvassing for sale of tickets or ticket coupons or selling tokens / coupons in connection with any scheme connected with the welfare of the employees except with the express permission in writing of the Management or doing any other private business.

25) Possession of any lethal weapon, knife, arms, or ammunition, or explosives in the Hospital / Company premises or precincts.

26) Any conduct which endangers the safety of the hospital/company premises, machinery, equipment or personnel.

27) Arrest or conviction by any court of law for any offence.

28) Giving false declaration regarding name, age, father's name, qualifications, emoluments or of previous service, or any such personal details or producing fake or bogus certificates or documents at the time of employment, or suppression or concealing of material facts relating to antecedents for the purpose of securing employment in the Company/Hospital, which should have prevented employment had they been made known before employment.

29) Committing any act within the premises of the Hospital/company or outside whether amounting to any offence or which would tend to have effect or result in impairing the reputation, the public confidence, the discipline, or the prestige of the Hospital or is in any way prejudicial to the interest of the Hospital/company.

30) Refusal to accept a charge sheet or any other communication from the Management.

31) Distribution or exhibiting within the Hospital / Company premises, any hand bills, pamphlets or posters, effigies, picketing or staging demonstration inside the Hospital / Company or within 150 meters outside the premises of the Hospital / Company or obtaining signature of the employees or pasting any notice inside the Hospital / Company premises without obtaining prior permission of the Management.

32) Refusal to accept or carry out any order of transfer.

33) Refusal to accept or carry out any order of deputation.

34) Falsifying or refusing to give testimony when an accident or any other matter connected to any incident related to the business or any daily functioning is under investigation.

35) Doing money lending business or any other monetary transaction by utilizing one's position as an employee of the Company for personal gain, irrespective of whether the actual transaction is made inside the Hospital premises or at any other place.

36) Making false statements about himself or any other employee or about the Superior or misrepresenting facts.

37) Unauthorized use or misuse of property of the Company or the Hospital or forcible occupation of any part or portion or premises of the Hospital / Company. Disclosing to any unauthorized person any information with regard to the processes, facts or figures, particulars, details of the work of the Hospital, technical know-how, security arrangements, administrative or organizational matters of confidential or secret nature, which may come into the possession / knowledge of the employee during the course of his work, unless compelled to do so by judicial authority or under law or without written permission from the Management.

38) Refusal to work overtime.

39) Incivility, rude or arrogant behavior towards the visitors, patients, guests or superiors of the Hospital.

40) Engaging in any work for gains in similar work or any other work than that of the Company or otherwise taking interest directly or indirectly in any other occupation free of charge or otherwise except with the written permission of the Management.

41) Committing an expressly prohibited act, failure to observe safety instructions notified for the purpose or interference with any safety devices or equipment installed, and safety of the guests or employee's property.

42) Delivering speech tending to incite or instigate employees to violence against the Management of the Company or raising slogans against the Management or Officers of the Company.

43) Malingering or sabotage or abetment or instigation thereof.

44) Engaging in any civic, political or trade union activities on the premises of the establishment unless specifically permitted in writing by the Management on special grounds except to the extent permitted by law or by the Management.

45) Contempt of rule and disrespect of authority and general affront to the Management

46) Interfering or tampering with the official records, attendance registers documents, identity cards, etc., pertaining to himself or any other employee.

47) Acts of immorality whether within or outside the precincts of the company and the establishment affecting the reputation of the Company.

48) Wastage or excess usage of company's materials or property either willfully or due to negligence.

49) Committing any nuisance in the Hospital or near the outskirts of the Hospital premises thereby disturbing the peace of the Hospital.

50) Willful non co-operation with fellow employees for proper discharge of duties.

51) Picketing or holding demonstration at the place of residence of the Directors, Managers and other Officers of the Company and at or near the Hospital precincts.

52) Breach or abet to breach any of the service rules.

53) Wearing of the uniforms / shoes provided by the Company outside duty hours or reporting for work without uniform.

54) Misuse of identity cards issued by the Management.

55) Disobeying any lawful and reasonable order of the Management or superior and refusal to accept any communication or letter from the management or endorse the fact having received any communication or letter on any peon book or on the duplicate copy of the document itself.

56) Refusal to sign any documents forms or registers kept or maintained for the purpose of maintaining daily records.

57) Failure to deposit any lost article found in the establishment premises with the Security Department (Lost and Found) and obtain a receipt for the same.

58) Failure to notify change of address within seven days.

59) Proxy registering of attendance or abetting in the act of registering attendance of any other employee.

60) Transferring the Identity card to any ex-employee.

61) Non-observance of hygienic conditions in the premises of the Hospital / Company.

62) Smoking or possession of matchbox or flame-producing material within the hospital precincts in places where it is prohibited.

63) Lending or borrowing money, article from his subordinates or a co-worker or any other person connected with the business of the Company.

64) Speculation in any investment or commodity within the premises.

65) Spreading rumor or giving false information, which tends to disrepute the Company or its employees, or spreading panic among the employees.

66) Theft of property belonging to the Hospital / Company or other employees, patients or guests inside the premises of the Hospital / Company.

67) Leaving work without permission or before being properly relieved at the end of his shift/duty.

68) Any act or omission, which amounts to loss of Management's confidence.

VII. PROCEDURE FOR DEALING WITH MISCONDUCT:

The procedure is outlined in HR policy as Disciplinary action. If required an enquiry shall be set up.

VIII. DOMESTIC ENQUIRY:

The process of domestic enquiry is as follows:

1) The Management shall appoint an Enquiry Officer from amongst the Officers of the establishment or any outsider who is not a witness to the charges alleged against the employee. The employee will be communicated the date, time and place where the enquiry is to be conducted. He shall be given full opportunity to answer the charges and permitted to be defended by a co-worker excepting the employee who is accused of misconduct or against whom an enquiry is pending. An outsider shall not be permitted to assist, defend or represent the employee in the domestic enquiry.

2) The enquiry officer shall submit his / her report to the Management.

3) If after the enquiry the employee is adjudged guilty and punished he shall be deemed to have been absent from duty for the period of suspension and he shall not be entitled to any wages or salary for such period over and above the amount, which might have been paid to him as Subsistence Allowance.

4) If he is not found guilty, the order of suspension shall be withdrawn and he shall be deemed to have been on duty during the period of suspension and shall be paid wages, which he might have been entitled to if had not been placed under suspension after deducting the amount of Subsistence Allowance paid to him for such period.

5) Where for the order of dismissal, permission is required to be obtained from any authority under the law, the employee concerned shall be under suspension until orders are passed by the aforesaid authority.

6) If during the enquiry it is found that the employee is guilty of an any act of omission or commission other than that stated in the charge sheet and that such act of omission or commission is an offence / misconduct under these service rules, the Management in its discretion may instead of issuing a fresh charge sheet, amend the original charge sheet accordingly, and the employee shall be given further opportunity for explaining and defending himself.

Leave Policy is as per HR **Code of Conduct** and as per HRM Chapter 09.

ROM 4 The organization is managed by the leaders in an ethical manner.

I. POLICY:
The policy defines the Code of Ethics given by Medical Council of India.

II. PURPOSE:
The policy is established to define the Medical Code of Ethics given by Medical Council of India that applicable to Hospital.

III. SCOPE:
Hospital wide

IV. RESPONSIBILITY:
Head Operations

V. DISTRIBUTION:
Hospital wide

VI. DEFINITION:
Definition of Code of Medical Ethics is as follows
Medical ethics is primarily a field of applied ethics, the study of moral values and judgments as they apply to medicine. As a scholarly discipline, medical ethics encompasses its practical application in clinical settings as well as work on its history, philosophy, theology, and sociology.

VII. ABBREVIATIONS:
MoU- Memorandum of Understanding

VIII. PROCESSDETAILS:
The Process Details Are Follows :

Ethics Committee:-Ethics committee issue policy on medical ethics. Review, evaluate, and approve cases for ethical dilemmas, terminal care, any other potential conflict of ethical issues and Medical policy and practice

DESCRIPTION OF THE PROCESS
(AMENDED UPTO DECEMBER 2010) (Published in Part III, Section 4 of the Gazette of India, dated 6th April,2002)
MEDICAL COUNCIL OF INDIA
NOTIFICATION
New Delhi, dated 11th March, 2002

No. MCI-211 (2)/2001/Registration. In exercise of the powers conferred under section 20A read with section 33(m) of the Indian Medical Council Act, 1956 (102 of 1956), the Medical Council of India, with the previous approval of the Central Government, hereby makes the following regulations relating to the Professional Conduct, Etiquette and Ethics for registered medical practitioners, namely:-

Short Title and Commencement:

1. These Regulations may be called the Indian Medical Council (Professional conduct, Etiquette and Ethics)

2. They shall come into force on the date of their publication in the Official Gazette.

CHAPTER I

- **CODE OF MEDICAL ETHICS**

1. Declaration:

Each applicant, at the time of making an application for registration under the provisions of the Act, shall be provided a copy of the declaration and shall submit a duly signed Declaration as provided in Appendix 1. The applicant shall also certify that he/she had read and agreed to abide by the same.

2. Duties and responsibilities of the Physician in general:

1) Character of Physician

(Doctors with qualification of MBBS or MBBS with post graduate degree/ diploma or with equivalent qualification in any medical discipline):

a) A physician shall uphold the dignity and honor of his profession.

b) The prime object of the medical profession is to render service to humanity; reward or financial gain is a subordinate consideration. Who- so-ever chooses his profession, assumes the obligation to conduct himself in accordance with its ideals. A physician should be an upright man, instructed in the art of healings. He shall keep himself pure in character and be diligent in caring for the sick; he should be modest, sober, patient, prompt in discharging his duty without anxiety; conducting himself with propriety in his profession and in all the actions of his life.

c) No person other than a doctor having qualification recognised by Medical Council of India and registered with Medical Council of India/State Medical Council (s) is allowed to practice Modern system of Medicine or Surgery. A person obtaining qualification in any other system of Medicine is not allowed to practice Modern system of Medicine in any form.

2) Maintaining good medical practice:

a) The Principal objective of the medical profession is to render service to humanity with full respect for the dignity of profession and man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion. Physicians should try continuously to improve medical knowledge and skills and should make available to their patients and colleagues the benefits of their professional attainments. The physician should practice methods of healing founded on scientific basis and should not associate professionally with anyone who violates this principle. The honoured ideals of the medical profession imply that the responsibilities of the physician extend not only to

individuals but also to society.

b) Membership in Medical Society: For the advancement of his profession, a physician should affiliate with associations and societies of allopathic medical professions and involve actively in the functioning of such bodies.

c) A Physician should participate in professional meetings as part of Continuing Medical Education programs, for at least 30 hours every five years, organized by reputed professional academic bodies or any other authorized organizations. The compliance of this requirement shall be informed regularly to Medical Council of India or the State Medical Councils as the case may be.

3) <u>Maintenance of medical records</u>:

a) Every physician shall maintain the medical records pertaining to his / her indoor patients for a period of 5 years from the date of commencement of the treatment in a standard pro forma laid down by the Medical Council of India and attached as Appendix 3.

b) If any request is made for medical records either by the patients / authorized attendant or legal authorities involved, the same may be duly acknowledged and documents shall be issued within the period of 72 hours.

c) Efforts shall be made to computerize medical records for quick retrieval.

4) <u>Display of registration numbers:</u>

a) A Registered medical practitioner shall maintain a Register of Medical Certificates giving full details of certificates issued. When issuing a medical certificate he / she shall always enter the identification marks of the patient and keep a copy of the certificate. He / She shall not omit to record the signature and/or thumb mark, address and at least one identification mark of the patient on the medical certificates or report. The medical certificate shall be prepared as in Appendix 2.

b) Every physician shall display the registration number accorded to him by the State Medical Council / Medical Council of India in his clinic and in all his prescriptions, certificates, money receipts given to his patients.

c) Physicians shall display as suffix to their names only recognized medical degrees or such certificates/diplomas and memberships/honors which confer professional knowledge or recognizes any exemplary qualification/achievements.

5) <u>Use of Generic names of drugs:</u>

Every physician should, as far as possible, prescribe drugs with generic names and he / she shall ensure that there is a rational prescription and use of drugs.

6) <u>Highest Quality Assurance in patient care</u>:

Every physician should aid in safeguarding the profession against admission to it of those who are deficient in moral character or education. Physician shall not employ in connection with his professional practice any attendant who is neither registered nor enlisted under the Medical Acts in force and shall not permit such persons to attend, treat or perform operations upon patients wherever professional discretion or skill is required.

7) Exposure of Unethical Conduct:

A Physician should expose, without fear or favor, incompetent or corrupt, dishonest or unethical conduct on the part of members of the profession.

8) Payment of Professional Services:

The physician, engaged in the practice of medicine shall give priority to the interests of patients. The personal financial interests of a physician should not conflict with the medical interests of patients. A physician should announce his fees before rendering service and not after the operation or treatment is under way. Remuneration received for such services should be in the form and amount specifically announced to the patient at the time the service is rendered. It is unethical to enter into a contract of "no cure no payment". Physician rendering service on behalf of the state shall refrain from anticipating or accepting any consideration.

9) Evasion of Legal Restrictions:

The physician shall observe the laws of the country in regulating the practice of medicine and shall also not assist others to evade such laws. He should be cooperative in observance and enforcement of sanitary laws and regulations in the interest of public health. A physician should observe the provisions of the State Acts like Drugs and Cosmetics Act, 1940; Pharmacy Act, 1948; Narcotic Drugs and Psychotropic substances Act, 1985; Medical Termination of Pregnancy Act, 1971; Transplantation of Human Organ Act, 1994; Mental Health Act, 1987; Environmental Protection Act, 1986; Pre-natal Sex Determination Test Act,
1994; Drugs and Magic Remedies (Objectionable Advertisement) Act, 1954; Persons with Disabilities (Equal Opportunities and Full Participation) Act, 1995 and Bio-Medical Waste (Management and Handling) Rules, 1998 and such other Acts, Rules, Regulations made by the Central/State Governments or local Administrative Bodies or any other relevant Act relating to the protection and promotion of public health.

CHAPTER 2

- **DUTIES OF PHYSICIANS TO THEIR PATIENTS**

1. Obligations to the Sick

Though a physician is not bound to treat each and every person asking his services, he should not only be ever ready to respond to the calls of the sick and the injured, but should be mindful of the high character of his mission and the responsibility he discharges in the course of his professional duties. In his treatment, he should never forget that the health and the lives of those entrusted to his care depend on his skill and attention. A physician should endeavor to add to the comfort of the sick by making his visits at the hour indicated to the patients. A physician advising a patient to seek service of another physician is acceptable; however, in case of emergency a physician must treat the patient. No physician shall arbitrarily refuse treatment to a patient. However for good reason, when a patient is suffering from an ailment which is not within the range of experience of the treating physician, the physician may refuse treatment and refer the patient to another physician.

1) Medical practitioner having any incapacity detrimental to the patient or which can

affect his performance vis-avis the patient is not permitted to practice his profession

2. Patience and Secrecy:

Patience should characterize the physician. Confidences concerning individual or domestic life entrusted by patients to a physician and defects in the disposition or character of patients observed during medical attendance should never be revealed unless their revelation is required by the laws of the State. Sometimes, however, a physician must determine whether his duty to society requires him to employ knowledge, obtained through confidence as a physician, to protect a healthy person against a communicable disease to which he is about to be exposed. In such instance, the physician should act as he would wish another to act toward one of his own family in like circumstances.

3. Prognosis:

The physician should neither exaggerate nor minimize the gravity of a patient's condition. He should ensure himself that the patient, his relatives or his responsible friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family.

4. The Patient must not be neglected:

A physician is free to choose whom he will serve. He should, however, respond to any request for his assistance in an emergency. Once having undertaken a case, the physician should not neglect the patient, nor should he withdraw from the case without giving adequate notice to the patient and his family. Provisionally or fully registered medical practitioner shall not willfully commit an act of negligence that may deprive his patient or patients from necessary medical care.

CHAPTER 3

- **Duties of PHYSICIAN IN CONSULTATION**

1. Unnecessary consultations should be avoided:

1) However in case of serious illness and in doubtful or difficult conditions, the physician should request consultation, but under any circumstances such consultation should be justifiable and in the interest of the patient only and not for any other consideration.

2) Consulting pathologists /radiologists or asking for any other diagnostic Lab investigation should be done judiciously and not in a routine manner.

2. Consultation for Patient's Benefit:

In every consultation, the benefit to the patient is of foremost importance.
All physicians engaged in the case should be frank with the patient and his attendants.

3. Punctuality in Consultation:

Utmost punctuality should be observed by a physician in making themselves available for consultations.

4. Statement to Patient after Consultation:

a) All statements to the patient or his representatives should take place in the presence of the consulting physicians, except as otherwise agreed. The disclosure of the opinion to the patient or his relatives or friends shall rest with the medical attendant.

b) Differences of opinion should not be divulged unnecessarily but when there is irreconcilable difference of opinion the circumstances should be frankly and impartially explained to the patient or his relatives or friends. It would be opened to them to seek further advice as they so desire.

5. Treatment after Consultation: No decision should restrain the attending physician from making such subsequent variations in the treatment if any unexpected change occurs, but at the next consultation, reasons for the variations should be discussed/explained. The same privilege, with its obligations, belongs to the consultant when sent for in an emergency during the absence of attending physician. The attending physician may prescribe medicine at any time for the patient, whereas the consultant may prescribe only in case of emergency or as an expert when called for.

6. Patients Referred to Specialists: When a patient is referred to a specialist by the attending physician, a case summary of the patient should be given to the specialist, who should communicate his opinion in writing to the attending physician.

7. Fees and other charges:

a) A physician shall clearly display his fees and other charges on the board of his chamber and/or the hospitals he is visiting. Prescription should also make clear if the Physician himself dispensed any medicine.

b) A physician shall write his name and designation in full along with registration particulars in his prescription letter head.

Note: In Government hospital where the patient-load is heavy, the name of the prescribing doctor must be written below his/her signature.

CHAPTER 4

- **RESPONSIBILITIES OF PHYSICIANS TO EACH OTHER**

1. A physician should consider it as a pleasure and privilege to render gratuitous service to all physicians and their immediate family dependants.

2. Conduct in consultation :

In consultations, no insincerity, rivalry or envy should be indulged in. All due respect should be observed towards the physician in-charge of the case and no statement or remark be made, which would impair the confidence reposed in him. For this purpose no discussion should be carried on in the presence of the patient or his representatives.

3. Consultant not to take charge of the case:

When a physician has been called for consultation, the Consultant should normally not take charge of the case, especially on the solicitation of the patient or friends. The Consultant shall not criticize the referring physician. He / she shall discuss the diagnosis treatment plan with the referring physician.

4. Appointment of Substitute:

Whenever a physician requests another physician to attend his patients during his temporary absence from his practice, professional courtesy requires the acceptance of such appointment only when he has the capacity to discharge the additional responsibility along with his / her other duties. The physician acting under such an appointment should give the utmost consideration to the interests and reputation of the absent physician and all such patients should be restored to the care of the latter upon his/her return.

5. Visiting another Physician's Case:

When it becomes the duty of a physician occupying an official position to see and report upon an illness or injury, he should communicate to the physician in attendance so as to give him an option of being present. The medical officer / physician occupying an official position should avoid remarks upon the diagnosis or the treatment that has been adopted.

CHAPTER 5

- **DUTIES OF PHYSICIAN TO THE PUBLIC AND TO THE PARAMEDICAL PROFESSION**

1. **Physicians as Citizens:**

Physicians, as good citizens, possessed of special training should disseminate advice on public health issues. They should play their part in enforcing the laws of the community and in sustaining the institutions that advance the interests of humanity. They should particularly co-operate with the authorities in the administration of sanitary/public health laws and regulations.

2. **Public and Community Health:**

Physicians, especially those engaged in public health work, should enlighten the public concerning quarantine regulations and measures for the prevention of epidemic and communicable diseases. At all times the physician should notify the constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules and regulations of the health authorities. When an epidemic occurs a physician should not abandon his duty for fear of contracting the disease himself.

3. **Pharmacists / Nurses**:

Physicians should recognize and promote the practice of different paramedical services such as, pharmacy and nursing as professions and should seek their cooperation wherever required.

CHAPTER 6

- **UNETHICALACTS:**

A physician shall not aid or abet or commit any of the following acts which shall be construed as unethical -

1. **Advertising:**

1) Soliciting of patients directly or indirectly, by a physician, by a group of physicians or by institutions or organizations is unethical. A physician shall not make use of him / her (or his / her name) as subject of any form or manner of advertising or publicity through any mode either alone or in conjunction with others which is of such a character as to invite attention to him or to his professional position, skill, qualification, achievements, attainments, specialties, appointments, associations, affiliations or honours and/or of such character as would ordinarily result in his self-aggrandizement. A physician shall not give to any person, whether for compensation or otherwise, any approval, recommendation, endorsement, certificate, report or statement with respect of any drug, medicine, nostrum remedy, surgical, or therapeutic article, apparatus or appliance or any commercial product or article with respect of any property, quality or use thereof or any test, demonstration or trial thereof, for use in connection with his name, signature, or photograph in any form or manner of advertising through any mode nor shall he boast of cases, operations, cures or remedies or permit the publication of report thereof through any mode. A medical practitioner is however permitted to make a formal announcement in press regarding the following:

- **a)** On starting practice.
- **b)** On change of type of practice.
- **c)** On changing address.
- **d)** On temporary absence from duty.
- **e)** On resumption of another practice.
- **f)** On succeeding to another practice.
- **g)** Public declaration of charges.

2) Printing of self photograph, or any such material of publicity in the letter head or on sign board of the consulting room or any such clinical establishment shall be regarded as acts of self advertisement and unethical conduct on the part of the physician. However, printing of sketches, diagrams, picture of human system shall not be treated as unethical.

2. **Patent and Copy rights:**

A physician may patent surgical instruments, appliances and medicine or Copyright applications, methods and procedures. However, it shall be unethical if the benefits of such patents or copyrights are not made available in situations where the interest of large population is involved.

3. **Running an open shop (Dispensing of Drugs and Appliances by Physicians**: -

A physician should not run an open shop for sale of medicine for dispensing prescriptions prescribed by doctors other than himself or for sale of medical or surgical appliances. It is not

unethical for a physician to prescribe or supply drugs, remedies or appliances as long as there is no exploitation of the patient. Drugs prescribed by a physician or brought from the market for a patient should explicitly state the proprietary formulae as well as generic name of the drug.

4. Rebates and Commission:

1) A physician shall not give, solicit, or receive nor shall he offer to give solicit or receive, any gift, gratuity, commission or bonus in consideration of or return for the referring, recommending or procuring of any patient for medical, surgical or other treatment. A physician shall not directly or indirectly, participate in or be a party to act of division, transference, assignment, subordination, rebating, splitting or refunding of any fee for medical, surgical or other treatment.

Nothing in this section, however, shall prohibit payment of salaries by a qualified physician to other duly qualified person rendering medical care under his supervision.

5. Secret Remedies:

The prescribing or dispensing by a physician of secret remedial agents of which he does not know the composition, or the manufacture or promotion of their use is unethical and as such prohibited. All the drugs prescribed by a physician should always carry a proprietary formula and clear name.

6. Human Rights:

The physician shall not aid or abet torture nor shall he be a party to either infliction of mental or physical trauma or concealment of torture inflicted by some other person or agency in clear violation of human rights.

7. Euthanasia:

Practicing euthanasia shall constitute unethical conduct. However on specific occasion, the question of withdrawing supporting devices to sustain cardio-pulmonary function even after brain death, shall be decided only by a team of doctors and not merely by the treating physician alone. A team of doctors shall declare withdrawal of support system. Such team shall consist of the doctor in charge of the patient, Chief Medical Officer / Medical Officer in charge of the hospital and a doctor nominated by the in-charge of the hospital from the hospital staff or in accordance with the provisions of the Transplantation of Human Organ Act, 1994.

CHAPTER7

- **MISCONDUCT:**

The following acts of commission or omission on the part of a physician shall constitute professional misconduct rendering him/her liable for disciplinary action

1. Violation of the Regulations: If he/she commits any violation of these Regulations.

2. If he/she does not maintain the medical records of his/her indoor patients for a period of three years as per regulation 1.3 and refuses to provide the same within 72 hours when the patient or his/her authorised representative makes a request for it as per the regulation

3. If he/she does not display the registration number accorded to him/her by the State

Medical Council or the Medical Council of India in his clinic, prescriptions and certificates etc. issued by him or violates the provisions of regulation 1.4.2.

4. Adultery or Improper Conduct: Abuse of professional position by committing adultery or improper conduct with a patient or by maintaining an improper association with a patient will render a Physician liable for disciplinary action as provided under the Indian Medical Council Act, 1956 or the concerned State Medical Council Act.

5. Conviction by Court of Law: Conviction by a Court of Law for offences involving moral turpitude /
Criminal acts.

6. Sex Determination Tests: On no account sex determination test shall be undertaken with the intent to terminate the life of a female foetus developing in her mother's womb, unless there are other absolute indications for termination of pregnancy as specified in the Medical Termination of Pregnancy Act, 1971. Any act of termination of pregnancy of normal female foetus amounting to female foeticide shall be regarded as professional misconduct on the part of the physician leading to penal erasure besides rendering him liable to criminal proceedings as per the provisions of this Act.

7. Signing Professional Certificates, Reports and other Documents: Registered medical practitioners are in certain cases bound by law to give, or may from time to time be called upon or requested to give certificates, notification, reports and other documents of similar character signed by them in their professional capacity for subsequent use in the courts or for administrative purposes etc. Such documents, among others, include the ones given at Appendix -4. Any registered practitioner who is shown to have signed or given under his name and authority any such certificate, notification, report or document of a similar character which is untrue, misleading or improper, is liable to have his name deleted from the Register.

8. A registered medical practitioner shall not contravene the provisions of the Drugs and Cosmetics Act and regulations made there under. Accordingly,

1) Prescribing steroids/ psychotropic drugs when there is no absolute medical indication;

2) selling Schedule 'H' & 'L' drugs and poisons to the public except to his patient; in contravention of the above provisions shall constitute gross professional misconduct on the part of the physician.

9. Performing or enabling unqualified person to perform an abortion or any illegal operation for which there is no medical, surgical or psychological indication.

10. A registered medical practitioner shall not issue certificates of efficiency in modern medicine to unqualified or non-medical person.

(Note: The foregoing does not restrict the proper training and instruction of bonafide students, midwives, dispensers, surgical attendants, or skilled mechanical and technical assistants and therapy assistants under the personal supervision of physicians.)

11. A physician should not contribute to the lay press articles and give interviews regarding diseases and treatments which may have the effect of advertising himself or soliciting practices; but is open to write to the lay press under his own name on matters of public health, hygienic living or to deliver public lectures, give talks on the radio/TV/internet chat for the same purpose and send announcement of the same to lay press.

12. An institution run by a physician for a particular purpose such as a maternity home,

nursing home, private hospital, rehabilitation centre or any type of training institution etc. may be advertised in the lay press, but such advertisements should not contain anything more than the name of the institution, type of patients admitted, type of training and other facilities offered and the fees.

13. It is improper for a physician to use an unusually large sign board and write on it anything other thanhis name, qualifications obtained from a University or a statutory body, titles and name of his speciality, registration number including the name of the State Medical Council under which registered. The same should be the contents of his prescription papers. It is improper to affix a sign-board on a chemist's shop or in places where he does not reside or work.

14. The registered medical practitioner shall not disclose the secrets of a patient that have been learnt in the exercise of his / her profession except -

i. in a court of law under orders of the Presiding Judge;
ii. in circumstances where there is a serious and identified risk to a specific person and / or community; and
iii. notifiable diseases.

In case of communicable / notifiable diseases, concerned public health authorities should be informed immediately.

15. The registered medical practitioner shall not refuse on religious grounds alone to give assistance in or conduct of sterility, birth control, circumcision and medical termination of Pregnancy when there is medical indication, unless the medical practitioner feels himself/herself incompetent to do so.

16. Before performing an operation the physician should obtain in writing the consent from the husband or wife, parent or guardian in the case of minor, or the patient himself as the case may be. In an operation which may result in sterility the consent of both husband and wife is needed.

17. A registered medical practitioner shall not publish photographs or case reports of his / her patients without their permission, in any medical or other journal in a manner by which their identity could be made out. If the identity is not to be disclosed, the consent is not needed.

18. In the case of running of a nursing home by a physician and employing assistants to help him / her, the ultimate responsibility rests on the physician.

19. A Physician shall not use touts or agents for procuring patients.

20. A Physician shall not claim to be specialist unless he has a special qualification in that branch.

21. No act of invitro fertilization or artificial insemination shall be undertaken without the informed consent of the female patient and her spouse as well as the donor. Such consent shall be obtained in writing only after the patient is provided, at her own level of comprehension, with sufficient information about the purpose, methods, risks, inconveniences, disappointments of the procedure and possible risks and hazards.

22. Research: Clinical drug trials or other research involving patients or volunteers as per the guidelines of ICMR can be undertaken, provided ethical considerations are borne in mind. Violation of existing ICMR guidelines in this regard shall constitute misconduct. Consent taken from the patient for trial of drug or therapy which is not as per the guidelines shall also be construed as misconduct.

23. If a physician posted in rural area is found absent on more than two occasions during inspection by the Head of the District Health Authority or the Chairman, ZillaParishad, the same shall be construed as misconduct if it is recommended to the Medical Council of India/State Medical Council by the State Government for action under these Regulations.

24. If a physician posted in a medical college/institution both as teaching faculty or otherwise shall remain in hospital/college during the assigned duty hours. If they are found absent on more than two occasions during this period, the same shall be construed as misconduct if it is certified by the Principal/Medical Superintendent and forwarded through the State Government to Medical Council of India/State Medical Council for action under these Regulations.

CHAPTER 8

- **PUNISHMENT AND DISCIPLINARY ACTION**

1. It must be clearly understood that the instances of offences and of Professional misconduct which are given above do not constitute and are not intended to constitute a complete list of the infamous acts which calls for disciplinary action, and that by issuing this notice the Medical Council of India and or State Medical Councils are in no way precluded from considering and dealing with any other form of professional misconduct on the part of a registered practitioner. Circumstances may and do arise from time to time in relation to which there may occur questions of professional misconduct which do not come within any of these categories. Every care should be taken that the code is not violated in letter or spirit. In such instances as in all others, the Medical Council of India and/or State Medical Councils have to consider and decide upon the facts brought before the Medical Council of India and/or State Medical Councils.

2. It is made clear that any complaint with regard to professional misconduct can be brought before the appropriate Medical Council for Disciplinary action. Upon receipt of any complaint of professional misconduct, the appropriate Medical Council would hold an enquiry and give opportunity to the registered medical practitioner to be heard in person or by pleader. If the medical practitioner is found to be guilty of committing professional misconduct, the appropriate Medical Council may award such punishment as deemed necessary or may direct the removal altogether or for a specified period, from the register of the name of the delinquent registered practitioner. Deletion from the Register shall be widely publicized in local press as well as in the publications of different Medical Associations/ Societies/Bodies.

3. In case the punishment of removal from the register is for a limited period, the appropriate Council may also direct that the name so removed shall be restored in the register after the expiry of the period for which the name was ordered to be removed.

4. Decision on complaint against delinquent physician shall be taken within a time limit of 6 months.

5. During the pendency of the complaint the appropriate Council may restrain the physician from performing the procedure or practice which is under scrutiny.

6. Professional incompetence shall be judged by peer group as per guidelines prescribed by Medical Council of India.

APPENDIX-1

DECLARATION

At the time of registration, each applicant shall be given a copy of the following declaration by the Registrar concerned and the applicant shall read and agree to abide by the same:

1. I solemnly pledge myself to consecrate my life to service of humanity.
2. Even under threat, I will not use my medical knowledge contrary to the laws of Humanity.
3. I will maintain the utmost respect for human life from the time of conception.
4. I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient.
5. I will practice my profession with conscience and dignity.
6. The health of my patient will be my first consideration.
7. I will respect the secrets which are confined in me.
8. I will give to my teachers the respect and gratitude which is their due.
9. I will maintain by all means in my power, the honour and noble traditions of medical profession.
10. I will treat my colleagues with all respect and dignity.
11. I shall abide by the code of medical ethics as enunciated in the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations 2002.

I make these promises solemnly, freely and upon my honour.

Signature .....
Name .....
Place .....
Address .....
Date.....

APPENDIX-2

LIST OF CERTIFICATES, REPORTS, NOTIFICATIONS ETC. ISSUED BY DOCTORS FOR THE PURPOSES OF VARIOUS ACTS / ADMINISTRATIVE REQUIREMENTS

1) Under the acts relating to birth, death or disposal of the dead.
2) Under the Acts relating to Lunacy and Mental Deficiency and under the Mental illness Act and the rules made thereunder.
3) Under the Vaccination Acts and the regulations made thereunder.
4) Under the Factory Acts and the regulations made thereunder.
5) Under the Education Acts.
6) Under the Public Health Acts and the orders made thereunder.
7) Under the Workmen's Compensation Act and Persons with Disability Act.
8) Under the Acts and orders relating to the notification of infectious diseases.
9) Under the Employee's State Insurance Act.
10) In connection with sick benefit insurance and friendly societies.
11) Under the Merchant Shipping Act.

12) For procuring / issuing of passports.
13) For excusing attendance in courts of Justice, in public services, in public offices or in ordinary employment.
14) In connection with Civil and Military matters.
15) In connection with matters under the control of Department of Pensions.
16) In connection with quarantine rules.
17) For procuring driving license.

1. SECRETARY

MEDICAL COUNCIL OF INDIA
(Published in Part III, Section 4 of the Gazette of India, dated 22nd February, 2003) MEDICAL COUNCIL OF INDIA NOTIFICATION No.MCI-211 (2)2002-Regn.- In exercise of the powers conferred under section 20A read with section 33(m) of the Indian Medical Council Act, 1956 (102 of 1956), the Medical Council of India, with the previous approval of the Central Government, hereby makes the following amendments to the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002, namely:-

1) Short Title and Commencement:
- These Regulations may be called the Indian Medical Council (Professional conduct, Etiquette and Ethics) (Amendment) Regulations, 2003.
- They shall come into force on the date of their publication in the Official Gazette.

2) In the Indian Medical Council (Professional conduct, Etiquette and Ethics) Regulations, 2002, the regulations, 7.23 and 7.24 appearing under Chapter 7, shall be omitted.
(Published in Part III, Section 4 of the Gazette of India, Extraordinary dated 27th May, 2004)MEDICAL COUNCIL OF INDIA NOTIFICATION

New Delhi, dated 11th March, 2002, No. MCI-211 (2)/2004-(Ethical). - In exercise of the powers conferred under section 20A read with section 33(m) of the Indian Medical Council Act, 1956 (102 of 1956), the Medical Council of India, with the previous approval of the Central Government, hereby makes the following amendments to the Indian Medical Council (Professional conduct, Etiquette and Ethics) Regulations, 2002, namely:-

(1) Short Title and Commencement: (i) These Regulations may be called the Indian Medical Council (Professional conduct, Etiquette and Ethics) (Amendment) Regulations, 2004.

(2) In the Indian Medical Council (Professional conduct, Etiquette and Ethics) Regulations, 2002, after the regulation

(3) appearing under Chapter 8, the following regulations, shall be added:

(4) Where either on a request or otherwise the Medical Council of India is informed that any complaint against a delinquent physician has not been decided by a State Medical Council within a period of six months from the date of receipt of complaint by it and further the MCI has reason to believe that there is no justified reason for not deciding the complaint within the said prescribed period, the Medical Council of India may-

- Impress upon the concerned State Medical council to conclude and decide the complaint within a time bound schedule;
- May decide to withdraw the said complaint pending with the concerned State

Medical Council straightaway or after the expiry of the period which had been stipulated by the MCI in accordance with para(i) above, to itself and refer the same to the Ethical Committee of the Council for its expeditious disposal in a period of not more than six months from the receipt of the complaint in the office of the Medical Council of India."

7. Any person aggrieved by the decision of the State Medical Council on any complaint against a delinquent physician, shall have the right to file an appeal to the MCI within a period of 60 days from the date of receipt of the order passed by the said Medical Council:
Provided that the MCI may, if it is satisfied that the appellant was prevented by sufficient cause from presenting the appeal within the aforesaid period of 60 days, allow it to be presented within a further period of 60 days.

MEDICAL COUNCIL OF INDIA AMENDMENT NOTIFICATION New Delhi, the 10th December, 2009

No.MCI-211 (1)/2009(Ethics)/55667 - In exercise of the powers conferred by Section 33 of the Indian Medical Council Act, 1956 (102 of 1956), the Medical Council of India with the previous sanction of the Central Government, hereby makes the following Regulations to amend the "Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002: -

1.

- These Regulations may be called the "Indian Medical Council (Professional Conduct, Etiquette and Ethics) (Amendment) Regulations, 2009 - Part-I".
- They shall come into force from the date of their publication in the Official Gazette.

2. In the "Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002", the following additions/modifications/deletions/ substitutions, shall be, as indicated therein: -

3. The following clause shall be added after clause 7:-

8. Code of conduct for doctors and professional association of doctors in their relationship with pharmaceutical and allied health sector industry.

In dealing with Pharmaceutical and allied health sector industry, a medical practitioner shall follow and adhere to the stipulations given below:-

1) <u>Gifts:</u>

A medical practitioner shall not receive any gift from any pharmaceutical or allied health care industry and their sales people or representatives.

2) <u>Travel facilities:</u>

A medical practitioner shall not accept any travel facility inside the country or outside, including rail, air, ship , cruise tickets, paid vacations etc. from any pharmaceutical or allied healthcare industry or their representatives for self and family members for vacation or for attending conferences, seminars, workshops, CME program etc as a delegate.

3) <u>Hospitality:</u>

A medical practitioner shall not accept individually any hospitality like hotel accommodation for self and family members under any pretext.

4) Cash or monetary grants:

A medical practitioner shall not receive any cash or monetary grants from any pharmaceutical and allied healthcare industry for individual purpose in individual capacity under any pretext. Funding for medical research, study etc. can only be received through approved institutions by modalities laid down by law / rules / guidelines adopted by such approved institutions, in a transparent manner. It shall always be fully disclosed.

5) Medical Research:

A medical practitioner may carry out, participate in, work in research projects funded by pharmaceutical and allied healthcare industries. A medical practitioner is obliged to know that the fulfillment of the following items (i) to (vii) will be an imperative for undertaking any research assignment / project funded by industry - for being proper and ethical. Thus, in accepting such a position a medical practitioner shall:-

(i) Ensure that the particular research proposal(s) has the due permission from the competent concerned authorities.

(ii) Ensure that such a research project(s) has the clearance of national/ state / institutional ethics committees / bodies.

(iii) Ensure that it fulfils all the legal requirements prescribed for medical research.

(iv) Ensure that the source and amount of funding is publicly disclosed at the beginning itself.

(v) Ensure that proper care and facilities are provided to human volunteers, if they are necessary for the research project(s).

(vi) Ensure that undue animal experimentations are not done and when these are necessary they are done in a scientific and a humane way.

(vii) Ensure that while accepting such an assignment a medical practitioner shall have the freedom to publish the results of the research in the greater interest of the society by inserting such a clause in the MOU or any other document / agreement for any such assignment.

6) Maintaining Professional Autonomy:

In dealing with pharmaceutical and allied healthcare industry a medical practitioner shall always ensure that there shall never be any compromise either with his / her own professional autonomy and / or with the autonomy and freedom of the medical institution.

7) Affiliation:

A medical practitioner may work for pharmaceutical and allied healthcare industries in advisory capacities, as consultants, as researchers, as treating doctors or in any other professional capacity. In doing so, a medical practitioner shall always:

i. Ensure that his professional integrity and freedom are maintained.

ii. Ensure that patient's interest is not compromised in any way.

iii. Ensure that such affiliations are within the law.

iv. Ensure that such affiliations / employments are fully transparent and disclosed.

8) <u>Endorsement</u>:

A medical practitioner shall not endorse any drug or product of the industry publically. Any study conducted on the efficacy or otherwise of such products shall be presented to and / or through appropriate scientific bodies or published in appropriate scientific journals in a proper way".

Value Travel Facilitator(MVTF).

Hospitals

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Applicant Hospitals for NABH Accreditation

The applications from the following hospitals have been received and are under different stages of processing. Stakeholders desirous of giving any feedback about the hospitals may do so by writing to CEO, NABH. The feedback would be taken into account while accreditation decisions are made.

S.N.	Appl. ID	Name	Date of receipt of application	Present Status
1	H-2006-0003	Bombay Hospital & Medical Research Centre, Mumbai, Maharashtra, India	07 Aug 2011	Pre assessment to be scheduled
2	H-2006-0029	Aashray Urology Institute, Vadodara, Gujarat, India	11 Nov 2006	Application Closed
3	H-2007-0038	Lifecare Institute of Medical Sciences & Research, Ahmedabad, Gujarat, India	26 Feb 2007	Application Closed
4	H-2007-0050	Divine Nursing Home Pvt. Ltd., Kolkata, West Bengal, India	09 Nov 2007	Application Closed
5	H-2007-0051	Fortis Hospitals Ltd,Cunnighan Road, Bangalore, Karnataka, India	26 Sep 2007	Application Closed
6	H-2007-0054	General Hospital, Rajpipla, Gujarat, India	16 Nov 2007	Application Closed
7	H-2007-0055	General Hospital, Godhra, Gujarat, India	12 Mar 2007	Application Closed
8	H-2007-0056	General Hospital, Valsad, Gujarat, India	12 Jul 2007	Application Closed
9	H-2007-0057	J P Hospital, Bhopal, Madhya Pradesh, India	12 Nov 2007	Application Closed
10	H-2007-0059	Global Hospitals, Hyderabad, Telangana, India	27 Dec 2007	Application Closed
11	H-2008-0061	General Hospital, Junagadh, Gujarat, India	16 Jan 2008	Application Closed
12	H-2008-0062	G.K. General Hospital, Bhuj, Gujarat, India	21 Jan 2008	Application Closed
13	H-2008-0067	General Hospital, Mehsana, Gujarat, India	03 Oct 2008	Application Closed
14	H-2008-0073	Holy Cross Hospital, Kollam, Kerala, India	14 May 2008	Application Closed
15	H-2008-0088	Lok Nayak Hospital, New Delhi, Delhi, India	10 Jul 2008	Application Closed
16	H-2009-0092	Baptist Christian Hospital, Tezpur, Assam, India	01 Sep 2009	Application Closed
17	H-2009-0093	Shri Bhavsinghji General Hospital, Porbandar, Gujarat, Porbandar, Gujarat, India	27 Jan 2009	Application Closed

		India		
500	H-2016-1071	Riddhi Vinayak Critical Care and Cardiac Centre, Mumbai, Maharashtra, India	23 Apr 2016	Documents not received
501	H-2016-1075	Travancore Medical College & Hospital, Kollam, Kerala, India	13 May 2016	Documents not received
502	H-2016-1076	Jeewan Nursing Home & Hospital, Delhi, Delhi, India	20 May 2016	Documents not received
503	H-2016-1077	Jain Multispecilaity Hospital, Khanna, Ludhiana, Punjab, India	20 May 2016	Documents not received
504	H-2016-1079	Prachin Healthcare Multispeciality Hospital (A Divison of Dake Hospitals Pvt. Ltd.), , Panvel, Maharashtra, India	20 May 2016	Corrective Action of PA is Awaited from HCO
505	H-2016-1082	Krishna Hospital & Research Centre, Haldwani (Nanital), Uttarakhand, India	25 May 2016	Documents not received
506	H-2016-1083	PVS Memorial Hospital, Kochi, Kerala, India	27 May 2016	Documents not received
507	H-2016-1085	Maharajaha's Institute of Medical Sciences, Vizianagaram, Andhra Pradesh, India	03 Jun 2016	Documents not received
508	H-2016-1086	Madhulok Hospital, Kanpur, Uttar Pradesh, India	06 Jun 2016	Documents not received
509	H-2016-1087	Narayana Medical College & Hospital, Nellore, Andhra Pradesh, India	17 Jun 2016	Documents not received
510	H-2016-1089	Bhagat hospital Pvt. Ltd., Delhi, Delhi, India	24 Jun 2016	Documents received
511	H-2016-1090	MGM Medical College Hospital and Medical Center Research Institute, Aurangabad, Maharashtra, India	15 Jul 2016	Pre assessment to be schedule
512	H-2016-1093	Moahk Medical & Research Centre Private Limited, Allahabad, Uttar Pradesh, India	22 Jul 2016	Documents not received
513	H-2016-1094	Lifeline Institute of Medical Sciences, Hisar, Haryana, India	25 Jul 2016	Documents not received
514	H-2016-1095	Sonia Hospital, Delhi, Delhi, India	28 Jul 2016	Documents not received
515	H-2016-1099	People Tree Hospitals, Bangalore, Karnataka, India	01 Sep 2016	Documents not received
516	H-2016-1100	Cresent Hospital & Heart Centre, Nagpur, Maharashtra, India	06 Sep 2016	Documents not received
517	H-2016-1104	Rainbow Children's Hospital and Birthright by Rainbow (A Unit of Rainbow Medicare Pvt. Ltd.), Marthalli, Bangalore, Karnataka, India	15 Sep 2016	Corrective Action of FA is Awaited from HCO
518	H-2016-1107	Dhanalakshmi Hospital Pvt. Ltd., Kannur, Kerala, India	23 Sep 2016	Documents not received
519	H-2016-1108	Usha Prime Multispeciality Hospital, Anakapalle, Andhra Pradesh, India	26 Sep 2016	Documents not received
520	H-2016-1113	Dr. Gadgil Eye Hospital, Thane, Maharashtra, India	26 Oct 2016	Documents not received
521	H-2016-1114	Parkash Hospital, Putlighar, Amritsar, Punjab, India	02 Nov 2016	Documents not received
522	H-2016-1115	Cygnus Maharaja Aggrasain Hospital, Panipat, Haryana, India	15 Nov 2016	Documents not received
523	H-2016-1116	Vedanta Hospitals, Guntur, Andhra Pradesh, India	17 Nov 2016	Documents not received
524	H-2016-1121	Shri Mata Vaishno Devi Narayana Superspeciality	29 Nov 2016	Documents not received

FDA

National Accreditation Board for Hospitals & Healthcare Providers

(Constituent Board of Quality Council of India)

Certificate of Accreditation

Mahatma Gandhi Mission Medical College & Hospital Blood Bank
Plot 1 & 2; Sector – 18
Kamothe, Navi Mumbai
District: Raigad – 410209, India

has been assessed and found to comply with NABH accreditation standards on Blood Banks/ Blood Centres and Transfusion Services. This certificate is valid for the Scope as specified in the annexure subject to continued compliance with the accreditation requirements.

Date of first accreditation: July 16, 2014
Valid from : July 16, 2017
Valid thru : July 15, 2020

Certificate No.
BB-2014-0067

PATIENT SAFETY & QUALITY OF CARE
NABH
ACCREDITED

Dr. Harish Nadkarni
Chief Executive Officer

Dr. Nandakumar Jairam
Chairman

National Accreditation Board for Hospitals & Healthcare Providers, 5th Floor, ITPI Building, 4A, Ring Road, IP Estate, New Delhi 110 002, India
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NABH as an organisation is ISQua Accredited

National Accreditation Board for Hospitals & Healthcare Providers

(Constituent Board of Quality Council of India)

Scope of Accreditation

Mahatma Gandhi Mission Medical College & Hospital Blood Bank
Plot 1 & 2; Sector – 18
Kamothe, Navi Mumbai
District: Raigad – 410209, India

Certificate No. BB-2014-0067
Date of first accreditation: July 16, 2014
Valid from : July 16, 2017
Valid thru : July 15, 2020

Sl. No.	Facility	Services
1.	Blood bank/Blood Center having component facility (also whole blood)	a. Whole blood b. Red blood cells c. Washed RBCs d. Platelets e. Apheresis Platelets f. Cryoprecipitated AHF g. Fresh Frozen Plasma (FFP)

NABH as an organisation is ISQua Accredited

Dr. Harish Nadkarni
Chief Executive Officer

Blood Banks

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Proficiency Testing

NABH Accredited Blood Banks

S.No.	Acc. No.	Name	Valid From	Valid Upto
1	BB-2009-0001	Fortis Hospitals Limited Blood Bank, Mumbai, Maharashtra, India	28 Jan 2018	27 Jan 2021
2	BB-2009-0002	Blood Bank - Fortis Hospital, Noida, Uttar Pradesh, India	28 Jan 2018	27 Jan 2021
3	BB-2009-0003	Blood Bank, Escorts Heart Institute & Research Centre, New Delhi, Delhi, India	28 Jan 2018	27 Jan 2021
4	BB-2009-0004	Blood Bank, Moolchand Hospital, New Delhi, Delhi, India	28 Jan 2015	27 Jan 2018
5	BB-2009-0006	NTR Memorial Trust Blood Bank,, Hyderabad, Telangana, India	28 Jan 2018	27 Jan 2021
6	BB-2009-0007	Max Blood Bank, Max Super Speciality Hospital (East Wing), New Delhi, Delhi, India	28 Jan 2018	27 Jan 2021
7	BB-2009-0008	Deptt. Transfusion Medicine, Fortis Flt. Lt. Rajan Dhall Hospital, New Delhi, Delhi, India	12 Mar 2018	11 Mar 2021
8	BB-2009-0009	Blood Bank of Max Super Speciality Hospital, New Delhi, Delhi, India	08 May 2018	07 May 2021
9	BB-2009-0010	HELP Voluntary Blood Bank, Ahmedabad, Gujarat, India	07 Aug 2015	06 Aug 2018
10	BB-2009-0011	KMC Hospital - Blood Bank, Mangalore, Karnataka, India	15 Dec 2015	14 Dec 2018
11	BB-2009-0012	Sarla Blood Bank, Vasai, Maharashtra, India	15 Dec 2015	14 Dec 2018
12	BB-2010-0013	Department of Immunohaematology & Blood Transfusion, Civil Hospital, Asarwa, Ahmedabad, Gujarat, India	25 Jan 2016	24 Jan 2019
13	BB-2010-0014	Prathama Blood Centre, Ahmedabad, Gujarat, India	02 Mar 2016	01 Mar 2019
14	BB-2010-0015	Dept of Transfusion Medicine, Apollo Hospital, Gandhinagar, Gujarat, India	02 Mar 2016	01 Mar 2019
15	BB-2010-0016	Sarvodaya Charitable Trust Blood Bank (Erstwhile Supratech Voluntary Blood Bank), Ahmedabad, Gujarat, India	08 Apr 2016	07 Apr 2019
16	BB-2010-0017	AD Gorwala Blood Bank, Karamsad, Anand, Gujarat, India	31 May 2016	30 May 2019
17	BB-2010-0018	Jeevan Blood Bank and Research Centre, Chennai, Tamil Nadu, India (Accreditation Voluntary Withdrawal)	04 Jun 2016	03 Jun 2019
18	BB-2010-0019	Blood Bank, Escorts Heart & Super Speciality Hospital Ltd., Jaipur, Rajasthan, India	24 Apr 2017	23 Apr 2020
19	BB-2010-0020	Blood Bank, Santokba Durlabhji Memorial Hospital & Research Centre, Jaipur, Rajasthan, India	24 Apr 2017	23 Apr 2020
20	BB-2010-0021	Blood Bank - Fortis Hospital, Mohali, Punjab, India	28 Dec 2016	27 Dec 2019

53	BB-2013-0059	Blood Bank, Aware Global Hospital, Hyderabad, Telangana, India	24 Apr 2017	23 Apr 2020
54	BB-2014-0060	Breach Candy Hospital Trust Blood Bank, Mumbai, Maharashtra, India	08 Jan 2017	07 Jan 2020
55	BB-2014-0061	Blood Bank; Medanta – The Medicity, Gurgaon, Haryana, India	23 Apr 2017	22 Apr 2020
56	BB-2014-0062	Blood Bank, Apollo Gleneagles, Kolkata, West Bengal, India	23 Apr 2017	22 Apr 2020
57	BB-2014-0063	Blood Bank; Krishna Hospital & Medical Research Centre, Satara, Maharashtra, India	04 Jun 2017	03 Jun 2020
58	BB-2014-0064	Artemis Medicare Services Ltd., Gurgaon, Haryana, India	04 Jun 2017	03 Jun 2020
59	BB-2014-0065	Dr. Hedgewar Raktapedhi Santha, Solapur, Maharashtra, India	04 Jun 2017	03 Jun 2020
60	BB-2014-0066	Blood Bank, Gleneagles Global Health City, Chennai, Tamil Nadu, India	16 Jul 2017	15 Jul 2020
61	BB-2014-0067	Blood Bank, Mahatma Gandhi Medical College & Hospital, Navi Mumbai, Maharashtra, India	16 Jul 2017	15 Jul 2020
62	BB-2014-0068	Indian Red Cross Society, Ahmedabad, Gujarat, India	28 Apr 2018	27 Apr 2021
63	BB-2015-0069	Blood Bank, Mahatama Gandhi Mission's Medical College, Aurangabad, Maharashtra, India	27 Mar 2015	26 Mar 2018
64	BB-2015-0070	Blood Bank, International Hospital, Guwahati, Assam, India	08 Sep 2015	07 Sep 2018
65	BB-2015-0071	Nashik Blood Bank & Transfusion Research Institute, Nasik, Maharashtra, India	08 Sep 2015	07 Sep 2018
66	BB-2015-0072	Jankalyan Blood Bank, Nasik, Maharashtra, India	03 Dec 2015	02 Dec 2018
67	BB-2015-0073	IMA Blood Bank of Uttarakhand, Dehradun, Uttarakhand, India	03 Dec 2015	02 Dec 2018
68	BB-2015-0074	Department of Transfusion Medicine & Blood Bank, Jaypee Hospital, Noida, Uttar Pradesh, India	03 Dec 2015	02 Dec 2018
69	BB-2016-0075	Amruta Blood Bank, Aurangabad, Maharashtra, India	30 Mar 2016	29 Mar 2019
70	BB-2016-0076	Saifee Hospital Trust Blood Bank, Mumbai, Maharashtra, India	30 Mar 2016	29 Mar 2019
71	BB-2016-0077	B. M. Birla Heart Research Centre, Blood Bank, Kolkata, West Bengal, India	30 Mar 2016	29 Mar 2019
72	BB-2016-0078	Lions Blood Bank, New Delhi, Delhi, India	30 Mar 2016	29 Mar 2019
73	BB-2016-0079	Pitampura Blood Bank, Pitampura, New Delhi, Delhi, India	21 Jul 2016	20 Jul 2019
74	BB-2016-0080	Blood Bank, Sakra World Hospital, Bangalore, Karnataka, India	21 Jul 2016	20 Jul 2019
75	BB-2016-0081	Billroth Hospitals Blood Bank & Transfusion Services, Chennai, Tamil Nadu, India	21 Jul 2016	20 Jul 2019
76	BB-2016-0082	AMRI Hospital Ltd. Blood Bank, Kolkata, West Bengal, India	04 Oct 2016	03 Oct 2019
77	BB-2016-0083	Regional Blood Transfusion Centre, G. T. B. Hospital, Delhi, Delhi, India	04 Oct 2016	03 Oct 2019
78	BB-2016-0084	Narayana Hrudayalaya Limited Blood Bank, Guwahati, Assam, India	04 Oct 2016	03 Oct 2019
79	BB-2016-0085	Janakalyan Blood Bank, Pune, Maharashtra, India	29 Dec 2016	28 Dec 2019
80	BB-2017-0086	Indian Red Cross Society Bombay City Branch Blood Centre, Mumbai, Maharashtra, India	24 Apr 2017	23 Apr 2020
81	BB-2017-0087	A.J. Blood Bank, Mangalore, Karnataka, India	24 Apr 2017	23 Apr 2020
82	BB-2017-0088	Narayana Medical College & Hospital Blood Bank, Nellore, Andhra Pradesh, India	20 Jul 2017	19 Jul 2020
83	BB-2017-0089	Blood Bank M/s Fortis Hospital, Ludhiana, Punjab, India	20 Jul 2017	19 Jul 2020
84	BB-2017-0090	Bharati Vidyapeeth Medical Foundations, Bharati Hospital Blood Bank, Pune, Maharashtra, India	20 Jul 2017	19 Jul 2020
85	BB-2017-0091	Blood Bank, Mahatma Gandhi Medical College and Hospital, Jaipur, Rajasthan, India	20 Jul 2017	19 Jul 2020

National Accreditation Board for Hospitals & Healthcare Providers

(Constituent Board of Quality Council of India)

Certificate of Accreditation

MGM Medical College Hospital and Medical Center Research Institute (MCRI)
Central Naka Road, N-6, CIDCO
Aurangabad - 431003, Maharashtra

has been assessed and found to comply with NABH Accreditation Standards for Hospitals. This certificate is valid for the Scope as specified in the annexure subject to continued compliance with the accreditation requirements.

Valid from : September 16, 2018
Valid thru : September 15, 2021

Certificate No.
H-2018-0573

Dr. Harish Nadkarni
Chief Executive Officer

National Accreditation Board for Hospitals & Healthcare Providers, 5th Floor, ITPI Building, 4A, Ring Road, IP Estate, New Delhi 110 002, India
Phone: +91-11-42600600, Fax: +91-11-2332 3415 • Email: helpdesk@nabh.co • Website: www.nabh.co

NABH and the NABH Accreditation Standards for Hospitals are ISQua Accredited

National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

CERTIFICATE OF ACCREDITATION

MGM'S CENTRAL PATHOLOGY LABORATORY

has been assessed and accredited in accordance with the standard

ISO 15189:2012

"Medical laboratories - Requirements for quality and competence"

for its facilities at

Mahatma Gandhi Mission Hospital, N-6, CIDCO, Aurangabad, Maharashtra

in the field of

MEDICAL TESTING

Certificate Number MC-2839

Issue Date 29/06/2018 **Valid Until** 28/06/2020

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Signed for and on behalf of NABL

8907697030001000511

Anil Relia
Chief Executive Officer

National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

SCOPE OF ACCREDITATION

Laboratory MGM's Central Pathology Laboratory, Mahatma Gandhi Mission Hospital, N-6, CIDCO, Aurangabad, Maharashtra

Accreditation Standard ISO 15189: 2012

Certificate Number MC-2839 **Page 1 of 3**

Validity 29.06.2018 to 28.06.2020 **Last Amended on** --

Sl.	Product / Material of Test	Specific Test Performed	Test Method	Range of Testing / Limits of Detection	CV%
			CLINICAL BIOCHEMISTRY		
1.	Serum/Plasma	Albumin	Bromocresil Green (BCG)	1.00 – 6.00 g/dl	2.9
2.	Serum/Plasma	Alkaline Phosphatase	PNPP, AMP Buffer-Vitros	20.00 -1500 U/L	4.3
3.	Serum/Plasma	ALT	UV with P5P - Vitros	6.00 – 100.0 U/L	8.6
4.	Serum/Plasma	Amylase	Amylopectin, Colorimetric - Vitros	30 – 1200 U/L	8.0
5.	Serum/Plasma	AST	Enzymatic, Colorimetric	3.00 - 750 U/L	4.1
6.	Serum/Plasma	Bilirurbin Total	Dual Wavelength-Vitros	0.10 - 27.00 mg/dl	7.3
7.	Serum/Plasma	Bilirurbin Direct	Calculated	0.10 - 27.00 mg/dl	NA
8.	Serum/Plasma	Cholesterol HDL	Direct Measure, PTA/Mgcl2-Vitros	5.00 – 110.00 mg/dl	4.1
9.	Serum/Plasma	Cholesterol Total	Cholestrol Oxidase, Esterase, Peroxidase	50.00 – 325.00 mg/dl	2.1
10.	Serum/Plasma	Creatinine	Enzymatic-Vitros IFCC	0.05 – 14.00 mg/dl	1.9
11.	Serum/Plasma	LDL Cholesterol	Calculated	NA	NA
12.	Serum/Plasma	VLDL Cholesterol	Calculated	NA	NA
13.	Serum/Plasma	Total To HDL Cholesterol Ratio	Calculated	NA	NA
14.	Serum/Plasma	Globulin	Calculated	NA	NA
15.	Plasma	Glucose	Glucose Oxidase, H2O2 (TRinder)	20.00 – 625.00 mg/dl	5.2
16.	Serum/Plasma	Bilirurbin Indirect	Dual Wavelength-Vitros	0.01 - 27.00 mg/dl	7.9
17.	Serum/Plasma	Calcium	Arsenazo III-Vitros	1.00 – 14.00 mg/dl	1.8
18.	Serum/Plasma	Lipase	Enzymatic with Colipase	10.00 – 2000 U/L	6.7
19.	Serum/Plasma	Phosphorus	Phosphomolybdate Reduction	0.50 – 13.00 mg/dl	3.2
20.	Serum/Plasma	Protein Total	Biurest Endpoint	2.00 – 11.00 g/dl	2.6
21.	Serum/Plasma	Urea/ Bun	Urease Colorimetric	2.00 – 120.00 mg/dl	3.7
22.	Serum/Plasma	Triglycerides	Enzymatic Endpoint	10.00 – 525 mg/dl	1.9
23.	Serum/Plasma	Uric Acid	Uricase Colorimetr	0.5 – 17.00 mg/dl	3.1
24.	Serum/Plasma	Creatine Kinase(CK)	Rosalki, Other Modified VIT	20.00 – 1600 U/L	3.7
25.	Serum/Plasma	LDH	L to P IFCC ref.Proc.Cal	100 – 2150 U/L	4.2

Syed Tahira Rizvi
Convenor

Ritu Kulshrestha
Program Manager

National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

SCOPE OF ACCREDITATION

Laboratory MGM's Central Pathology Laboratory, Mahatma Gandhi Mission Hospital, N-6, CIDCO, Aurangabad, Maharashtra

Accreditation Standard ISO 15189: 2012

Certificate Number MC-2839

Validity 29.06.2018 to 28.06.2020 **Last Amended on** --

Sl.	Product / Material of Test	Specific Test Performed	Test Method	Range of Testing / Limits of Detection	CV%
26.	Serum/Plasma	Sodium	ISE	20 – 250 mmol/L	1.9
27.	Serum/Plasma	Potassium	ISE	0.2 – 20 mmol/L	3.0
28.	Serum/Plasma	T3	CLIA	0.103 – 12.00 ng/ml	14.9
29.	Serum/Plasma	T4	CLIA	0.405 – 24.9 ug/dl	14.7
30.	Serum/Plasma	TSH	CLIA	0.015 – 100 mIU/L	19.0
31.	Serum/Plasma	FT3	CLIA	0.50 – 22.8 pg/mL	18.7
32.	Serum/Plasma	FT4	CLIA	0.07 – 6.99 ng/dL	25.4
33.	Serum/Plasma	Ferritin	CLIA	0.299 – 1000 ng/mL	12.0
34.	Serum/Plasma	Vitamin B12	CLIA	159 – 1000 pg/mL	13.6
35.	Serum/Plasma	Folic Acid (Folate)	CLIA	0.34 – 20.0 ng/mL	23.9
36.	Serum/Plasma	Vitamin D3	CLIA	8.0 – 150 ng/mL	28.2
37.	Serum/Plasma	CEA	CLIA	0.31 – 400 ng/mL	11.9
38.	Serum/Plasma	CA - 125	CLIA	5.5 – 1000 U/mL	30.1
39.	Serum/Plasma	CA – 19.9	CLIA	1.4 – 1000 U/mL	12.6
40.	Serum/Plasma	AFP	CLIA	0.476 – 500 IU/mL	14.3
41.	Serum/Plasma	Total PSA	CLIA	0.010 – 100 ng/mL	17.9
42.	Serum/Plasma	Beta HCG	CLIA	2.39–15,000 mIU/mL	27.5
43.	Serum/Plasma	FSH	CLIA	0.66 – 200 mIU/ml	20.2
44.	Serum/Plasma	LH	CLIA	0.216 – 200 mIU/ml	14.7
45.	Serum/Plasma	Prolactin	CLIA	30.8–7000 mIU/ml	39.5

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Laboratory MGM's Central Pathology Laboratory, Mahatma Gandhi Mission Hospital, N-6, CIDCO, Aurangabad, Maharashtra

Accreditation Standard ISO 15189: 2012

Certificate Number MC-2839

Validity 29.06.2018 to 28.06.2020 **Last Amended on** --

Sl.	Product / Material of Test	Specific Test Performed	Test Method	Range of Testing / Limits of Detection	CV%
			HAEMATOLOGY & IMMUNOHAEMATOLOGY		
1.	Whole Blood	Hemoglobin	Photometric	0 – 22.5 gm/dl 0 – 30 gm/dl	2.6
2.	Whole Blood	WBC Count	Optical	0.02 – 400 x 10^3/ul 0.3 – 99.9 x 10^3/ul	10.0
3.	Whole Blood	RBC	Optical	0 – 7.0 x 10^5/cmm 0.2 – 9.99 x 10^6/cmm	5.8
4.	Whole Blood	HCT	Calculated	100 %	8.5
5.	Whole Blood	MCV	Calculated	200 %	5.2
6.	Whole Blood	MCH	Calculated	0.00 – 99.00 pg	6.8
7.	Whole Blood	MCHC	Calculated	0.00 – 99.00 gldl	8.9
8.	Whole Blood	Platelet Count	Optical	5.0 – 3500 x 10^3/uL	9.3
		Polymorphs	Flowcytometry	0-100 %	5.7
		Lymphocytes	Flowcytometry	0-100 %	6.4
		Monocytes	Flowcytometry	0-100 %	6.9
		Eosinophils	Flowcytometry	0-100 %	23.0
9.	Whole Blood	Peripheral Smear For Morphology	Manual Microscopy (Field/Leishman Stain)	NA	NA

Syed Tahira Rizvi
Convenor

Ritu Kulshrestha
Program Manager

National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

CERTIFICATE OF ACCREDITATION

MGM MEDICAL COLLEGE & HOSPITAL'S CENTRAL LABORATORY

has been assessed and accredited in accordance with the standard

ISO 15189:2012

"Medical laboratories - Requirements for quality and competence"

for its facilities at

Plot No. 1 & 2, NH-4 Junction, Sion Panvel Express Highway, Sector 1, Kamothe, Navi Mumbai, Maharashtra

in the field of

MEDICAL TESTING

Certificate Number MC-2166 *(in lieu of M-0555)*

Issue Date 26/04/2017

Valid Until 25/04/2019

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Signed for and on behalf of NABL

Dr. Vandana Jain
Program Director

Anil Relia
Chief Executive Officer

National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

SCOPE OF ACCREDITATION

Laboratory	**MGM Medical College and Hospital's Central Laboratory, Plot No. 1 & 2, NH-4 Junction, Sion Panvel Express Highway, Sector 1, Kamothe, Navi Mumbai, Maharashtra**
Accreditation Standard	**ISO 15189: 2012**
Certificate Number	**MC-2166** *(in lieu of M-0555)* **Page 5 of 5**
Validity	**26.04.2017 to 25.04.2019** **Last Amended on --**

MICROBIOLOGY & SEROLOGY

Sl.	Product / Material of Test	Specific Test Performed	Test Method	Range of Testing / Limits of Detection	CV%
1.	Serum	RA	Slide Agglutination	Semi Quantitative	NA
2.	Serum	ASO	Slide Agglutination	Semi Quantitative	NA
3.	Serum	CRP	Slide Agglutination	Semi Quantitative	NA
4.	Serum	WIDAL	Slide & Tube Agglutination	1:20 -1:1280	NA
5.	Serum	RPR	Flocculation Test	NA	NA
6.	Serum	HBsAg	Immunochromatography	NA	NA
7.	Serum	Dengue IgM, IgG Antibodies	Immunochromatography	NA	NA
8.	Serum	Dengue NS1 Antigen	Immunochromatography	NA	NA
9.	Sputum, Urine, Body Fluids, Pus, Stool, CSF, Endo-tracheal Secretions, Central Venous Catheter Tip & Others	Aerobic Culture & Sensitivity	Conventional	Growth-No Growth	NA
			Disk Diffusion-Modified Kirby-Bauer Method	Sensitive-Intermediate-Resistant	
10.	Blood	Aerobic Culture & Sensitivity	Conventional	Growth-No Growth	NA
			Disk Diffusion-Modified Kirby-Bauer Method	Sensitive-Intermediate-Resistant	
11.	Sputum, Urine, Body Fluids, Pus, CSF	Gram Stain	Microscopy	Gram Positive Cocci/ Bacilli Seen/Not Seen	NA
				Gram Negative Cocci/ Bacilli Seen/Not Seen	
12.	Sputum, Urine, Body Fluids, Pus, CSF	Ziehl-Neelsen Stain	Microscopy	Acid Fast Bacilli Seen/ Not Seen	NA

K. Udaya Bhaskhar
Convenor

Dr. Vandana Jain
Program Director

National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)

SCOPE OF ACCREDITATION

Laboratory MGM Medical College and Hospital's Central Laboratory, Plot No. 1 & 2, NH-4 Junction, Sion Panvel Express Highway, Sector 1, Kamothe, Navi Mumbai, Maharashtra

Accreditation Standard ISO 15189: 2012

Certificate Number MC-2166 *(in lieu of M-0555)*

Validity 26.04.2017 to 25.04.2019 Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method	Range of Testing / Limits of Detection	CV%
8.	Whole Blood	Differential Leucocyte Count (DLC) 1. Neutrophils 2. Lymphocytes 3. Monocytes 4. Eosinophils 5. Basophils	Electrical Impedance Laser Light scattering and Dye Bonding	 0-100% 0-100% 0-100% 0-100% 0-100%	 4.6 8.5 14.7 18.9 16.3
9.	Whole Blood	Peripheral Smear (Morphology)	Microscopy by Leishman/ Field's stain	NA	NA
10.	Whole Blood	Platelet Count	Electrical impedance laser lightscattering and Dye Bonding D.C. Detection Method	5.03983 x10^3 /uL 10000-000 /cu.mm	13.6 6.7
11.	Whole Blood	Erythrocytes Sedimentation Rate	Westergren's Method-(Manual)	1-150 mm/hour	NA.
12.	Whole Blood	Reticulocytes Count	Supravital Staining (Methylene Blue)	NA	NA
13.	Whole Blood	Malarial Parasites	Staining of Thick & Thin Smear	NA	NA
14.	Whole Blood	Malaria Antigen	Ag-Ab Immunoassay [HRP 2 for p. Falciparum and PAN specific for pLDH for Plasmodiun species (P. Falciparum, P. Vivax, P. malariae, P. Ovale)]	NA	NA

K. Udaya Bhaskhar
K. Udaya Bhaskhar
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Dr. Vandana Jain
Program Director

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SCOPE OF ACCREDITATION

Laboratory MGM Medical College and Hospital's Central Laboratory, Plot No. 1 & 2, NH-4 Junction, Sion Panvel Express Highway, Sector 1, Kamothe, Navi Mumbai, Maharashtra

Accreditation Standard ISO 15189: 2012

Certificate Number MC-2166 *(in lieu of M-0555)*

Validity 26.04.2017 to 25.04.2019 Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method	Range of Testing / Limits of Detection	CV%
			CLINICAL BIOCHEMISTRY		
1.	Plasma / Serum Body Fluid	Glucose	Hexokinase	40 - 800 mg/dl	4.3
2.	Serum	Triglycerides	GPO PAP (Enzyme Colour Test)	37-900 mg/dl	4.5
3.	Serum	Cholesterol- Total	CHOD.POD (Enzyme Colour Test)	56-350 mg/dl	3.3
4.	Serum	Cholesterol- HDL	CHOD.POD (Enzyme Colour Test, Immuno-Inhibition)	13-90 mg/dl	5.3
5.	Serum	Cholesterol- LDL	Calculations	NA	NA
6.	Serum	VLDL Cholesterol	Calculations	NA	NA
7.	Serum / Plasma	Urea	Urease, GLDH kinetic	09-2000 mg/dl	3.2
8.	Serum	AST / SGOT	IFCC without Pyridoxal phosphate (Kinetic UV Test)	6-8419U/L	3.7
9.	Serum/ Plasma	Creatinine	Modified Jaffe' / Kinetic Method (Kinetic Colour Test)	0.1-14 mg/dl	4.5
10.	Serum	LDH	L->P; IFCC 37^0	4-4750U/L	6.6
11.	Serum	Uric acid	Uricase,POD (Enzyme Colour Tests)	1.5-37 mg/dl	3.3
12.	Seum	Calcium	Arsenoazo III	2.0-12 mg/dl	2.5
13.	Serum	Phosphorus	Molybdate UV	1.4-16.5 mg/dl	5.0
14.	Serum / Body Fluids	Total Protein	Biuret End PT	2-10 gm/dl	4.4
15.	Serum	Albumin	BCG	0.6-4 gm/dl	2.5
16.	Serum	Globulin	Calculations	NA	NA
17.	Serum	Bilirubin (Total)	DPD Colour Test	0.01-60 mg/dl	3.0
18.	Serum	Bilirubin (Direct)	DPD Colour Test	0.01-39 mg/dl	5.4

K. Udaya Bhaskhar
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SCOPE OF ACCREDITATION

Laboratory MGM Medical College and Hospital's Central Laboratory, Plot No. 1 & 2, NH-4 Junction, Sion Panvel Express Highway, Sector 1, Kamothe, Navi Mumbai, Maharashtra

Accreditation Standard ISO 15189: 2012

Certificate Number MC-2166 *(in lieu of M-0555)*

Validity 26.04.2017 to 25.04.2019 Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method	Range of Testing / Limits of Detection	CV%
19.	Serum	Bilirubin (Indirect)	Calculation	NA	NA
20.	Serum	Amylase	pNPG3 (kinetic Colour Test)	10-2365U/L	3.7
21.	Serum	CPK-NAC	IFCC (Kinetic Colour Test)	20-3000 U/L	5.1
22.	Serum	Alkaline Phosphatase	IFCC (Kinetic Colour Test with AMP buffer)	15-650 U/L	7.7
23.	Serum	ALT/ SGPT	IFCC without Pyridoxal phosphate (Kinetic UV test)	7-6100U/L	6.1
24.	Serum	Iron	Colorimetric without PPT	10-1000 µg/dl	4.5
25.	Serum	UIBC	Fe-UIBC (Saturation with Iron)	55-450 µg/dl	7.0
26.	Serum	Sodium	ISE by Indirect Method	48-167 meq/L	2.5
27.	Serum	Potassium	ISE by Indirect Method	1.6-9.0 meq/L	3.2
28.	Serum	T3	Electrochemiluminiscence	0.195-6.5 ng/ml	7.1
29.	Serum	T4	Electrochemiluminiscence	0.420-24.86 µg/dl	10.0
30.	Serum	FT3	Electrochemiluminiscence	0.26-21pg/ml	8.4
31.	Serum	FT4	Electrochemiluminiscence	0.023-7.76 ng/dl	10.5
32.	Serum	TSH	Electrochemiluminiscence	0.005-100 µIU/L	4.6
33.	Serum	FSH	Electrochemiluminiscence	0.100-200 mIU/ml	6.2
34.	Serum	LH	Electrochemiluminiscence	0.100-200 mIU/ml	8.2
35.	Serum	Prolactin	Electrochemiluminiscence	1.00-10,000 µIU/ml	10.8
36.	Serum	Vit D	Electrochemiluminiscence	0-70 ng/ml	12.3
37.	Serum	Vit B12	Electrochemiluminiscence	30-2000 pg/ml	8.1

K. Udaya Bhaskhar
Convenor

Dr. Vandana Jain
Program Director

National Accreditation Board for Testing and Calibration Laboratories

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SCOPE OF ACCREDITATION

Laboratory MGM Medical College and Hospital's Central Laboratory, Plot No. 1 & 2, NH-4 Junction, Sion Panvel Express Highway, Sector 1, Kamothe, Navi Mumbai, Maharashtra

Accreditation Standard ISO 15189: 2012

Certificate Number MC-2166 *(in lieu of M-0555)*

Validity 26.04.2017 to 25.04.2019 **Last Amended on** --

Sl.	Product / Material of Test	Specific Test Performed	Test Method	Range of Testing / Limits of Detection	CV%
			HAEMATOLOGY & IMMUNOHAEMATOLOGY		
1.	Whole Blood	Haemoglobin	Electrical Impedance Laser Light Scattering and Dye bonding	CN free0-23 gm/dl CN: 0-22.5 gm/dl	1.5
			Non Cyanide (Oxyhaemoglobin Method)	0.21-25 gm/dl	2.5
2.	Whole Blood	RBC Count	Electrical Impedance Laser Light Scattering and Dye Bonding	0-6.76 x 10^4/µl	2.5
			D.C. Detection Method	0.3 -7.0 million/cu.mm	1.5
3.	Whole Blood	Hematocrit (PCV)	Calculated from the RBC count & MCV	NA	2.1
			Calculation of RBC pulse height	NA	2.1
4.	Whole Blood	Mean Corpusc. Volume (MCV)	Low Angle Light Scatter	NA	1.0
			Mathematical Calculation	NA	1.1
5.	Whole Blood	Mean Corpuscular Haemoglonin (MCH)	Mathematical Calculation	NA	1.7
			Mathematical Calculation	NA	2.8
6.	Whole Blood	Mean Corpuscular Haem. Concent. (MCHC)	Mathematical Calculation	NA	2.1
			Mathematical Calculation	NA	3.1
7.	Whole Blood	Total Leucocyte Count (TLC)	Electrical Impedance Laser Light scattering and Dye Bonding	0.02 – 409.55 x 10^3/µL	4.4
			D.C. Detection Method	1000-999000/cu.mm	3.1

K. Udaya Bhaskhar
Convenor

Dr. Vandana Jain
Program Director

सत्यमेव जयते

Rajiv Gandhi Jeevandayee Arogya Yojana

(MAHARASHTRA STATE)

(Registration No. 2136, Dated-24 Aug.2011.)

Jeevandayee Bhavan, E.S.I.S Hospital Compound, Ganpat Jadhav Marg, Mumbai - 400 018, Phone no.22671797, Website - www.jeevandayee.gov.in

RGJAY/EC-re-assessment/1064/CA/ /2014
Date : 6th August 2015

To

MGM Kamothe
Raigad

Subject: Rajiv Gandhi Jeevandayee Arogya Yojana (Phase II)
Your application for Re-assessment & revised gradation as per NABH Scores.

Dear Sir/ Madam

We appreciate the interest shown by you in being associated with the State's flagship scheme of Rajiv Gandhi Jeevandayee Arogya Yojana which aims to alleviate impoverishment of low income families. In this context, we are happy to inform you that our empanelment committee has completed review of your hospital based on your self assessment tool, Infrastructure Audit & NABH Audit done by our Audit teams.

After six monthly re-audit base on NABH criterions, we hereby notify revised score of 98.12 % claimed by your hospital and with new score your hospitals is placed in A1 grade. You are requested to kindly confirm your acceptance on your letter head in the enclosed format. If you have to appeal on shared grade then you can raise appeal within 15 days from the receipt of this letter on email of respective CMO's. It can be sent to Committee for Quality Health Sector for further decision.

Kindly acknowledge the same.

Signatories from EC:

MD India / Medi Assist / Paramount TPA

National Insurance Company Ltd (NIC)

Rajiv Gandhi Jeevandayee Arogya Yojana Society. (RGJAYS)

FDA,(M.S.)

Form 26-G

(See Rule 122-F)

CERTIFICATE OF RENEWAL OF LICENCE TO OPERATE A BLOOD BANK FOR PROCESSING OF WHOLE HUMAN BLOOD AND/OR* FOR PREPARATION FOR SALE OR DISTRIBUTION OF ITS COMPONENTS

1. Certified that licence number (Form 28-C) **KD-36** granted on **04.05.2006** to **M/S. MAHATMA GANDHI MISSION MEDICAL COLLEGE & HOSPITAL** for the operation of a Blood Bank for processing of whole blood and / or for preparation of its components at the premises situated at **Kamothe, Sector-18, Navi Mumbai, Dist. Raigad, Maharashtra** is hereby renewed with effect from **04.05.2016 to 03.05.2021.**

2 Name (s) of Items :

1. **Whole Human Blood I. P.**
2. **Packed Red Cell Concentrate I.P.**
3. **Fresh Frozen Plasma B.P.**
4. **Platelet concentrates U.S.P.**
5. **Cryoprecipitate U.S.P.**
6. **Saline Washed Red Cells U.S.P.**
7. **Single Donor Platelet (By Aphaeresis) USP**

JT. COMMISSIONER (K.D.) FOOD & DRUG ADMIN. M.S. THANE

3. Name(s) of competent Technical Staff :

(a) Name(s) of Medical Officer : - **Dr. Seema Gupta, MBBS, DPB, DNB**

(b) Name(s) of Technician :-

1. **Mrs. Neha Kamath, B.Sc., DMLT**
2. **Mrs. Manju A. Bhatti, B.Sc., DMLT**
3. **Mrs. Sharada A. Anchan, B.Sc., DMLT**
4. **Mr. Ravindra A. Attarde, B.Sc., DMLT**
5. **Ms. Rohin Jadhav, B.Sc., DMLT**
6. **Mrs. Sandhya Powale, B.Sc., DMLT**

(c) Name(s) of Registered Nurse :-

1. **Ms. Vaishli Urankar, GNM**
2. **Ms. Mariamma, GNM**

(d) Name(s) of Technical Superwiser : **Mr. Abhay V. Firake (BSc. DMLT)**

7/12/16

(V. T. Paunikar)
Joint Commissioner (K. D.) &
Licensing Authority
Food and Drug Administration,
M.S, Thane

Date :- .12.2016

Central Licence Approving Authority
Dr. G. N. SINGH
Drugs Controller General (India)
Dte. General of Health Services
Ministry of Health & Family Welfare
FDA Bhawan, Kotla Road, New Delhi-110002

FDA.Maharashtra,

FORM 26 – G

(See Rule 122-F)

Certificate of **renewal** of license to operate a blood bank for processing of Whole Human Blood and/of for preparation for sale or distribution of its components.

1. Certified that license number **28-C-AD/BB/018**
2. granted on **13/07/2007** to **M/s Dean, Mahatma Gandhi Mission Medical College & Hosp.Blood Bank** for the Operation of a Blood Bank for processing of Whole Human Blood /or for Preparation of its components at the premises situated at **N-6,Town Centre, CIDCO, New, Aurangabad. (M.S.)** is hereby renewal with effect from 13/07/2017 to 12/07/2022

2 Name(s) of Items: **1) Whole Human Blood I.P. 2) Fresh Frozen Plasma B.P. 3) Platelet Concentrate I.P. 4)Concentrated Human Red Blood Corpuscles I.P.**

3. Names(s) of Competent Technical Staff

1) Dr.Mrs.S.S.Muley M.D.- B.T.O
2) Dr. A.A.Vare M.D. -B.T.O.
3) Dr Anuradha Patil,M.D.- B.T.O
4)Dr Ganesh Kadam.M.D.-B.T.O
5)Dr Mrs.M.S.Mahajan M.D.-B.T.O
6)Dr Mrs. S.N.Kulkarni M.B.S-B.T.O
7)Dr Reeta Taksali M.D.- .T.O
8)Dr S.S. Kale M.D.- B.T.O
9)Dr Bidri Arhna, M.D.-B.T.O
10)Dr C.P.Bhale,M.D.- B B Incharge
11)Dr. Mrs. S.M.Bindu M.D.- B.T.O

4.Name (s) of Blood Bank Technicians

1) Shri. M.A.Gayke, MTL, Supvr.
2) Shri. Naveeduddin Khan,MTL Supvr.
3) Kadubal G Chabukswar, Technican
4) U.H.Narwade , Technican MTL
5) A.N. Pathrikar,B.S.C- Technican

4. **Name of Registered Nurse**. Mrs. S.S.Pawar, Nurse- GNM

Dated: 07/08/2017

Joint Commissioner Food & Drug Admn. (M.S.) Aurangabad

Signature

Central Licensing Approving Authority Licensing Authority.

Signature

(A. T. Nikhade)
Licensing Authority.
Joint Commissioner (Aurangabad Divn)
Food and Drugs Administration M.S.
Aurangabad.

दूरध्वनी क्र. 240–2331526
रजिस्टर्ड पोस्ट.

क.औसौप्र/ब्लड बँक/1597/17/3
सह आयुक्त (औरंगाबाद विभाग)
अन्न व औषध प्रशासन म. राज्य,
2 रा मजला, नाथ सूपर मार्केट,
औरंगपूरा, औरंगाबाद.
दिनांक :– 07 नोव्हेंबर 2017.

प्रति,
मे. महात्मागांधी मिशन हॉस्पिटल कॉलेज
ॲन्ड हॉस्पिटल ब्लड बँक एन–6
सिडको, औरंगाबाद.

विषय :– औषधे व सौंदर्य प्रसाधने कायदा 1940 व त्याखालील नियम.
रक्तपेढी परवाना/नुतनीकरन दाखल्याबाबत
संदर्भ :– 1) आपला अर्ज दि. 25/04/2017.
2) या कार्यालयाचे पत्र क्रं D&C/BB/Ren/1086/2017 दि.22/08/2017

महोदय,

सोबत खालील नमूद मूळ परवाना/नूतनिकरण दाखला/ आपणकडे त्याखालील औषधाच्या/सौंदर्य प्रसाधनाच्या पाठाच्या मान्य झालेल्या सूचीसह पाठवण्यात येत आहेत.

अ.क्र.	प्रपत्र	अनुज्ञप्ती कमांक/ नूतनीकरण दाखला क्रं	दिनांक व कालावधी
1	FORM "26-G"	28-C-AD/BB/018	13/07/2017 to 12/07/2022

सदर नुतनीकरण दाखला फक्त औषधी व सौंदर्य प्रसाधने नियम 1945 व्या अंतर्गत देण्यात आला आहे. याशिवाय या संबंधित असलेल्या इतर सर्व कायद्याच्या पूर्तता करण्याची जबाबदारी आपणावर राहील याची कृपया नोंद घ्यावी.

आपला,

(संजय श. काळे)
प्रभारी सह आयुक्त (औरंगाबाद विभाग)
अन्न व औषध प्रशासन, म. राज्य,
औरंगाबाद.

MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Plot No. 1&2, Kamothe, Navi Mumbai – 410 209
Tel.: 022 27437900/7901 Fax: 27431723

PATIENT FEEDBACK FORM

Name Of Patient :_____ Age/ Sex:_____ Contact no. _____

IP No. _____ DOA: _____ DOD:_____ Ward: _____

Diagnosis: _____ Name of Doctor: _____

Rate us for following services	Poor	Below Average	Average	Good	Execllent
ENQUIRY					
Courteous & helpful					
Respons to questions					
ADMISSION & REGISTRATION					
Admission & registration procedure					
Staff Courteous & helpful					
DOCTORS					
Communication with patient					
Courteous, kind & Sympathetic					
Frequency of Doctors Visit					
NURSING STAFF					
Caring & prompt in service					
Courteous & helpful					
Respons to queries					
WARD FACILITIES					
Linen					
Ward Amenitis					
HOSKEEPING SERVICES					
Cleanliness					
Courteous & helpful					
FOOD SERVISES					
Quality of Food					
Taste					
PHARMACY					
Most requirement available					
Staff Courteous & helpful					
BILLING					
Transperancy in billing					
Accuracy					
Promptness					

Overall Comment

_____

Signature of Patient/ Relative _____

MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Plot No. 1&2, Kamothe, Navi Mumbai – 410 209
Tel.: 022 27437900/7901 Fax: 27431723

$gNa AiBap`aya

$gNaacao naava : vayaÀvaYao- : saMpk- k`maaMk

AaMtr$gNa k`maaMMk : A^DimaSana idnaaMk : iDsacaaja- idn

raogainadana : Da^@TraMcao naava :

KalaIla saovaaMsaazI	vaa[-T	zIk	bara	caaMg	]%tma
caaOkSaI					
kma-caarI¹kaLjaIvaahU va madtSaIla					
ivacaarlaolyaa p`SnaaMnaa p`itsaad					
A^DimaSana va rijasT/oSana					
A^DimaSana va rijasT/oSana					
Aai%mayata va madt krNyaacaI tyaarI					
Da^@Tr					
$gNaaMSaI saMvaad					
$gNaaMivaYayaI sahanauBautI					
Da^@TraMcyaa BaoTIcaI					
pircaarIka					
kaLjaIpUva-k t%pr saovaa					
kma-caarI¹madtSaIla					
p`SnaaMnaa p`itsaad					
kxaatIla sauivaQaa					
$gNaasaazI kpDo					
kxaatIla [tr sauivaQaa					
svacCtaivaYayak saovaa					
svacCta					
kma-caarI¹kaLjaIvaahU va madtSaIla					
jaovaNaacaI saaoya					
Annaacaa djaa-					
cava					
AaOYaQaBaMaDar					
AavaSyak AaOYaQaaMcaI pUt-					
kma-caarI¹ t%pr va madtSaIla					
ibaIaIMga					
ibailaMgamaQaIla pardSa-kta					
Acaukta					
t%prta					

sava-saaQaarNa mat :

$gNaacaI naatovaa[-kacaI sahI :

FEEDBACK FORM SEPTEMBER 2018

FEEDBACK FORM OCTOBER 2018

FEEDBACK FORM NOVEMBER 2018

FEEDBACK FORM DECEMBER 2018

FEEDBACK FORM AUGUST 2018

MOU FILE

MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Plot No. 1&2, Kamothe, Navi Mumbai – 410 209
Tel.: 022 27437900/7901 Fax: 27431723

OPD PATIENT FEEDBACK FORM

Name Of Patient :_____ Age/ Sex:_____ Contact no. _____

Date of consultation :_____ OPD: _____

Diagnosis: _____ Name of Doctor: _____

Rate us for following services	Poor	Below Average	Average	Good	Execllent
ENQUIRY					
Courteous & helpful					
Response to questions					
REGISTRATION					
Registration procedure					
Staff Courteous & helpful					
DOCTORS					
Communication with patient					
Courteous & Sympathetic					
Consultation Waiting time					
NURSING STAFF					
Caring & prompt in service					
Courteous & helpful					
OPD FACILITIES					
OPD Amenitis (Sitting Arreegment, Fans etc.)					
HOUSEKEEPING SERVICES					
Cleanliness					
Courteous & helpful					
PHARMACY					
Most requirement available					
Staff Courteous & helpful					
BILLING					
Transperancy in billing					
Accuracy					
Promptness					

Overall Comment

Signature of Patient/ Relative _____

MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Plot No. 1&2, Kamothe, Navi Mumbai – 410 209
Tel.: 022 27437900/7901 Fax: 27431723

$gNa AiBap`aya

$gNaacao naava : vayaÀvaYao- : saMpk- k`maaMk

AaMtr$gNa k`maaMMk : A^DimaSana idnaaMk : iDsacaaja- idn

raogainadana : Da^@TraMcao naava :

KalaIla saovaaMsaazI	vaa[-T	zIk	bara	caaMg	]%tma
caaOkSaI					
kma-caarI¹kaLjaIvaahU va madtSaIla					
ivacaarlaolyaa p`SnaaMnaa p`itsaad					
A^DimaSana va rijasT/oSana					
A^DimaSana va rijasT/oSana					
Aai%mayata va madt krNyaacaI tyaarI					
Da^@Tr					
$gNaaMSaI saMvaad					
$gNaaMivaYayaI sahanauBautI					
Da^@TraMcyaa BaoTIcaI					
pircaarIka					
kaLjaIpUva-k t%pr saovaa					
kma-caarI¹madtSaIla					
p`SnaaMnaa p`itsaad					
kxaatIla sauivaQaa					
$gNaasaazI kpDo					
kxaatIla [tr sauivaQaa					
svacCtaivaYayak saovaa					
svacCta					
kma-caarI¹kaLjaIvaahU va madtSaIla					
jaovaNaacaI saaoya					
Annaacaa djaa-					
cava					
AaOYaQaBaMaDar					
AavaSyak AaOYaQaaMcaI pUt-					
kma-caarI¹ t%pr va madtSaIla					
ibaIaIMga					
ibailaMgamaQaIla pardSa-kta					
Acaukta					
t%prta					

sava-saaQaarNa mat :

$gNaacaI naatovaa[-kacaI sahI :

FEEDBACK FORM SEPTEMBER 2018

FEEDBACK FORM OCTOBER 2018

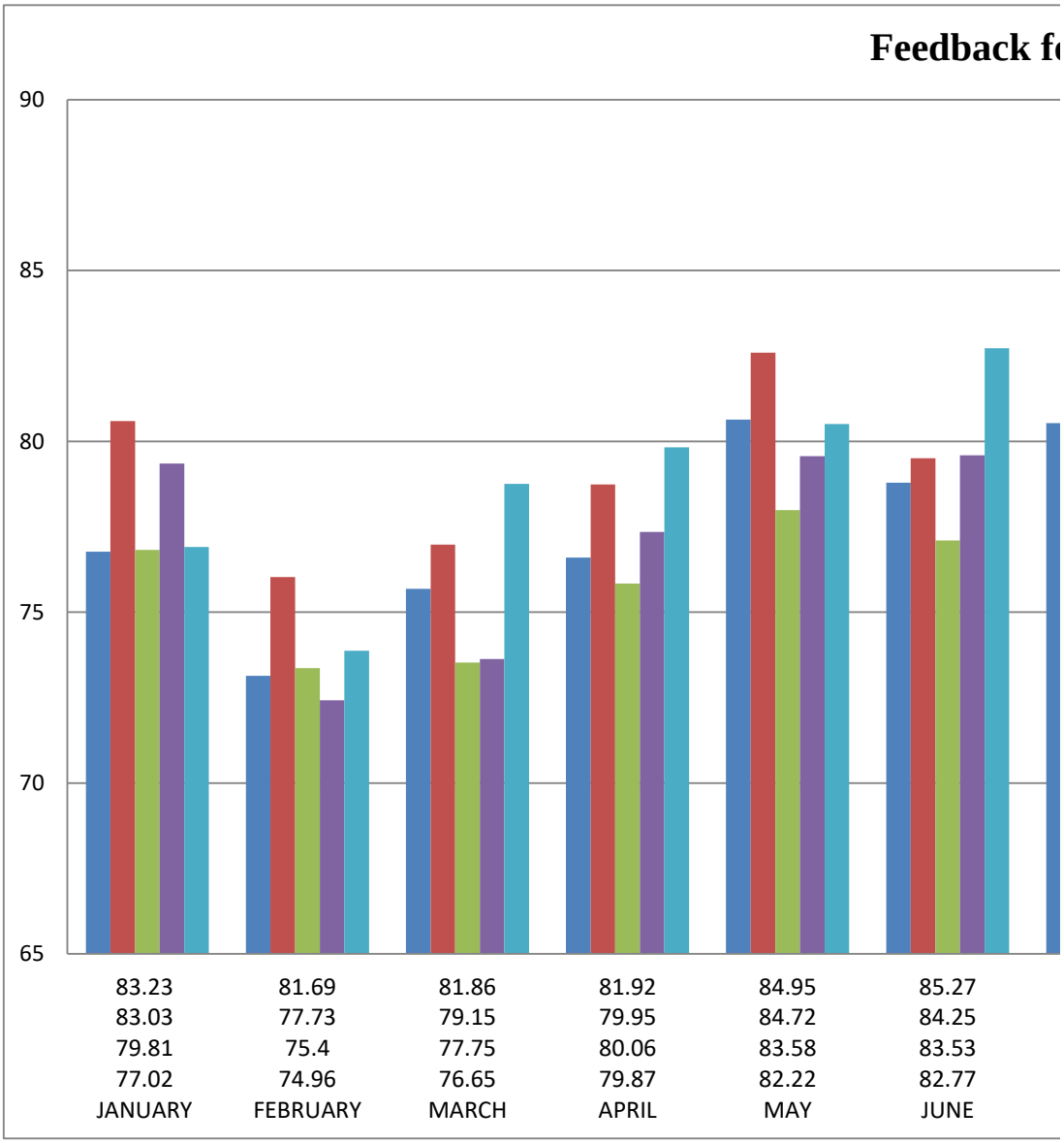
FEEDBACK FORM NOVEMBER 2018

FEEDBACK FORM DECEMBER 2018

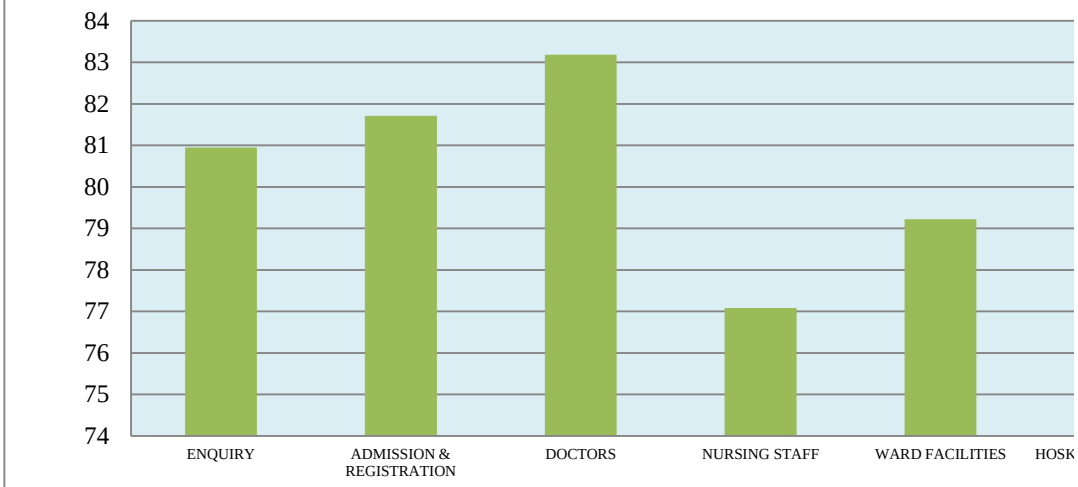
FEEDBACK FORM AUGUST 2018

MOU FILE

SERVICES				
PARAMETERS	**JANUARY**	**FEBRUARY**	**MARCH**	**APRIL**
ENQUIRY	77.02	74.96	76.65	79.87
ADMISSION & REGISTRATION	79.81	75.4	77.75	80.06
DOCTORS	83.03	77.73	79.15	79.95
NURSING STAFF	83.23	81.69	81.86	81.92
WARD FACILITIES	76.77	73.14	75.68	76.6
HOSKEEPING SERVICES	80.59	76.03	76.98	78.74
FOOD SERVISES	76.82	73.36	73.53	75.84
PHARMACY	79.35	72.42	73.63	77.35
BILLING	76.91	73.87	78.76	79.83
AVERAGE	**79.28**	**75.4**	**77.11**	**78.9**



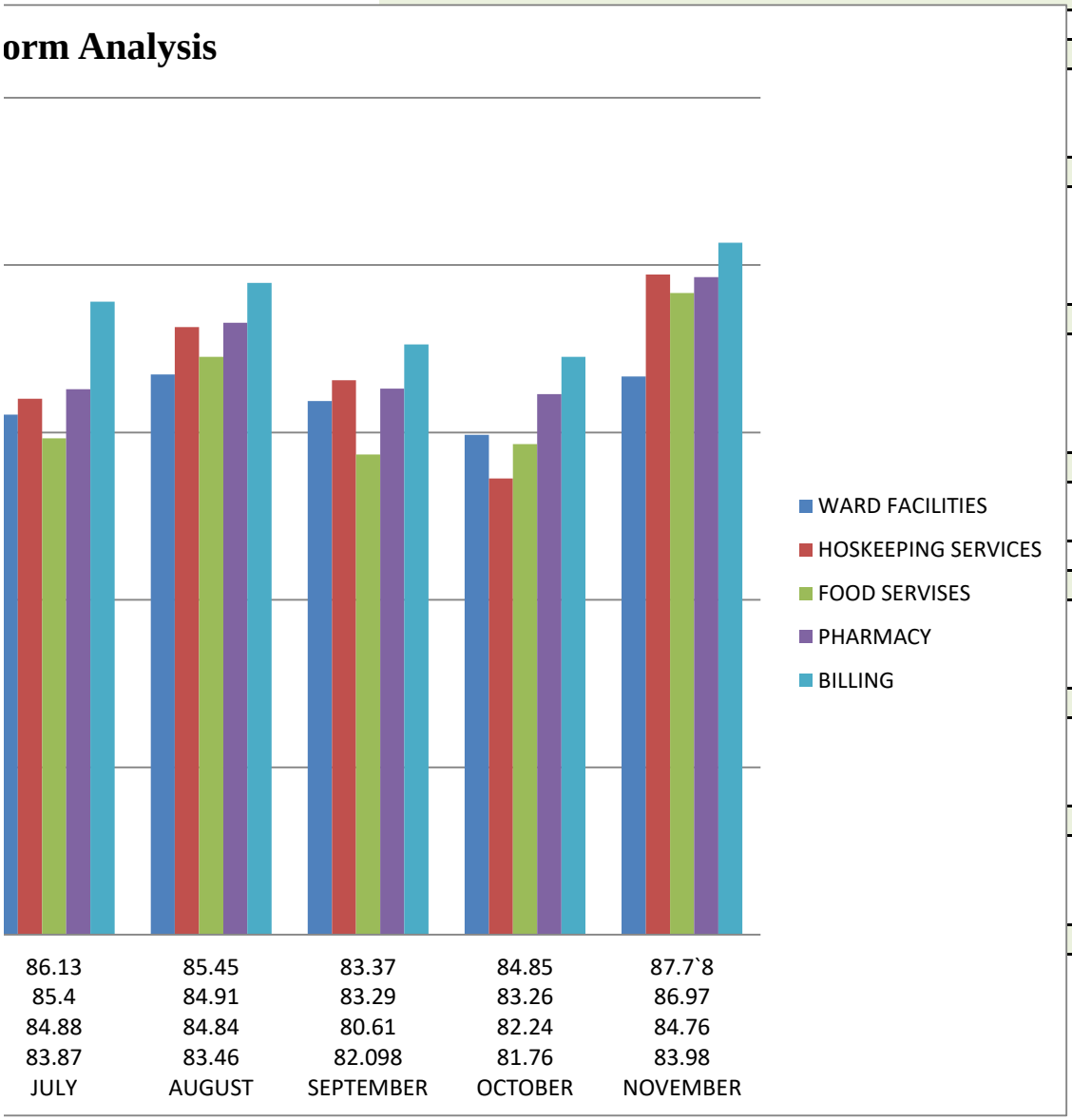
FEEDBACK AVERAGE



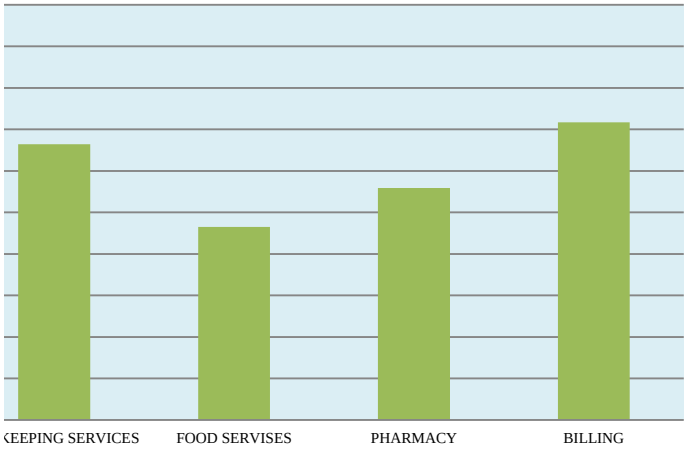
% of feedback score

MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
82.22	82.77	83.87	83.46	82.098	81.76	83.98	82.76	971.418
83.58	83.53	84.88	84.84	80.61	82.24	84.76	**83.1**	980.56
84.72	84.25	85.4	84.91	83.29	83.26	86.97	85.59	998.25
84.95	85.27	86.13	85.45	83.37	84.85	87.7`8	86.34	925.06
80.64	78.79	80.53	81.73	80.94	79.93	81.67	**84.27**	950.69
82.6	79.51	81.01	83.15	81.56	78.63	84.72	**84.27**	967.79
77.99	77.1	79.83	82.26	79.34	79.65	84.17	**83.98**	943.87
79.57	79.59	81.29	83.28	81.31	81.15	84.64	**81.55**	955.13
80.51	82.73	83.91	84.47	82.63	82.26	85.67	82.58	974.13
81.86	**81.5**	**82.98**	**83.72**	**81.68**	**81.52**	**84.57**	**83.82**	972.34

orm Analysis



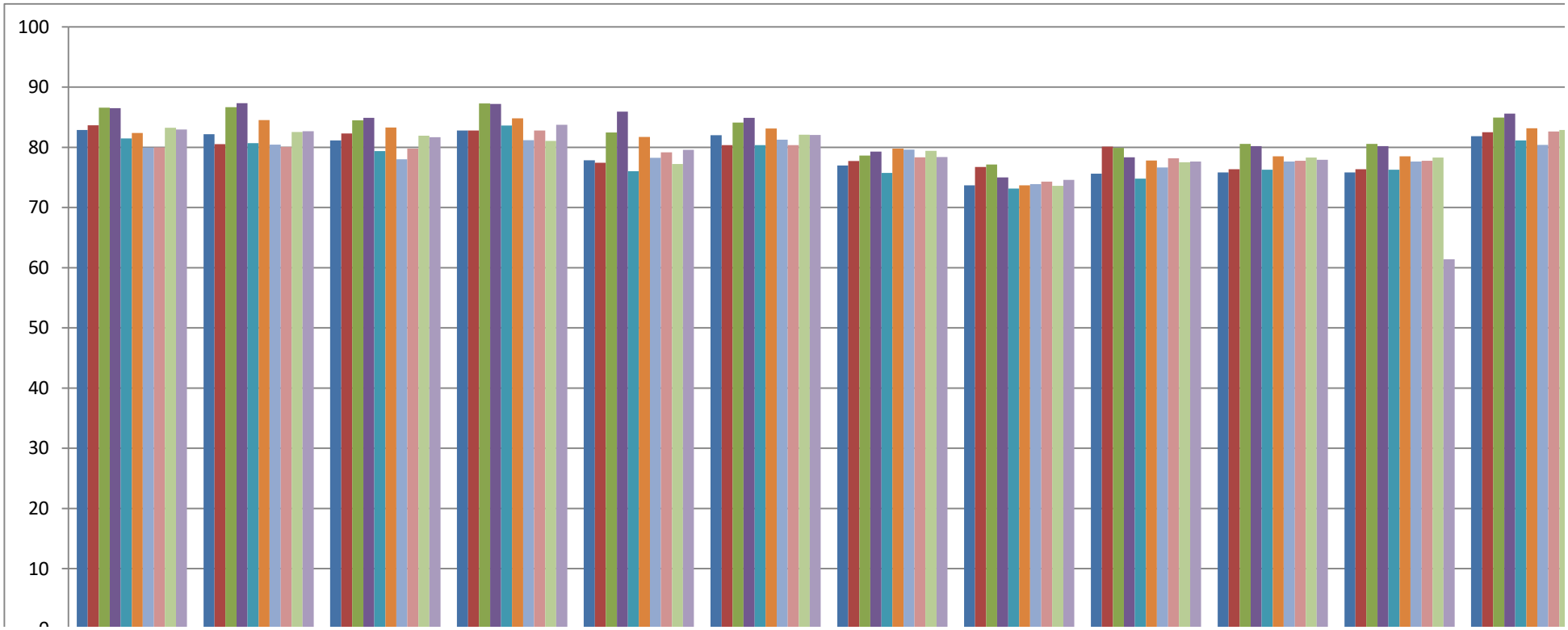
RATING



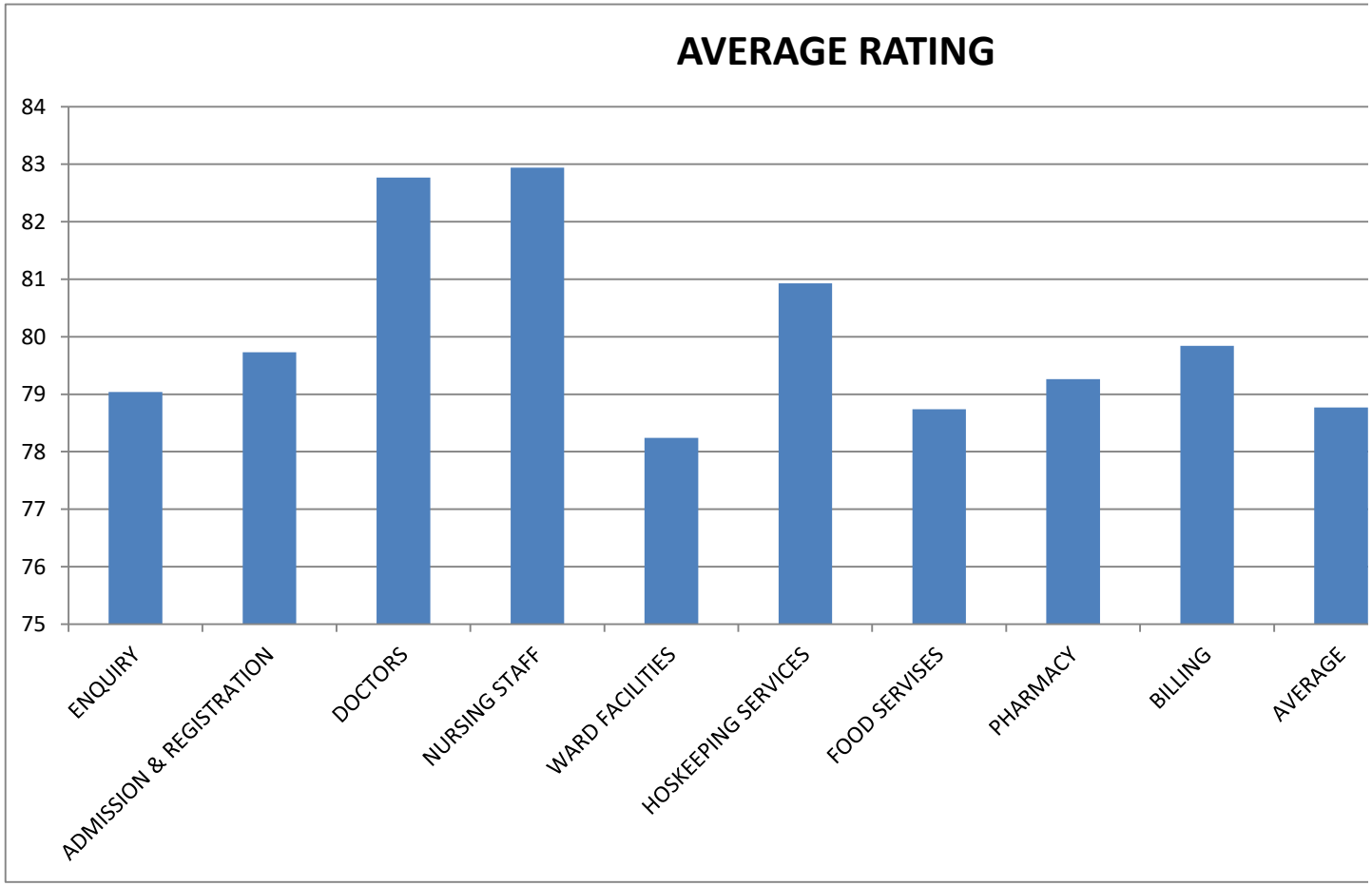
AVRAGE
80.9515
81.713333
83.1875
77.088333
79.224167
80.649167
78.655833
79.594167
81.1775
81.028333

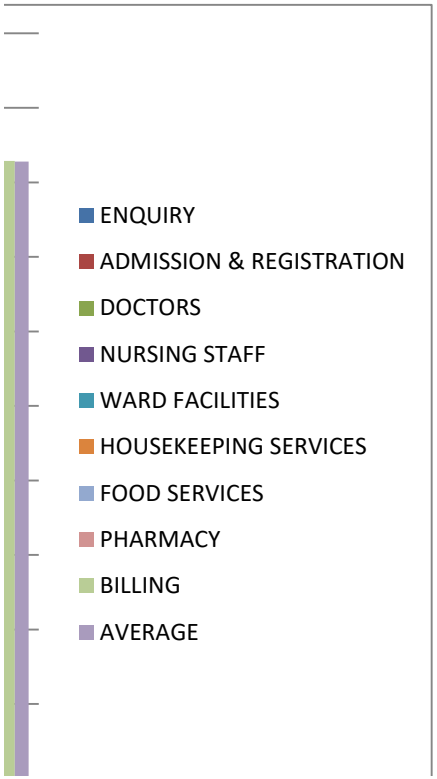
SERVICES	FEEDBACK
PARAMETERS	**AVRAGE RATING**
ENQUIRY	80.95
REGISTRATION	81.71
DOCTORS	83.18
NURSING STAFF	77.08
FACILITIES	79.22
SERVICES	80.64
FOOD SERVISES	78.65
PHARMACY	79.59
BILLING	81.17
AVERAGE	81.02

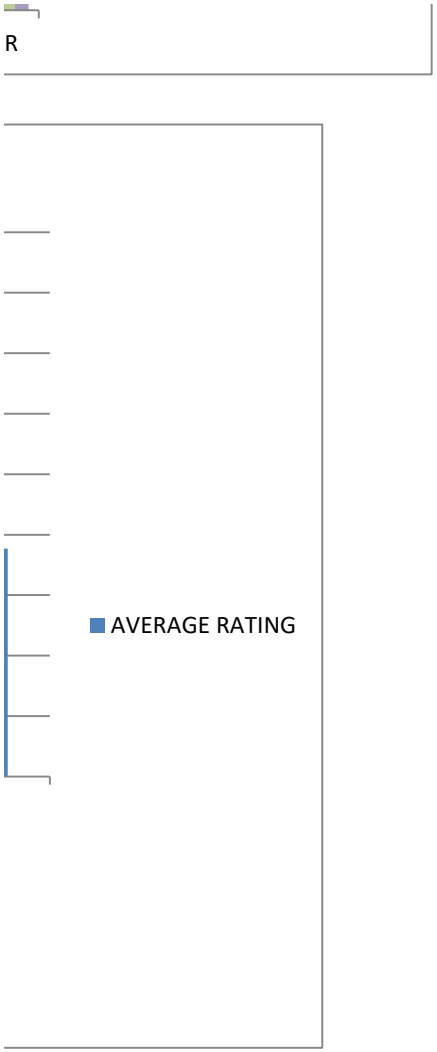
SERVICES	IPD Patients Feedback Form Analysis 2019													
PARAMETERS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL	AVRAGE
ENQUIRY	82.86	82.18	81.14	82.8	77.85	82.01	77	73.68	75.61	75.82	75.82	81.86	948.59	79.0491667
ADMISSION & REGISTRATION	83.65	80.52	82.29	82.8	77.44	80.36	77.7	76.73	80.12	76.34	76.34	82.49	956.81	79.7341667
DOCTORS	86.6	86.66	84.47	87.28	82.44	84.09	78.6	77.122	79.91	80.57	80.57	84.94	993.262	82.7718333
NURSING STAFF	86.52	87.31	84.88	87.2	85.91	84.89	79.3	75.017	78.35	80.19	80.19	85.58	995.327	82.9439167
WARD FACILITIES	81.47	80.69	79.38	83.6	76.02	80.36	75.8	73.15	74.78	76.29	76.29	81.12	938.9	78.2416667
HOUSEKEEPING SERVICES	82.38	84.51	83.28	84.8	81.73	83.11	79.8	73.68	77.78	78.51	78.51	83.17	971.22	80.935
FOOD SERVICES	79.94	80.45	78.01	81.2	78.26	81.28	79.6	73.89	76.63	77.65	77.65	80.4	944.98	78.7483333
PHARMACY	80	80.07	79.77	82.8	79.18	80.36	78.4	74.31	78.17	77.75	77.75	82.64	951.15	79.2625
BILLING	83.24	82.55	81.93	81.06	77.21	82.07	79.4	73.61	77.5	78.31	78.31	82.88	958.09	79.8408333
AVERAGE	82.96	82.66	81.68	83.72	79.56	82.05	78.38	74.57	77.65	77.93	61.39	82.79	945.34	78.7783333



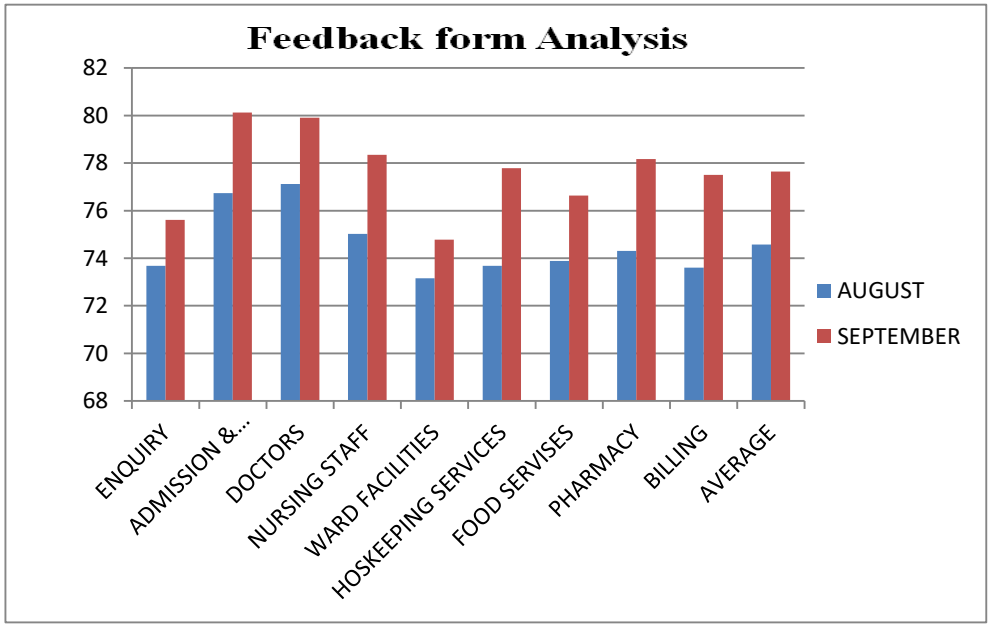
PARAMETERS	AVERAGE RATING
ENQUIRY	79.04
ADMISSION & REGISTRATION	79.73
DOCTORS	82.77
NURSING STAFF	82.94
WARD FACILITIES	78.24
HOSKEEPING SERVICES	80.93
FOOD SERVISES	78.74
PHARMACY	79.26
BILLING	79.84
AVERAGE	78.77



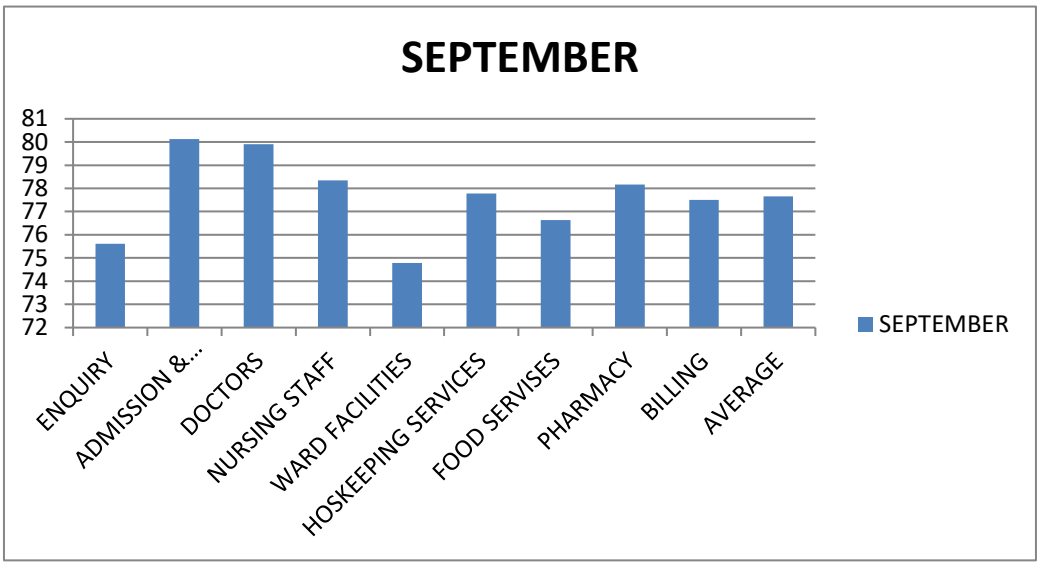

ENQUIRY
ADMISSION & REGISTRATION
DOCTORS
NURSING STAFF
WARD FACILITIES
HOUSEKEEPING SERVICES
FOOD SERVICES
PHARMACY
BILLING
AVERAGE


R
AVERAGE RATING

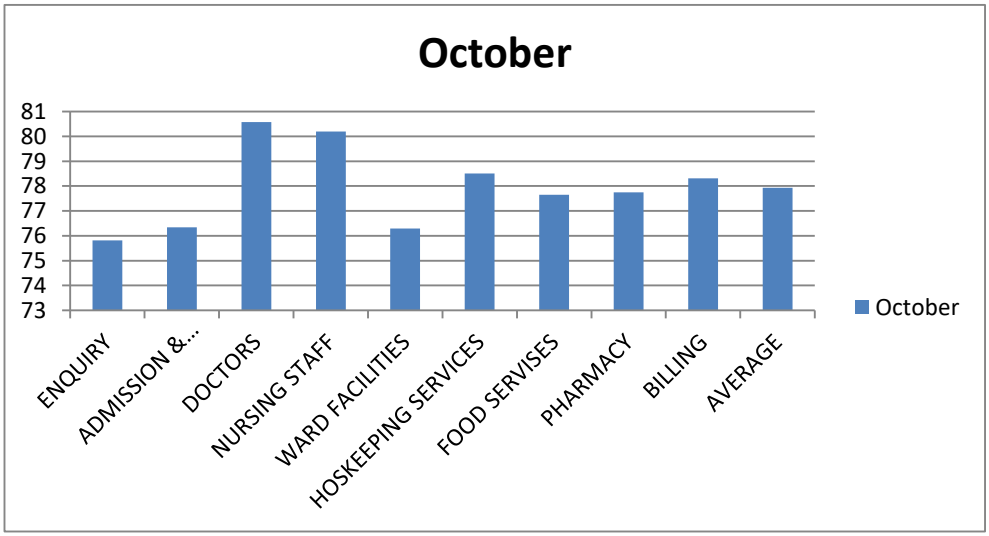
SERVICES				
PARAMETERS	**AUGUST**	**SEPTEMBER**	**TOTAL**	**AVRAGE**
ENQUIRY	73.68	75.61	149.29	74.645
ADMISSION & REGISTRATION	76.73	80.12	156.85	78.425
DOCTORS	77.122	79.91	157.032	78.516
NURSING STAFF	75.017	78.35	153.367	76.6835
WARD FACILITIES	73.15	74.78	147.93	73.965
HOSKEEPING SERVICES	73.68	77.78	151.46	75.73
FOOD SERVISES	73.89	76.63	150.52	75.26
PHARMACY	74.31	78.17	152.48	76.24
BILLING	73.61	77.5	151.11	75.555
AVERAGE	74.57	77.65	152.22	76.11



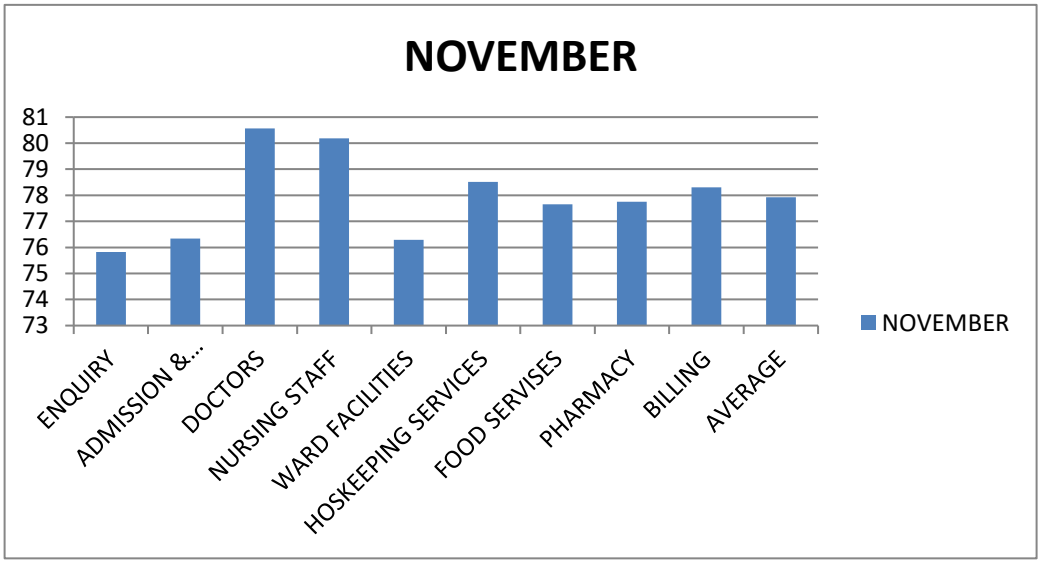
SERVICES			
PARAMETERS	**SEPTEMBER**	**TOTAL**	**AVRAGE**
ENQUIRY	75.61	75.61	75.61
ADMISSION & REGISTRATION	80.12	80.12	80.12
DOCTORS	79.91	79.91	79.91
NURSING STAFF	78.35	78.35	78.35
WARD FACILITIES	74.78	74.78	74.78
HOSKEEPING SERVICES	77.78	77.78	77.78
FOOD SERVISES	76.63	76.63	76.63
PHARMACY	78.17	78.17	78.17
BILLING	77.5	77.5	77.5
AVERAGE	77.65	77.65	77.65



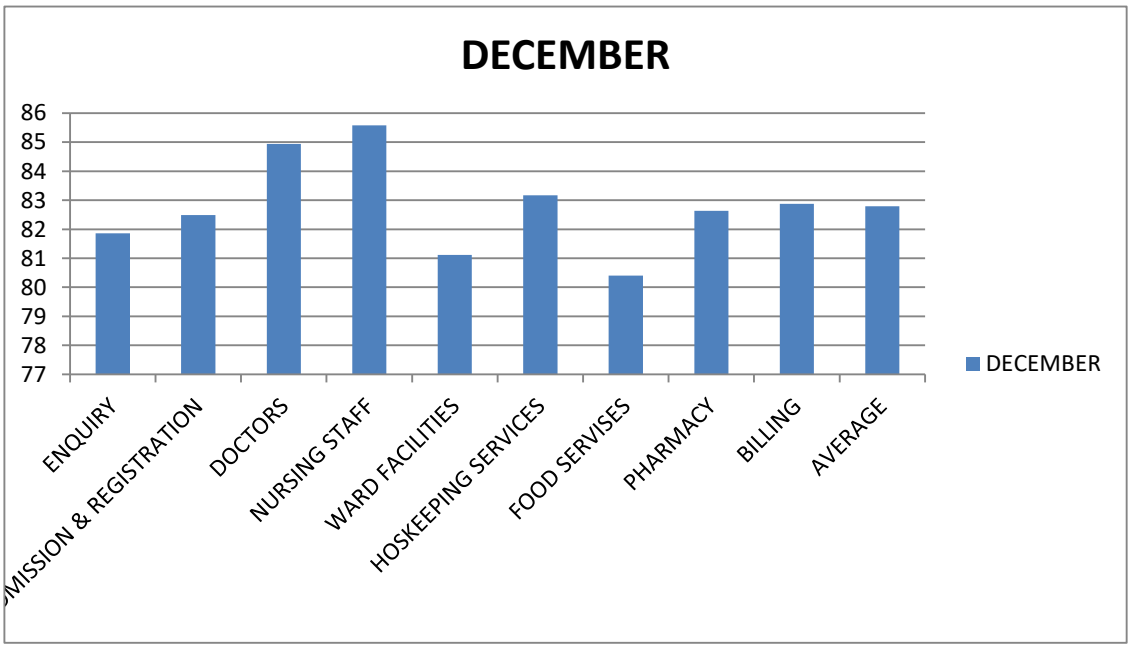
SERVICES			
PARAMETERS	**October**	**TOTAL**	**AVRAGE**
ENQUIRY	**75.82**	75.82	75.82
ADMISSION & REGISTRATION	**76.34**	76.34	76.34
DOCTORS	**80.57**	80.57	80.57
NURSING STAFF	**80.19**	80.19	80.19
WARD FACILITIES	**76.29**	76.29	76.29
HOSKEEPING SERVICES	**78.51**	78.51	78.51
FOOD SERVISES	**77.65**	77.65	77.65
PHARMACY	**77.75**	77.75	77.75
BILLING	**78.31**	78.31	78.31
AVERAGE	**77.93**	77.93	77.93



SERVICES			
PARAMETERS	**NOVEMBER**	**TOTAL**	**AVRAGE**
ENQUIRY	**75.82**	75.82	75.82
ADMISSION & REGISTRATION	**76.34**	76.34	76.34
DOCTORS	**80.57**	80.57	80.57
NURSING STAFF	**80.19**	80.19	80.19
WARD FACILITIES	**76.29**	76.29	76.29
HOSKEEPING SERVICES	**78.51**	78.51	78.51
FOOD SERVISES	**77.65**	77.65	77.65
PHARMACY	**77.75**	77.75	77.75
BILLING	**78.31**	78.31	78.31
AVERAGE	**77.93**	77.93	77.93



SERVICES	DECEMBER		
PARAMETERS	DECEMBER	TOTAL	AVRAGE
ENQUIRY	81.86	81.86	81.86
ADMISSION & REGISTRATION	82.49	82.49	82.49
DOCTORS	84.94	84.94	84.94
NURSING STAFF	85.58	85.58	85.58
WARD FACILITIES	81.12	81.12	81.12
HOSKEEPING SERVICES	83.17	83.17	83.17
FOOD SERVISES	80.4	80.4	80.4
PHARMACY	82.64	82.64	82.64
BILLING	82.88	82.88	82.88
AVERAGE	82.79	82.79	82.79



MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Plot No. 1&2, Kamothe, Navi Mumbai – 410 209
Tel.: 022 27437900/7901 Fax: 27431723

PATIENT FEEDBACK FORM

Name Of Patient :_____ Age/ Sex:_____ Contact no. _____

IP No. _____ DOA: _____ DOD:_____ Ward: _____

Diagnosis: _____ Name of Doctor: _____

Rate us for following services	Poor	Below Average	Average	Good	Execllent
ENQUIRY					
Courteous & helpful					
Respons to questions					
ADMISSION & REGISTRATION					
Admission & registration procedure					
Staff Courteous & helpful					
DOCTORS					
Communication with patient					
Courteous, kind & Sympathetic					
Frequency of Doctors Visit					
NURSING STAFF					
Caring & prompt in service					
Courteous & helpful					
Respons to queries					
WARD FACILITIES					
Linen					
Ward Amenitis					
HOSKEEPING SERVICES					
Cleanliness					
Courteous & helpful					
FOOD SERVISES					
Quality of Food					
Taste					
PHARMACY					
Most requirement available					
Staff Courteous & helpful					

BILLING					
Transperancy in billing					
Accuracy					
Promptness					

Overall Comment

Signature of Patient/ Relative _____

		395995	395802	395792	395793	jaua	395903	395418	390371	395747
	Rate us for following services Poor:1, Below Average:2 , Average:3, Good:4, Excellent :5									
	ENQUIRY									
1	Courteous & helpful	4	4	5	4	4	4	4	5	4
2	Respons to questions	4	4	5	4	4	4	4	5	4
		8	**8**	**10**	**8**	**8**	**8**	**8**	**10**	**8**
	ADMISSION & REGISTRATION									
3	Admission & registration procedure	4	4	5	4	4	5	4	5	4
4	Staff Courteous & helpful	4	4	5	4	4	5	4	5	4
		8	**8**	**10**	**8**	**8**	**10**	**8**	**10**	**8**
	DOCTORS									
5	Communication with patient	4	4	5	4	4	5	4	5	4
6	Courteous, kind & Sympathetic	4	4	5	4	4	5	4	5	4
7	Frequency of Doctors Visit	4	4	5	4	4	5	4	5	4
		12	**12**	**15**	**12**	**12**	**15**	**12**	**15**	**12**
	NURSING STAFF									
8	Caring & prompt in service	4	4	5	4	4	5	4	5	4
9	Courteous & helpful	4	4	5	4	4	5	4	5	4
10	Respons to queries	4	4	5	4	4	5	4	5	4
		12	**12**	**15**	**12**	**12**	**15**	**12**	**15**	**12**
	WARD FACILITIES									
11	Linen	4	4	5	4	4	5	4	5	4
12	Ward Amenitis	4	4	5	4	4	5	4	5	4
		8	**8**	**10**	**8**	**8**	**10**	**8**	**10**	**8**
	HOSKEEPING SERVICES									
13	Cleanliness	4	4	3	4	4	5	4	5	4
14	Courteous & helpful	4	4	5	4	4	5	4	5	4
		8	**8**	**8**	**8**	**8**	**10**	**8**	**10**	**8**
	FOOD SERVISES									
15	Quality of Food	4	4	4	4	4	5	4	5	4
16	Taste	4	4	4	4	4	5	4	5	4
		8	**8**	**8**	**8**	**8**	**10**	**8**	**10**	**8**
	PHARMACY									
17	Most requirement available	4	4	4	4	4	5	4	5	4

18	Staff Courteous & helpful	4	4	4	4	4	5	4	5	4
		8	**8**	**8**	**8**	**8**	**10**	**8**	**10**	**8**
	BILLING									
19	Transperancy in billing	4	4	5	4	4	5	4	5	4
20	Accuracy	4	4	5	4	4	5	4	5	4
21	Promptness	4	4	5	4	4	5	4	5	4
		12	**12**	**15**	**12**	**12**	**15**	**12**	**15**	**12**
		84	84	99	84	84	103	84	105	84
		80%	**80%**	**94%**	**80%**	**80%**	**98%**	**80%**	**100%**	**80%**

Ma Score 105

395507	bhagyash	345285	395573	39554	396098	396063	396153	396115	395924	395901	395953	396073	396192
4	5	4	4	4	4	4	4	4	4	4	4	4	4
4	5	5	5	4	4	4	4	4	4	4	4	3	4
8	**10**	**9**	**9**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**7**	**8**
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4	5	5	4	4	4	4	5	5	4	4	4	4	5
12	**15**	**13**	**12**	**12**	**12**	**12**	**15**	**15**	**12**	**12**	**12**	**11**	**15**
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12	**14**	**14**	**13**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
84	97	92	91	84	84	84	92	92	84	84	84	82	92
80%	**92%**	**88%**	**87%**	**80%**	**80%**	**80%**	**88%**	**88%**	**80%**	**80%**	**80%**	**78%**	**88%**

395964	395918	baby	395908	3955967	395600	395875	395894	345699	395055	395773	3876309	395649	395609
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15	**15**	**15**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**15**	**12**	**12**
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4	4	4	4	4	4	4	4	4	4	5	5	4	4
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4	5	4	4	4	4	4	4	4	4	5	5	4	4
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4	4	4	4	4	4	4	4	4	4	5	5	4	4
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8	**8**	**10**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**9**	**9**	**8**	**8**
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90	92	99	84	84	84	84	84	84	84	93	97	84	84
86%	**88%**	**94%**	**80%**	**80%**	**80%**	**80%**	**80%**	**80%**	**80%**	**89%**	**92%**	**80%**	**80%**

395642	393525	393481	393174	392777	393706	3837745	393332	393377	393601	392963	344645	394005	punam
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4	5	2	4	4	5	5	2	2	4	4	4	3	4
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12	**15**	**15**	**14**	**12**	**15**	**15**	**6**	**6**	**11**	**10**	**15**	**12**	**15**
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4	5	5	5	4	5	5	2	3	3	3	5	4	4
12	**15**	**15**	**15**	**12**	**15**	**15**	**6**	**9**	**10**	**10**	**15**	**12**	**13**
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8	**4**	**10**	**8**	**8**	**8**	**10**	**4**	**4**	**7**	**7**	**10**	**7**	**8**
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4	5	5	5	4	5	5	2	3	4	4	5	5	4
8	**10**	**10**	**10**	**8**	**10**	**10**	**4**	**6**	**7**	**7**	**9**	**10**	**9**
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8	**10**	**10**	**9**	**8**	**8**	**10**	**4**	**4**	**7**	**7**	**8**	**10**	**8**
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4	5	5	4	4	4	5	2	2	4	4	5	3	5
8	**10**	**10**	**8**	**8**	**9**	**10**	**4**	**4**	**7**	**7**	**10**	**7**	**10**
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4	5	5	5	4	4	5	2	3	3	3	4	4	4
12	**15**	**15**	**15**	**12**	**12**	**15**	**6**	**9**	**10**	**10**	**13**	**12**	**12**
84	99	99	96	84	95	105	42	52	73	72	99	81	89
80%	**94%**	**94%**	**91%**	**80%**	**90%**	**100%**	**40%**	**50%**	**70%**	**69%**	**94%**	**77%**	**85%**

394097	394057	394526	399304	394056	393936	393589	3838483	394366	393915	394054	rukmini	393973	vandna
4	4	4	5	4	4	5	5	2	4	5	4	5	5
4	4	4	5	5	5	5	4	2	3	5	4	5	5
8	**8**	**8**	**10**	**9**	**9**	**10**	**9**	**4**	**7**	**10**	**8**	**10**	**10**
4	4	4	3	4	5	4	4	2	4	5	4	5	5
4	4	4	3	4	4	4	5	2	4	5	4	5	5
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4	4	5	5	4	5	5	5	2	1	5	2	5	5
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12	**12**	**12**	**15**	**12**	**15**	**13**	**14**	**6**	**4**	**15**	**12**	**15**	**15**
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4	4	4	4	4	5	5	5	2	4	5	2	5	5
8	**8**	**6**	**8**	**8**	**10**	**10**	**10**	**4**	**8**	**10**	**4**	**10**	**10**
5	5	3	5	4	5	5	5	2	5	5	4	5	5
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9	**10**	**6**	**10**	**8**	**10**	**10**	**10**	**4**	**7**	**10**	**8**	**10**	**10**
2	4	4	4	4	5	5	5	2	4	5	4	5	5
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4	**8**	**8**	**8**	**8**	**10**	**10**	**10**	**4**	**7**	**10**	**8**	**10**	**10**
4	4	4	5	4	5	4	4	2	2	5	4	5	5

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8	**8**	**8**	**10**	**8**	**10**	**8**	**9**	**4**	**3**	**10**	**8**	**10**	**10**
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12	**12**	**12**	**12**	**13**	**12**	**11**	**15**	**6**	**10**	**15**	**12**	**15**	**15**
81	86	83	92	86	100	95	101	42	57	105	74	105	105
77%	**82%**	**79%**	**88%**	**82%**	**95%**	**90%**	**96%**	**40%**	**54%**	**100%**	**70%**	**100%**	**100%**

3948128	394905	395042	399168	394171	394173	394216	radha	pushpa	394043	394216	39444	394172	395604
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10	**4**	**8**	**9**	**8**	**8**	**8**	**10**	**9**	**10**	**8**	**8**	**7**	**10**
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10	**4**	**8**	**9**	**8**	**8**	**8**	**10**	**5**	**10**	**8**	**8**	**6**	**7**
5	2	4	5	4	4	4	5	3	5	4	3	3	5
4	2	4	5	4	4	4	5	4	5	4	4	4	5
9	**4**	**8**	**10**	**8**	**8**	**8**	**10**	**7**	**10**	**8**	**7**	**7**	**10**
4	2	4	5	4	4	4	5	3	5	4	4	2	4
4	2	4	5	4	4	4	5	4	5	4	4	2	4
8	**4**	**8**	**10**	**8**	**8**	**8**	**10**	**7**	**10**	**8**	**8**	**4**	**8**
4	2	4	5	4	4	4	4	4	5	4	4	3	5

4	2	4	5	4	4	4	4	5	5	4	3	3	5
8	**4**	**8**	**10**	**8**	**8**	**8**	**8**	**9**	**10**	**8**	**7**	**6**	**10**
4	2	3	5	4	4	3	5	5	5	4	4	3	5
4	2	3	5	4	4	3	5	5	5	4	4	4	4
4	2	3	5	4	4	3	5	5	5	4	4	4	5
12	**6**	**9**	**15**	**12**	**12**	**9**	**15**	**15**	**15**	**12**	**12**	**11**	**14**
91	42	81	102	84	84	81	100	85	105	84	78	73	95
87%	**40%**	**77%**	**97%**	**80%**	**80%**	**77%**	**95%**	**81%**	**100%**	**80%**	**74%**	**70%**	**90%**

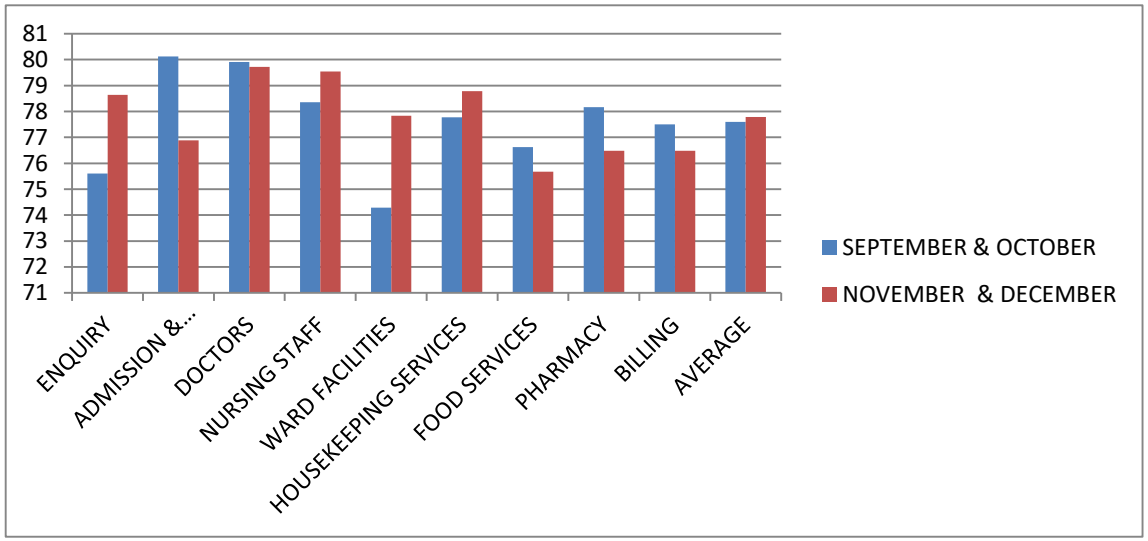
395422	394848	395460	394846	395274	395186	395177	394798	3952931	395295	394950	395118		
4	4	2	4	4	5	3	2	5	4	4	2		
4	4	2	5	4	5	3	2	5	5	4	2		
8	**8**	**4**	**9**	**8**	**10**	**6**	**4**	**10**	**9**	**8**	**4**	**0**	**0**
4	4	2	4	4	5	3	2	5	4	4	3		
4	4	2	4	4	5	3	2	5	4	4	3		
8	**8**	**4**	**8**	**8**	**10**	**6**	**4**	**10**	**8**	**8**	**6**	**0**	**0**
4	4	3	4	4	5	2	2	3	5	4	2		
4	4	3	4	4	5	2	2	3	5	4	2		
4	4	3	4	4	5	2	2	3	5	4	2		
12	**12**	**9**	**12**	**12**	**15**	**6**	**6**	**9**	**15**	**12**	**6**	**0**	**0**
4	4	5	4	3	5	3	5	4	5	4	5		
4	4	4	4	3	2	3	5	4	5	4	5		
4	4	3	4	3	2	3	5	4	5	4	5		
12	**12**	**12**	**12**	**9**	**9**	**9**	**15**	**12**	**15**	**12**	**15**	**0**	**0**
4	4	4	4	3	5	2	5	3	4	4	3		
4	4	5	4	4	5	2	5	3	4	4	3		
8	**8**	**9**	**8**	**7**	**10**	**4**	**10**	**6**	**8**	**8**	**6**	**0**	**0**
4	4	5	4	4	4	3	5	4	4	4			
4	4	4	4	4	4	3	5	4	4	4			
8	**8**	**9**	**8**	**8**	**8**	**6**	**10**	**8**	**8**	**8**	**0**	**0**	**0**
4	4	4	4	4	2	2	5	4	5	4			
4	4	4	4	4	2	2	5	4	5	4			
8	**8**	**8**	**8**	**8**	**4**	**4**	**10**	**8**	**10**	**8**	**0**	**0**	**0**
4	4	4	4	2	4	4	5	4	4	4			

4	4	5	4	4	4	4	5	4	4	4			
8	**8**	**9**	**8**	**6**	**8**	**8**	**10**	**8**	**8**	**8**	**0**	**0**	**0**
4	4	5	4	3	4	2	5	4	5	4			
4	4	5	4	4	4	2	5	4	5	4			
4	4	5	4	4	4	2	5	4	5	4			
12	**12**	**15**	**12**	**11**	**12**	**6**	**15**	**12**	**15**	**12**	**0**	**0**	**0**
84	84	79	85	77	86	55	84	83	96	84	37	0	0
80%	**80%**	**75%**	**81%**	**73%**	**82%**	**52%**	**80%**	**79%**	**91%**	**80%**	**35%**	**0%**	**0%**

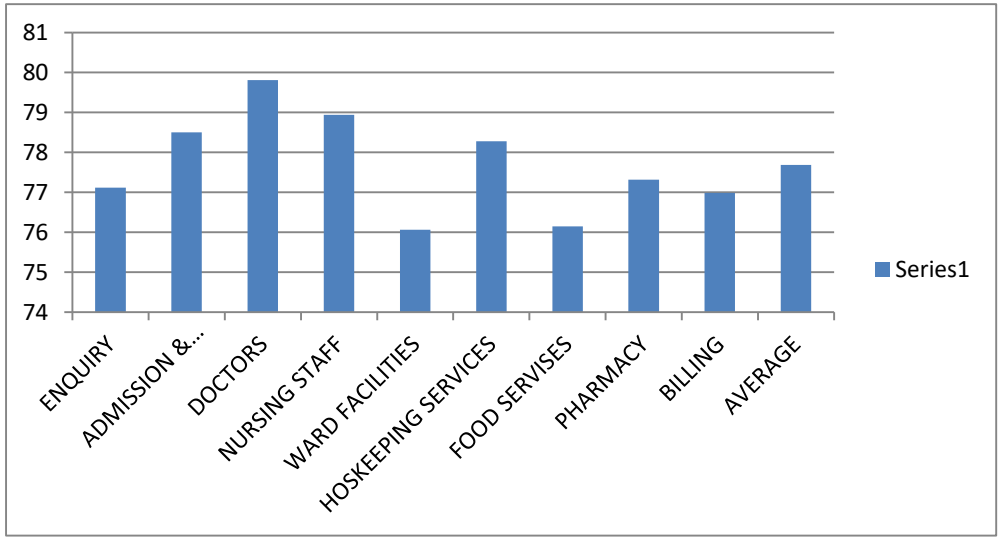
								Total	Average	Percentage	
								0	0	0	
								370	1.4859438	29.718876	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**370**	**1.4859438**	**29.718876**	**0**
								365	1.4658635	29.317269	
								372	1.4939759	29.879518	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**737**	**2.9598394**	**59.196787**	**0**
								372	1.4939759	29.879518	
								374	1.502008	30.040161	
								372	1.4939759	29.879518	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1118**	**4.4899598**	**89.799197**	**0**
								381	1.5301205	30.60241	
								379	1.5220884	30.441767	
								375	1.5060241	30.120482	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1135**	**4.5582329**	**91.164659**	**0**
								355	1.4257028	28.514056	
								368	1.4779116	29.558233	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**723**	**2.9036145**	**58.072289**	**0**
								376	1.5100402	30.200803	
								378	1.5180723	30.361446	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**754**	**3.0281124**	**60.562249**	**0**
								361	1.4497992	28.995984	
								363	1.4578313	29.156627	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**724**	**2.9076305**	**58.15261**	**0**
								365	1.4658635	29.317269	

								371	1.4899598	29.799197	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**736**	**2.9558233**	**59.116466**	**0**
								368	1.4779116	29.558233	
								369	1.4819277	29.638554	
								368	1.4779116	29.558233	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1105**	**4.437751**	**88.75502**	**0**
0	0	0	0	0	0	0	0	7402	29.726908	594.53815	0
0%	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**7050%**	**28%**	**566%**	**0%**

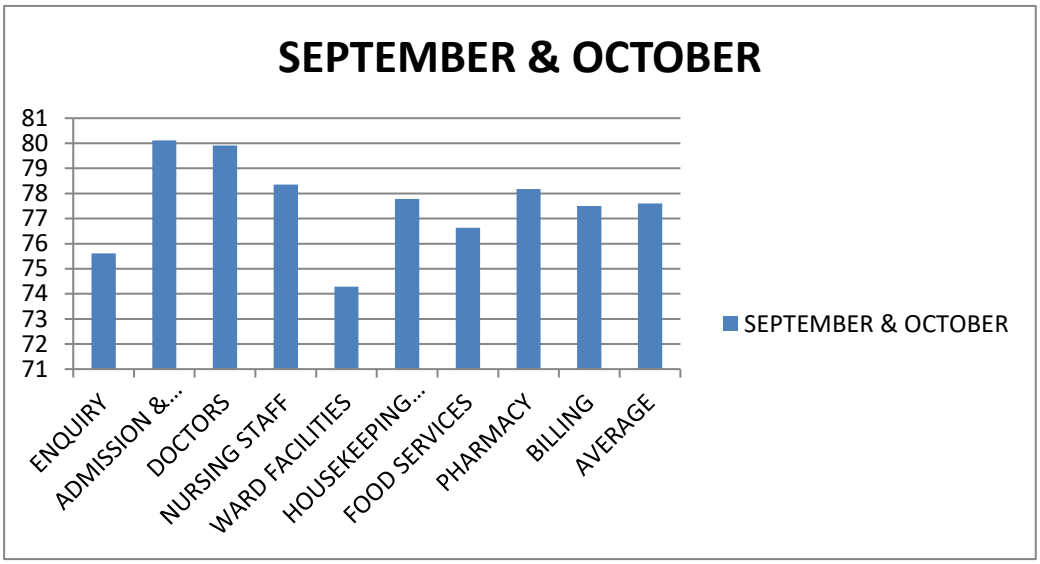
SERVICES	Patients Feedback Form Analysis 2019			
PARAMETERS	SEPTEMBER & OCTOBER	NOVEMBER & DECEMBER	TOTAL	AVRAGE
ENQUIRY	75.61	78.64	154.25	77.125
ADMISSION & REGISTRATION	80.12	76.89	157.01	78.505
DOCTORS	79.91	79.72	159.63	79.815
NURSING STAFF	78.35	79.54	157.89	78.945
WARD FACILITIES	74.29	77.83	152.12	76.06
HOUSEKEEPING SERVICES	77.78	78.78	156.56	78.28
FOOD SERVICES	76.63	75.67	152.3	76.15
PHARMACY	78.17	76.48	154.65	77.325
BILLING	77.5	76.48	153.98	76.99
AVERAGE	77.6	77.79	155.39	77.695



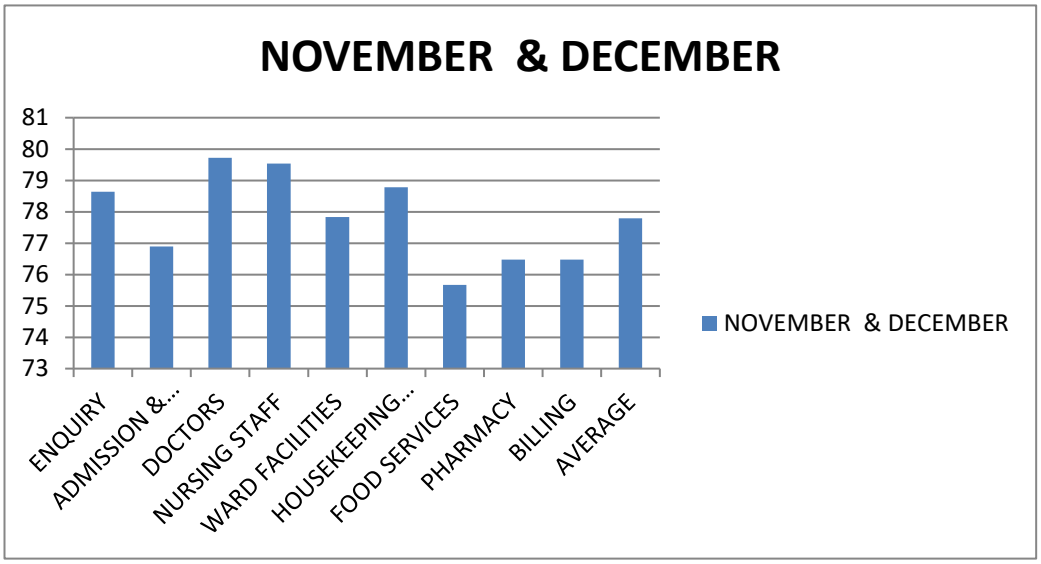
PARAMETERS	AVERAGE RATING
ENQUIRY	77.12
ADMISSION & REGISTRATION	78.5
DOCTORS	79.81
NURSING STAFF	78.94
WARD FACILITIES	76.06
HOSKEEPING SERVICES	78.28
FOOD SERVISES	76.15
PHARMACY	77.32
BILLING	76.99
AVERAGE	77.69



SERVICES			
PARAMETERS	SEPTEMBER & OCTOBER	TOTAL	AVRAGE
ENQUIRY	75.61	75.61	75.61
ADMISSION & REGISTRATION	80.12	80.12	80.12
DOCTORS	79.91	79.91	79.91
NURSING STAFF	78.35	78.35	78.35
WARD FACILITIES	74.29	74.29	74.29
HOUSEKEEPING SERVICES	77.78	77.78	77.78
FOOD SERVICES	76.63	76.63	76.63
PHARMACY	78.17	78.17	78.17
BILLING	77.5	77.5	77.5
AVERAGE	77.6	77.6	77.6



SERVICES			
PARAMETERS	NOVEMBER & DECEMBER	TOTAL	AVRAGE
ENQUIRY	78.64	78.64	78.64
ADMISSION & REGISTRATION	76.89	76.89	76.89
DOCTORS	79.72	79.72	79.72
NURSING STAFF	79.54	79.54	79.54
WARD FACILITIES	77.83	77.83	77.83
HOUSEKEEPING SERVICES	78.78	78.78	78.78
FOOD SERVICES	75.67	75.67	75.67
PHARMACY	76.48	76.48	76.48
BILLING	76.48	76.48	76.48
AVERAGE	77.79	77.79	77.79



MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Plot No. 1&2, Kamothe, Navi Mumbai – 410 209
Tel.: 022 27437900/7901 Fax: 27431723

PATIENT FEEDBACK FORM

Name Of Patient :_____ Age/ Sex:_____ Contact no. _____

IP No. _____ DOA: _____ DOD:_____ Ward: _____

Diagnosis: _____ Name of Doctor: _____

Rate us for following services	Poor	Below Average	Average	Good	Execllent
ENQUIRY					
Courteous & helpful					
Respons to questions					
ADMISSION & REGISTRATION					
Admission & registration procedure					
Staff Courteous & helpful					
DOCTORS					
Communication with patient					
Courteous, kind & Sympathetic					
Frequency of Doctors Visit					
NURSING STAFF					
Caring & prompt in service					
Courteous & helpful					
Respons to queries					
WARD FACILITIES					
Linen					
Ward Amenitis					
HOSKEEPING SERVICES					
Cleanliness					
Courteous & helpful					
FOOD SERVISES					
Most requirement available					
Staff Courteous & helpful					
BILLING					
Transperancy in billing					
Accuracy					
Promptness					

		3811840							
	Rate us for following services Poor:1, Below Average:2 , Average:3, Good:4, Excellent :5								
	ENQUIRY								
1	Courteous & helpful	3							
2	Respons to questions	3							
		6	0	0	0	0	0	0	0
	REGISTRATION								
3	registration procedure	3							
4	Staff Courteous & helpful	4							
		7	0	0	0	0	0	0	0
	DOCTORS								
5	Communication with patient	3							
6	Courteous, kind & Sympathetic	3							
7	Consultaion Wating time	2							
		8	0	0	0	0	0	0	0
	NURSING STAFF								
8	Caring & prompt in service	3							
9	Courteous & helpful	3							
		6	0	0	0	0	0	0	0
	OPD FACILITIES								
	OPD Amenitis (Sitting arrangement, Fans, Drinking water etc.)	3							
		3	0	0	0	0	0	0	0
	HOSKEEPING SERVICES								
13	Cleanliness	3							
14	Courteous & helpful	4							
		7	0	0	0	0	0	0	0
	PHARMACY								
17	Most requirement available	4							
18	Staff Courteous & helpful	3							
		7	0	0	0	0	0	0	0
	BILLING								
19	Transperancy in billing	4							
20	Accuracy	3							
21	Promptness	2							

	9	0	0	0	0	0	0	0

	53	0	0	0	0	0	0	0
Ma Score 105	**50%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**

Average	Percentage
0.012766	0.25531915
0.012766	0.25531915
0.0255319	0.25531915
0.012766	0.25531915
0.0170213	0.34042553
0.0297872	0.29787234
0.012766	0.25531915
0.012766	0.25531915
0.0085106	0.17021277
0.0340426	0.22695035
0.012766	0.25531915
0.012766	0.25531915
0.0255319	0.17021277
0.012766	0.25531915
0.012766	0.12765957
0.012766	0.25531915
0.0170213	0.34042553
0.0297872	0.29787234
0.0170213	0.34042553
0.012766	0.25531915
0.0297872	0.29787234
0.0170213	0.34042553
0.012766	0.25531915
0.0085106	0.17021277

0.0382979	0.25531915	
0.2255319	1.92907801	0
0%	**2%**	**0%**

75.61
80.12
79.91
78.35
74.29
77.78
76.63
78.17
77.5

MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Kamothe, Navi Mumbai – 410 209

Ref.No.: MGM/KAM/2019/ **Date: 30th October 2019**

To

Dr Sweekar

Dept of Pediatrics

Patient Feedback Report
Compliments

1 With ref to NABH standard CQI 5 e, regarding patients feedback about care and service .Feedback received from a patient Adhav Abioh of Pediatric ICU ward Dated 18/10/19

2 The Patient has complimented Doctor Sweekar and conveyed appreciation for his positive caring attitude, is pleased and has also conveyed his thanks and good wishes Copy of feedback attached

3 Medical Suptd and Management of MGM Hospital is pleased to convey appreciation and compliments to Doctor Sweekar, keep up the good work

Dr KR Salgotra

Copy to
Medical Director
Dean
HOD Pediatrics

MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Kamothe, Navi Mumbai – 410 209

Ref.No.: MGM/KAM/2020/ **Date: 20th January 2020**

To
Dr. Anirudh Khare
Department of Surgery

Patient Feedback Report
Compliments

1. With ref to NABH standard CQI 5 e, regarding communication of patients feedback about care and service. Feedback is submitted from a patient Mr. Gaurav of Special ward under unit II Surgery dated 12/12/19
2. The Patient has complimented Dr. Anirudh Khare and conveyed appreciation in his comments "Happy to go home early because of excellent service given , thanks to Dr. Anirudh Sir".
3. Medical Superintendent and Management of MGM Hospital is pleased to convey appreciation and compliments to Dr. Anirudh, keep up the good work

Medical Superintendent

Copy to
Medical Director
Dean
HOD Surgery
Surgery Unit II Incharge

MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Kamothe, Navi Mumbai – 410 209

Ref.No.: MGM/KAM/2019/ **Date: 30th October 2019**

To

Dr Sweekar

Dept of Pediatrics

Patient Feedback Report
Compliments

1 With ref to NABH standard CQI 5 e, regarding patients feedback about care and service .Feedback received from a patient Adhav Abioh of Pediatric ICU ward Dated 18/10/19

2 The Patient has complimented Doctor Sweekar and conveyed appreciation for his positive caring attitude, is pleased and has also conveyed his thanks and good wishes Copy of feedback attached

3 Medical Suptd and Management of MGM Hospital is pleased to convey appreciation and compliments to Doctor Sweekar, keep up the good work

Dr KR Salgotra

Copy to
Medical Director
Dean
HOD Pediatrics

MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Kamothe, Navi Mumbai – 410 209

Ref.No.: MGM/KAM/QD/PFR/19 **Quality Dept**
25/10/19

To
Medical Superintendent
MGM hospital

Patients Feedback Report For the Month of September 2019

1 Patients feedback and satisfaction report for the month of September 2019 is submitted as under

2 Total number of feedbacks received is as under

Month September 2019	**OPD**	**IPD**
Total feedbacks	253	369
Compliments Received	4	4
Complaints	9	2
Suggestions	3	2
Satisfaction index		72%

3 Actionable points from patient's feedbacks are submitted as under

A Suggestions

- Bed sheets should be changed at least once in 2 days. (FMW)
- Patients opined that hot water be provided for drinking as well as for washroom.(FMW)
- Requirement of Xerox machine facility in discharge counter and Pharmacy .
- Staff needs to be more transparent in communication in admission &billing,
- Security staff to improve communication

B Compliments

- Special thanks to Dr Deepak and Dr Prashant from patients of special ward for good services provided.
- Compliments to Dr Gautham for being very helpful and courteous.
- Compliments given from patients of EICU to Dr Sagar Sinha for help and guidance
- Dr Rakesh and his entire unit complimented by special ward patients for good medical care .
- Very nice medical care and treatment given by all staff of PICU to her daughter compliments by parents of a patient
- 'Nursing staff are angels' comments given from patient of FMW

4 All patient complaints are submitted on incident report forms and action taken informed to the patient and HOD concerned

Annexure Details of feedback analysis and satisfaction index is attached as annexure

Dr Philomena Isaac
Medical Administrator

Copy to Medical Director
Dean
All HOD's Clinical

MAHATMA GANDHI MISSION HOSPITAL

Sector-1, Kamothe, Navi Mumbai – 410 209

Ref.No.: MGMH/KAM/QD/2020/002 **Date: 15 February 2020**

To
Medical Superintendent
MGM hospital

Patients Feedback Report For the Month of December 2019

1 Patients feedback and satisfaction report for the month of December 2019 is submitted

2 Total number of feedbacks received is as under

Month December 2019	**OPD**	**IPD**
Total feedbacks	235	321
Compliments Received	12	33
Complaints	6	1
Suggestions	5	1
Satisfaction index	77.79%	82.79%

3 Actionable points from patient's feedbacks are submitted as under

A Suggestions

- Patient attending orthopedic OPD has suggested that the numbers of counters in the pharmacy should be increasedd.
- A patient from Orthopedics OPD has suggested to improve seating arrangement in the OPD.
- Waiting time for fixing plaster POP should be improved in Orthopedic plaster OPD i.
- Patients from ENT OPD suggested that additional billing counter should be provided.
- A geriatric patient has suggested that services in geriatric OPD is good but the OPD should be on the ground floor.

B Compliments

- Patient from MSW has appreciated the facility of IPD services from admission to discharge.
- PICU patient has appreciated the excellent medical services .
- Excellent treatment provided by Dr. Anirudh as given in feedback by a patient in Special Ward.
- Staff Communication is excellent in cardiology OPD.

C Complaints

- Patient from Medicine OPD has complained that TB, Asthma, cold and fever patients are all waiting in the same area together.
- Maintenance of AC and electrical switches is not working properly in Special Ward.

Most of the feedbacks are complimentary. No written patient complaints received in December 2019, however other minor verbal complaints are actioned by Office of Medical Superintendent and treating doctors concerned.

4 Annexure

Details of feedback analysis and satisfaction index is attached as annexure

Dr Philomena Isaac
Medical Administrator/QD

Copy to

The Hon'ble Medical Director,
The Dean,MGM Medical College, Kamothe,
All HOD's Clinical
Nursing Suptd

MAHATMA GANDHI MISSION HOSPITAL
Sector-1, Kamothe, Navi Mumbai – 410 209

Ref.No.: MGM/KAM/QD/PFR/19 **Quality Dept**
20/11/19

To
Medical Superintendent
MGM hospital

Patients Feedback Report For the Month of October 2019

1 Patients feedback and satisfaction report for the month of October 2019 is submitted as under

2 Total number of feedbacks received is as under

Month OCT 2019	**OPD**	**IPD**
Total feedbacks	235	383
Compliments Received	12	17
Complaints	1	5
Suggestions	4	8
Satisfaction index	81.52	77.93%

3 Actionable points from patient's feedbacks are submitted as under

A Suggestions

- Facilities of food provided in the ward, and pharmacy services needs to be improved,
- Cleanliness and sanitation needs to be improved in the Special Ward
- Cashless facility may be provided for billing
- Doctors of the FMW should improve communication with patients.
- Hot water facility may please be provided for patients in toilets
- Ventilation should be improved in the FMW

B Compliments

- Staff of Ophthalmic ward are very friendly
- Excellent facilities in special ward and available at very reasonable price
- Excellent service given by staff and doctors at the surgery OPD

4 Most of the feedbacks are complimentary. No written patient complaints recieved in October 2019, however other minor verbal complaints are actioned by Office of Medical Suptd and treating doctors concerned.

Annexure
Details of feedback analysis and satisfaction index is attached as annexure

Copy to Medical Director
Dean
All HOD's Clinical
Nursing Suptd

Dr Philomena Isaac
Medical Administrator/QD