सत्यमेव जयते
GOVERNMENT OF INDIA

Hospital Manual
April 2025

Directorate General of Health Services
Ministry of Health & Family Welfare

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सत्यमेव जयते

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
स्वास्थ्य सेवा महानिदेशालय
Government of India
Ministry of Health & Family Welfare
Directorate General of Health Services

PREFACE

The Hospital Manual is an important advisory resource. Hospitals involve a diverse human resource with varied skill sets. Hence it is imperative to have a resource document detailing respective roles and responsibilities of every employee of the hospital. Hospital operation is extremely complex, with multiple departments collaborating to deliver health care commensurate with needs and expectation of the society. In today's era of evidence based medicine, documental guidelines are imperative to steer the departments and hospitals on the right path in an objective manner. The health care organizations are also governed by many statutory norms and Acts and it is important to lay down guidelines for hospitals accordingly.

The Hospital Manual of Directorate General of Health Services which was last revised in the year 2002 and needed revision in view of many changes in health-care technology, laws and standards. Today there is a lot of emphasis on quality and safety in health-care delivery. A system of accreditation and certification is already in place by the Quality Council of India. Adherence to such quality standards is entirely voluntary. However, some basic quality and safety norms must be inculcated in the hospital operations. Hence, revised Hospital Manual has introduced basic elements of quality and quality. The contents in this document has been updated till January 2025.

I am sure this compendium, authored and edited by a very competent team of experts will go a long way in improving the functionality of the hospitals. I may also state that such documents are living documents and need to change. I may also state, if there is a confusion regarding interpretation of anything stated in the manual, saving life/patient's interest will be supreme and override everything else.

(Atul Goel)

Committee for Revision of Hospital Manual

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Members:

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ii. Dr. Neeraj Kumar Gupta, Sr. CMO (HAG- NFU), Dept. of Respiratory Medicine, VMMC and Safdarjang Hospital
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The contribution of all the above officers is acknowledged.

New Delhi
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CHAPTER 1: EMERGENCY SERVICES

1.01 The Emergency is the face of the hospital and reflects the quality and scope of care.

1.02 The emergency department and services should function 24 hours a day throughout the year. The scope of services available or not available should be displayed prominently at entrance.

1.03 No patient requiring emergency care should be refused treatment. The treatment is to be given priority over the paperwork.

1.04 If the required facility/specialty is not available at the hospital, resuscitation and primary care should be provided, and patient should then be referred to an appropriate health care facility in a safe manner.

1.05 The emergency department should have infrastructure consistent with the scope of services provided by the institution.

1.06 Staff available should be well-trained and empathetic to render immediate and appropriate life-saving treatment.

1.07 An efficient and fool-proof communication system should be available in an emergency for coordination between various departments. It is desirable to have a system to coordinate with prehospital services.

1.08 Proper documentation and timely intimation to appropriate authorities regarding Medico-legal cases and foreign nationals should be in accordance with the statutory guidelines.

1.09 The emergency department should be easily accessible to the public and for prehospital services, and should have a designated ambulance bay.

1.10 There should be directional boards and signage in an easily understandable manner and language/ languages leading to the emergency department. They should be well-marked and visible day and night.

1.11 Adequate wheelchairs and trolleys, along with attendants, should be available at the entrance of the emergency department at all times for the safe transport of patients.

1.12 The supportive services for the emergency, like pharmacy, electrocardiogram (ECG), radiology, and emergency laboratory services, should be available 24*7. These services should be easily accessible.

1.13 ECG and required Point of Care (POC) diagnostics may be made available at the bedside as required.

i. Hemoglobin
ii. Blood glucose
iii. Blood gas analysis
iv. PT; APTT
v. Urine analysis
vi. Troponin, Creatinine Kinase - MB
vii. Malaria

1.14 Emergency should have a well-defined triaging policy with defined RED, YELLOW, GREEN, and BLACK zones. Triaging should be executed by identified trained healthcare personnel.

1.15 After triaging, doctors and nurses trained for emergency services should perform an initial assessment of all patients within a defined time frame (as per Emergency Department policy).

1.16 There should be Standard Operating Procedures (SOPs) /guidelines for common conditions of each specialty that are available for uniform patient care management. Relevant algorithms/flowcharts should be available in respective areas for reference of healthcare professionals.

1.17 An officer designated by hospital administration as Head for administration and supervision will ensure the Emergency Medicine Department's smooth functioning and implement various policies, procedures, and guidelines issued by Min. of Health & F.W./Dte. G.H.S. and Medical Superintendent.

1.18 The physical infrastructure should follow the National Building Code for Hospital guidelines. Adequate provision for examination cubicles, doctor's room, nursing station with injection area, Minor OT, Plaster Cast room, One-Stop Centre, Child Abuse and Geriatric abuse care facility, and Police constable room. The resources should meet the requirements of the Clinical Establishment Act 2010 (http://www.clinicalestablishments.gov.in/En/1070-draft-minimum-standards.aspx)

1.19 The area should be conducive for Persons with Disabilities (PwD/Divyangjans). Emergency areas and services should be conducive for PwD.

1.20 There should be designated observation wards as per the scope of services, manned by qualified and trained residents/medical officers who are available around the clock and under the supervision of senior doctors.

1.21 The following ancillary services should be available adjacent to the emergency department.

i. Registration and Admission cum Inquiry office. Reception should generate registration with at least three identifiers, i.e., Name, age/gender/ABHA No./Address/phone no. for all patients, and a Unique Hospital Identification Number (UHID). The same UHID should be used in all revisits.
ii. Radiology services with x-ray and ultrasound
iii. Laboratory collection centre
iv. Pharmacy
v. Waiting area for patients and caregivers
vi. Drinking water
vii. Public conveniences
viii. Cafeteria

1.22 There should be a general parking area, a stretcher, and a wheelchair bay. Exclusive ambulance bay, driver's room, and facility of mortuary van should be there.

1.23 The emergency area should be well-lit and adequately ventilated. An adequate power backup, fire safety, and emergency exit should be provided.

1.24 For efficient emergency services, all types of provisions, medical supplies, and functional equipment to meet the requirements of services provided should be available in sufficient quantity.

Some of the essential equipment and other items required are as follows:

i. 24-hour, preferably centralized, oxygen supply
ii. Facility for suction, preferably centralized
iii. Airways and resuscitation equipment for both paediatric and adult patients
iv. Availability of appropriate crash cart.
v. Neck and spine supports

1.25 Functionality of all essential and lifesaving equipment should be ensured by periodic inspection.

i. Blood pressure monitor (Mercury-free)
ii. Cardiac monitors
iii. Defibrillators
iv. Automated External Defibrillator
v. Laryngoscopes
vi. Thermometer (Mercury-free)
vii. SpO2 monitors

1.26 The availability of Basic Life Support (BLS) and Advance Life Support ambulances (ALS) should be ensured. All resources should be checked regularly.

1.27 Patients requiring observation for a short period should be kept in designated areas under monitoring by specialists, resident doctors, and nursing personnel. Proper records should be maintained for such patients.

1.28 Patients requiring intensive care shall be transferred to the concerned Intensive Care Unit only after confirmation of the availability of beds.

1.29 Specialists on call are to be called to see a patient whenever the C.M.O./Resident doctor requires an expert opinion.

MEDICO-LEGAL CASES (FOR DETAILS SEE APPENDIX- V)

1.30 All medico-legal cases are to be entered in the medico-legal register indicating the patients name, age/date of birth, gender, complete postal address, mobile number if any, identification marks, date, time, MLC No., details of history, examination, investigations done, provisional diagnosis, signature of attending doctor with stamp and designation. Police officials should be informed accordingly. Details of the person who brought the MLC to the casualty be recorded.

1.31 Patients brought to Casualty as brought dead (except old age, natural death Cases) are made MLC cases and sent to the mortuary for post-mortem

examination. Other non-MLC death cases are to be sent to the mortuary for disposal to the next of kin of the deceased.

1.32 All documents, including admission cards, case sheets, forms, etc., of medico-legal cases like accident, trauma, assault, rape, poisoning, unconscious, brought dead, etc., should be stamped as M.L.C.

1.33 Three copies of M.L.C to be made. The original is handed over to the police, and two carbon copies are retained for hospital records for future legal proceedings.

1.34 The particulars of the patient and doctor attending the M.L.C. should be correct with legible handwriting. The Medical Officer should sign, stamp, and write his Name in block letters for future record retrieval.

1.35 The M.L.C. report should be completed as soon as possible except for delays due to unavoidable reasons.

1.36 The Radiological opinion is to be given along with the M.L.C. report to the police only.

1.37 The decision regarding MLCs is the sole discretion of the attending medical doctor.

1.38 In all poisoning cases, vomitus is to be preserved, as well as the clothes considered relevant and necessary.

1.39 Safe custody of the MLC register is the responsibility of the Casualty Medical Officer.

1.40 When the MLC Register is complete (full), it must be sent to the Medical Record Department with a receipt slip to be kept by the responsible officer, Nursing I/c Casualty.

1.41 When a person is brought to the hospital and pronounced dead on arrival by the resident, the nurse assisting the resident will wrap the body and do the rest of the routine, leading to its eventual disposal to the mortuary or to the police.

RECORDS

1.42 Availability and maintenance of the following records should be ensured.

i. Patient's attendance record (Name, age, gender, complete postal address, time)
ii. Observation and follow-up record.
iii. Referral record within and outside the hospital.
iv. Treatment record.
v. M.L.C. record with all the diagnostic and investigation results.
vi. Log Book of vehicles.
vii. Attendance Record of all categories of staff
viii. Duty roster of Doctors, Specialists (Nodal Officer)
ix. Daily record of administrative problems and their management.
x. Adverse event and incident report

DISASTER PLAN

1.43 A disaster management plan with provision for surge capacity should be available to meet the requirements of the disaster situation. The plan must be rehearsed and reviewed periodically to ensure its effectiveness.

1.44 There should be a disaster management committee as per guidelines (https://nidm.gov.in/PDF/pubs/NDMA/18.pdf).

1.45 In case of disaster, the disaster management protocol should be initiated by the officer in charge of the Emergency /Nodal Officer Casualty as follows:

i. On receiving the message, the Head of the Institution and Medical Superintendent are to be informed.
ii. Mobilisation of disaster team members and other ancillary staff is to be done.
iii. An Advanced trained team will be sent in ambulances to the disaster site if called for. Ambulances should be equipped with first aid and life-saving equipment.
iv. Flexible space/beds (surge capacity) should be ensured to accommodate patients and relatives.
v. The availability of drugs and other supplies is to be ensured.
vi. The patient transport facility is to be augmented within the organization.
vii. Communication within and outside the hospital should be made effective.
viii. All available information about the disaster victims to be communicated to competent authority (state/central level)
ix. Patient documentation is to be established.
x. Cooperation from adjoining hospitals to be taken if required.
xi. Emergency Control Room Officer (ECRO) should try decentralizing patients to their respective departments.
xii. Only the designated Public Relations Officer should communicate with media personnel.
xiii. An inquiry counter is to be opened to provide information about the disaster victims to their relations or friends.

DUTIES OF STAFF IN CASUALTY:

In addition to the defined responsibilities, all the staff members posted in the department are required to perform any other suitable duty assigned by superior authority in the interest of patient care.

Responsibilities of Head, Department of Emergency Medicine/In-charge (Casualty):

1.46 The head of the Department of Emergency Medicine/In-charge (Casualty) has a pivotal role in managing Casualty and emergency services.

1.47 Head, Department of Emergency Medicine/In-charge (Casualty) will be responsible for overall human resource management of all categories of staff.

1.48 He shall take a supervisory round to see that all equipment is in working order and all essential supplies are available.

1.49 He will supervise the maintenance of all documents, especially the Medico-legal and daily registers.

1.50 Terms and conditions for utilization of imprest money may be developed at institutional/hospital level. Head of Emergency shall monitor imprest money spent in emergency for patient care and get it replenished at the earliest.
1.51 Maintenance of sanitation and to follow the guidelines for hazardous biomedical waste management in the Department.
1.52 Examine critical patients as and when required.
1.53 Responsible for training/ reorientation classes of all categories of personnel working in the emergency department.
1.54 Drill for emergency management/Disaster action plan should be rehearsed on a regular basis and corrective actions including trainings should be done.
1.55 He should have a congenial personality, adequate leadership, and managerial skills.

Casualty Medical Officer

1.56 He/she will be responsible for emergency medical care services.
1.57 He/she will supervise the working of Medical Officers, Senior and Junior residents posted in casualty.
1.58 He/she will be responsible for Medico-Legal formalities and records.
1.59 Death in casualty to be countersigned by Casualty Medical Officer in regular service or designated officer. See 3.58

Emergency Control Room Officer (ECRO) / Nodal Officer Casualty

1.60 He/she will be in administrative charge of emergency services beyond working hours.
1.61 In the Case of disaster, the Disaster management protocol should be initiated by Emergency Control Room Officer (ECRO)/Nodal Officer Casualty.
1.62 The Emergency Control Room Officer (ECRO) should try to decentralize patients to their respective departments.
1.63 ECRO will be the custodian of imprest money and will have the authority to spend it when needed.

Specialist

1.64 He/she will be on regular duty or on call duty in Casualty as per order of the Head of Institution or Department.
1.65 He/she will give expert guidance in the management of the patient as and when required.
1.66 He/she will put his/her notes on the case sheets whenever he/she is called or consulted and approve the plan of care. Telephonic instructions are to be avoided as far as possible; but when given, it should be recorded by the Sr. Resident in the sheet with the date and time and full signature and counter-signed by the specialist at the earliest.
1.67 Surgical specialists on call will supervise or perform surgery whenever required.
1.68 He/she should guide his/her subordinate staff in taking histories and examining medico-legal cases.

1.69 He /she will train the Resident doctors to handle all types of emergency patients.

Senior Resident

1.70 Senior residents of each specialty shall be available physically in the emergency at all times.

1.71 They shall examine all patients and provide prompt, appropriate treatment.

1.72 He/she shall ensure medication reconciliation for all patients. Medication reconciliation entails obtaining and recording the history of medications already being taken by the patient to avoid duplication as well as drug-drug interactions in the interest of patient safety. Junior residents shall follow the practice.

1.73 He/She will consult with a specialist for all serious patients.

1.74 He / She will transfer the patient to ward /operation Theatre/ICU and will consult specialist whenever deemed necessary

1.75 He/ She will cooperate with the Casualty Medical Officer to complete the patient's Medico-Legal records.

1.76 Senior Resident shall ensure that history, examination, laboratory investigations and provisional diagnosis followed by care plan are written on case sheet. The proper maintenance of hospital records is his responsibility.

1.77 Resident/clinician who has last managed the case shall be responsible for certifying the death of a patient. The cause of death shall be confirmed by the Clinician at the earliest possible.

Junior resident

1.78 He/she will perform rotational duties in the Casualty and Emergency Department.

1.79 He/she will carry out treatment as advised by the Senior Resident/Medical Officer.

1.80 He/she will write the patient's case sheet in neat and legible handwriting without missing out on any essential relevant finding.

1.81 He/she will perform minor operative procedure under guidance of Senior Resident.

1.82 He/she will do dressing under the guidance of the Senior Resident.

1.83 He/she will take rounds of short observation patients along with his Senior Resident.

1.84 He/she will perform the work assigned to him during the rounds.

Assistant Nursing Superintendent (ANS/ Sister In-Charge)

1.85 She is responsible for the efficient working of the emergency department.

1.86 ANS will judiciously allot staff nurses for various points of time and supervise their work, especially at times of mass casualties/disasters.

1.87 ANS will prepare the duty roster of various staff support staff including Nursing attendants/ Sanitation/MTS working in casualty and ensure their presence. Day to day absent report to be sent to the concerned authority.

1.88 ANS are responsible for maintaining sanitation and cleanliness of wards through support. Special care should be taken of MLC/critical patients to ensure that the patients are supervised.

1.89 She will ensure adequate of stock all essential drugs, I.V. Fluids, consumables, and maintain a proper record. She will ensure that equipment is in working order.

1.90 She shall perform any other suitable work assigned by the superior authority in the interest of patient care services.

1.91 There should be an atmosphere of harmony and coordination amongst all levels of staff working in the casualty.

1.92 Nursing personnel should be active, alert, and sympathetic while discharging their duties.

Nursing Officers

1.93 She/he will attend to the patient with the utmost professionalism, sincerity, and devotion and in accordance with the patient care guidelines and advice of the treating doctor.

1.94 Nursing personnel will assess all patients within defined timeframe and document a nursing care plan.

1.95 Nursing Personnel will make the bed, feed the patient, administer injections, medicine, etc., and arrange for investigation and diagnostic procedures for the patients with the assistance of the Nursing Attendant.

1.96 She will administer oxygen, catheterization and assist in wound dressing of the patients.

1.97 She will maintain a record of vital signs including pulse, blood pressure, temperature, respiratory rate and pain assessment as well as Intake/Output, medications, and injections ordered by the treating doctor with date and time.

1.98 He/she will assist the doctor in sample collection, venesection and other procedures.

1.99 Sanitation workers and nursing attendants will provide full cooperation to the nursing personnel by providing bedpans and urine pots to the patient.

1.100 Nursing personnel should be proficient in computer and IT technology, handling the HMIS and computerised record keeping.

1.101 Nursing personnel should be trained in at least Basic Life Support.

1.102 Nursing Personnel will seek the guidance of Nursing superintendent/ ANS and apprise her of day to day problems.

Nursing Attendant/ Ward Ayah/ Boy/ Porters

They will have following responsibilities:

1.103 Dusting of the casualty department and will also assist the Nursing Personnel for disinfection of the rooms.

1.104 Assist Nursing Personnel in patient care.

1.105 Getting the indent from Stores and also bringing sterilized items from C.S.S.D.

1.106 Taking referral calls to various departments.

1.107 Providing first-aid to patients when required.

1.108 Transferring patients from the casualty department to other supportive departments for investigations and diagnostic procedures.
1.109 Assisting Nursing Staff in packing the dead body and its transportation to the mortuary.
1.110 Porters will be prompt in carrying out his duties in transferring the patient to the casualty department and any other area as directed.
1.111 They should be polite towards patients and their attendants.
1.112 They will perform any other work assigned to him by his/her superiors.

Security Guard

1.113 He/she should be polite, tactful, sympathetic, and courteous under all circumstances.
1.114 They shall perform duties as per roster prepared by Security Officer/CMO In-charge casualty.
1.115 They will manage the crowd and regulate the flow of patients or their attendants.
1.116 They will be responsible for the security of the area under his charge and are answerable to CMO (Casualty) and protect health care professionals and property in case of any untoward incidence.
1.117 They should be trained in first aid, BLS, and disaster management skills, including fire management.
1.118 He will be on duty near the entrance or casualty according to assignment.
1.119 He will assist in transferring the patient from the ambulance/car to the Casualty or other departments on a stretcher or wheelchair/trolley.
1.120 He will perform any other duty as required by his supervisor/security officer

Sanitation Worker

1.121 He will keep the area neat and clean
1.122 He will give urinals and bedpans as and when required by the patient by the patient after thoroughly cleaning and disinfecting with disinfectant/antiseptic lotion.
1.123 He will be cleaning the soiled linen with water and, after treatment with 1% bleach solution or sodium hypo chloride, will send it to the laundry for further washing of linen.
1.124 He will take all personal precautions while handling infections and bio-medical waste in the hospital.
1.125 He will be courteous to patients and their attendants.
1.126 He will do any other duty assigned by CMO (Casualty).

CHAPTER 2: OUT PATIENT DEPARTMENT

2.01 The outpatient department (OPD) is a very important wing of the hospital, which visited by a large section of the community. The care and attention provided to them go a long way, building up the reputation and confidence of the society in the Hospital. The services of the OPD should be defined and provided in accordance with the needs of the community.

2.02 The OPD should provide promotive, diagnostic, curative, rehabilitative, and palliative services. All services are available and not available should be English.

2.03 OPD should be located near the entrance from the main road. There should be direct access to the OPD area from the road for patients in ambulances, wheelchairs, and personal vehicles.

2.04 All OPD services in various disciplines, including special clinics, should be easily accessible to the patients. OPD services should be made accessible to the disabled/ Divyangjan with provision as per standard accessibility norms as per RPwD Act. (https://cdnbbsr.s3waas.gov.in/s3e58aea67b01fa747687f038dfde066f6/uploads/2023/11/2023112913472814 24.pdf)

2.05 Sufficient numbers of wheelchairs/trolleys are to be made available along with adequate manpower, i.e., assistant (nursing attendant/stretcher bearer-MTS at the entrance of OPD).

2.06 Manned help desk should be available to guide the patient for information and directions to various services available.

2.07 All hospital employees must be in the prescribed uniform of the staff with ID cards/ name badge.

2.08 Registration hours for morning and afternoon services and special clinics should be displayed prominently.

2.09 Patients and attendants must follow the queue system. The electronic call system should preferably be available for Queue Management.

2.10 The OPD area should have prominent displays and directional signage in a bilingual format for services available, along with timings and days of the week when such services are available. All OPD rooms should be numbered for the patient's convenience, and the whole area should be mapped appropriately.

2.11 Institution should provide priority in registration to the following groups;

i. PwD
ii. Senior Citizen
iii. Pregnant ladies
iv. CGHS beneficiaries
v. Institutional beneficiaries
vi. OPD patients referred from one department of healthcare facility to another

2.12 Provisions for Online/Digital registration facility should be available. A separate counter shall be available for those who have registered through the

Online Registration system to print their OPD card. There should be an attempt to make OPD registration solely online.

2.13 Timings for receiving outpatients department/indoor patients for laboratory and radiological investigations as well as pharmacy should be prominently displayed at respective areas.

2.14 Each patient registered in the OPD shall be given a Unique Hospital Identification Number (UHID) through HMIS. This ID will identify the patient across the hospital and all services and should figure in all records about the patient. OPD records must have details like card mentioning the date, UHID No. Patient Name, father/mother/ husband name, age, gender, ABHA ID No., mobile number, address and room number of attending doctor, unit & Name of OPD and its unit in charge, etc. Hospitals should maintain OPD registration records, preferably electronically.

2.15 There should be provision of emergency help desk number/s to assist in case of adverse drug reactions.

2.16 If a patient visits the OPD inadvertently on the wrong day, he must not be returned but seen and treated. He must be then instructed to consult the same doctor which he visited initially.

2.17 Patients may be prescribed medicines per the OPD medicines formulary list. The list of medicines available for OPD patients must be circulated to all the attending doctors periodically for their knowledge. This list should be periodically reviewed to update it.

2.18 Disbursal of special medicines should be as per the hospital policy.

2.19 Dispensing of medication including antibiotics should be as per disease condition and institutional guidelines. Institutions must establish guidelines for this purpose.

2.20 List of the available drugs should be displayed in the Pharmacy and should also be shared with the clinicians for reference.

2.21 Hospital pharmacy should ideally be functional 24*7. In case of any limitation, timing should be displayed prominently.

2.22 Applicable user charges of diagnostic procedures or any other service should be displayed. Mandatory provision for digital payments should be available.

2.23 Medical certificate and Fitness certificate book should be securely placed and made available to the medical officers/ specialists as and when required.

2.24 After the registration, initial assessment of patient shall be completed in a stipulated time period as per the hospital policy.

2.25 Referral of patient to another department must be done as per the referral guidelines issued by Dte GHS, MOHFW (2024) (Appendix- VII)

2.26 Cases requiring immediate attention must be seen by a senior doctor and shifted to the appropriate care area.

MINOR OPERATION THEATRE

2.27 Minor O.T. should be situated in the premises of the OPD and should have restricted entry and appropriate zoning according to infection control guidelines.

2.28 Wherever possible, two minor O.T.s should be there, one for septic and the other for clean cases.

2.29 Facility for local anaesthesia/block and oxygen supply should be available in Minor OT.

2.30 Only the privileged/authorized person should perform minor surgical procedures under supervision.

2.31 Consent for OPD procedures shall be taken authorized person in the language understood by the patient and retained by the nursing staff of Minor O.T.

2.32 Proper entry of all minor surgical operations/diagnostic tests performed must be entered in the register for record.

2.33 Minor operations are to be performed on a first-come, first served basis, and coordination is to be done by the Sister-in-charge on duty. However, priority may be given on clinical grounds or as advised by the Doctor on duty.

2.34 Facilities for patient resuscitation including a crash cart should be available.

INJECTION ROOM

2.35 The injection room should be situated near the casualty or OPD block, where doctors' services can be availed in case of an adverse event due to injection.

2.36 All injections/vaccines requiring test-doses must be carefully watched by the nursing staff and given sufficient time. All adverse reactions shall be recorded on the OPD and reported to hospital authorities.

2.37 A crash cart including all lifesaving drugs, oxygen mask, intravenous fluid bottles and infusion sets should be available in the injection room.

2.38 Inventory of all the injections shall be maintained for audit purposes. Look-alike sound-alike (LASA) and high-risk medicines should be stored separately.

2.39 Entries of injections given are to be made in the patient's record and in the register maintained in the room for preparing monthly reports. Follow-up instructions should be documented and explained to patients.

2.40 Safe injection practices should to be followed. (https://www.who.int/teams/integrated-health-services/infection-prevention-control/injection-safety). Multidose vial policy should be practiced as per the Institutional policy.

2.41 Standard precautions are to be followed per WHO guidelines by all healthcare workers when coming in contact with a patient's blood, body fluid, or tissue.

2.42 Biomedical waste shall be disposed of as per the guidelines

PHARMACY

2.43 Pharmacy of the Hospital should be located in or close proximity to the OPD of the hospital.

2.44 Inventory of the dispensed drugs shall be maintained, and reconciliation shall be done daily. Drugs from the pharmacy should be dispensed on a First-in, First-out basis.

2.45 Surprise check of stock of drugs to be done periodically by the Medical Officer-in- charge of the dispensary.

2.46 No loose drugs/tablets/capsules shall be dispensed.

2.47 Drugs should be stored in the dispensary according to prescribed guidelines. Look-Alike and Sound-Alike (LASA) drugs shall be stored separately.

2.48 There should be a list of identified High-risk drugs which shall be stored in a safe manner.
2.49 Drugs with short expiry and expired drugs should be brought to the notice through the Medical Officer in charge of the Pharmacy. They should be managed by policy for short expiry and expired medicine.
2.50 A list of medicines with quantity in stock and expiry date should be circulated to all the doctors quarterly for their information.
2.51 All prescriptions by the doctors shall be Signed, Named, Timed, and Dated with their stamps.
2.52 The doctor's prescription must be honoured.
2.53 All prescriptions should be in consonance with prevailing guidelines issued by National Medical Commission from time to time.

RADIOLOGY DEPARTMENT

2.54 There should be proper information and directional signage from the OPD.
2.55 Various radiological facilities available in the Department should be displayed in bilingual format. The functional status of the equipment should also be displayed for the patients' knowledge and the expected repair date.
2.56 The work of the Department is to be organized systematically with the segregation of emergency patients, outdoor patients, and indoor patients if it is a shared facility. Emergency X-ray rooms and routine X-ray rooms should be separate to avoid unnecessary delays for patients requiring emergency treatment.
2.57 For routine outdoor patients, policy of first come, first served basis should be followed.
2.58 X-Ray requisition form should be filled with all details and signed by the Senior Resident or his superiors and stamp of the officer recommending radiological investigation.
2.59 Appointment system should be followed for special radiological investigations.
2.60 Approved charges for radiological investigations shall be displayed and levied before the investigation. Charges may be waived as per guidelines and recommendation of Head of Unit.
2.61 Turn-around time for various radiological investigations should be displayed and communicated to the patients/caregivers.
2.62 There should be a protocol for screening patients for safety and risk before imaging. Whenever an X-ray of a female has to be taken, a female Nursing Officer/attendant must be present at the time of the X-ray. The date of the last menstrual period should be recorded for females in the childbearing age group.
2.63 Statutory signage as prescribed under the PC-PNDT Act and signage cautioning pregnant women should be prominently displayed in bilingual format.
2.64 A changing room /preparation room with adequate privacy for patients undergoing radiological procedures should be made available.
2.65 Proper stock of equipment and X-ray films to be maintained.
2.66 Valid AERB registration certificates should be available with In-charge and displayed.

2.67 All major equipment should be under maintenance contract for smooth functioning.
2.68 The department is responsible for getting the equipment repaired as soon as possible.
2.69 Record of all MLC X-rays shall be kept by Department under lock and key.
2.70 Daily work record registers to be appropriately maintained for statistical purpose.

LABORATORY SERVICES

2.71 Sample collection area should be available in the OPD area or nearby.
2.72 Laboratory tests under scope of services should be displayed.
2.73 Urine sample collection bottles for routine and culture examination should be provided to the patients. Patients shall be provided guidance on the correct method of urine sample collection with the help of educational material/displays.
2.74 Laboratory investigations shall be done at the advice of the authorized medical professional.
2.75 The designated clinician may authorize special biochemical investigations as per Institutional policy.
2.76 Report turnaround time should be displayed outside the laboratory and communicated to the patients.
2.77 Barcoded labels with UHID numbers should be provided at the registration counter for labelling samples.
2.78 Records should be maintained for statistical purposes as well as audits.
2.79 Charges levied for specific investigation should be prominently displayed and collected before investigation. Charges may be waived as per Institutional policy.
2.80 Periodic quality control measures should be taken to avoid erroneous laboratory reports, and remedial measures should be taken well in advance if required.
2.81 Refresher courses are to be organized for laboratory technicians and should be periodically rotated in all labs for variable work experience.
2.82 Stock register for equipment, consumable and non-consumable stores shall be maintained and supervised by the Medical Officer assigned the responsibility.

PHYSIOTHERAPY, OCCUPATIONAL THERAPY & REHABILITATION SECTION

2.83 Available services should be displayed prominently
2.84 Cases are to be seen by appointment only when a limited number of patients visit the Department.
2.85 Where many patients visit the hospital, work is to be systematically organized amongst the physiotherapist/occupational therapist and the doctors.
2.86 Proper records to be maintained by the department.
2.87 Equipment stock register to be maintained, and equipment should be functional.

SOCIAL WELFARE: HELP DESK

2.88 Social workers and social guides/ counsellors are to be appointed in the Hospital if the posts exist.

2.89 Non-Government social organizations should be actively involved in the Hospital to help the poor and needy patients.

2.90 Social workers should act as liaisons between patients and doctors.

2.91 Social workers should be able to guide patients about Government policies, including Ayushman Bharat.

2.92 The Medical Social Welfare Department shall coordinate the issue of Rail concession passes to beneficiaries like Persons with Disability and patients suffering from cancer and tuberculosis as per guidelines of the Government.

DOCUMENTATION

2.93 The following documents are to be maintained by the Sister Inc-harge of the OPD:

i. Stock inventory- consumables, movable, immovable, perishable
ii. Expendable stock register.
iii. Linen inventory.
iv. Equipment inventory. She will coordinate early repair or replacement of non-functional equipment.

PATIENT WELFARE FACILITIES

2.94 Spacious and well-ventilated hall with chairs to be available near the registration counter;

2.95 Potable drinking water and a neat and clean toilet facility to be available for patients or their relatives.

2.96 Adequate child-care facilities including feeding rooms should be available in/near paediatric OPD.

2.97 Prayer room may be made available if space resources permit.

2.98 Provision of Patient experience feedback should be available in electronic and physical form. Complaint/suggestion boxes to be fixed for receiving complaints and opened regularly, at least once in fortnight.

2.99 Citizen Charter, Patients' rights and responsibilities should be prominently displayed in bilingual language.

2.100 The grievance redressal procedure should be prominently displayed in bilingual manner.

CHAPTER 3: WARD MANAGEMENT

3.01 Admissions through OPD or otherwise to the hospital shall be centralized. General consent of authorized person should be taken at admission. The consent form shall be bilingual i.e. in the language the local population understands and English.

3.02 Patients coming alone (unaccompanied by attendant/relative) and who need admission, should be admitted on his/her signature (if he/she is a major) and the family may be intimated.

3.03 In case of a shortage of beds, the patient/attendant should be advised.

3.04 All indoor patients shall wear an identification band mentioning their name, gender, age, and UHID.

3.05 Initial patient assessment shall be done per institutional policy and documented by the doctor and nursing staff on duty. A pre structured initial assessment form may be encouraged to bring uniformity.

3.06 The initial assessment shall also include pain assessment, nutritional screening, and history of drug allergy.

3.07 The initial assessment/evaluation shall result in a documented initial diagnosis, treatment goal, and plan of care. The Consultant in charge of the patient shall countersign the initial assessment and plan of care within 24 hours.

3.08 The patient shall be re-assessed at appropriate intervals by both doctor and nurse and shall be documented in the medical case sheet.

3.09 The medication order shall be written legibly as per guidelines issued by National Medical Commission from time to time, and at the defined location of the medical case sheet. There shall be documentation of medication administration by nursing staff in the medical case sheet.

3.10 All the entries/ notes shall be signed, named, dated, and timed.

3.11 A Temperature, pulse rate, respiration rate and pain assessment to be charted by the attending nurse while admitting the patient and shall be part of initial assessment done by nurse.

3.12 Display of Instructions in the Wards:

i. Visitor timings.
ii. Food distribution timings (1. Breakfast 2. Lunch 3. Evening Tea 4. Dinner)
iii. No valuables should be left with the patients.
iv. Hospital is "No- smoking zone".
v. Patient's rights and responsibilities.
vi. Complaint and feedback box.
vii. Fire exit plan.
viii. Help the hospital authorities to "Keep the Hospital Clean."
ix. Biomedical and Solid waste management guidelines

3.13 The seriously ill/vulnerable patients should be escorted to his/ her bed.

3.14 The nursing staff shall maintain patient awareness about his/ her rights and responsibilities upon admission.

3.15 Transfer of a patient to another ward in the hospital shall be done only under the orders of the attending doctor, according to the transfer SOPs of the hospital 2024 (Appendix-VII).

3.16 On transfer of the patient within the same hospital, his/ her medical records, medicines, and belongings shall be sent to the area concerned. A seriously ill patient who needs to be transferred to another hospital, safe transport of patient in ambulance with all supportive line of treatment.

3.17 Admissions, discharges and transfers preferably be done through HMIS.

3.18 A senior resident/ specialist/ consultant may give Verbal orders regarding the treatment of the patient. However, the same shall be documented in the medical case sheet and countersigned by the doctor, who gave a verbal order, as soon as possible.

3.19 Senior resident/ Specialist/ consultant should at least take two routine rounds of his ward- one in the forenoon and one in the afternoon. On emergency days and for emergencies, he will visit the patient as often as required.

3.20 Revised treatment must be recorded every day in the patient records.

3.21 The sister in charge shall ensure the cleanliness and disinfection in her ward, which shall include cobweb removal, bathroom & floor cleaning (wet mopping and washing, etc.), sinks, walls, and windows by housekeeping staff. The cleaning frequency and the disinfectant to be used shall be defined in consultation with the hospital infection prevention team.

3.22 The sister in-charge shall also ensure that the diets are given to the patients as prescribed by the treating doctor or the dietician.

3.23 The nursing staff should ensure that laboratory and radiological investigations, as advised by doctors, are completed and that the reports are ready for perusal at the earliest possible time. They should confirm the timings Prescribed by the chief of laboratories and X-ray departments for sending samples and patients.

3.24 Attending resident/doctor shall record all reports in the chronological order.

3.25 Nursing staff shall give sub-cutaneous/intramuscular/ intravenous injections and follow safe injection practices. The high risk and narcotic medication shall be given under medical supervision.

3.26 Nursing staff/staff must always be present to help the specialists/residents with any minor surgery/procedure/stitch removal/dressing of wounds, etc., in the ward/treatment room/side rooms.

3.27 Adequate privacy should be ensured for the patients while minor operative procedures or dressing or special treatment are done in the ward.

3.28 Preparing the patients for the operation is the responsibility of the nursing staff. Male patients will however be prepared by the male nursing officer or orderlies attached to the ward. Patients should be prepared for operation twice, once on the previous evening and once on the morning of operation day. For an operation on bones and joints, preparation as per the guidance by the treating surgeon should be done. Preparation of patients can vary as and when required based on the advice of the resident/specialist.

3.29 Resident should take special precautions to prevent surgical site infection, particularly in the case of implant surgery, burns, or other serious surgical cases

that necessitate prolonged stay in the hospital. The hospital shall prepare the SOP in consultation with the hospital's infection prevention team.

3.30 All wards must ensure availability of items required for segregation and disposal of Bio- medical waste as per current BMW guidelines of CPCB. Examples are colored-coded bins, needle destroyers, PPE, disinfectants, etc. The nurse in charge shall ensure the availability of a spill kit with defined content and replenishment.

3.31 Newborn babies should be properly identified and associated with their mothers in the relevant case records by the nursing staff. https://nhm.gov.in/images/pdf/programmes/child-health/guidelines/NSSK/NSSK-Resource-Manual.pdf.

3.32 Hospital shall provide point of care tests as per the list decided by the Health care facility according to needs and resources.

3.33 Cases of infectious and contagious diseases should be admitted and treated in a separate isolation ward/ room, if available. If this is unavailable, such cases should be transferred to the nearest infectious diseases hospital. The HIV Patients should be treated as General Patients with standard precautions. Guidelines issued by NACO in this regard shall be followed. https://naco.gov.in/sites/default/files/HIV_and_AIDS_Policy_for_Establishments_2022_1.pdf and https://naco.gov.in/sites/default/files/HCTS%20Guideline%202024_High%20Res%20shared%20with%20SACS%20on%203rd%20Dec%202024%20by%20NC.pdf

3.34 The list of infectious diseases and SOP for their prevention shall be coordinated with the Hospital infection prevention team e.g., SOP on contact precaution, droplet precaution, and airborne precaution.

3.35 Ward management is the undivided responsibility of ANS and senior nursing officer. The senior nursing officer of an appropriate level is designated to take overall charge of management and administration of specific ward.

3.36 ANS/ senior nursing officer will ensure the availability of drugs and consumables and equip the ward with adequate wheelchairs, oxygen, cylinders, patient trolleys, other lifesaving equipment, etc.

3.37 ANS will accompany during Specialist/H.O.D. rounds. Nursing officer/ senior nursing officer will accompany the senior residents/ specialist on their rounds and comply with their instructions.

3.38 Nursing officer should prepare the diet sheet as per doctor’s advice and will ensure proper distribution of food to the patients.

3.39 ANS/ senior nursing officer shall ensure that the departments have adequate patient furniture and fixtures as per load and service provision

3.40 ANS/ SNO should establish ward routines. This plan should include delegation of duties, availability of duty roster, getting the work done in an efficient way, implementation of policies and manual, orientation of new personnel, writing and giving reports, handling telephone calls, supervision, teaching, etc.

3.41 Safe and comfortable environment for patients and service providers shall be assured. This includes noise prevention, good ventilation, cleanliness of the ward, good housekeeping, etc.

3.42 Senior nursing officer shall ensure the availability of linen and use standard procedures for handling, collection, and transportation of linen. The linen register should be maintained.

3.43 ANS/ SNO should ensure that all healthcare workers in the ward adhere to infection control and BMW policies.

3.44 ANS/SNO of the respective Department should supervise or monitor the work of the nursing officer and ensure that nursing care is delivered as per SOPs.

3.45 ANS/SNO should ensure that all adverse drug reactions and transfusion reactions of their respective Department is documented and reported to the concerned.

3.46 ANS/SNO should ensure that all incidents in the ward are reported to the concerned Quality team.

3.47 There is an established procedure for forecasting, indenting and storage of drugs, consumables and equipment.

i. All drugs and consumables are indented by a designated nursing personnel, and the same is countersigned by HOD/competent authority as per hospital policy.
ii. Medications are labelled with name and expiry date and stored in a clean, safe, and secure environment by incorporating the manufacturer's recommendation(s).
iii. Senior nursing officer should maintain stock and expenditure register of drugs and consumables
iv. Sound inventory control practices like Vital essential desirable (VED), Fast moving, slow-moving, normal moving (FSN), First in, first out (FIFO), etc., should be followed to guide the storage of the medications in all patient care areas. A list of available medications should be displayed.
v. Look-alike and Sound-alike medications are identified periodically and stored physically apart from each other. The LASA list should be displayed.
vi. The list of emergency medications is defined, displayed, and stored uniformly. A crash cart stores these medications, the rows and drawers are defined, and the daily checklist is maintained.
vii. Emergency medications are always available and replenished in time. Emergency medicines should never be out of stock.
viii. High-risk medications are identified and displayed, and different concentrations of the same drugs are stored physically apart from each other.
ix. The facility ensures management of expiry and near expiry drugs. Near-expiry drugs should be stored separately.
x. The Narcotic and psychotropic drugs shall be stored under double lock and key to ensure their rational usage, and proper record of their uses, administration, and disposal shall be maintained.
xi. Processes/SOPs for maintaining potency of vaccines should be followed and recorded.

https://mohfw.gov.in/sites/default/files/Unit4ColdChainandLogisticsManagement.pdf

xii. It should be an endeavour to avoid stock outs of all vital and essential drugs.

xiii. Senior designated nursing personnel should ensure the availability of functional equipment and instruments for examination and monitoring.

xiv. Senior designated nursing personnel officer should ensure timely corrective breakdown maintenance and preventive maintenance of the equipment. Maintain a record for the same.

xv. The organization could conduct annual audits /physical verification at regular intervals (as defined by the organization) to verify the stock and detect instances of loss or theft.

3.48 Maintaining the privacy, confidentiality, and dignity of patients and related information.

i. Senior nursing officer/ nursing officer is responsible for providing privacy and confidentiality to every patient, especially of conditions with social stigma, and also safeguards vulnerable groups.

ii. They must ensure staff behaviours are dignified and respectful while delivering the services.

iii. Confidentiality of patient records and clinical information should be maintained. MLC case records are kept in a secure place beyond the access of the general public.

iv. Ensure all medical records are completed and handed over to the MRD section promptly as per hospital policy.

3.49 Documented policies and procedures are used for registering and admitting patients' registration and admission process.

i. The nursing officer/ senior nursing officer on duty provides the bed to the patient on presentation of the admission papers and should escort the critically ill patient to his/her bed. The nurse concerned should complete all admission procedures as per hospital policy.

ii. Nursing Initial assessment and reassessment should be done within the time frame and documented as per the hospital policy.

iii. The patient and the family are oriented to the ward, the patient's rights & responsibilities, and hospital rules

iv. Admission is informed to the resident doctor of concerned department/unit.

3.50 Transfer (in an out) and patient referral as per policy shall be done per Dte' GHS guidelines from time to time.

i. Transfer of the patient is with the agreement of the Consultant under whom the patient has been admitted, and the patient has been clinically assessed and declared safe for transfer.

ii. During transfer or referral, accompanying appropriate staff should accompany according to the patient's clinical condition.

iii. The patient's healthcare record and treatment summary should accompany the patient on transfer. This information must be provided by

a Registered Nurse with direct responsibility for the patient and given to a Registered Nurse.

iv. Appropriate mode of transport, privacy, and patient dignity is maintained during transfer.

3.51 The nurses' change of shift and change of unit handover should be standardized and documented. Information shared should include the patient's current condition, recent changes in the condition, ongoing treatment, and complications. Situational briefing techniques such as Situation Background Assessment & Recommendation (SBAR) may be used.

3.52 Discharge of the patient as per documented policies and procedures

i. The hospital defines discharge time and monitors delays, if any.

ii. The resident doctor prepares a detailed discharge summary, and the nurse should hand over the discharge summary with all reports to patients/relatives and get signatures from the patient/family.

iii. Proper information about the discharge medication to be given by the nursing officer.

iv. Information on red-flag signs, and when and how to obtain emergency should be documented and explained to patient/caregiver.

v. The concerned nurse should inform the discharge of MLC cases to the police.

3.53 Discharge of destitute and non-ambulatory patients without relatives should be informed to the social workers and police, and they are sent to the proper place per the hospital policy.

3.54 The patient's right to refuse treatment and his/her request to leave the organisation is respected, the declaration of the patient/attendant is to be documented in a proper format and registered by the nursing staff, and a LAMA summary with all reports is handed over to patient/family as usual.

3.55 All the files of discharge/ death/ abscond/ LAMA patients must be handed over to the MRD staff within 48hrs as per the hospital policy.

3.56 The case file which belongs to patient on leave should be kept in ward for 24hrs and the same should be reported to competent authority after 24hrs for the further action if the patients fails to report back.

3.57 The nursing officer should observe that a patient has absconded when the patient is not found on his/ her bed for more than six hours. The unit duty doctor must be informed, and a detailed report regarding the patient, any hospital document/property that is missed, and the time since he is missing is mentioned and declared as absconded. The same should be informed to the police post.

3.58 Care of patient during the dying process and death.

i. Nursing officer should provide end of life care in a compassionate and considerate manner as per the hospital guideline.

ii. The nurse should present at the bedside and support the patient and family throughout the dying process. An attempt should be made to respect the religious practices if possible.

iii. It is the duty of the attending resident to pronounce the death of a patient and break the bad news with counselling and empathy; the nurse should be present there.

iv. The nurse should ensure appropriate care and packing of dead body is to be followed. Then, the dead body can be handed over to the identified family with a copy of the death slip and obtain a signature in the register as per policy.

v. In the case of MLC, Police Officer to be informed by nursing personnel on duty and the body should be shifted to mortuary as per hospital guideline for further necessary action.

3.59 A dead foetus known to be advanced or beyond the 20 weeks of gestation will be treated and handed over as a full-term stillbirth. Proper identification should be established and documented as per hospital policy before handing over to relatives.

3.60 All cases in which death occurs under unexplained or unnatural circumstances must be treated as medico-legal cases and established procedure should be followed.

3.61 Care givers may be counselled for potential organ donation in a eligible dying patient.

3.62 In case the relatives are not available at the time of death, the nearest relative of the patient will be informed of the death by a nurse or the resident promptly and appropriately.

3.63 Personal articles of the deceased will be handed over to the caregiver.

3.64 The dead body should be washed. The chin should be tied so that the mouth is closed. Eyes should be closed. The body should be dressed in the patient's clothes and wrapped in a morgue sheet. Two tags giving the name of the patient, hospital case sheet reference, and the date and time of death should be tied to the body, one around the neck and the other around the wrist. The nurse attending to the patient at the time of death is responsible for the proper wrapping and disposal of the body at the mortuary. Non-recoverable morgue sheets may be written off by hospital administration.

3.65 Unattended body should be retained in the mortuary for a period of 72 hours at the maximum from the time of death. After the expiry of this time limit the dead body will be treated as unclaimed and sent to nearest medical college or disposed of by the hospital according to the religious rites of the expired patient. With the permission of the hospital administration, dead bodies, in exceptional cases, will be retained in the mortuary even after the expiry of 72 hours.

3.66 The post-mortem will be done jointly in the mortuary by the Forensic Medicine & Toxicology and Pathology departments for academic & research purposes.

3.67 Hospitals should aim to do reasonable pathological autopsies in a year in all hospital deaths in the mortuary along with the Forensic Medicine department.

3.68 Forensic Medicine & Toxicology faculty & residents should be involved.

3.69 Clinical-pathological correlation, after the autopsy, should be done in the death review committee. Review should be done monthly, and PGs and SRs should also be involved.

3.70 Patients in general ward normally should not be asked to purchase medicines and other consumables from outside the hospital.

3.71 The following documents are to be maintained by nursing personnel.

i. Admission, discharge, and death register

ii. Stock register for drugs, consumables and equipment
iii. Linen register
iv. Report book
v. Case records
vi. Call book
vii. Treatment book if medication chart not available
viii. Waste disposal record

SURGICAL SPECIALTIES WARD

3.72 The patient should be admitted to the hospital at least 12 hours before the day of operation.

3.73 Intimation regarding the operation of patients will be received by the Nursing Officer/SNO of the ward at least 12 hours before the commencement. The operation list will include Name of patient, UHID, bed number, ward, diagnosis and operating theatre number. This will be written neatly in block letters or written in type.

3.74 No surgeries will be scheduled on Sunday and holidays except emergency cases.

3.75 If the patient (unaccompanied by relatives) requires urgent surgery, he can be operated upon under his/her own signature along with the signatures of two consultants of the hospital.

3.76 Preoperative routine procedures like arranging blood, collecting laboratory and X-ray reports, and writing the history in the case record are the responsibility of residents. The Senior Resident of the unit concerned in this regard should give clear Instructions to them as per the surgical checklist.

3.77 Preparing the patient, and the body part concerned, making the patient wear hospital gowns, surgical caps, etc. is the responsibility of the nursing staff.

3.78 Patients should be sent to the operating theatres according to the hospital policy. They will be accommodated in a preoperative area and should not be allowed to remain in the corridor.

3.79 The case record, including all relevant investigations of the patient, should accompany the patient to the theatre and return to the ward with the patient after the operation with clear instructions regarding post-operative management and monitoring for complications.

3.80 Surgical team shall take all steps to ensure safe surgery like use of Surgical Safety Checklist (https://www.who.int/teams/integrated-health-services/patient-safety/research/safe-surgery/tool-and-resources)

3.81 Healthcare professionals should take special precautions to avoid postoperative infection in surgical cases.

3.82 Patients should be monitored as per hospital policy after surgery.

3.83 Institutional Antibiotic Policy should be followed for surgical antibiotic prophylaxis as well as therapeutic use of antimicrobials.
https://www.icmr.gov.in/icmrobject/custom_data/pdf/resource-guidelines/treatment_amr_2022.pdf

MATERNITY WARDS/ NURSERY

3.84 No patient should be refused admission in the General ward even if the patient has been delivered outside the hospital. Septic cases shall be separately received and managed.

3.85 Patients registered in the antenatal clinic shall be given admission in preference to others.

3.86 The patient should be sent to the delivery room when the labour is active and the obstetrician shall be informed.

3.87 The nursing staff shall prepare the patient for labour room delivery.

3.88 After delivery, the patient shall be sent to her ward. She will be on general diet unless specifically indicated.

3.89 The resident or the obstetrician shall conduct the delivery. Caesarean section, however, shall be done by or under supervision of the obstetrician only. Paediatric residents shall be present during delivery, and a senior paediatrician should be called in while delivering complicated cases.

3.90 Babies should be properly identified. The gender of the newborn, date and time of birth, and mother's name should be recorded on "Mother-- Baby" waterproof and oil-proof bands and fastened on the wrist or ankle of the baby and mother. Simultaneously, the un-smudged footprint of the baby and the mother's index fingerprint is recorded on the case record of the mother.

3.91 No unidentified visitor shall be allowed in the nursery. Doctors and nurses entering the nursery must wear gowns and change shoes as per Institutional policy; and if they are suffering from upper respiratory infections, they must also wear masks. They must do hand hygiene after examining each baby and follow the WHO's "Five Moments of hand hygiene".

3.92 Health professionals who care for children shall have age-specific competency.

3.93 Babies suffering from infection or other abnormal conditions may be kept in an isolation nursery on the advice of the paediatrician.

3.94 Premature babies may be put in an incubator on the advice of the paediatrician.

3.95 Adequate security measures should be taken to prevent abduction of baby. Code Pink shall be developed that can be activated in case of suspected baby theft. All staff shall be trained for Code Pink.

3.96 Unless specified by the institution, children over 12 years shall not be admitted in the paediatric ward.

3.97 One of the parents, preferably the mother, may be allowed to stay with the paediatric patient.

3.98 A dietician may prescribe the feeding formula for children in consultation with the paediatrician.

3.99 Isolation beds should be established to treat and manage communicable diseases and infections.

3.100 The child's family members are educated about nutrition, immunization, and safe parenting.

PSYCHIATRY WARD

3.101 Admission to the Psychiatry Ward shall be made only through the following routes:

i. OPD: The consultant in the OPD shall determine the need for admission and accordingly issue instructions on the OPD slip for admission. Senior Residents can admit the patients only with the approval and signature of the consultant.

ii. Emergency: Patients can be admitted to the psychiatry ward from the psychiatry emergency services available after OPD hours by the written orders of the resident doctor with the approval of the senior resident/consultant on emergency duty.

3.102 After the directions to admit prescribed admission procedure can be followed are issued, the patients shall be registered in the Central Registration Office.

3.103 After the admission document is issued by the CRO, the patient shall report to the Psychiatry Ward Nursing Staff on duty, who will register the patient in the admission register of the Department.

3.104 After the admission, the patient (in case of voluntary admission) shall provide the consent for admission under the provisions of the Mental Healthcare Act 2017.

3.105 In case of supported admission, the family member or a nominated representative shall provide consent

3.106 Patient admitted to the Psychiatry Ward need to have one attendant throughout their stay in the hospital. This is ensured by the Nursing Staff on duty at the time of admission.

POST ADMISSION

3.107 Sister on duty should ensure that the patient does not possess any valuables and doesn't have any object, which can be used to endanger his or any other life. (for example, sharp objects, ropes, matchboxes, heaters, etc.). Nursing Staff on duty should also ensure that the patient does not have possession of any psychoactive substance for use.

3.108 Sister on duty should inform the doctor on duty about the admission.

3.109 The Resident Doctor on duty then does the initial evaluation and starts the management as advised by the admitting doctor.

3.110 The Resident Doctor on duty will take four routine rounds daily.

3.111 All the medicines, including injections (IM. /SC), are to be administered by the nursing staff on duty. The nurse under Medical Supervision, while maintaining all necessary precautions, should administer IV injections.

3.112 All provisions of Mental Healthcare Act 2017 (MHA) shall be complied with.

SPECIAL CIRCUMSTANCES

A. Patients with Suicidal Risk:

i. All the general instructions for admission are to be followed.

ii. The risk of suicide should be explained to the attendant of the patient, nursing staff, and other employees of the ward.

iii. Patients should not be kept in isolated rooms.
iv. Suicidal risk of the patient should be mentioned on the first page of the case sheet of the patient in bold letters.
v. Suicidal-risk patients should preferably be given a bed near the sister's duty room so that the nursing staff and ward boys can maintain a constant watch.
vi. Precautions regarding the availability of any suicidal means shall be strictly implemented (removing any sharp objects, medications, long rope or clothes, etc., from the possession or access to the patient).
vii. In case E.C.T. is indicated, consent is a must from the patient close relative before starting E.C.T. ECT shall not be administered to minors unless required permission from the Mental Health Review Board is obtained

B. Violent patients- adequate measures to be taken, including appropriate medications, to prevent violence to self or others; any injury to the patient should be taken care of appropriately.

C. Stuporous patients- a medical assessment including the opinion of a specialist if required regarding the oral intake/IV fluids/RT feeding and any special care apart from the psychiatric management should be taken. Proper nursing care to prevent the development of bed sore should be given.

D. De-addiction - Patients admitted for de-addiction should be screened for associated medical illnesses like TB, COPD, HIV,viral hepatitis. If required, appropriate advice to be taken from the specialists. Patients should be checked for possession of any psychoactive substances before admission and checked in the round for any signs of intoxication.

E. Emergency Call/Admission :

i. Calls sent from the A/E Ward will be received by the doctor on duty.
ii. An initial evaluation is to be done by the doctor on duty, and the management should be done under the supervision of a senior resident/consultant on duty. (If the orders are taken telephonically, he should note them down).
iii. If a doctor on duty faces any difficulty in the management or a patient needs admission, the Senior Resident has to personally see the case, and consultants can be called if required. Admission should be done by Senior Residents / Consultants only.
iv. Senior Residents should then evaluate the patient, and if needed, the patient is admitted subject to the availability of the bed in the Psychiatry Ward.
If the bed is not available and the patient requires admission, then the patient may be referred to the nearest Government Mental Health Establishment (MHE) for admission.
If admission is not required, then the patient is advised medication and is asked to follow up in the Psychiatry OPD

v. For all the patients, the doctors on duty/Senior Residents are encouraged to involve the Consultant in all for assessment and advice.
vi. After admission, the patient is shifted to the Psychiatry Ward, and safety procedures for any other indoor patients will be followed.

F. Homeless Person with Mental Illness (HPMI):-

i. Patient brought by the police in the Psychiatry OPD - Patient assessed, and if the attendant is provided, the patient should be admitted to the Psychiatry Ward, and the same procedure as for any other indoor patient is followed.
ii. If no attendant is available, the procedure, as depicted in the flowchart below, shall be followed as per the provisions of the MHCA 2017.

STAGES OF CARE OF HOMELESS PERSON WITH MENTAL ILLNESS (DUTIES OF THE POLICE OFFICER)

G. Patients sent to the Psychiatry Department for Admission by the Court shall be admitted under the consultant on duty as per the provisions of the MHCA 2017

H. Patient referred by the Medical Board for Psychiatric opinion

The Consultant in the OPD will first see patient. If required, the patient will be admitted to the Psychiatry Ward for evaluation. The report should be sent to the concerned authorities after evaluating the patient

I. Caregiver deserts patient after admission in the Psychiatry Ward:-

If a patient gets admitted with an attendant and the attendant deserts the patient, or if the patient is admitted with hired Attendants and relatives fail to turn up, in these cases, the help of the social welfare department will be taken to contact the relatives of the patient

If the family refuses to take care, then the police officer shall be informed of the same, and the patient should be admitted under the care of a Nominated Representative (NR) appointed by the Social Welfare Department of the Hospital or as directed by the court

J. OTHERS

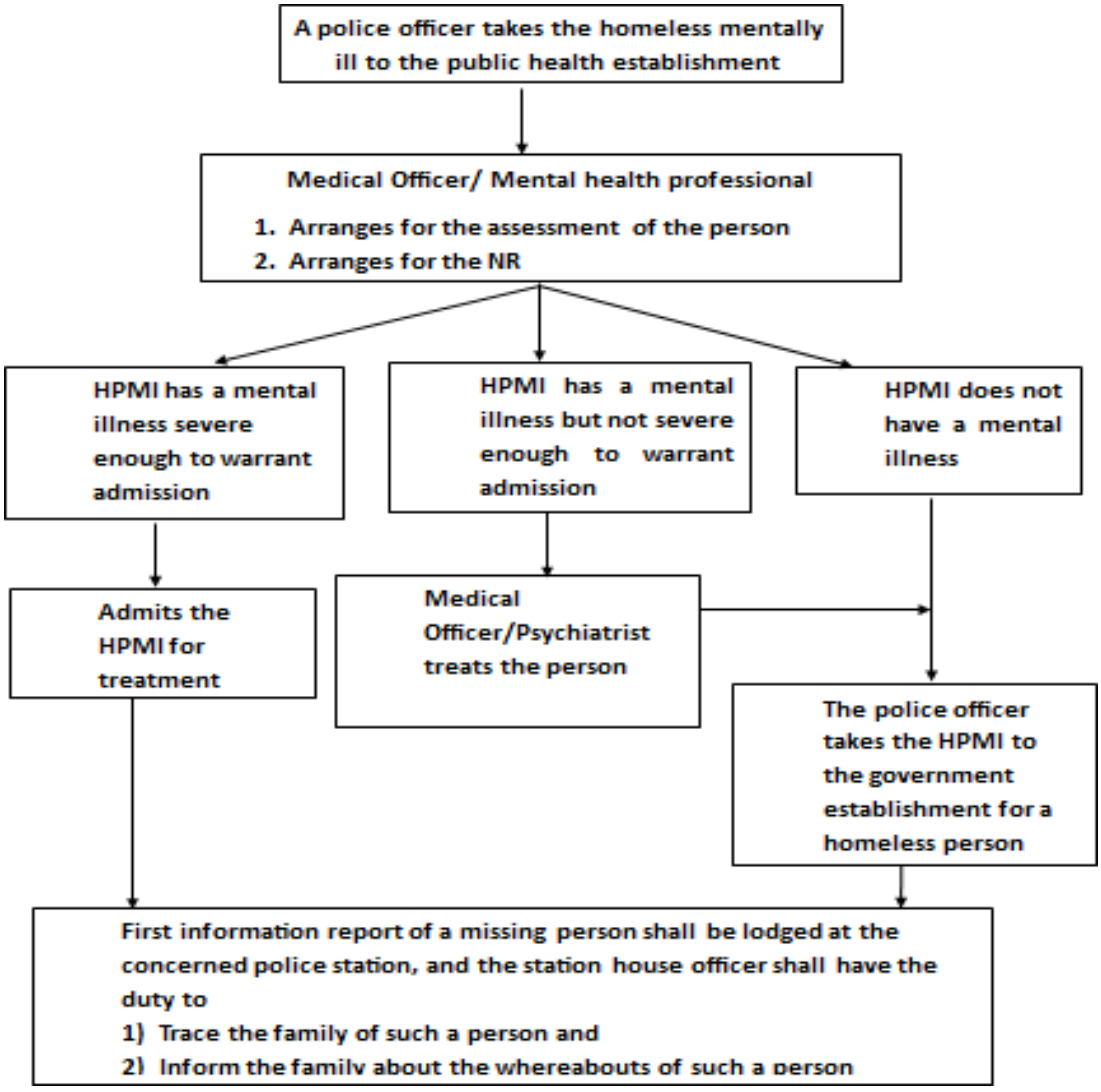
a) Social Worker: A patient requiring the help of a social worker should be referred to the social welfare department at Hospital, and the social worker will address the problem and, if required, will make home visits also.
b) Psychologists: Patients requiring psychological testing or counselling should be referred to the Psychologist for evaluation and counselling.
c) Inter-Agency Collaboration:
(i) Patients referred by other agencies (NGOs) should be evaluated on a routine basis. If needed, admission can be done following the routine admission guidelines

(ii) If the patient is required to be sent to other Agencies (Nari Niketan , Street Children Home, etc.), the help of a social worker should be taken, and the social worker should then follow up on the case.

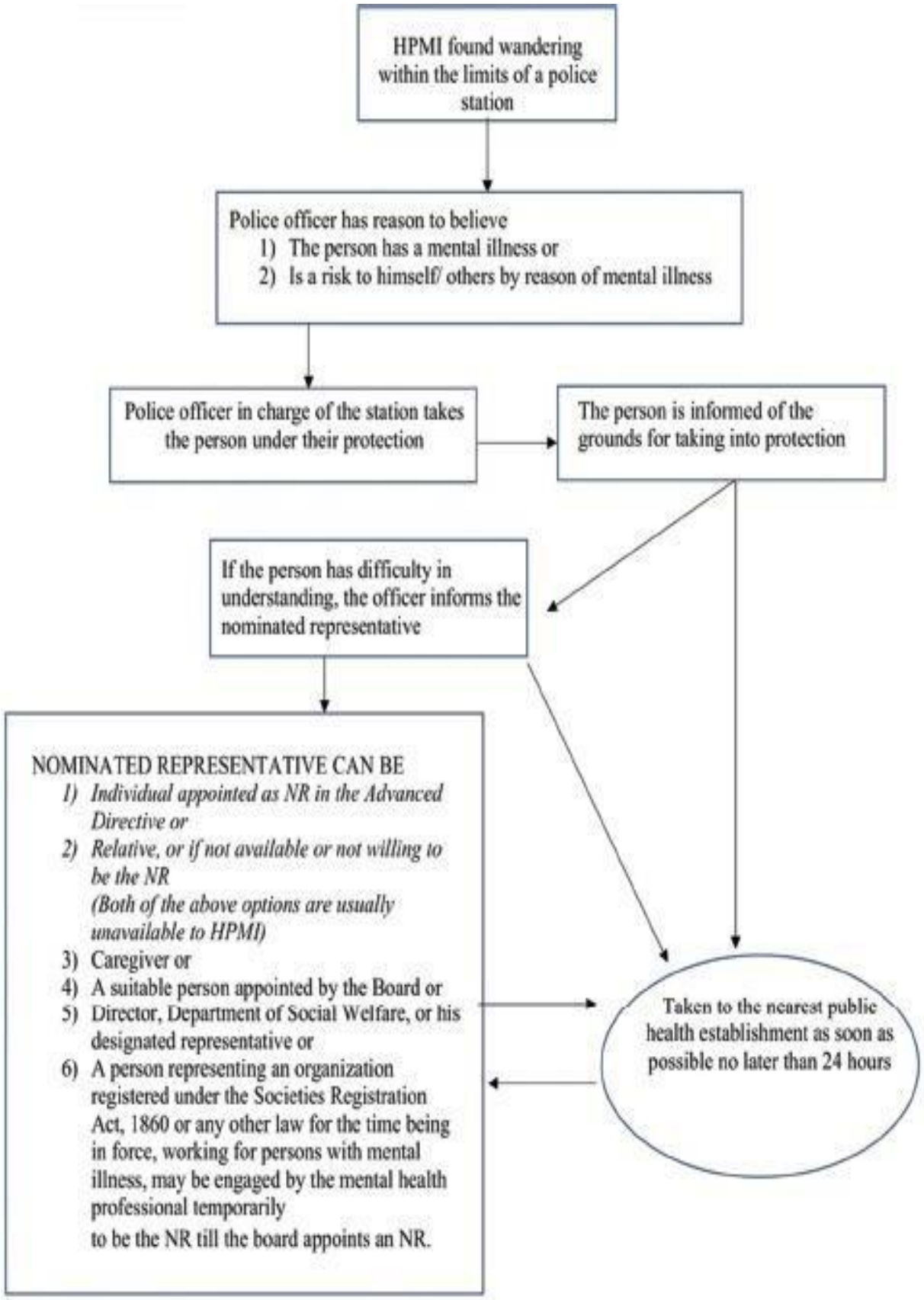
d) Transportation: Violent patients requiring transportation for any investigative procedures or any other purpose should be adequately and appropriately sedated. The Nursing Staff on duty will administer all the injections (except IV) as advised by the doctor.

K. All admissions in the Psychiatry ward shall be in compliance with the Mental Health Care Act 2017

Stages of Care of Homeless Person with Mental Illness (MHCA 2017**)**



(i) If no attendant is available, the procedure as depicted in the flowchart below shall be followed as per the provisions of the MHCA 2017.



Stages of Care of Homeless Person with Mental Illness (Duties of the Police Officer)

CHAPTER 4: INTENSIVE CARE AREA LIKE OPERATION THEATRE, LABOUR ROOM, RECOVERY ROOMS, POSTOPERATIVE ROOM, INTENSIVE CARE UNIT, CORONARY CARE UNIT ETC

4.01 Since these departments handle serious cases or those that require intensive monitoring, they assume importance in the hospital and should be given top priority by the hospital administration. The senior doctors should be available on call round the clock for these areas.

4.02 All theatres, ICUs, labour rooms, recovery rooms, etc., should be controlled by a responsible person, who will be known as the 'Officer-In-charge.' Appropriately trained and experienced senior nurses should assist them.

4.03 An organogram showing the hierarchy of the staff working in the department should be prepared and exhibited

4.04 Job responsibilities of all categories of staff working in the operation theatre, labour rooms, and recovery rooms should be specified.

4.05 As per norms, adequate Staff should be posted in these areas. The duty roster of the subordinate staff should be prepared by their in-charge. The unscheduled absenteeism of the Staff in these areas should be seriously discouraged, and suitable administrative measures should be taken in this regard, as it affects patient care in such sensitive areas.

4.06 CARE OF PATIENTS

i. Informed consent for both surgery and anaesthesia and for any other procedures should be obtained from the patient or the nearest relation (or legally authorized representative) or in case of unconscious patients by the concerned team member in the prescribed form and attached to the case sheet. In the case of the destitute, where no consent is forthcoming, the surgeon concerned along with the ECRO should decide the matter based on the case's merits. In the case of a minor, a written statement of either the patient's parents or guardians is essential. The consent should be taken in the language the patient or the relative (or legally authorized representative) understands, and the corresponding form should be used.

ii. The officer in charge should issue clear written administrative and technical instructions for dealing with emergency and daily scheduled operations. He/she would also specify the 'ward and theatre's Responsibility for preparing patients.

iii. It is the Nursing Officer's Responsibility to ensure that the correct patient is sent to the operating theatre with the case record, X-ray, consent form, etc. The Nursing Officer should check and complete the pre-operative checklist. The theatre pre-operative nursing staff should cross-verify as per the checklist and ensure that all the pre-operative orders have been followed.

iv. Steps should be taken to minimize the risk of a foreign body being inadvertently left in a patient following a surgical procedure. WHO surgical

safety checklist should be diligently followed by all the concerned team members.

Recommended steps for this purpose are as follows.

- Swab and pack count should never be missed.
- All swabs and packs included in the count should preferably be white and have a radio-opaque marker. Packs may have a tape which is attached to a clip.
- Swabs and gauze should never be cut by surgeon without information of the scrub nurse.
- If gauze cut from a roll is inserted in the patient's body and is completely hidden from view, a label or a tag should be attached to the patient's forehead. If the forehead is the field of operation, some other suitable skin area should be used. The same should be recorded in patient records
- When a patient is returned to the ward with a swab or, pack or tube deliberately left after an operation, this fact should be reported to the ward sister. Written instruction on the patient's case sheet should be given of the date and time for its removal.
- All swabs and packs to be used during the operation should be in bundles of five and counted again before the start of the operation. There should be a double check of the number of swabs in bundles, packs, and instruments issued to the scrub nurse.
- The list should be displayed in the operating theatre on a slate or black/whiteboard before the commencement of operations.
- The discarded swabs and packs should not be removed from the theatres till such time as all the swabs and instruments are accounted for by the scrubbed nurse, the circulating nurse, and the surgeon at the end of the operation, preferably before the closure of the wounds.
- The scrub nurse must maintain the records of the needles. Second suture should not be handed to surgeon unless first needle is received back. In case, more than one suture/needle is being use under some circumstances, scrub nurse should be extra cautious to keep the count of needles returned. She must also account for all broken pieces of needle, if any.
- At the time-out (commencement) and sign-out (before closure), the scrub nurse must confirm the number of gauze, pack, instruments etc. to the surgeon.
- The surgeon must satisfy himself about the gauze, pack and instrument counts before closure. It is his personal responsibility and should not be delegated.
- In case the surgeon is obliged to close the wound without prior swab/instrument count due to compelling circumstances or compromising count by the staff nurse, the fact should be recorded in the patient records and brought to the knowledge of head of Institution.

- In case of any discrepancy of swabs/instruments/needles etc., the fact should be recorded on the case sheet of the patient.

v. Operating surgeons and anaesthetists should see that the medical record case sheets of the patients are complete in all respects while they are in the theatre, labour rooms, or recovery room. The use of abbreviations should be avoided.

vi. In consultation with the surgeon/physicians concerned, the officer in charge of the theatres should see to the prompt shifting of patients from the recovery room to the ward / ICU /HDU as per the predefined criteria i.e. Aldrete Criteria.

vii. Relatives of the patients should be properly counselled, prognosticated, and informed about any change in the plan of care and condition of the patient

viii. In the case of postponement of scheduled operations, the reason for the same should be documented, and data should be analysed on a monthly basis and the report should be shared with the quality cell and Head of the institute

ix. In case of the death of a patient on the operating table, labour room, or recovery room, the Director/ Medical Superintendent should be informed by the officer-in-charge theatres to hold an immediate inquiry and take into his custody all relevant records of the case. This practice should be done in case of all deaths in the hospital, whether suspicious or otherwise, by the Unit concerned.

4.07 INFECTION CONTROL

i. Visitor control policy should be followed. Limit the number of personnel in these critical areas to avoid infection.

ii. Appropriate zoning of the critical areas should be done and patient, personnel, and material flow should conform to the infection control practices.

iii. Procedures in these areas shall comply with infection control guidelines to prevent patient cross-infection.

iv. Laundry and Linen control should be properly organized. A Central Linen store should well serve these areas. Policy on the dirty, soiled or bloodstained linen should be followed appropriately.

v. Footwear used by the Staff and visitors inside the operation theatres should be washed and cleaned daily. Different types of identified footwear can be issued to the staff and the visitors.

vi. Biomedical waste from operation theatre and other areas should be handled appropriately and safely as per the guidelines.

vii. Disinfection and sterilization of instruments, equipment, and devices should be as per written guidance.

viii. All the measures should be taken to prevent or reduce healthcare-associated infections in the Staff.

ix. Institutional Antibiotic Policy should be followed for Surgical Prophylaxis.

x. Appropriate engineering controls should be followed in these critical areas to prevent infections.
xi. HAI data is to be collected, and actions should be taken to prevent the same.
xii. Regular surveillance to be done in these areas. Periodicity of surveillance to be defined by hospital Infection Control Practices Guidelines.

4.08 DRUGS AND EQUIPMENT

i. Medications should be stored in a clean, safe and secure environment per the manufacturer's recommendations. Sound inventory control practices should be followed. High-risk medications, including look-alike and sound-alike medications, and different concentrations of the same medications are stored physically apart from each other. Emergency medications are to be stored uniformly, always available and replenished when used. Near-expiry medications should be sorted and returned to the pharmacy.
ii. Storage of Narcotic drugs to be guarded as per regulations. A proper record should be kept of the usage, administration, and disposal of these drugs.
iii. Medical supplies and consumables should be stored appropriately and are available when required.
iv. Equipment maintenance should be an important activity for nurses, technicians, and doctors in charge of the areas. A record of non-functioning equipment including down-time logs should be maintained.
v. X-ray facility should promptly be made available in the operation theatre on request.

4.09 FACILITY MANAGEMENT

A system should be in place to provide a safe and secure environment. Patient safety devices, as installed across, should be inspected periodically.

4.10 FIFE EMERGENCIES

i. Provisions for early detection, reduction, and containment of fire should be well addressed in these critical areas. Exit plans should be displayed. In consonance with the National Building Code. Fire exit doors should not be blocked or locked under any circumstances
ii. The training for prevention of fire hazards should be done periodically
iii. Fire practice drills should be a regular feature in these areas. Corrective and preventive actions for deficiencies should be taken after the analysis of the drills
iv. Planned preventive maintenance of all theatre requirements, electrical circuits and wall attachments, storage facilities of X-ray films and blood and electric lights, anaesthetic gases, flammable liquids, and other combustible materials will go a long way to minimizing fire hazards. The operating room technician whenever they are available; otherwise, designated persons should be made responsible for this work.

4.11 TRAINING

i. There shall be a process of credentialing and privileging medical, nursing, and paramedical professionals to provide patient care.
ii. There shall be ongoing training for the Staff on all important aspects like infection control, CPR, safety-related issues etc.
iii. Training should also occur when job responsibility changes /new equipment is introduced

4.12 All AERB guidelines should be followed in case radiological equipment is used in theatres like C-Arm, ultrasound, x-rays. Appropriate radiation protection and monitoring devices for all concerned healthcare personnel should be made available.

4.13 DOCUMENTS

The following documents should be maintained in the operatic theatres, labour rooms, and recovery rooms:

i. Operation Register
ii. Maternity cases Register
iii. Operation list file.
iv. Inventory of dead stock articles and equipment.
v. Indent books for consumable and non-consumables
vi. Planned preventive maintenance schedules and breakdown register
vii. Linen account.
viii. History sheet of all expensive equipment and downtime logs
ix. Narcotic register
x. Monitoring of piped gas pressures on regular basis
xi. Monitoring of OT temperature, relative humidity, air circulation etc.

4.14 The officer-in-charge of theatres should ensure a pleasant and calm atmosphere under all circumstances. A limited number of medical and paramedical persons should be there to avoid infection.

4.15 The "officer in charge" of theatres holds the responsibility of all activities in his area. For this purpose, he should ensure that the patient's case record is written meticulously, indicating various procedures completed and the checks and counter checks done of several swabs, instruments, needles, etc. The case record should reveal unambiguously the acts done or left undone and the persons responsible for them.

4.16 On site portable X-ray facilities should promptly be made available to operating theatres / ICU/Labour room, etc., on request.

4.17 Linen control should be properly organized. A Central Linen Supply should serve theatres, lab rooms and recovery rooms on a daily exchange basis. Dirty, soiled, or bloodstained linen should not accumulate in the area. The staff, consumables, medicine etc. should be adequately met in these areas, as they

are highly labour intensive areas. The ratio of nurses to patients in these areas should be adequate and appropriate.

4.18 Services of adequate anaesthetists, centralized piped medical gases including oxygen, central suction should be available.

4.19 Alternate sources of medical gases should be available to mitigate any emergency. These shall be checked at regular intervals.

4.20 All biomedical waste generated in the operation theatre and other areas should be managed as per guidelines in this regard.

INTENSIVE CARE UNITS

4.21 Space and infrastructure should be available in accordance with established guidelines.

4.22 Written SOPs should be available for management of patients in Intensive care areas

4.23 Admission and discharge criteria to the intensivvce care areas should be defined. (Guidelines for Intensive Care Unit Admission and Discharge criteria, 2023, DteGHS, MoHFW, GoI) https://dghs.mohfw.gov.in/technical- guidelines.php)

4.24 Healthcare professionals trained and qualified in intensive care service should be available. Adequate trained nursing personnel should in consonance with the established guidelines should be provided.

4.25 Staff should have area/specialty specific training in critical care management.

4.26 Diligent handover between respective categories of health care professionals on change of shift should be done and documented

4.27 Staff should be trained to identify early signs of deterioration and take appropriate action.

4.28 Adequate monitoring resources should be provided; central monitoring should be preferred

4.29 Infection control practices should be followed in the areas https://ncdc.mohfw.gov.in/wp-content/uploads/2024/09/NGIPC.pdf

4.30 There should be provision for an identified isolation room with appropriate environmental controls.

4.31 Incharge shall ensure that stock out of vital and essential drugs is avoided.

4.32 All efforts should be made to keep all equipment in functional condition at all times.

4.33 Caregivers of the patients shall be counselled about the condition of the patients at regular intervals.

RECOVERY ROOMS

i. A Postanesthesia Care Unit (PACU) or an recovery area which provides equivalent postanesthesia care should be available to receive patients after anesthesia care.

ii. All patients who receive anesthesia care shall be admitted to the PACU or its equivalent facility **except** by specific order of the anesthesiologist responsible for the patient's care.

iii. General medical supervision and coordination of patient care in the PACU should be the responsibility of an anesthesiologist.
iv. The staff and the equipment of the PACU shall be according to the national or recognized guidelines.
v. The medical aspects of care in the PACU (or equivalent area) shall be governed by predetermined policies and procedures.
vi. A patient transported to PACU shall be accompanied by a member of Anesthesia team who is knowledgeable about patient's condition The shall be monitored and provided optimal support during transfer.
vii. The patient's status on arrival in the PACU shall be documented; information concerning the preoperative condition and the surgical/anesthetic course shall be communicated to the receiving responsible healthcare professional.
viii. Patient's condition with reference to oxygenation, ventilation, circulation, level of consciousness and temperature.shall be continuously monitored and documented.
ix. An accurate written report of the recovery period shall be maintained. Use of an appropriate scoring system is recommended to assist with management and discharge readiness.
x. An Anaesthesiologist or managing physician shall be responsible for discharge of the patients from the PACU who shall document transfer order.
xi. A physician capable of managing complications and providing cardiopulmonary resuscitation for patients in the PACU shall be available.

LABOUR ROOMS

4.34 Labour rooms should be organized to meet the established guidelines. https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCH_MH_Guidelines/LaQshya-Guidelines.pdf

CHAPTER 5: RADIOLOGICAL AND IMAGING SERVICES

5.01 The radiology department of a hospital not only forms one of the pillars of diagnostic services but also provides interventional services, both of which are essential for optimum patient management, both for out-patients and in-patients and as a part of emergency services. Scope of radiology services should meet the needs of the services provided by the hospital.

5.02 All routine investigations, including X-ray, Ultrasound, CT scan, and MRI, should be available round the clock to the extent possible and commensurate with the clinical services provided by the Institution.

5.03 For special radiological investigation and others appointment system should be available and attempt should be made to perform them at the earliest.

5.04 Wherever applicable, the investigations' charges should be displayed before the service point. An easy system of collection of charges should be developed, a proper receipt should be given, and money should be accounted for.

5.05 Turnaround time for the reports should be displayed and explained to the patients.

5.06 Upgradation of Equipment- In recent years, immense technical advances have been seen in imaging equipment, such as CT, MRI, ultrasound, Doppler machines, digital radiography and mammography, and fluoroscopy. There should be efforts to periodically upgrade the existing equipment in the department, to improve patient care services.

5.07 Ideally, efforts should be made to digitize the imaging investigations with a dedicated radiology information system (RIS) and picture archiving and communications system (PACS) and integration with hospital management information system (HMIS) to enable easier access to patients and clinicians for improving the delivery of patient care services.

5.08 Work-study techniques and costing of the services rendered should be adopted for effective management control of the laboratory.

5.09 Adequate Contrast media and films should be available in the Radiology department and replenished periodically. A storekeeper/senior technician should be made responsible for this task.

5.10 Regular quality audits should be performed to assess the functioning of the department.

5.11 Maintenance of equipment- Senior radiographers/ Technical Supervisors should oversee day-to-day maintenance of costly equipment. To enable smooth functioning, the maintenance contracts for these equipment (ideally comprehensive maintenance) should be periodically renewed as per Government/ Institutional policy post warranty. A list of non-functioning equipment with date, likely date of repair should be prominently displayed.

5.12 High-tech equipment like CT scans and MRI, Ultrasound machines should be handled specifically under the supervision of this department's specialists/ senior officers, and residents should work with them. This practice will maintain the quality of tests and avoid frequent breakdowns of the machine.

5.13 The medico-legal case reporting to be done by the Senior Resident/Medical Officer, Specialist designated for this purpose. The films and reports of these cases should be kept in lock and key and produced on request from legal authorities by the Hospital Medical Record Section as and when required to do the same.

5.14 A female attendant/nursing officer should be available while performing a radiological investigation on a female patient.

5.15 A separate area with adequate privacy should be available for changing clothes by patients. A clean washroom should also be available.

5.16 The date of the last menstrual period should be enquired about and recorded for a female in the reproductive age group before performing a radiological investigation except for ultrasound.

5.17 Adequate precautions and safeguards are to be adopted by the Head of the department to prevent unnecessary radiation hazards to the employees, patients, and their relatives. Regular monitoring of radiation exposure (TLD) badges should be done. Regular checks of Lead aprons and other radiation protection devices should be done and records maintained.

5.18 MRI safety measures- All department personnel should be aware of MRI safety guidelines, including contraindications of MRI scans. Entry to MRI machines should be restricted and under the control of/ monitored by MRI technical staff and doctors. Prominent signage should be placed to prevent any accidents related to the magnetic effects of MRI. Appropriate declaration and consent by the patient should be obtained before any procedure.

5.19 During radiography, fluoroscopy, CT studies, and other modalities using ionizing radiation, all necessary precautions should be taken to minimize radiation doses to the patients, their attendants, and Staff. Special precautions should be taken for vulnerable groups like pregnant ladies and children.

5.20 Periodic quality assurance (QA) of the equipment including radiation scatter should be carried out.

5.21 A system should be in place to manage any contrast reactions resulting from iodinated contrast use in the Radiology department. Emergency drugs must be available on hand. Adverse drug reactions caused by contrast should be duly reported.

5.22 A Crash cart and oxygen should be available in the radiology department. Basic life support training should be imparted to all staff members. Support from other clinical departments should be available to the Department of Radiology whenever required, including for managing contrast reactions.

5.23 Prevention of Sex determination- All the guidelines prescribed in the PC-PNDT Act (Pre-Conception and Pre-Natal Diagnostic Techniques Act, 1994) should be strictly followed for the prevention of sex determination while imaging pregnant ladies.

5.24 Interventional radiology equipment- It is desirable to have equipment for Digital subtraction angiography for vascular intervention procedures, which are an essential part of management and even life saving for many patients. Ultrasound machines and fluoroscopy machines should be available for ultrasound and fluoroscopy-guided interventions.

5.25 Portable radiography and ICU ultrasound equipment- An adequate number of portable radiography machines should be available. It is desirable to have separate ultrasound machines for sick ICU patients to enable bedside ultrasound examination.

5.26 A Radiation Safety Officer of appropriate level should ensure compliances and monitoring all the regulatory requirements for diagnostic radiology facilities as prescribed by the Atomic Energy Regulatory Board (AERB) should be followed. (Available to download on the official AERB website- www.aerb.gov.in)

Chapter 6: LABORATORY SERVICES & BLOOD CENTRE

6.01 Each hospital should have well equipped laboratories covering all major sub areas like Haematology, Clinical Biochemistry, Clinical Pathology, Microbiology, Histopathology. Cytology, etc. The scope of Lab services should meet the needs of the services provided by the hospital.

6.02 Each service area should be under the active supervision of a designated consultant/specialist.

6.03 The Emergency laboratory should function round the clock. It should provide facilities for all essential investigations pertaining to Haematology, Clinical Biochemistry, Microbiology, etc., required for patient management.

6.04 Routine investigation should be done with a time schedule for collection of samples, processing of samples, and delivery of reports to OPD and Wards. In situations of resource constrains, indoor patients should get priority over OPD patients.

6.05 Turn Around Time for each test should be defined and displayed.

6.06 A Central sample collection centre should be established where samples are drawn for all laboratories so that patients do not have to visit multiple places in the hospital.

6.07 Reports of indoor patients should be sent to ward where patient is admitted, preferably within 24 hours for routine tests. The OPD reports should be dispatched to the concerned OPDs and patient collects these from there. Arrangement for providing reports in digital mode should be explored.

6.08 Urgent sample reports should be communicated to the treating ward immediately. Critical values should be communicated to the treating Clinician within 30 minutes. System of same day collection of reports by the patient or relatives may be permitted.

6.09 Indoor patient's samples duly labelled by the Nurse/phlebotomist of the ward shall be carried by a hospital employee i.e. MTS or equivalent to the respective laboratories or Central Collection Centre, whichever is feasible, at an appropriate time after entering in the register or computer

6.10 Receiving samples in the various laboratories shall be done by Laboratory Assistant /designated person and provide signed, dated and timed receipt.

6.11 Sample processing and technical tests to be done by technical staff on duty. The technical Staff is responsible for taking care of the samples and processing them meticulously and methodically before submitting the results to the medical doctor for interpretation, clinical correlation, and release of the report.

6.12 Investigation reports shall be authorized by the designated medical professional. They will be approved by the concernedin-charge.

6.13 Laboratory reports shall be signed by the authorized/ designated officer as per the applicable guidelines Central or State’s guidelines . If, on urgency, the report is released when a medical officer is not available, the report is to be released as provisional, and the final report is to be issued by the designated Officer after review.

6.14 Laboratory staff will be responsible for the report dispatch, and the Nurse of the ward /OPD will be responsible for receiving the report. Alternatively, the report can be retrieved from Hospital Information ystem, if available.

6.15 No test including emergency test should be conducted in the laboratory without a properly filled written requisition (which should include patient's name, UHID, age/gender, treating department, provisional diagnosis or clinical presentation in brief) by Medical Officer/Senior Resident/Junior Resident. Clinician sending the request shall should put his name, designation signature and stamp, date thereon. He should also clearly mention the indication of the test.

6.16 Requests for laboratory tests for emergency cases should be attended to expeditiously, and reports should be available preferably within one hour of receipt in the laboratory. The officer in charge of the division should ensure that wards and outpatient departments do not misuse this facility. For this purpose, the definite indication of an emergency test must be mentioned in the requisition. At least a senior resident should authorise emergency requisition of tests.

6.17 Quality Management system should be designed and implemented in the laboratory services to ensure the reliability of the tests. Appropriate Internal and External Quality Assurance systems should be in place.

6.18 Quality Assurance (QA) practices, including regular maintenance and calibration of Equipment, should be done as per the manufacturer's guidelines to maintain accuracy of test results.

6.19 Procurement of reagents, chemicals, and kits is to be standardized, and approved material (BIS/FDA/CE) is to be procured. On receipt, the lot should be verified for fitness for use.

6.20 Responsibility for rendering reliable laboratory reports rests on the technician and the officer in charge of laboratory/HOD.

6.21 Automation should be introduced wherever possible. The laboratory should have computers for database, information, and interpretation systems. Lab Information System (LIS) should eventually be used in all labs to minimize transcription errors and reduce paperwork.

6.22 Distribution of laboratory reports should be systematized to ensure that no report is misplaced or lost and the practice of giving duplicate copies of the report is minimized. LIS will facilitate report retrieval at home and in wards/OPDs.

6.23 Messenger system/or automated system for bringing specimens from the wards and outpatient departments to the main Centralized Laboratory should be introduced wherever possible in the interest of efficiency.

6.24 Preventive maintenance of all laboratory equipment should be done as per the manufacturer's guidelines.

6.25 It is recommended that the Doctors and technical staff designated to operate them are trained on new/upgraded equipment. Refresher courses and training should be organized periodically for all technicians and medical officer to keep them well informed of the advancement of laboratory practices.

6.26 It is desirable that technical staff is rotated in the various disciplines of the laboratory periodically so that they gain all-around experience. The training given and competency assessment done should be documented.

6.27 Work-study techniques and costing of the services rendered should be adopted for effective management control of the laboratory.

6.28 Instructions for preparing the patients should be written in easily understandable language.

6.29 Every effort should be made to introduce an appointment system wherever required so that the patient called does not have to wait for long.

6.30 The charges for the investigations, if applicable, should be displayed in front of the service point. An easy system of collection of charges should be developed, a proper receipt should be given, and money should be accounted for.

GUIDELINES FOR COLLECTION OF BLOOD SAMPLES
(https://www.cdc.gov/dpdx/diagnosticprocedures/blood/specimencoll.html)

6.31 Two identifiers should verify the patient's identity.

6.32 Check patient's preparation before collection of samples

6.33 Explain the procedure briefly to the patient before performing it.

6.34 Order of draw of samples should be followed and prepared.

6.35 Standard precautions should be followed during the procedure.

6.36 Take care to avoid contamination of the hands and surrounding areas with blood.

6.37 Use disposable screw-capped vials/vacutainers to avoid the risk of leakage, breakage, or spills. These should be labelled with the patient name, age, date and UHID and required test prior to draw of blood.

6.38 Use of adequate size single-use disposable syringes and needles should be practised.

6.39 When an intravenous solution is being administrated in a patient’s arm, blood should be drawn from the opposite arm. If an intravenous infusion is running in both arms, sample should be drawn after the intravenous infusion is turned off for 15 minutes (minimum 2 minutes) before venipuncture and the tourniquet should be applied below the intravenous infusion site

6.40 The tourniquet must be removed before the sample is withdrawn and apply pressure on the puncture side with dry cotton swab until bleeding stops.

6.41 Place used needles and syringes in puncture-resistant containers containing disinfectant as per hospital infection control guidelines.

6.42 Do not recap used needles or remove the needle from the syringe.

6.43 Cap the specimen containers securely. Wipe off the exterior of the container free of any blood with a disinfectant.

6.44 Plastic 'bread boxes' with proper' caution' labels should be used for transporting this specimen to the laboratory.

6.45 Wash hands following completion of blood collection.

6.46 All objects contaminated with blood must be regarded as infected.

6.47 No paper work to be done on potentially contaminated surfaces.

6.48 All the clinical laboratory waste is pre-treated by autoclaving/microwaving/ non-chlorinated chemicals disinfectants like aldehydes, etc., on-site as per schedule I of BMWM RULES 2016.

Prevention of Sharps / Needle Stick Injuries

6.49 Although many potential routes of exposure exist, the majority of all exposures of healthcare workers occur as a result of needle sticks. Avoid the use of needles and syringes when possible.

6.50 Needles should not be recapped, bent, or broken by hand, removed from disposable syringes, or otherwise manipulated by hand.

6.51 Disposable syringes with attached needles, scalpels, blades and other sharps should be placed in puncture proof, leak proof and tamper proof white containers as close as practical to the area of use.

Management of Sharps/ Needle Stick Injury

6.52 Do not panic, do not put in your mouth, and do not use any antiseptic.

6.53 In the event of needle prick/other skin puncture wound, immediately wash thoroughly with soap and water and let blood flow freely.

6.54 All incidents of NSI should be reported to Hospital Information Control Committee Inform the nodal officer for post-exposure prophylaxis

6.55 Submit blood specimen of self and source for testing for HBV, HCV, and HIV.

6.56 Informed consent for HIV should be taken from the source, and after collecting the reports after 30 to 45 minutes, report to the ART center or the CMO room for post-exposure prophylaxis for HIV if required as per source code and exposure code.

Management of exposure to HBV

6.57 If the patient is HBs Ag negative, no further action is required.

6.58 If the Patient is HBs Ag positive-

• HCW is unvaccinated: HBV vaccination and Hepatitis B immunoglobulin within administered 48 hours.

• If HCW is previously vaccinated and is a known responder (i.e, anti-hepatitis B surface antigen positive) -Both HBV vaccination and Hepatitis B immunoglobulin"

• If HCW is previously vaccinated and is known non-responder-both HBV vaccination and Hepatitis B immunoglobulin

• If Exposed worker has non-immune antibody response is < 10mlu/ml: Hepatitis B vaccine and Hepatitis B should be administered immunoglobulin.

6.59 Follow-up testing- testing for HIV, HBV, and HCV for at least 6 months after the exposure (6 weeks, 12 weeks, and 12 months)

Management of exposure to HIV

6.60 For per-cutaneous exposure, wash the wound and surrounding skin with water, soap, and rinse.

6.61 For eye, irrigate the exposed eye with water or normal saline

6.62 For mouth, spit fluid out immediately and rinse mouth thoroughly, using water or saline several times.

6.63 Consult the designated physician in the ART Clinic/ Emergency/ Casualty.

6.64 The need for PEP depends on exposure as well as the source person's HIV status and the extent of the disease

6.65 PEP is decided based on exposure code and source code as per protocol. A three drug ART is usually administered. The first dose should be administered within 2 hours and not later than 72 hours

6.66 Exposed person shall be managed according to the NACO guidelines https://naco.gov.in/sites/default/files/HCTS%20Guideline%202024_High%20Res%20shared%20with%20SACS%20on%203rd%20Dec%202024%20by%20NC.pdf

BLOOD CENTRE

http://www.clinicalestablishments.gov.in/WriteReadData/1491.pdf

6.67 The Blood Centre is a unit that carries the operation of collection, storage, processing, and distribution of blood or its components safely and adequately by arranging blood from donors.

6.68 It is mandatory under law to get each Blood Centre licensed by the Drug Controller under the Drugs and Cosmetic Act. It Is the Responsibility of the Head of Institution to get the Blood Centre licensed and renewed from time to time. A separate license is required for Blood components.

6.69 The Blood Centre is to be looked after by an Officer in-charge who is qualified by training or by experience. He is responsible for all the day-to-day activities in the Blood Centre and supervises all other Staff working in the Department The in-charge is also responsible for laying down policies, standard operating procedures, training of Staff, making supplies available, quality control and administrative work relating to Blood Centre (Condition of license notification Part XII-B 5.4.99 2, amendment).

6.70 The location of Blood Centre should be such that it can be kept clean, hygienic and should have around 100 sq. meters of area. If blood components are prepared, additional 50 sq. meters is required.

6.71 Blood Centre should have provision for separate air conditioned space for blood collection, blood component separation, testing lab, refreshment cum rest room for donors. In addition, space is required for reception, sterilisation cum washing, and store cum record room.

6.72 According to the needs and logistics, staff may include qualified & experienced Medical Officer, Blood centre technician, registered nurse, technical supervisor (for blood components), lab technician etc.

6.73 The required equipment for this unit are temperature recorder, refrigerated centrifuge, haematocrit centrifuge, general laboratory centrifuge, automated blood typing, haemoglobin meter, refract meter, weighing machine, water bath, autoclave, serological rotators, lab. Thermometer, electronic thermometer, blood agitators etc. This equipment should be kept in proper running condition, standardized frequently and calibrated periodically.

6.74 The consumable supplies like testing reagents/kits should be kept in clean environment, at the temperature recommended for each reagent. The principle of FIFO should be adopted to avoid expiry of materials.

6.75 Each blood centre, based upon the rules framed under the Drugs & Cosmetic act, should develop standard operating procedures, including art steps to be followed for collection, processing, and testing. compatibility, storage, distribution transport of blood, preparation of blood components, autonomous transfusion, donor suitability, donor qualifying tests, donor referral, adverse reaction management, record keeping, quality control etc. The technical Staff working in blood should be trained well in following these SOPS.

6.76 It is the Responsibility of the incharge Blood Centre to ensure that whole blood collected, processed and supplied conforms to the standards laid down in the Indian Pharmacopoeia and other texts published, if any.

Currently, test is done for HIV I, HIV II, Hepatitis B, Hepatitis C, VDRL and Malaria parasite. The result of such tests is recorded on the label of the containers.

6.77 Records - Many records must be kept in Blood Centre like Blood donor record, Master Register for blood, issue register, register of components supplied, record of ACD/CPD bags, register for diagnostic kits cross match register, adverse reaction record, stock book. Blood bag labels are also prescribed under act having different standardized colour-coding for different groups.

6.78 Voluntary - Blood donations camps outside the institution can be organized by a licensed designated regional transfusion centre, a licensed Government Blood Centre and Indian Red Cross society. The Inter Government hospital transfer of blood can be done to meet shortage of any particular group of blood or blood components.

6.79 For technical procedural details, mandatory provisions, Blood Centre in charge should refer to the Drug & Cosmetic Act 2nd amendment) Rules 2020 Part II Section 3(i), No. 166 (e) Issued by Gazette notification dated 11th March 2020 by Ministry of Health & Family Welfare (Government of India), New Delhi.

6.80 Bio safety - immunization of all Blood Centre staff against Hepatitis B should be done and booster doses given at appropriate interval. All the Staff should adopt universal barrier precaution. The disposal of Blood Centre waste should be done as per guidelines issued by Ministry of Environment and Forest in their BMW rules 2019 (updated from time to time). All HIV, HBsAg, VDRL, Malaria, Haemolysed, Time bared blood bags should be disposed of by incineration on regular basis.

CHAPTER 7: PHYSICAL MEDICINE & REHABILITATION (PM&R) DEPARTMENT

7.01 Physical Medicine and Rehabilitation (PM&R), also known as Physiatry or Rehabilitation Medicine, aims to enhance and restore functional ability and quality of life to those who have any medical condition which restricts participation in activities and not in a state of good health as defined by WHO. These impairments or disabilities could be due to affliction of brain, spinal cord, nerves, bones, joints, ligaments, muscles, and tendons. A PMR Specialist (Physiatrist) treats patient as a whole with the goal to help them understand their condition and provide the tools and resources to manage a successful healing process with the ultimate aim of improving the functioning of the patient. The continuity of care offers a variety of treatment methods to reduce or eliminate challenges and address recurrence.

PMR specialists are post graduate trained doctors (Post MBBS- MD/DNB/Dip. PMR) who provide the necessary expertise related to acute and chronic pain management, deformities & amputation, work-related injuries, orthopaedic injuries, sports medicine, paediatric neuromusculoskeletal problems, and dynamic team-oriented approach.

7.02 OBJECTIVES

- Early identification and prevention of disabilities
- Medical and functional rehabilitation
- Community-based rehabilitation (CBR)
- Social and vocational reintegration
- Disability certification and assistive device facilitation
- Capacity building, training, academic and research activities

7.03 TEAM

Physical Medicine & Rehabilitation Department functions on the principal of multi-disciplinary approach through a dedicated team of medical, allied health and rehabilitation professionals under the leadership of a PMR Specialist. The team works for achieving the goals of medical rehabilitation, which are set after full evaluation of the case by the concerned team members. The members of the team should include:

i. Physiatrist
ii. Physiotherapist
iii. Occupational therapist
iv. Prosthestist & Orthotist
v. Medical social welfare officer
vi. Rehabilitation nurse
vii. Relevant technical and non-technical assistants
viii. It is desirable to have vocational counsellor, Craft instructor, Multi-rehab worker, Speech therapist, Clinical psychologist, Special educator and any other technical expert as per the requirement of the department.
ix. The team members in the department may function in their own hierarchy or organisational structure as may be devised for the most efficient functioning of the hospital. The individual team members should preferably

be under sub-sections of the department to allow for professional and patient care development.

7.04 SCOPE OF SERVICES

Department provide treatment to patients from new born to elderly age group with developmental delay, metabolic disorders, amputation, spinal cord injury, stroke, traumatic brain injury and other debilitating neurological, musculoskeletal, pulmonary and cardiovascular injuries or conditions. In treating these patients, Physiatrists lead an interdisciplinary team of physical, occupational, recreational and speech therapists, nurses, psychologists, prosthetist & orthotist and social workers in outpatient and Inpatient setting.

7.05 MANDATORY SERVICES (MINIMUM REQUIREMENT)

These services must be present in all tertiary and district-level hospitals:

i. Medical Rehabilitation
   - Neurorehabilitation
   - Early Intervention & Paediatric Rehabilitation
   - Musculoskeletal & Sports Injury Rehabilitation
   - Pain Management (non-invasive/interventional)
   - Geriatric Rehabilitation
   - Cardiopulmonary rehabilitation
   - Disability Assessment & Certification
   - Inpatient Rehabilitation Services for musculoskeletal and neurological disorders leading to long-term or permanent disabilities

ii. Inpatient Rehabilitation Ward (Mandatory)
   - Essential for comprehensive rehabilitation of:
   - Stroke and brain injury patients
   - Spinal cord injury cases
   - Post-traumatic rehabilitation
   - Multiple trauma, post-surgical, amputee care
   - Paediatric neuro disabilities

iii. Physiotherapy Services
iv. Occupational Therapy Services
v. Orthotic & Prosthetic Services
vi. Medico-Social Work & Counselling Services
vii. Outreach / Community-Based Rehabilitation (CBR) Services

Desirable/Advanced Services (Based on infrastructure & Demand)

i. Speech & Language Therapy
ii. Clinical Psychology Section
iii. Operation Theatre Wing (for rehabilitation-related surgeries)
iv. Vocational Counselling
v. Advanced Rehabilitation Robotics
vi. Gait Lab setup
vii. Virtual Rehabilitation setup

viii. Neuromodulation setup
ix. Assistive Technology Lab

7.6.1 Medical Section is responsible for medical assessment, diagnosis and prescription writing for all patients. A specialist in PMR Specialty always heads it. If this department of Physical medicine & Rehabilitation is located in a medical college; it should fulfil norms of National Medical Commission, in terms of manpower, equipment, space requirement.
7.6.2 A proper appointment system should be maintained by the department for all services and diagnostics with a proper appointment register which should clearly record the name, identification number, diagnosis, procedure, date, contact details etc.
7.6.3 Consents should be recorded wherever required as per hospital policy.
7.6.4 The department should operate as per the standards of healthcare as practiced in the hospital like NABH etc. and be included in such assessment.
7.6.5 While the medical section may need to do both invasive and non-invasive interventions such as intra-articular injection, slow infusion of morphine in spinal cord, Manipulations, corrective plasters, local nerve block, phenol blocks, tenotomy, closure of pressure injury, debridement of pressure injury, skin grafting on anaesthetic limb etc. all such procedures should be done with proper patient safety standards.
7.6.6 Disability certificate is issued to the eligible 'DIVYANGJAN' by the Disability board

7.07 PHYSIOTHERAPY SECTION

i. This section Provides physical therapy program in consensus with the treating physician. Physiotherapist will treat patients using electrotherapy, microwave diathermy, exercise therapy, shortwave diathermy, hydro collator (hot packs), paraffin wax therapy, mechanical traction therapy, ultrasound therapy, laser therapy, gait and balance training, exercises to control obesity, manual therapy etc. after a detail physical assessment of the patient.
ii. Physiotherapy services also include preparing home exercise program for the patients as per their requirement. Contribute in neurorehabilitation, cardio rehabilitation, pulmonary rehabilitation, paediatric rehab, geriatric rehab, spinal injury cases, menopause clinic etc.
iii. Physiotherapy services are also provided to the patients referred from the hospital's different wards and all ICUs regularly.
iv. Maintains therapy records, home exercise programs, and conducts education sessions

7.08 OCCUPATIONAL THERAPY SECTION

i. This section will provide therapy focused on return to daily activities and societal roles in consensus with the treating physician. Occupational therapist treat patient with preventive health education & intervention in activities of daily living (ADL), work & productive activities, play, leisure and spiritual activities; functional capacity analysis, designing and training

in the use of assistive technology & adaptive equipment, and environmental modification to enhance functional performance. Further these may include:

- Developmental therapy with the help of sensory integration, early intervention, NDT, cognitive & perceptual frame of reference etc.
- Ergonomics and ADL /Instrumental ADL training.
- Part of collaborative and team clinics as per design of such clinics like spinal injury, amputation, burns etc.
- Work & industry (occupational hazards): - prevention & therapy of cumulative trauma disorders, peripheral nerve disease.
- Mental health & autism spectrum disorders

ii. Maintains therapy records, home programs, and conducts education sessions

7.09 ORTHOTIC & PROSTHETIC SECTION:

This section will provide Custom fabrication, and fitting in consensus with the treating physician. Orthotic appliances include splints caliper, braces, shoe modifications etc. Prosthetic appliances include artificial limbs. In the workshop, measurements are taken and appliances are manufactured, fitted, finalized it also maintains a small store of materials required for fabrication.

7.10 MEDICO SOCIAL WELFARE SECTION:

This section is meant for socioeconomic evaluation of the patients, his/ her family support system and inter - person –relationships. Solutions are suggested for various problems like financial constraints, weak family support, desertion, psychosocial conflicts etc. Provide counselling and other support services to the patients and their care givers helping them cope well with their existing situation/grief. Medical Social Welfare Officer is also engaged in teaching training and supervision. Liaise with government departments and NGOs to mobilize internal and external social resources to meet patients' needs.

7.11 CLINICAL PSYCHOLOGY SECTION (DESIRABLE)

This section is meant for assessment of intelligent quotient and developmental quotients counselling, behavioural therapy and monitoring. Mental retardation and such other patients are most important clients for this section. It should be separate from the similar section in psychiatry department, if present.

7.12 VOCATIONAL SECTION (DESIRABLE)

This section is meant for assessment vocational capabilities of the patient ‘suggestions and practice of improvement of Vocational potentials, arrangement for transient placement and vocational guidance and counselling including various government benefits to disabled.

7.13 OPERATION THEATRE (DESIRABLE)

i. Equipped for elective and emergency surgeries related to:
   - Soft tissue & Deformity correction
   - Tendon transfers
   - Amputation revisions
   - Pressure injury management

ii. Must include pre-op and post-op monitoring areas

7.14 INTER-DEPARTMENT COLLABORATION:

As the rehabilitation process of any patient is multi-faceted and long in time, it may require the specialized skills and support of different specialities in the hospital. The hospital will ensure that all such services are provided to the patients requiring rehabilitation through a proper referral and collaborative system.

7.15 DEPARTMENTAL OFFICE PROCEDURES

The office of the department needs to be located within the department and needs to provide the administrative assistance, record keeping and store management. As the PMR departments tend to be larger departments with multiple technical personnel, the office section also needs to be adequately strengthened. The office section will also be responsible for the conduct of:

i. Disability Board: through Medical Record Department.
ii. All the investigation reports of the patient are kept safely & timely delivered to the patient.
iii. Management of any training programme
iv. Training of personnel in Fire Safety, BMW and other such hospital practice trainings as per the standards of the hospital.

7.16 ACCESSIBILITY:

This department should be conveniently located and free of architectural barriers with sufficient space for mobility of patients in trolley and wheel chair and waiting area for patient's attendants. There should also be a dedicated registration counter for PWDs to address accessibility and universal design. There should be adequate space for all the sub-sections of the department to function independently and cohesively meaning thereby that they should be provided their own separate areas which are located in the same major departmental premises for faster and efficient interaction for patientcare.

General Infrastructure Guidelines

i. The department should be barrier-free and centrally located
ii. Wheelchair-accessible corridors, therapy rooms, and toilets
iii. Separate OPD, therapy, counselling, and assessment zones
iv. Therapy gym, P&O workshop, ADL room, quiet room for sensory therapy
v. Waiting, counselling, and caregiver education areas

7.17 HOSPITAL ROLES:

The department should be part and contribute in the universal design, accessibility, disability certification and PWD rights committees of the hospital.

7.18 OUTREACH SERVICES (CBR):

i. Regular rural visits for screening, awareness, and follow-up
ii. Partnership with community health workers (CHWs), ASHAs, PHCs
iii. Focus on prevention, early detection, and community reintegration

CHAPTER 8: SUPPORTIVE SERVICES

(Ambulance, Laundry, CSSD, Dietary, Fire Prevention, Communication and Biomedical engineering)

AMBULANCE SERVICES

8.01 A Chief Medical Office/ Transport Officer is assigned Responsibility for ambulance services.
8.02 All ambulances shall comply with statutory guidelines like vehicle registration, fitness, insurance, pollution control and valid driver's licences.
8.03 He must ensure that all vehicles are in functioning condition and are fully equipped with oxygen cylinder, mask and first aid box.
8.04 Ambulances shall be checked by a designated person in every day for equipment, drugs and resources as per the checklist.
8.05 Ambulance shall be checked for adequate drugs and functional drugs before each dispatch to bring or transfer any patient to another facility.
8.06 A suitable health care professional shall accompany the patient during transfer according the medical condition i.e. critical, unstable or stable. This could be a doctor, nursing personnel or attendant.
8.07 Ambulances should be provided with communication devices to facilitate communication with emergency department during transfer in of any patient.
8.08 All drivers and helpers working in the ambulance must be trained in First Aid and life support techniques
8.09 Vision and medical examination all the drivers to assess their health status must be done periodically.
8.10 C.M.O. / Transport Officer should be authorized to carry out recurring repair from the sanctioned imprest money as per institutional policy.
8.11 Servicing of each vehicle should be carried out after every 5000 Km.
8.12 Vehicles requiring repair for more than Rs.5000/- should be decided by Transport Committee, which gets the repair done by an authorized dealer.
8.13 CMO Incharge Transport/Transport Officer is responsible for putting up a proposal for replacing condemned vehicle.
8.14 CMO should be authorized to sanction Petrol, Oil & Lubricant.
8.15 Surprise check of vehicles should be done for petrol consumption.
8.16 CMO in charge Transport will detail vehicle for bonafide Government duty within the municipal limits. For journeys outside the municipal limit, permission form the appropriate authorities to be obtained.
8.17 Whenever patients hire vehicle, CMO will ensure that payment for the hiring charges and credit it to the Hospital authorities.
8.18 Mock demonstration of emergency/disaster should be carried out periodically.
8.19 Driver and the helper should also be trained in first aid & CPR.
8.20 CMO will nominate a Driver/Mechanic who will bring to his notice the need for prompt repair and maintenance problem.
8.21 Duties should be assigned to drivers and helper for working days/holidays and in case of emergency.

8.22 Transport workshop should be maintained by adequate number of Mechanic and Supervisor. They should be able to manage small mechanical job in hospital.
8.23 Sufficient space of designated ambulance bay, parking, room for drivers with attached toilet and workshop should be available.
8.24 The rate of hiring ambulances by patients who are discharged to be displayed outside casualty.
8.25 A proper logbook of each vehicle should be maintained. In addition to detail of trips made, it should have entries of change of tyres, batteries, petro, repair etc. Transport Officer/CMO In charge should regularly countersign this.
8.26 The workshop will maintain the following documents:
a) Suitable amount given as Imprest money.
b) Inventory of non-expendable stores in use in the workshop.
c) Expendable stores register.
d) Job cards.
e) Purchase files.

LAUNDRY AND LINEN SERVICE

Laundry services should be available on In-house or outsourced basis. In house laundry shall follow the guidelines given in National guidelines available at https://nhsrcindia.org/sites/default/files/Guidelines-on-CSSD-and-Mechanised-Laundry.pdf
8.27 Laundry shall have adequate space depending on the bed strength of the Hospital.
8.28. Unidirectional work - flow shall be ensured in the laundry.
8.29 Adequate Electro-mechanical equipment like washing machine, hydro extractor (spin & dry) and dry tumbler should be available of different capacities depending upon the size of the Hospital and workload.
8.30 In a large hospital facility, a steam form boiler will be made available for use in dry heating of linen and for heating the water during washing of linen.
8.31 All wards, OTs, labour rooms, Nursery, ICU & ICCU, emergency departments etc, should be supplied through centralized linen service.
8.32 Administrators to provide 6 sets of complete linen in each user area. 4 sets to be kept in ward for emergency condition, one to be utilized and one sent to laundry.
8.33 Separate arrangements should be made for sluicing of washing soiled, foul smelling and infected linen.
8.34 All soiled linen must reach the laundry after they have been soaked in 1% bleach solution for 30 minutes and rinsed with water.
8.35 Mending and condemnation of linen should be centralized or decentralized depending upon life span of linen and the availability of resources.
8.36 Blankets should be washed in the laundry and properly stored in the respective function unit.
8.37 Mattresses (coir/foam) should have polythene/rubberized material covering to avoid mattress contamination with body fluids.
8.38 Periodical bacteriological tests must be done to ensure infection free linen.
8.39 Proper counting of linen at receiving and issuing end to be there to avoid pilferage of linen.

8.40 Nursing Superintendent along with Supervisor laundry must make surprise rounds to see that linen is always given to the patients.
8.41 Physical maintenance of linen should be done by Sister In-charge of ward and Line Mistress in Operation Theatre, if post of Line Mistress is available.
8.42 Blankets should be washed/dry-cleaned between each patient use per hospital infection control policy.
8.43 Mattresses must be kept under sun light for some time periodically.
8.44 Separate linen should be available for use by health care professionals for use in hospital and the same should be washed separately.
8.45 There should be proper marking on the linen for identification so that same linen is returned to respective ward or OT and minimizes complaint by user department on the quality of the linen returned.
8.46 The senior most technicians should be assigned supervisory Responsibility.
8.47 All personnel working in the Laundry should undergo periodic medical and dermatological examination.
8.48 The following documents should be maintained:

i. Catalogue of equipment and AMC of all equipment.
ii. Inventory of non-expendable item.
iii. Wash register.
iv. Muster roll.
v. Linen receipt and issue register.

CENTRAL STERILE SUPPLY DEPARTMENT

(https://nhsrcindia.org/sites/default/files/Guidelines-on-CSSD-and-Mechanised-Laundry.pdf)

8.49 It is divided into 2 sections in bigger hospital:-
a) Centralized service
b) Operation Theatre service
8.50 Department of C.S.S. may work during day shifts or all 24 hours depending upon the workload of the hospital.
8.51 C.S.S. should take up repacked dressing catheters, gloves, 0.T./ward instruments dressing gowns and linen for OTs.
8.52 Theatre service will deal with sharps like scissor, basin, endoscopes, rubber, table mattresses etc.
8.53 Issue of items to be done on clean exchange basis on one for one principle basis.
8.54 Messengers service from CSSD to be introduced to save manpower and time At least messenger services to be available for all OTs, Labour Rooms, Nursery, Injection Room, ICU, ICCU and Emergency Departments of the hospital.
8.55 Physical control to be exercised to minimize losses and damages.
8.56 All soiled instruments, catheters and linen should be treated as per guidelines on Hospital Waste Management t before sending it to CSSD for sterilization. .
8.57 All workers while handling instrument o linen must take self precaution like wearing of cap, mask and gloves .
8.58 All equipment must be repaired and maintained functional, and A.M.C. will be renewed annually.
8.59 The following register will be maintained in the Department:

i. Inventory of non-expendable items.

ii. Expendable stores register.
iii. Register of losses and breakage
iv. Sterilizer instruction manual.
v. Load recorded, contents of load, cycle time, temperature, date and time, and operator's name

DIETARY SERVICES

Healthcare facility shall establish kitchen and dietery services and may follow available National guidelines
https://nhsrcindia.org/sites/default/files/Guidelines%20for%20Modern%20Kitchen%20and%20Diatery%20Services.pdf

8.60 This department should function under direct supervision of Senior Dietician/Chief Dietician. She will report to Addl. Medical superintendent in charge of Dieting Services.
8.61 Meal timings should be fixed. The following are the recommended timings:

Morning tea 7 AM – 8 AM
Breakfast 9 AM- 10 AM
Lunch 1 PM — 2 PM
Evening tea 4 PM – 5 PM
Dinner 6 PM — 7 PM

These may be modified as per institutional policy.

8.62 Items like egg, bread, butter, and fruit should be listed and sent to the wards and proper receipts obtained from the sisters concerned to prevent pilferage.
8.63 Strict supervision/quality check should be done during cooking so that the required food quality is cooked and issued.
8.64 It is unnecessary that dietary articles should be exactly according to prescribed scales. Considerable economy can be practiced in medium and large sized hospitals.
8.65 Requisition for diets should reach the kitchen a day before the actual requirement. In large sized hospitals a link can be established between midnight census and actual diet requirements statistically and general diet requisitions dispensed with
8.66 The storekeeper should receive the perishable and non-perishable dieting articles against a proper indent from an approved supplier. The Dietician-In-Charge should check the quantity and quality of goods received. A quality check/receipt register should be maintained for bills activity
8.67 Store Keeper issuing dietary articles should have the time fixed for this purpose. He should also see that when any item is unavailable or in short supply the dietician does alternate menu planning.
8.68 Menu planning for summer and winter should be prepared scientifically by the dietician and all concerned informed.
8.69 Dietician and Nursing Superintendent should make surprise checks of food distribution, particularly on the days when special items are prepared and sent to the wards.
8.70 Tea and food should be served through well-insulated trays and trolleys.
8.71 It is advisable that arrangements are made to prepare tea, milk and snacks in the ward pantry.

8.72 Nursing staff is responsible to see that dietician's instructions for the distribution of food are properly carried out. They should ensure spotless cleanliness of trays and trolleys.

8.73 Dieticians will run orientation courses for medical Staff and nursing staff on dietetics.

8.74 Hospital should allow dietetic interns to be trained in the dietetic department.

8.75 Subordinate Staff working in the kitchen should be periodically subjected to medical examination.

8.76 List of duties of all categories of kitchen staff will be-prepared by the dietician and circulated.

8.77 Therapeutic diet for uremic patient, hypertensive and diabetic patient to be prepared as per demand from respective department.

8.78 Dietetic counselling to be conducted by Dietetic Department for obese hypertensive, diabetic patients, heart patients, low birth weight babies and antenatal patients "Time and days" of week and the person responsible for counselling services should be displayed in the counselling hall and circulated to all the staff members of the hospital.

8.79 Research and training on nutrition to be conducted by Dietetics Department.

8.80 Proper hygiene and cleanliness to be maintained in kitchen. Grains and raw-food to be stored in a manner that is out of reach of rodents.

8.81 Senior Dietician/Chief Dietician will ensure regular supply of cooking gas cylinders and proper maintenance of cold storage for perishable items.

8.82 Proper financial management to be done by Store Officer, if posted.

8.83 The following documents will be maintained in this Department:-

i. Inventory of non-expendable stores in use in the Section.
ii. Inventory of expendable stores issued to the Section.
iii. Diet requisitions file.
iv. Diet consolidation sheets.
v. Supply order file.
vi. Stock ledgers of raw dietary articles.
vii. Store requisition files, and
viii. Register of surpluses and losses.

8.84 All information required for costing of dietary service will be recorded in these documents.

FIRE PREVENTION

8.85 The fire protection programme should be an indispensable part of every hospital's general safety program.

8.86 Maintenance of building and its safety against fire rests with the Engineering personnel working under the C.P.W.D.

8.87 Hospital administrator has also the moral responsibility for safety of patient, hospital workers and community people.

8.88 Each hospital should have a safety committee comprising Engineers (Civil & Electrical) and Heads of Departments from high-risk areas like Operation Theatre, laboratory, store and administration.

8.89 Each functional unit should have stairs besides lifts on both sides of the wards. All the fire exit stairways should be free between different stories of the building and no dumping of condemned stores item to be stored on the stairs.

8.90 High fire risk areas like operation theatre, laboratories, hospital stores, medical records and plant areas like laundry, CSSD and kitchen should have automatic fire alarm and fire extinguisher facilities. If feasible, facilities to be made available include smoke detection, heat activated alarm, automatic water sprinkler and chemical extinguisher.

8.91 Multi-storied hospital complex should have wide-open areas for entrance of fire brigade vehicles on all sides.

8.92 Medium and big sized hospitals should have fire hydrant facility with functioning electrical pump. Location of fire hydrant should be easily heard and identifiable with arrow marks on the road and also to be shown on guide map of the hospital.

8.93 Fire extinguisher should be inspected and checked frequently by the engineering department.

8.94 Each hospital should have a sound practical evacuation plan

8.95 Illuminated signboards for exit ways should be there in all the working areas of the hospital.

8.96 Arrangement for generator to operate emergency fire lifts and illumination of fire exit and other, emergency light facility should be there.

8.97 Training of all level of Staff in fire-fighting should be mandatory and they must know how to operate fire-extinguishers.

8.98 Mock drill of fire-fighting to be carried out periodically.

8.99 Although all public areas have been declared as 'NO SMOKING ZONE AREA' but special preventive measures to be taken for hospitals.

COMMUNICATION

8.100 Communication is an important tool in enhancing quality care of acutely ill patients, accidents victims and mass disastrous conditions, which are on increase especially in metropolitan cities.

8.101 All telephones, EPABX, intercoms and mobiles telephones should he functional in all hospital areas.

8.102 Technical staff looking after maintenance must repair the instrument or the lines instantaneously, if fault is local.

8.103 If the fault rectification is required by service provider, its repair must be prioritized.

8.104 Surprise check of the telephone / instruments to be done by Supervisor telephones.

8.105 Hospital telephones should not be used for private calls and instruction should be issued, to all the employees.

8.106 Telephone facilities will be given at the residence as per Government order.

8.107 With advancement of tele-communication hospital should have better facility of communication like cellular phone, E-Mail and Internet wherever permissible.

8.108 There should be facility for effective communication between the Emergency department and ambulance on Pre-hospital care service. Hospitals shall endeavour to establish smart ambulance services.

BIOMEDICAL ENGINEERING

To effectively manage the Bio-Medical Equipments and create a repository of equipment, a qualified team of Bio-Medical Engineers, Technical Officers, Data Entry officers and Data Analyst should be in place.

Scope of Work:

1. **Asset Mapping**
   - 1.1 A department-wise list of existing equipments is to be prepared as per attached format and the same list is to be approved by HoD.
   - 1.2 A consolidated list of all equipments will be prepared after receiving the list from each department and same list is to be approved by Nodal Officer deputed by the Hospital.
2. **Unique Equipment ID**

   On basis the approved list, a unique equipment ID and Barcode are to be generated and a sticker having Barcode and equipment information like preventive maintenance and calibration details (as provided by the department) are to be pasted on each equipment.
3. **Bar coding or Labeling of Equipment**

   These stickers will be updated on a regular basis whenever Preventive Maintenance or calibration of the equipment is done.
4. **Preventive Maintenance G Calibration Schedule**
   - 4.1 The list will also be updated on a regular basis whenever Preventive Maintenance or calibration C breakdown maintenance of the equipment is done.
   - 4.2 Preventive Maintenance schedule and calibration schedule are to be prepared by the team and shared with the respective departments on a yearly basis.
   - 4.3 The data of Preventive maintenance done or Calibration done are to be collected and maintained every month and will be updated in the records.
5. **Breakdown TAT**
   - 5.1 Breakdown data of all equipment to be maintained for effective documentation of Breakdown data and to calculate Breakdown Turnaround Time (TAT).
   - 5.2 The team will maintain the data related to Warranty/CMC/AMC of equipments and will inform the departmental Nodal Officer a month before the expiry of the contract.
6. **New Equipment**
   - 6.1 All new equipment installed in the hospital/department will be added to the existing equipment list on a regular basis.
   - 6.2 All old equipments condemned from the hospital will be removed from

the list.

7. **Training**

   The team shall maintain training records of all staff undergoing training by OEM after new equipment installation.

8. **Analysis**

   The team shall also submit any maintained data to the management of the Hospital as and when required.

9. **Accreditation**

   The team will share all maintained data to Hospital's Nodal Officer for accreditation process.

CHAPTER 9: HOSPITAL ADMINISTRATION

GENERAL

9.01 An Organogram of the hospital administration with hierarchy along with formal and functional reporting should be documented and displayed. (Appendix

9.02 Standing order or Hospital order is to be issued only by the Director/ Medical Superintendent of the hospital or by any Officer authorised by him or her.

9.03 Senior-most designated official will act as in charge of the hospital and has delegated authority when the Director/ Medical Superintendent is not on duty.

9.04 Other officer dealing with Hospital Administration, e.g., Addl. Medical Superintendent, CMO's / DDA / Administrative Officer, Deputy Medical Superintendent, Nursing Superintendent will be in charge of specific areas of works.

9.05 Chief Nursing Officer, Nursing Superintendent, Deputy Nursing Superintendent, Assistant Nursing Superintendent and other Nursing Staff must perform the duties specified in the Appendix-I. Nursing Superintendent is directly responsible answerable to the Medical Superintendent for providing efficient nursing care to patients and proper training of student nurse. He/she will, however, work in close cooperation with Addl. Medical Superintendent/DDA/Administrative Officer, Deputy medical Superintendent and others.

9.06 Financial administration to be controlled by the DDO/Accounts Officer. He will be responsible answerable to the Director/ Medical Superintendent and the DDA for the efficient running of Ms Office institution. His duties are as detailed in Appendix-I.

9.07 Consultants, Specialists and other medical officers will be responsible answerable to the Director/ Medical Superintendent for providing the best medical care to patients within the resources available.

9.08 Information to the public, Radio, T.V., Newspapers and Social Media to be handled by the Director/ Medical Superintendent or designated Public Relations Officer. Enquiries regarding the condition of patients should be directed to the Central Admitting Officer/ Addl. Medical Superintendent (Hospital) or the Nursing Superintendent or the authorised nursing personnel. Precaution must be taken not to disclose any confidential information. Information of any patient should not be given without his/her consent.

9.09 It should be prominently exhibited all over the hospital that patients must not bring valuables or wear expensive jewellery. If they do so, it will be at their own risk. There may be occasions when valuables are brought into the hospital and in such cases the attending nurse or house officer should make a correct list of such items, duly witnessed in the case of unconscious patients and have them deposited in the financial section Nursing Superintendent section and proper receipt be issued.

9.10 At the time of giving back the valuables, the financial section Nursing Superintendent section will ensure these are given to the patient concerned or to the legal heir in the case of a patient who dies in the hospital.

PERSONNEL ADMINISTRATION

9.11 Rules framed by the Government or other concerned authorities will be strictly followed in the matter of recruitment or promotion. The strength of Staff in each department should, however, be fixed after studying the requirement and in no case it should exceed sanctioned strength.

9.12 An appointment letter should include the terms and conditions, including the job responsibilities. Appointment will be given to an employee and his/her acceptance of the terms and conditions of employment will be taken in writing and recorded in the personal file of the employee.

9.13 Immediate notification of the appointment or promotion will be sent to all concerned and particularly to the financial section.

9.14 Financial section will draw the pay of the employee without delay and make arrangements, for its prompt disbursement.

9.15 Personal file, service document recording all details and confidential dossier of the employee will be maintained up to-date and safely kept under lock and key by respective administrative sections.

9.16 Drawl and disbursement of monthly pay will be on the days prescribed but arrears of pay will be drawn and paid with the least possible delay.

9.17 List of holidays will be exhibited prominently particularly in the OPD. Employees will avail of these holidays subject to exigencies of service. Administration shall ensure that the OPD will open one of the day.

9.18 All mail/correspondence of the hospital will be delivered in the administrative block to a designated official in diary and dispatch section/receipt & issue section. Official mail/correspondence to be properly entered in diary and distributed promptly to the section concerned after perusal by Hospital Administration. Personal mail to be sent to the departmental head that will ensure that the mail reaches the individuals. In case electronic file tracking system like E- office is in place all mail/ correspondence will be received in the diary & dispatch section and then will be distributive to the respective section.

9.19 Separate sick room will be provided in the Hospital for the nursing staff, medical staff, medical/nursing students, residents and others, if possible. Arrangement of crèche should be made by the hospital.

9.20 Enforcement of discipline will be the responsibility of departmental heads. Breaches should be reported to the Chief of till the Hospital who will take appropriate action according to rules.

9.21 Trade union or demonstrational activities during routine working hours prohibited.

9.22 In the event of strikes by workers and others detail instructions for maintaining the hospital services will be issued by the Chief of the Hospital.

9.23 The Director/ Medical Superintendent should display prominently the inconvenience likely to be caused to the public and seek public cooperation for running the hospital through social welfare agencies, in case of emergencies, though the Institutional Disaster Management Plan should be in place in the institution.

9.24 Police protection to loyal workers and those guarding vital installations of the hospital like water thanks, power stations should be arranged.

9.25 In the event of total strike, transfer of patients to other hospitals should be resorted to and attempt should be made for running minimum hospital services with reference to the availability of hired or honorary manpower.

9.26 All complaints pertaining to patient care, negligence or misbehaviour by any staff will be dealt with by the Public Grievance Redressed Cell, which may be set up by the Medical Superintendent of the hospital to deal with all such cases. The name and contact no. of the complaint and grievance officer should be prominently displayed in the hospital and posted on the website. Mechanism of grievance redressal should be mentioned clearly.

Similarly, grievances of the staff members of the hospital will be heard by the Staff Grievance Redressed cell of the hospital as may be set up by the Medical Superintendent/ Head of the Institution.

9.27 An Internal Committee and Workplace Harassment Committee should be in place to deal with the grievances regarding sexual harassment /workplace harassment of working women in the workplace. The Internal Committee should be as per the statutory guidelines.

FINANCIAL ADMINISTRATION

9.28 Officer in-charge financial section is responsible for proper functioning of this section of Hospital Administration.

9.29 He will allocate the work in such a manner that the load on the section is equally distributed. He will for this purpose get work-study done and makes a detailed list of duties of the staff working in the section.

9.30 All transactions shall be done in digital/electronic form as far as possible. Officer In-charge will be jointly responsible for all cash transactions and custody of cash along with the cashier.t.

9.31 He will ensure that the payments to the concerned persons are made in according to defined guidelines.

9.32 He will specify the dates by which he will receive bills for payment. He will develop/ follow a system which obviates the need of physical interaction with the vendors.

9.33 He will promptly enquire into the complaints of delay or non-payment of bills or salaries and take appropriate remedial action. He will fix responsibility for avoidable delays in his section and record such Instances in the confidential dossier of the individual concerned.

9.34 He will compile budget returns with care and submit the returns on the due dates to the authorities concerned.

9.35 He will prepare conventional and performance budget returns. For this purpose he will get costing of hospital services done.

9.36 He will inform the Hospital administration about the expenditure booked under different "heads" from time to time and also bring to the notice of the Director/ Medical Superintendent any abnormal rise or decline in expenditure booked against budget heads.

9.37 He will ensure that proper sanctions exist for drawing money from the Treasury. He will present the bills to the Treasury, only when he Is satisfied mall respects. This is his undivided responsibility.

9.38 He will present the bills to the Treasury by the prescribed dates.

9.39 He will draw a checklist for the guidance of the staff working under him for scrutinising all categories of bills.

9.40 He will devise adequate safeguards to ensure that payments are made to the right person. In case of doubt he will seek legal advice through hospital administration. The responsibility for giving pay order rests solely on him.

9.41 He will give financial advice when needed by hospital administration. He will scrutinise all losses before they are written off. He will scrupulously observe all rules and regulation in the interest of patient care, he will however interpret them liberally.

9.42 He will act in the interest of Patient Care in accordance with the directions of the hospital administration.

NURSING ADMINISTRATION

9.43 While preparing the duty roster of nursing staff it will be ensured that as far as possible every member has an equal share of duty hours, days off, holiday and night duty. Guidelines to be prepared and finalised by the Nursing Superintendent with Head of the Institution.

9.44 No one should proceed on leave without sanction. No one should absent herself/himself from place of duty under any circumstances. If the nursing staffs are ill, she will inform the Nursing Superintendent who will make necessary arrangements.

9.45 The officer in charge nursing administration will issue detailed instruction to the nursing staff regarding nursing care procedures, reporting of missing patients, control and management of communicable diseases, isolation techniques, control and administration of narcotics, hypnotics, poisons, radioactive materials, use of restraints, etc. Details SOPs should be displayed at proper places.

9.46 She Nursing Superintendent will supervise safety control measures for preventing accidents, fire hazards in anaesthesia, oxygen and therapy gas equipment, electrical appliances, heating pads, hot-water bottles, etc.

9.47 Nursing staff in the Hospital will normally not be rotated from one area to other without consulting the unit medical chiefs. They will be given leave with the consent of the concerned officer if charge/ Head of Department /Unit Head. A clear cut policy guidelines should be made for rotation of nursing staff.

9.48 The officer in charge will coordinate food and house-keeping services in the interest of patient care.

9.49 Distribution of food is the responsibility of the nursing staff. Distribution of therapeutic diet is however the responsibility of dieticians.9.48 The officer in charge will ensure that patients' relations do not interfere or hinder the medical or nursing care. Only sister in-charge of wards and departments will issue admission or food passes to patients' relations, during visiting hours.

9.50 The Chief Nursing Officer/Nursing Superintendent will arrange training programmes for specialized nursing regularly for nursing personnel through CNEs.

SECURITY

9.51 The Director/ Medical Superintendent should issue detailed instruction for the security of hospital property and documents to the designated Officer in charge.

9.52 There will be a designated officer incharge who should be on regular rolls of the officer swill responsible for the administrative management for security services.

9.53 Attention will be paid to secure doors and windows firmly. Good quality locks will he provided. Keys of all locks in the wards and departments will be in the custody of designated official concerned. Duplicate keys will be lodged in the hospital locker. Keys of departments like laboratory, X-ray, OPD, Hospital Administration offices will be kept centrally in secure place guarded by a designated security person round the clock.

9.54 If the original or duplicate key is lost, the lock should be replaced immediately.

9.55 Each department should nominate an official by rotation for closing and opening duty. He should clearly be informed in writing of his responsibilities and his acknowledgement be recorded by the officer in charge of the department.

9.56 Duty roster of designated security person and security guard should be prepared to ensure that the same person is not given the same duty all through.

9.57 The security personnel should be given clear instruction regarding the pass system for allowing the visitors inside the hospital premises and this should also be publicised widely so that misunderstanding in the minds of the visitors and patients is dispelled.

9.58 Maximum lighting should be provided in the hospital premises consistent with economy. The security personnel should take frequent beats in the dark comers of the hospital. Only limited number of gates should be opened in the night.

9.59 Head security guard and security officer should do surprise checks at night and submit reports to the Director/ Medical Superintendent about security lapses.

9.60 All medical equipment like, microscopes, ophthalmoscopes, endoscopic instrument, stethoscope, office equipment like type writers, calculating machines, etc., should be locked up in almirahs when not in use. The officer concerned should fix responsibility for their safe custody on the users.

9.61 The whole hospital premises should be cover under CCTV surveillance. The surveillance should be monitored round the clock by the designated officer. Any incident noticed should be reported to the consult authority immediately.

9.62 Operations, maintenance and monitoring shall be done by the designated officer.

DOCUMENTS

9.63 Confidential papers and files should be stored in secured spaces by the officer concerned. Classified documents when sent by post should be enclosed in double cover. The inner cover should be sealed and addressed by name to the officer for whom it is intended and the number and particulars of the enclosure should be intentioned on that cover. The outer cover should bear the name and official designation of the addressee and the franking of the dispatching office.

9.64 Confidential papers should be typed or printed by stenographers and clerks known for their integrity and carried from one place to another in the hospital by the officer concerned.

9.65 Loss of confidential papers or files should be promptly looked into and responsibility fixed.

OFFICE MANAGEMENT

9.66 The office superintendent or the head clerk of the office is responsible for efficient office management.

9.67. e-Office shall be practiced as much as possible.

9.68 All physical dak received should be properly entered in diary and distributed to the dealing assistants within 24 hours of receipt.

9.69 Officers who dispose of the dak directly on receipt may be entered in diary subsequently.

9.70 Routine letters are to be disposed of by the dealing assistants within a week of their receipt.

9.71 Noting will be clone on non-routine letters and put up to officer concerned within a week of their receipt.

9.72 Immediate letters will be replied within 24 hours of their receipt if this is not possible appropriate note will be submitted to the officer concerned explaining the likely delay.

9.73 Weekly out Standing report of letters not replied will be submitted by the office superintendent or head clerk to the officer concerned who will record his directions to the dealing assistants. This will among other things be the basis for the officer to write confidential reports about the staff working under him.

9.74 Reminders received will be marked by the office superintendent or head clerk as warranted or unwarranted. List of warranted reminders will be prepared weekly and submitted to the officer condemation who will call the dealing assistant and ask for his oral explanation. If he is not satisfied with the explanation, he will record his remarks on the list. This also will figure in the confidential record of the individual concerned.

9.75 Master files, correspondence files, confidential files and personal files should be separately maintained. Master files will contain all letters relating to policy matters. Correspondence files will contain routine matters. Confidential files will be for all confidential correspondence and personal files relate to hospital staff.

9.76 File number should be simple and follow established guidelines for Office Procedures.. The section abbreviation, the classification of the file and number of the file should alone be recorded, e.g., Estt. MF- 12-F.S-Cor-15 -This means Establishment Section Master File Number 12, Financial Section correspondence File Number 15 M.S.-Con-20-This means medical stores confidential file Number 20. Estt. - Per- 1-This means establishment section personal file Number 1.

9.77 Each section should maintain a file index register. File number should be given either by the office superintendent or the head clerk.

9.78 All letters should be promptly filed, page numbered, linked and cross-linked by the dealing assistants.

9.79 Administration will prescribe the period of retention of each type of record; Records beyond this period will be produced before the Condemnation Board and destroyed in their presence.

9.80 Master files, hospital orders, pay bills and service documents will be neatly bound and retained.

9.81 Efforts should be made to digitally achieve all documents.

CHAPTER 10: PLANNING, ORGANIZATION AND MANAGEMENT TECHNIQUES

PLANNING

10.01 Each hospital should have a prospective master plan of development. This can be broken into phases. The plan should include physical structures, building, equipment, furniture, manpower and consumables needed. Wherever needed, assistance of related experts in hospital planning should be taken.

10.02 The plans should be flexible & expendable in nature and costing including escalation should be done.

10.03 The annual plan prepared by the hospital each year should be based upon the master plan and submitted to competent authorities for approval. Adhoc planning or projects should be avoided. Planning should address the vision of the hospital

ORGANIZATION

10.04 A hospital is a complex organization where people ranging from illiterate to highly qualified specialist work together. They all have different motivation level and qualities. A hospital needs the coordinated working of all such people. It is thus a challenging task for the administration to run it as a well-knit organization where all groups work in harmony to each other. Strategies should be developed to have different level of incentives or discentives to make the different groups work efficiently. The leadership should be result oriented.

10.05 The leader should be one who can visualize the situation in the organization, take corrective steps in time, if needed, rather than resorting to crisis management.

10.06 The administration should set up practices, frame rules and regulations where responsibilities are clearly defined and lapses can be pinpointed.

10.07 A system of feedback from Patients/Staff should be developed so that suggestion can be received for improvement of hospital's functioning

10.08. Training of staff in psychosocial behaviour should be adapted to achieve maximum proficiency.

10.09 The computerization should he adapted to maximum extent in departments where work is large and repetitive. Modern information technology tools like Internet, Email, Fax etc, should be made available.

MODERN MANAGEMENT TECHNIQUES

10.10 Being a complex organization, modern management techniques should be adopted.

10.11 Network analysis for project planning, inventory control methods for stores management, work-study operational research, are effective tools of management.

10.12 The use of computers, Internet, E-Mail, etc. should be introduced in a phased manner in every department of the hospital to make its working efficient and transparent.

10.13 Built in surveys should be developed for each department and outcome analysed to improve the functioning.

10.14 Costing of all services offered should be done periodically and cost should be recovered, if permitted by the Government.

CHAPTER 11: MATERIALS MANAGEMENT

11.01 The hospital should have separate Stores and Purchase Sections under this department, each one headed by separate officers of suitable rank. Both these sections should function under the supervision of Additional Medical Superintendent, who in turn should report in Director/ Medical Superintendent/Principal

PURCHASE SECTION

11.02 The Purchase Section is to be directly supervised by an Office Superintendent/ Head Clerk designated as Purchase Officer.

11.03 This section is responsible for compilation of all the demands, finalization of specifications, floating of tender enquiry, placement of indents to GeM or other authorized agencies, issue of expenditure sanction, supply orders, monitoring of liabilities, record keeping regarding payment of bells, audit reports and Parliament Questions, etc.

11.04 The Section will ensure that all the GFR, delegation of financial power rules and other instructions issued by the Government from time to time are followed in purchase practices.

11.05 The section shall process the demands of equipment, medicines and consumables received from the Stores section expeditiously as per the prescribed procedure.

11.06 Purchase section shall monitor and minimize internal and external lead time to ensure expeditious procurement.

11.07 Purchase section shall keep in contact with the various suppliers to ensure that timely delivery of the orders is executed.

STORE SECTION

11.08 The Store section shall function under the control of a designated Senior officer of at least rank of Chief Medical Officer/DMS Director Professor and shall be directly supervised by the designated Store Officer. One or two officers depending upon the workload may assist the Store Officer. The storekeepers and other staff will function under this section.

11.09 This section is responsible for initiation and compilation of demands, receipt of goods, testing and quality control, record keeping in stock ledgers, issue of goods, bill verification, maintaining continuous and uninterrupted supply (avoiding stock out position)

11.10 This section should formulate their own standard operating procedures to make the functions smooth and uniform. A model SOP's are enclosed as per Appendix-IV which can be modified by the individual hospitals depending upon their local circumstances and requirements.

11.11 Stores section shall apply the inventory management techniques like VED, FSN to maintain uninterrupted availability of all necessary medicines, intravenous fluids, consumables, stationary and other supplies at all times.

11.12 Store section shall use techniques like ABC analysis to monitor usage of various medicines including antibiotics, and consumables to monitor, control and ensure optimal utilization of financial resources.

11.13 The inventory of the hospital should be computerized to the extent feasible and Inventory Management System should be utilized.

11.14 Store section shall forecast the requirements on annual basis based on requests from various department and previous utilization data and submit requirements to purchase section for one-time or staggered supplies.

11.15 The officers/officials posted in the Purchase & Store department should be periodically shifted and no one person should preferably stay on one seat for more than two years. The personnel posted there should be frequently sent on training in materials management.

DIETARY STORE

11.16 As the requirement for the dietary item is of a different nature, a separate set up should exist for its procurement, storage and issue under the charge of Dietician.

11.17 As in the main store, there should be separate personnel dealing with procurement and storage of these items.

11.18 All the supplies received in be inspected for quantity and quality by the dietician I/c of the respective hospitals and the relevant entries to this effect should be made in inspection/quality control register.

11.19 All the supplies received should be entered in stock register and the dietician should countersign each entry.

11.20 All bills of dietary department to be verified by the designated Officer Incharge

EQUIPMENT MAINTENANCE AND REPAIR

11.21 A separate section or a desk should exist in each hospital to deal with all matters relating to maintenance and repair of equipment. An officer of suitable level, preferably a Bio-Medical Engineer (If the post exist), should be designated to supervise this important activity.

11.22 A maintenance and repair committee should be constituted in each hospital to finalize the contracts for repair and maintenance of all equipment. The tenders for the maintenance contract should preferably be invited by "Double Bid system", Efforts should be made to bring all the sophisticated equipment under annual maintenance contract to the extent feasible.

11.23 A history short of all expensive and hi-tech equipment should be maintained in each department indicating the cost of equipment, date of purchase, source of purchase, details of repairs done, cost incurred on repairs/spares/consumable, period when the equipment remained out of orders, etc.

11.24 A periodic review of status of functioning of all equipment in the hospital should be done at the highest level. Prompt action should be taken so that equipment is in functional status optimally. The status of all-important equipment should be displayed prominently in the hospital.

11.25 HOD of concerned Department should be responsible for the repair of the equipment in a reasonable period of time.

ANNUAL PHYSICAL STOCK VERIFICATION

11.26 An annual stock verification of all the stores, wards. Departments, units, etc., to be got done by deputing various officers within the hospital.

11.27 The ground balance should be checked with the balance in stock ledger of the stores/wards/departments and the entries checked and initiated.

11.28 Major losses and heavy surplus should be noted and informed to the head of the institutions who in turn should take appropriate action to fix the responsibilities.

11.29 The responsibility of getting the annual physical verification done rests with the head of the organisations.

CONDEMNATION OF MATERIALS

11.30 A condemnation board should be constituted to condemn the non-consumable items in the hospital. This board should meet at frequent intervals so that timely condemnation of unserviceable goods can be done.

11.31 This board should declare items condemned after proper scrutiny of records, physical inspection, unserviceable report, etc. The board will issue a proper condemnation certificate as prescribed in the GFR.

11.32 Each department will maintain proper records of all the items condemned in their departments and will make proper entries in their stock ledgers.

11.33 The condemned items will be stored separately under lock and key and should be disposed of by auction as early as possible. The infected linen and other infected articles should be disposed off separately as per standard guidelines. Adequate precautions should be taken to prevent the recycling of condemned articles.

CHAPTER 12: MEDICAL RECORD SERVICES AND MEDICAL AUDIT

12.01 Medical Record keeping has importance in efficient patient health care.

INDOOR PATENTS RECORD

12.02 This department shall be headed by a trained Medical Record Officer.

12.03 The organization of this department shall be divided into various desks as follows:

i. Central Admitting and Enquiry Services and preparation patients name index cards
ii. Census of in-patients
iii. Assembly of records
iv. Typing out discharge list for internal use
v. Admission and discharge statistical analysis
vi. Completing of records
vii. Coding of diseases and operative procedures
viii. Indexing- Diagnostic and operations coding
ix. Filing

12.04 It is the personal responsibility of Medical Record Officer to keep records pertaining to medico-legal cases in safe custody.

12.05 This department should never allow medical records to be incomplete.

12.06 Regular audit should be prescribed by this department to ensure that doctors complete the case records.

12.07 The medical record shall contains

i. Information regarding reasons for admission, diagnosis and care plan.
ii. Details of assessments, re-assessments and consultations.
iii. Results of investigations and the details of the care provided.
iv. Operative and other procedures performed
v. When a patient is transferred to another organisation, the medical recordcontains the details of the transfer
vi. A copy of the discharge summary
vii. In case of death, the medical record contains a copy of the cause of death report

12.08 It is desirable that this department locates its technicians in OPD and accident & emergency department to see to the prompt completion and safe custody of records

12.09 It is the responsibility of Unit -Incharge to see that the case records of in-patients are complete in all respects and sent to Medical Record Department by 10:00 AM., the day following the discharge of the patients.

12.10 Loss of medical records should be promptly enquired into by the medical records officer and brought to the notice of the hospital administration.

12.11 Court summons for production of medical records should be honoured This is the personal responsibility of the technician concerned.

12.12 The department shall compile a monthly report of medical statistics required by hospital administration.

12.13 The department shall support the medical staff in their research work when needed and after due permission.

12.14 There should be a regular task force for weeding out old records. The minimum recommended period of retention is three years. However, MLC record shall be maintained till the case is disposed off. The electronic record may be maintained for the lifetime of the patient.

12.15 The hospital shall maintain confidentiality, integrity and security of records, data and information.

12.16 This department should not part with their records to any outside agency without permission of hospital administration.

12.17 Medical Records should not be issued to hospital staff indiscriminately. They should be issued only on the written request of the Heads of the Department or hospital administration.

12.18 This department should not divulge the contents of any medical record to anyone without the permission of hospital administration.

12.19 Completion of forms sent by Life Insurance agencies and disability certificates with reference to medical records of patients should be done with speed and promptness. Fees for this purpose should be laid down by Hospital administration.

12.20 Medical Officer only will be competent to sign the reports/certificates referred to in above. All other routine certificates like birth and death certificate may be signed by trained Medical Record Officer if they do not infringe any statutory requirement.

12.21 It is desirable that Medical Record Department & Admission Office should be computerized for quick retrieval of information whenever demanded by the office.

OUTPATIENT RECORD

12.22 In the Outpatient department, every patient is given a registration number in the form of a card/ticket. This is returned to the patient with the history, examination finding, provisional diagnosis and treatment written on it. For attending special clinics, proper follow up record file to be kept in OPD.

MEDICO LEGAL CASES

12.23 All medico-legal case record registers should be sent to Medical Record Department and a Medical Record Officer/Technician should be made responsible for safe custody of the record

12.24 It is to be prepared in duplicate on a medical legal register where columns for entry are already printed

12.25 One carbon copy is kept as hospital record and first copy is given to Investigating Officer from Police Station of the respective area

Guidelines to be followed while making record of medico legal case

12.26 Notes shall be legible.

12.27 All aspects shall be complete like age, gender, history, examination, diagnosis, Lab, test results, treatment and disposition.

12.28 All entries shall be signed with date and time by the person recoding the entry and his/her name and designation should be written in capital letters.
12.29 Document disposition, advice and referral for further care to be noted
12.30 The time of discharge and patients' condition at discharge shall be documented.
12.31 Vague and unsubstantiated statements shall be avoided.
12.32 Written consent shall be obtained prior to examination.
12.33 Original records shall be released only with court's order.

FORMS

12.34 Document control shall be established for all the forms and stationary used in the Hospital. They should all be serially numbered and colour -coded for easy identification.
12.35 Design of forms should be with reference to the intent of its use. Hospital administration may take help of outside agencies that are specialized in the field may for designing the forms.
12.36 Pre structured form/format shall be encouraged like consent forms, initial assessment forms, medication chart, vital chart, discharge summary etc.
12.37 It should be the aim of the hospital administration to provide adequate quantities of forms needed for hospital's working.
12.38 When forms are out of stock, for reasons beyond the control of hospital administration, substitutes should be procured and supplied to the indenters.
12.39 Medical and nursing staff should use the forms with utmost economy.

DOCUMENT RETENTION

12.40 All hospital documents and patient care records shall be stored as per established guidelines
12.41 Medical records of the patients shall be stored as following

a) Physical records
   i. In-patient medical case records–3 years
   ii. OPD records/registers- 3 years
   iii. Medico-legal case records and registers- 10 years or till the disposal of court case related to any such records
b) Digital records: These may be stored indefinitely in HER or digitized form. These shall be managed as per the policy and guidelines updated from time to time. https://esanjeevani.mohfw.gov.in/assets/guidelines/ehr_guidlines.pdf

12.42 All other records shall be maintained and stored according to the guidelines issued by Department of Administrative Reforms and Public Grievances https://darpg.gov.in/sites/default/files/RRS_WC.pdf

CHAPTER 13: GRIEVANCE REDRESSAL AND CITIZEN'S CHARTER

13.01 Each Hospital should have effective Grievance Redressal machinery for patients and their caregivers

13.02 A Grievance Redressal Officer should be designated in each hospital. The name of the Officer, location of office, timings, phone numbers etc. should be prominently displayed in important locations of the hospital.

13.03 Options available for registering a grievance should be prominently displayed in bilingual language at vantage places for adequate information of the patients and their care givers.

13.04 Option of registering grievance at CPGRAMS (https://pgportal.gov.in) and feedback at https://meraaspataal.nhp.gov.in should be informed to the public at large.

13.05 A number of Complaint Boxes should be placed at strategic locations for collection of complaints from the patients and their relatives These should be opened regularly at least once in a month and all complaints should be duly registered and action taken thereof.

13.06 The follow up action on the complaints registered by the patients should be prompt and disposed of in a time bound manner. All complaints by patients should be duly acknowledged.

13.07 A committee headed by Senior Officer authorized by the head of the Institution should monitor the complaints received on any of the portals/ complaint box. They should be sent to the concerned Officer/ Department for response for necessary action and corrective action. Feedback should be provided to the complainant in a time bound manner.

13.08 A Grievance Redressal Committee also exists in the Directorate General of Health Services and cases are examined in this Committee periodically.

13.09 Preferably, a Citizen's Charter should be prepared and adopted by each hospital. This Charter should be the guiding force in providing the services with a customer focus in view. The Citizen's Charter should enlist the level of services being pledged by hospital towards patients. The copies of the Citizen's Charter should be made available to patient’s request

13.10 These Charters should be periodically reviewed and updated. A nodal officer should be designated to monitor the implementation of the Charter.

CHAPTER 14: HOSPITAL INFECTION CONTROL

Hospital Associated Infections (HAI) or nosocomial infections are those infections that were neither present nor incubating at the time when the patient was admitted to the health care facility. The majority of HAI become evident 48 hours or more following admission. However, it may not become clinically evident until after discharge.
Therefore, each Hospital should have the following organization for the prevention and control of Hospital Associated Infection (HAI):

14.01 INFECTION CONTROL COMMITTEE

This committee formulates the policies for control of infection. Head of Hospital/Health Care Facility should be the chairman of this committee. The secretary should be Infection Control Officer. Members are representative of medical/surgical (HODs of all units), nursing, engineering, administrative, domestic, pharmacy, CSSD Departments. Committee should meet every 3 months or earlier if required.
A separate sub-committee chaired by the Medical Superintendent should deal specifically with Hospital Waste Management.

14.02 FUNCTIONS

Policymaking regarding:

i. Provision of adequate building, equipment, isolation facilities etc.
ii. Ventilation of operation theatre, wards and other units.
iii. Standardization of procedures for operation theatre, wards, housekeeping, kitchen, laundry and CSSD,
iv. Preparation of manuals for procedures like preparative skin preparation, I/V infusions, and catheterisation, lumbar puncture, wound dressing.
v. Formulation of disinfection policy.
vi. Antibiotic policy for rational use of antibiotic in therapy and prophylaxis.
vii. Implementation of Bio Medical Waste Management Rules in the hospital.
viii. Prevention of occupation health hazard among Healthcare workers (HCWs)

14.03 INFECTION CONTROL TEAM

Its Member should be Infection Control officer and Infection Content Nurse. The team can also include the In-charge of CSSD, In-charge ICU, and Operation Theatre. The team carries out day-to-day measures for the control of infection
Infection Control officer is usually a Microbiologist.

Functions of Inspection Control Team (Roles & responsibilities of Infection Control Team):

i. Surveillance of infection to give base line information about the level of endemic infection in the hospital
ii. Investigation of outbreaks of infection, including detection of sources of infection with the help of typing procedures and epidemiological information
iii. Controlling the outbreak by rectifying technical lapses if any.
iv. Monitoring of procedures (Wound dressings, IV injections etc.) sterilization and disinfection processes. Bacteriological monitoring of environment and hazardous equipment.
v. Monitoring of hospital staff carriers
vi. Training of staff in control of hospital infection
vii. To cure implementation of Standard Precautions in the hospital
viii. Infection Content Officer (CO)

Functions:

- Secretary of Infection Control Committee (ICC)
- Identification and reporting of pathogens and their antibiotic sensitivity
- Regular analysis and dissemination of antibiotic resistance data, emerging pathogens and unusual laboratory findings
- Initiating surveillance of hospital infections and detection of outbreak
- Investigation of outbreaks
- Analyse the surveillance data
- Give timely feedback to the concerned unit in-charge
- Provide trends of HAI to the concerned units
- Prepare guideline for infection control practices
- Liaison between director and clinical heads of the department
- Hold regular training programme for HCW on HAI and BMWM
- Hold HAI committee meeting quarterly
- Training and education in infection control procedures and practice.

Infection Control Nurse (ICN)

Detailed functions are detailed in Appendix- I on Responsibilities

- Liaison between microbiology department and clinical departments for detection and control of hospital infection.
- Surveillance of infection and detection of outbreaks
- Collection of specimens and preliminary processing.
- Training and education of staff in infection control procedures and practice under supervision of ICO
- Awareness among patients and visitors about infection control
- Collection of disinfectant from hospitals for in use testing
- Settle plate culture in Ots
- Collect water samples for culture
- Biological indicator testing of autoclave in Ots
- Sterility testing of I/V fluids received from store
- Check segregation of BMW (ICN at Common collection site of biomedical medical waste)
- Monitor compliance of usage of facilities by HCW

- Liaison between HODs, CNOs and ICO
- Train link nurses

14.04 UNIVERSAL PRECAUTIONS

1. Universal precautions are essential whole dealing with all patients irrespective of the diagnosis.
2. Practicing universal precautions is the most effective and efficient method of preventing hospital-acquired infections.
3. Basic principles:

   i. Consider all patients as potentially infective
   ii. Use appropriate barrier precautions routinely (gloves, masks, aprons and eye protection).

4. Universal precautions should be applied to all patients, all samples
5. Procedures

   i. Hands should be washed/ hand hygiene is must before and after all patient or specimen contact
   ii. Blood and body fluids of all patients should be handled as potentially infectious.
   iii. Gloves should be worn for potential contact with blood and body fluids
   iv. Used syringes should be immediately placed in nearby sharp container, do NOT recap or manipulate needle in any way by hand, use syringe and needle destroyers or hub cutters. Discard the plastic syringe in proper colour coded waste bin.
   v. Proper Personal Protective equipment (PPE) such as Protective eyewear and mask should be worn if splash with blood or body fluids is possible (eg. bronchoscopy, oral surgery)
   vi. All linen soiled with blood and/or body secretions should be handled as potentially infectious
   vii. All laboratory specimens should be processed as potentially infectious and as per biomedical waste handling rules 2016
   viii. Mask should be worn when handling patients of potential respiratory infections. Use N95 mask if handling patients with potential airborne transmission such as TB.

14.05 PROTECTION AGAINST BLOOD BORNE INFECTIONS (HBV AND HIV)

Specific measures in laboratories

   i. Mechanical pipetting aids should be used
   ii. Spills and breakage should be immediately decontaminated
   iii. Gloves should be worn during handling of blood, blood products and body fluids
   iv. All open wounds on hands and arms should be covered with watertight dressing
   v. Hands should be washed with soap and water immediately after exposure to specimen.

vi. Working surfaces should be made of non-penetrative material that is easy to clean. Use sodium hypochlorite 1% to decontaminate surface.
vii. Specimens should be decontaminated with 1% sodium hypochlorite before disposal.
viii. Post exposure prophylaxis (PPE) for HIV should be taken within 2 hours and not beyond 72 hrs.
ix. Mandatory Hepatitis B vaccination for all healthcare workers and their Anti HBsAg titre should be checked and documented.

Specific measures in Hospital Wards

A) Injection:

i. By sterile disposable needles and syringes.
ii. Used needles and syringes should be discarded in disinfectant (1% hypochlorite, bleaching powder 14 g/IL).
iii. Disposable needles and syringes should be collected in separate puncture-proof containers.
iv. Disposable syringes and needles should be disinfected and shredded/mutilated.

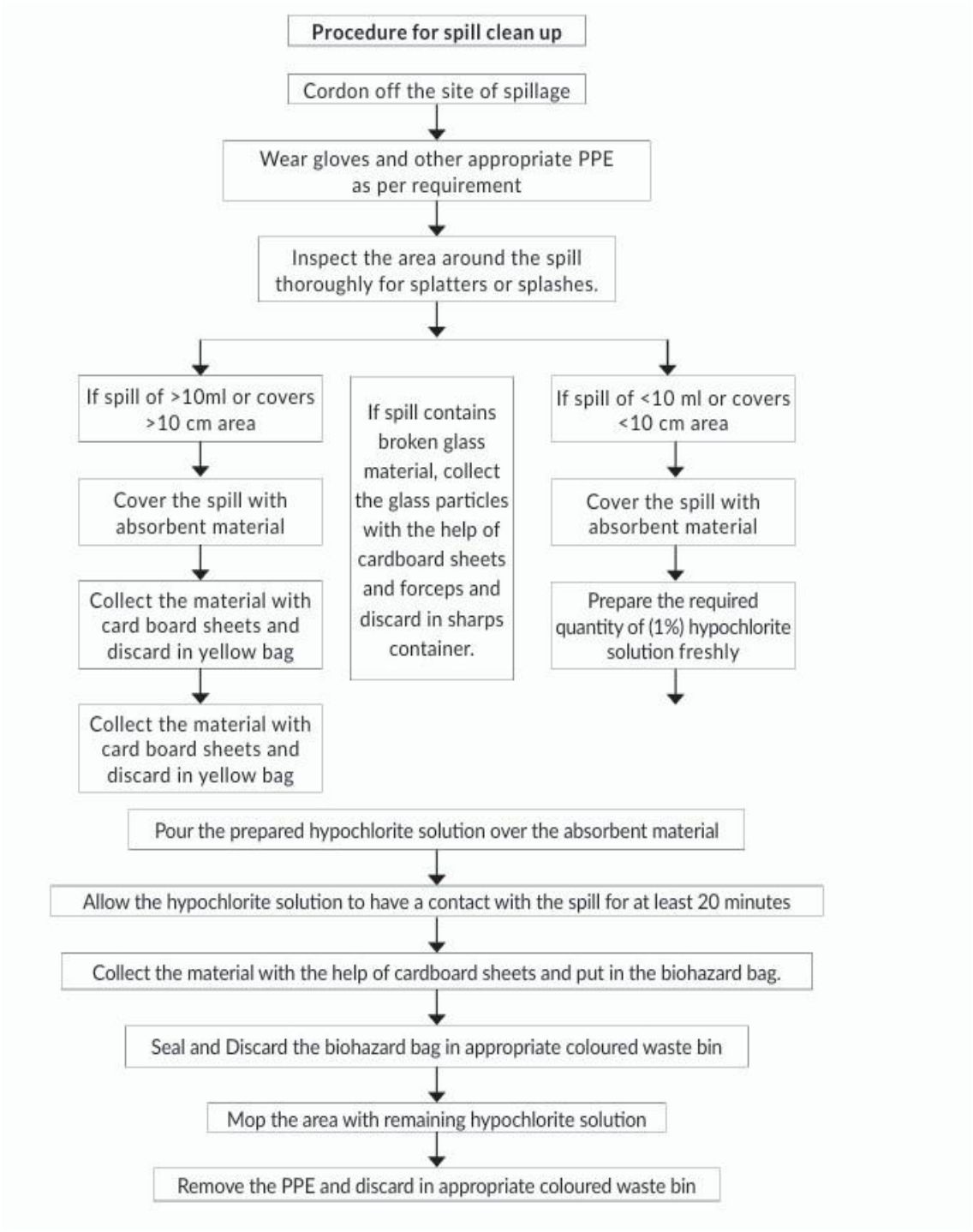
B) Surgical Procedures:

i. All instruments, equipment and material used must be sterile.
ii. Used instruments, equipment should be cleaned and sterilized according to specific recommendation for each.

14.06 INFECTION CONTROL IN SPECIAL AREAS SUCH AS ICU AND OT

i. In the ICUs bundle care approach is to be practiced (A small, straightforward set of evidence-based practices — generally three to five) for the prevention of device associated infections such as Catheter Associated Urinary Tract Infection (CAUTI), Ventilator Associated Events (VAE) and Central Line Associated Blood Stream Infections (CLABSI).
ii. In the OT, bundle approach towards prevention of SSI should be followed.
iii. Cleaning of OT (before the procedure, during the procedure, in between cases and terminal cleaning) along with disinfection and sterilization of equipment as per manufacturer's protocol
iv. Inside the OT the temperature, humidity and ventilation should be as per standards such as OT Air conditioning Standards set by NBC or accreditation bodies.

Spillage or surface contaminated by blood or blood product:



i. Spillage should be covered with absorbent material after which disinfectant should be (1% hypo chlorite/bleaching power 14g/IL) poured over it and left for 20 minutes. Waste disposal to be dealt with separately.

ii. Tissues, organs, or limbs removed during surgery should be incinerated or buried deep with bleaching powder/lime

CHAPTER 15: AUTOPSY & MORTUARY MANAGEMENT

15.01 Mortuary and cold storage unit shall be under charge of Head of Forensic Medicine or in their absence by Pathologist.

15.02 This unit should be responsible for storage of dead bodies and conduct of medico-legal autopsies wherever permitted.

15.03 Trained and educated para-medical staff should as far as possible be posted in the mortuary.

MORTUARY

15.04 This section should receive dead bodies all through day and night

15.05 This section should normally receive dead bodies from associated hospitals and dead bodies sent by designated police station for post mortem. Dead bodies-other than those mentioned above should not be collected without permission of Mortuary In-charge/hospital administration.

15.06 Without any identity tags, no dead body should be received and stored in the cold storage.

15.07 Details of the case i.e. UHID/C.R No., MLC/Non-MLC, Ward/Casualty, name, age & address, mobile no.(In case of identified dead body) etc. (filled in performa for storage of dead bodies in mortuary) should always be mentioned in the request for storing dead bodies, with signature and designation of the Doctor on duty and countersigned by unit In-charge. The performa should be accompanied by Death summary in case of Hospital death.

15.08 Mortuary in-charge should authorize mortuary technician to be responsible for handing over the dead bodies (Non-MLC) after proper identification to the relatives of deceased.

15.09 Dead bodies in non-MLC cases normally should not be retained in the cold storage for more than 72 hours. Hospital administration/hospital social worker should take appropriate action for disposal/handing over the dead body (non-MLC) to its relatives.

15.10 Dead bodies of medico-legal cases in cold storage shall remain under the custody of police and only handed over to them.

15.11 This section should be responsible for conducting medico-legal autopsy work wherever permitted.

15.12 Medico-legal autopsy should be conducted during office hours on all working days and on public holidays and after sunset (As per Office Memorandum F. No. H-1 1021 IO7 12021-H-I of Government of India, Ministry of Health & FamilY Welfare, (Hospital-I Section) Nirman Bhawan, New Delhi Dated 15.11.2021) as well as on special request.

15.13 Medico-legal autopsy should be carried out only at the behest of appropriate legal authority (Police or Magistrate).

15.14. Post-mortem examination by medical board should be as per guidelines issued by Spl.Secretary (Health) of Department of Health and Family Welfare, Govt of NCT of Delhi vide No. Vig/H&FW(112248262/2013/1115-32 dated 06-02-2015.

15.15 The request for medico-legal autopsy should also be accompanied by inquest and other relevant documents.

15.16 Post-mortem should be conducted after the dead body has been properly identified by the investigating officer (I.O) of the case and relatives.

15.17 Autopsy should preferably be conducted under natural light and in some cases after sunset with proper lighting facilities (As per Office Memorandum F. No. H-1 1021 IO7 12021-H-I of Government of India, Ministry of Health & Family Welfare, (Hospital-I Section) Nirman Bhawan, New Delhi Dated 15.11.2021)

15.18 -Medico legal autopsy should always be conducted by a authorized Medical Personnel only.

15.19 No unauthorized person should be allowed to be present at the time of medico-legal autopsy.

15.20 Complete autopsy should be conducted in all the cases.

15.21 Autopsy Surgeon should undertake relevant investigations required to facilitate forming an opinion. The hospital authority should ensure proper coordination from other investigative departments.

15 22 Dead body after post-mortem examination should be handed over to the Investigating officer (I.O.) of the case.

15.23 Postmortem report, inquest papers duly signed by the autopsy surgeon along with preserved items, if any, sealed properly should be handed over to the I.O. of the case as early as possible, in accordance with the instructions issued vide office memorandum No.F.131/11192-M &P1-1/ Vol. 11 dated 22.7.94 from Department of Medical & public health Government of National Capital Territory of Delhi and other competent authority of other State.

15.24 Proper records should be maintained in the mortuary by the mortuary technician.

CHAPTER 16: HOSPITAL WASTE MANAGEMENT

16.01 INTRODUCTION

The Ministry of Environment Forests and Climate Change, Govt. of India notified the Bio-Medical Waste Management Rules, 2016 on 28th March 2016, under the provisions of Environment Act 1986. These rules fill up the gaps in the old rules, in furtherance to its vehement commitment, to ensure the Fundamental Right to live in clean and safe environment. These rules have been framed to regulate the disposal of various categories of Bio-Medical Waste as envisaged therein; so as to ensure the safety of the staff, patients, public and the environment. These rules shall apply to all persons who generate, collect, receive, store, transport, treat, dispose, or handle bio-medical waste in any form including hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories, blood banks, Ayush hospitals, clinical establishments, research or educational institutions, health camps, medical or surgical camps, vaccination camps, blood donation camps, first aid rooms of schools, forensic laboratories and research labs.

Every hospital should make all efforts to implement the Bio Medical Waste Rules 2016 notified under the Environment Protection Act.

https://cpcb.nic.in/uploads/projects/bio-medical-waste/guidelines_healthcare_june_2018.pdf

16.02 Each hospital should take appropriate authorization from the competent authority for the different activities connected with the Waste Management. It may be noted that it is punishable under the act to run the hospital without such authorization and Head of the healthcare facility is responsible for it.

16.03 A Hospital Waste Management Committee, chaired by the head of the institute should be constituted and this committee should make detailed hospital specific action plan for Waste Management detailing each activity like segregation, collection, transportation, treatment, disposal, safety precautions and training of staff within the ambit of the Waste Management Handling Rules. A detailed model guideline in this regard may be followed.

16.04 The hospital will make all arrangement to prevent recycling of disposable items like syringes, needles, catheters etc.

16.05 The reports/returns need to be filed as per rules and the healthcare facility should comply with the same.

16.06 In case, the waste needs to be transported outside the hospital for treatment, adequate precautions as mentioned in the rules should be taken. Uninformed inspections should be carried out to verify appropriate disposal of waste.

GUIDELINES FOR HOSPITAL WASTE MANAGEMENT

16.07 OBJECTIVES

i. To enable each hospital to smoothly implement the Bio Medical Waste (Management & Handling) Rules 2016, notified under the Environment Protection Act by the Ministry of Environment & Forest (Government of India) and any amendments thereof.

ii. To help hospitals to develop their own comprehensive plan for Hospital Waste Management in terms of segregation, collection, transportation and disposal of hospital waste.

16.08 SEGREGATION OF WASTE

i. It should be done at the source of generation of Bio-medical Waste eg. all patient care activity areas; diagnostic services areas, operation theatres, labour rooms, treatment rooms etc.
ii. The responsibility of segregation should be with the generator of Biomedical Waste Le. Doctors, Nurses, Technician etc. (Medical & Paramedical personnel).
iii. The Biomedical waste should be segregated as per categories applicable mentioned in the rules.
iv. Categories of waste for segregation

Hazardous, toxic and biomedical waste should be segregated into following categories for the purpose of its safe transportation in a specific site for specific treatment. Certain specific categories of toxic and hazardous waste require specific treatment (disinfection/decontamination) before transportation for treatment, which can also be done if we follow the categorization as mentioned below.

16.09 COLLECTION OF BIOMEDICAL WASTE

Collection of Biomedical Waste in following categories

Serial no.	Categories	Types of waste
1.	Yellow	a) Human anatomical waste: (b) Animal anatomical Waste C) Soiled Waste D) Expired or Discarded Medicines E) Chemical Waste: solid discarded chemicals F) Chemical Liquid Waste: G)Discarded linen: F) PVC Blood bags & Lab waste in respective category H) Masks (including triple layer mask, N95 mask, etc.), head cover/cap, shoe-cover, disposable linen Gown, non-plastic or semi-plastic cover all
2.	Red	Contaminated Waste(Recyclable) Plastics
3.	White (Translucent)	Sharps waste
4.	Blue	Metal guns etc implant s/ metal

		Glass: Medicine glass vials or broken or discarded and contaminated glass

i. All the items sent for incinerator/burial should be placed in Yellow coloured bags.
ii. Location of containers All BMWM bins and bags should be located at the point of generation of waste ie. near OT tables, injection rooms, diagnostic service areas. The colour of containers/plastic bags used for collection of segregated Biomedical waste should be identifiable.

iii. Labelling: All the bags/bins must be labelled according to the rules. Bar coding should be practiced.
iv. Bags/Containers- It should be ensured that waste bags/containers are effectively secured and filled up to only 3/4 capacity and removed from site of generation regularly and timely.
v. Certain categories of waste, which may need pre-treatment (decontamination/disinfection) at the site of generation such as lab waste etc. should be removed from the site of generation only after treatment.

16.10 TRANSPORTATION WITHIN THE HOSPITAL

i. Within hospital, waste routes must be designed to avoid the passages of waste through patient care areas.
ii. Separate time should be earmarked for transportation of biomedical waste to reduce chances of its mixing with general waste.
iii. Dedicated covered wheeled appropriately coloured, trolleys or carts should be used to transport the waste bins/plastic bags to the site of storage/treatment.
iv. Trolleys or carts should be thoroughly cleaned and disinfected in the event of any spillage. Facility for washing the trolleys should be available
v. The wheeled containers should be so designed that the waste can be easily loaded, remains secured during transportation, does not have any sharp edges and easy to clean and disinfect.

16.11 TRANSPORT OF BIOMEDICAL WASTE TO COMMON BIOMEDICAL TREATMENT AND DISPOSAL FACILITY (CBWTF): CBWTF should be authorised by SPCB

General Waste (Non hazardous, non toxic, non infectious)

75-80% of the waste generated in the hospital belongs to this category. The safe disposal of this waste is the responsibility of the local Municipal Body.

16.12 SAFETY MEASURES

i. All the sanitation workers engaged in the handling and transporting should be made aware of the risks involved in handling the biomedical waste
ii. All the generators of biomedical waste should adapt standard precautions and appropriate safety measures while doing therapeutic and diagnostic activities and also while handling the Biomedical Waste.
iii. It should be ensured that:

- Drivers, collectors and other handlers are aware of the nature and risk of the waste
- Written instructions are provided regarding the procedures to be adopted in the event of spillage accidents.
- Protective gears are provided and instruction regarding their use given.
- Workers are protected by vaccination against tetanus and hepatitis-B

16.13 TEACHING

i. Each and every healthcare organization must have well planned awareness and training programme for all categories of personnel including administrators (medical, paramedical and administrative)
ii. All the medical professionals must be made aware of BMWM Rules 2016 as amended.
iii. To make aware all other categories of staff, the provisions of BMWM Rules 2016 as amended and the responsibilities of different categories of personnel therein.
iv. To make aware about safe hospital waste management practices
v. Training should be conducted category and more emphasis should be given in training modules as per category of personnel.
vi. Training should be conducted in appropriate language/ medium and in an acceptable manner.
vii. Where possible audio-visual material and experienced trainers should be used

16.14 MANAGEMENT AND ADMINISTRATION

i. Heads of each hospital will have to take authorization for generation of waste from appropriate authorities as notified by the concerned state/U.T. Government well in time and get it renewed as per time schedule laid in the rules. The application is to be made as per format given in form I of BMW Rules
ii. Each hospital should constitute a hospital waste management committee, chaired by the head of the institute and having wide representation from all major departments. This committee should be responsible for making hospital specific action plan for hospital waste management and its supervision, monitoring and implementation.
iii. The annual reports, accident reporting, as required under BMW rules should be submitted to the concerned authorities as per BMWM Rules.

16.15 DUTIES OF OCCUPIER

i. Occupier provides training to all its health care workers and others, involved in handling of bio medical waste at the time of induction and thereafter at least once every year and the details of training programmes conducted, number of personnel trained and number of personnel not undergone any training shall be provided in the annual report.

ii. The occupier gets all its health care workers and others, involved in handling of bio- medical waste for protection against diseases including Hepatitis B and Tetanus. All the permanent healthcare personnel employed by SJH will be required to get their immunization through CGHS. For the contractual employees the outsource agency or the contract agency will be responsible for immunization.

iii. The occupier ensures segregation of liquid chemical waste at source and ensure pre- treatment or neutralization prior to mixing with other effluent generated from health care facilities and ensures treatment and disposal of liquid waste in accordance with the Water Act.

iv. The occupier ensures occupational safety of all its health care workers and others involved in handling of BMW by providing appropriate and adequate personal protective equipments.

v. The occupier gets conducted the health check up at the time of induction and at least once in a year for all its HCWs and others involved in handling of bio-medical waste and maintain the records. All the permanent healthcare personnel employed by SJH will get their health check-up through CGHS. For the contractual employees the outsource agency or the contract agency will be responsible for health check up.

vi. The occupier maintains and updates on day to day basis the bio-medical waste management register and displays the monthly record on its website according to the bio-medical waste generated in terms of category and colour coding as specified in rules.

vii. The occupier reports major accidents including accidents caused by fire hazards, blasts during handling of biomedical waste and the remedial action taken and the records relevant thereto, in Form I to the prescribed authority and also along with the annual report.

viii. The occupier makes available the annual report on its web-site and shall make own website within two years ie 27 March 2018.

ix. The occupier informs the prescribed authority immediately in case the operator of CBMWTDF does not collect the BMW within the intended time.

x. The occupier establishes a system to review and monitor the activities related to bio- medical waste management, either through a committee to review and monitor the activities relating to bio-medical waste management within the establishment and submit the annual report.

xi. The occupier maintains all record for operation of autoclaving for waste, for a period of five years.

xii. The occupier shall phase out use of non-chlorinated plastic bags within two years ie 27 March 2018, the chlorinated plastic bags shall not be used for storing and transporting of bio-medical waste.

16.16 MEASURES FOR WASTE MINIMIZATION

i. As far as purchase of possible, purchase of reusable items made of glass and metal should be encouraged.
ii. Select non-PVC plastic items.
iii. Effective sterilization procedures, quality assurance, proper monitoring and validation of cleaning, disinfection and sterilization of reusable items for patient care, will go a long way in increasing confidence in reusable items and reduce reliance on pre-sterilised single use items.
iv. Adopt procedures and policies for proper management of waste generated, the mainstay of which is segregation to reduce the quantity of waste to be treated
v. Establish effective und sound recycling policy. For plastic recycling, get in touch with authorized manufacturers.
vi. Special efforts should be made to minimize chemical hazardous waste as given in the BMWM Rules 2016, as amended.

16.17 COORDINATION BETWEEN HOSPITAL AND OUTSIDE

i. Municipal authorities: As quite a large percentage of waste (in India up to 90%) generated in Indian hospitals belong to general category (non-toxic and non-hazardous), hospital should have constant interaction with municipal authorities so that this category of waste is regularly taken out of the hospital premises for land fill or other treatment.
ii. Coordinated efforts should be made by health authorities and municipal authorities to develop norms and practices for transport of biomedical waste outside the hospital for treatment
iii. Coordinated efforts should be made by health authorities and municipal authorities to involve private sector/NGO for creation of common facilities for treatment.
iv. Efforts will also be required for training of waste generator of small units.
v. Health authorities in coordination with municipal authorities should play leading role in utilizing excess capacity or providing alternative for short-fall in capacity.
vi. Co-ordination with Pollution Control Board: Search for better methods technology, provision of facilities for testing, approval of certain models for hospital use in conformity with standards laid down.
vii. Co-ordination with NGO's and Essential Group: For public awareness, education and training of hospital employees.
viii. Sharing of facility: Hospitals, which are not in possession of their own facility for treatment, may get their waste, treated in a shored facility. The hospitals having excess capacity rfor treatment should extend the capacity to nearby smaller hospital or health care units.

16.18 RESEARCH AND DEVELOPMENT

Regarding cost effective and comprehensive waste management practices, adequate research activities should be conducted by institutions/ departments of Environment/Environmental Engineering/Health and Hygiene. The main purpose of the research should be:

i. To search for cost effective and environmental friendly technology for treatment of Bio-medical and hazardous waste
ii. To search for suitable materials to be used as containers for Bio-medical waste requiring incineration/autoclaving/micro waving.
iii. Development of non-PVC plastics to substitute the plastic, which is used for manufacture of disposable items.
iv. Incentive should be given to Indian industries for development of indigenous technology & material etc. for cost effective and eco-friendly management of hospital waste.

16.19 OTHER WASTE

Radioactive waste, hazardous waste, E-waste covered under different Acts and Rules

REFERENCES

1 Bio-Medical Waste Management (Principal) Rules, 2016. Published in the Gazette of India, Extraordinary, Part II, Section 3. Sub Section (i), Government of India Ministry of Environment, Forest and Climate Change. Notification; New Delhi, the 28th March. 2016.

2 BMWM (Amendment) rules, 2018. Government of India Ministry of Environment, Climate Change. Notification; New Delhi, the 16th March, 2018.

3 BMWM (Amendment) rules, 2019. Government of India Ministry of Environment, Forest and Climate Change. Notification; New Delhi, Feb, May 2019.

4 Guidelines for Disposal of Biomedical Waste generated during Universal Immunization Program (UIP): CPCB, 8th February 2021

5 Guidelines for Handling, Treatment and Disposal of Waste generated during Treatment/Diagnosis/Quarantine of COVID-19 patients, CPCB, Version 5, 26th April 2022

FOR MORE INFORMATION VISIT THE GIVEN BELOW LINK:

https://dhr.gov.in/sites/default/files/Bio-medical_Waste_Management_Rules_2016.pdf

CHAPTER 17: TRANSPLANTATION OF HUMAN ORGAN ACT, 1994 (THOA)

The Transplantation of Human Organs Act (THOA), 1994 was enacted in the year 1994 and has been adopted in all States except erstwhile State of J&K and Andhra Pradesh which have their own legislation in this regard. Main purpose of the Act is to regulate the removal, storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs.

The Act was amended in 2011 and the Transplantation of Human Organs (Amendment) Act 2011, has come into force on 10-1-2014. The amended Act is now named Transplantation of Human Organs and Tissues Act (THOTA), 1994.

Brain Stem death is recognized as a legal death in India under the Transplantation of Human Organs and Tissues Act, since 1994 like many other countries, which has revolutionized the concept of organ donation after death. After natural cardiac death only a few organs/tissues can be donated (like cornea, bone, skin and blood vessels) whereas after brain stem death almost 37 different organs and tissues can be donated including vital organs such as kidneys, heart, liver and lungs.

In pursuance to the Amendment Act, the Transplantation of Human Organs and Tissues Rules have been notified on 27th March, 2014. The amended Act and revised Rules have many provisions for promotion of organ donations from cadavers. Important amendments under the (Amendment) Act 2011 are as under:-

i. Tissues have been included along with the Organs.
ii. 'Near relative' definition has been expanded to include grandchildren, grandparents.
iii. Provision of 'Retrieval Centres' and their registration for retrieval of organs from deceased donors. Tissue Banks shall also be registered.
iv. Provision of Swap Donation included.
v. There is provision of mandatory inquiry from the attendants of potential donors admitted in ICU and informing them about the option to donate – if they consent to donate, inform retrieval centre.
vi. Provision of Mandatory 'Transplant Coordinator' in all hospitals registered under the Act
vii. To protect vulnerable and poor there is provision of higher penalties has been made for trading in organs.
viii. Constitution of Brain death certification board has been simplified- wherever Neurophysician or Neurosurgeon is not available, then an anaesthetist or intensivist can be a member of board in his place, subject to the condition that he is not a member of the transplant team.
ix. National Human Organs and Tissues Removal and Storage Network and National Registry for Transplant are to be established.
x. There is provision of Advisory committee to aid and advise Appropriate Authority.
xi. Enucleation of corneas has been permitted by a trained technician.
xii. Act has made provision of greater caution in case of minors and foreign nationals and prohibition of organ donation from mentally challenged persons.

Source of Organs for Transplant: Source may be, Living or Deceased Donor:

Living Donor Transplant:

i. Near Relative donor (mother, father, son, daughter, brother, sister, spouse)
ii. Other than near relative donor: Such a donor can donate only for the reasons of affection and attachment or for any other special reason and that too with the approval of the authorisation committee.
iii. By SWAPPING of near relative donors between pairs of unmatched donor and recipient

Deceased donor Transplant

i. Donor after Brain stem death: Organ Donation is practically possible in the situation of Brain stem death e.g. a victim of road traffic accident etc. where the brain stem is dead and person cannot breathe on his own but can be maintained through ventilator, oxygen, fluids etc. to keep the heart and other organs working and functional.
ii. Donor after cardiac death (DCD): Practically in Indian scenario only tissues are donated after cardiac death. But few centres has started DCD.

Components of National Organ Transplant Programme (2017-20)

National THOTA and NOTP Cell Located in MG section, DteGHS Headquarter, Nirman Bhawan, New Delhi. The functions are: -

1. Registration and renewal of organ & tissue transplant centers, eye bank in all Union territories except Delhi as part of work of DGHS being the appropriate authority for all Union territories except Delhi. Organizing inspections for the same.
2. Monitoring of the transplant centers and Tissue Banks through regular data collection and inspections.
3. Cases of appeal against the decisions of authorization committee or appropriate authorities under THOTA 1994 of Union territory of Delhi and other UTs
4. RTI and Court matters etc. related to THOTA and NOTP
5. All technical, administrative and financial matters of NOTP including NOTTO/ROTTOs/SOTTOs
6. Implementation and Monitoring of various components of National Organ Transplant Programme through respective State Governments and NOTTO/ROTTOs/SOTTOs, as applicable.
7. Facilitating Organizing Indian Organ Donation Day annually
8. Consultancy on all transplant law and program related matters.

Networking: through creating institutional mechanisms

I. National Organ & Tissue Transplant Organization (NOTTO)
An apex level organization, National Organ and Tissue Transplant Organization (NOTTO) having components of National networking, National Registry, National

level Biomaterial centre and facility of cadaver organ and tissue retrieval Operation theatre has been established in the Safdarjung Hospital Campus, New Delhi under Directorate General of Health Services. Broad Functions of NOTTO are

• Drafting Policy guidelines and protocols
• Web based Networking
• Maintaining National Registry
• Advocacy and awareness
• Co-ordination when organ is allocated outside region and to PIO/Foreigner and in Delhi
• Research
• Dissemination of information
• Coordinate and organize trainings
• Consultancy support on all aspects of donation and transplantation
• National Biomaterial centre
• SOTTO for Delhi

II. ROTTO: Regional Organ and Tissue Transplant Organization
Broad Functions of ROTTO are

• Networking including allocation, where SOTTOs not functional
• Co-ordination when organ is allocated outside State
• Collection of data and statistics from SOTTOs including registry of the region
• Monitoring and surveillance
• Training and workshops
• Developing IEC materials as per regional need
• Intersectoral meetings, IEC and advocacy for deceased organ donation in the region
• Technical guidance and Support
• Establishing and operationalizing regional biomaterial centre

III. SOTTO: State Organ and Tissue Transplant Organization
It is envisaged to establish one SOTTO each State. Broad Functions of SOTTO are

- Coordinate for Implementation all schemes under NOTP in consultation with State Government
- Maintain State wise Waiting list of patients
- Networking and State level registry
- Co-ordination from organ and tissue procurement, matching, allocation, transportation, storage and transplantation
- Coordinate for BSD certification and retrieval teams
- Dissemination of information to hospitals, organizations & individuals
- IEC Activities
- Training and CMEs with in the State

Chapter 18: QUALITY, PATIENT SAFETY & RISK

MANAGEMENT

18.01 The Healthcare Organizations shall provide quality health care services to all patients and make provisions to achieve the same.

18.02 They may go for accreditations and certifications under the programs initiated by the Government of India and other Accreditation bodies.

18.03 To achieve this the Hospital Quality and Safety Committee shall be formed

18.04 The Hospital Quality and Safety Committee will advise the hospital administration regarding all matters related to patient safety and the quality of care and promote a culture of safety and continuous quality improvement. The committee will monitor and report the overall quality of services provided by ensuring compliance with relevant standards and regulations and recommend quality improvement initiatives and policies.

18.05 The committee will have the role of overseeing Safety issues of the hospital by reviewing and approving plans for harm reduction, monitoring patient, staff, and workplace safety and recommend risk management policies related to patient safety. The committee will also promote of a open culture of incident reporting and will analyze incident reports and identify trends to plan risk mitigation policies and measures.

18.06 COMPOSITION OF THE COMMITTEE

It should include representatives from various disciplines: Physicians, Surgeons, laboratory and imaging specialists, nurses, administrators, quality improvement specialists, Radiation Safety Officer and Fire Safety Officer, The committee will nominate two members as Hospital safety Officer and Quality safety Officer.

18.07 TERMS OF REFERENCE HOSPITAL SAFETY OFFICER

1. Identify the potential safety and security risks to staff, patients, and visitor in the hospital.
2. To identify, assess & mitigate risk related to hospital operation.
3. Give recommendation for patients, employees and visitors safety in the hospital.
4. Eliminate such risks by taking precautionary actions
5. Coordinate, implement and monitor the Hospital-wide safety program that specifically includes the Laboratory safety program and the Radiation Safety Program Hazardous materials & waste, Emergency management, Fire safety, medical equipment, Utility systems, Security and Management
6. To design and implement safety management activities and risk management plan.
7. Ensure safety manuals of respective Departments are updated and the staff trained to adhere to the safety norms.
8. Ensure Emergency Evacuation Drills are conducted twice a year in the Hospital premises.
9. Training of the hospital staff for the safety management plan

10. Carrying out workplace inspections.
11. Promoting the health and safety policy and program.
12. To ensure staff in trained on safety through effective training program.
13. To ensure the provisions for safe water, electricity, medical gases and vacuum system
14. To ensure standard protocol are being followed for fire & non-fire emergencies.
15. To develop policy and procedures for the handling of community emergencies epidemics and other disasters.
16. To develop and document policy and procedure for handling of hazardous material in the hospital.

18.08 TERMS OF REFERENCE OF HOSPITAL QUALITY OFFICER

1. Evaluate the quality improvement activities on an ongoing basis.
2. Review policies & procedures relating to each function and make necessary revisions to initiate quality improvement measurements in priority areas.
3. Collaborate with all other committee to know the gaps and improve the quality of patient care.
4. Coordinate Quality Initiatives of all the departments.
5. Ensure monitoring and compliance of all the new processes introduced routinely.
6. To develop standard format for documenting and reporting all quality measures hospital wide.
7. To establish priorities for quality improvement activities.
8. To take care of new processes and changes in the system required for quality improvement.
9. Organize Quality Sensitization programs to train and educate the staff about quality improvement activities and the transformation associated with it.
10. Review the quality of care provided to patients through the monitoring of indicators sentinel events and performance of processes/system that are intradepartmental.
11. To monitor quality indicators on monthly basis and report any deviations to the Quality and Safety Committee.

18.09 Operational guidelines by the MoHFW on improving the patient care services in the healthcare organizations are available at https://mohfw.gov.in/sites/default/files/Approved%20Report%20on%20Operational%20Guidelines%20on%20Improving%20Patient%20Care%20Services%20across%20Hospitals.pdf

18.10 “Patient Safety at a Glance “ by National Patient Safety Secretariat , Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India may be referred for guidance.

18.11 Guidance reference on improving quality in public sector health care organizations is available at https://qps.nhsrcindia.org/sites/default/files/2022-04/Operational-Guidelines-for-Improving_Quality_Public_Health_Facilities_2021.pdf

APPENDIX- I

DUTIES AND RESPONSIBILITIES OF STAFF IN HOSPITAL

HOSPITAL ADMINISTRATION

DUTIES AND RESPONSIBILITIES OF DIRECTOR

The Director shall be overall in-charge of the college and hospital. She/ He shall: -

1. Exercise powers delegated as "Head of the Department".
2. Exercise such supervision and executive control as may be necessary subject to the prevailing rules and regulations of the Government of India
3. Allocate duties/ responsibilities to doctors and other officers / staff members of the hospital/college in consultation with Medical superintendent of the hospital and Principal of the college for efficient and effective discharge of multiple roles and responsibilities depending on requirements of the hospital and college and in accordance with prevailing rules and regulations of the Ministry of Health and university respectively.
4. Act as the Head of administration of the College and Hospital, and deal with the funds and budget of the institute granting administrative and financial approvals, as per delegation of financial power and in accordance with the prevailing rules and regulations of the Government of India.
5. Act as head of academics and research of the college, and ensure that the academic and research objectives of the college are fulfilled. In this regard, she/he shall take into consideration the opinion/recommendations rendered by principal and HoDs in their concerned areas and take action in accordance with framework of rules and regulations of the hospital and the Government of India.
6. Act as head of the hospital service delivery and shall ensure highest quality of health-care to patients attending the hospital in line with the vision, policies and schemes of the Government and need of the public. In this regard, she/he shall take into consideration the opinion/recommendations rendered by Medical Superintendent and act within the framework of rules and regulations of the hospital and the Government of India.
7. Oversee procurement, standardization and maintenance of equipment in hospital and medical units, authorizing AMC/CMC for costly equipment as required and grant administrative as well as financial sanctions within the power of the Head of the Department in respect of medical stores, hospital necessities and equipment etc.
8. Coordinate and interact with the Ministry of Health & Family welfare and other Central or State Government Departments, local bodies etc., as the case may be.
9. All matters for consideration by Ministry including service matters will be routed through Director. She/he shall function as leave sanctioning authority and recommend leaves of doctors as well as officers as per delegation and shall

exercise powers of initiating/ reviewing/ accepting authority of APARs in respect of officers and staff posted under his charge and as per channel of reporting.

10. Exercise disciplinary powers as per delegation.
11. Handle matters related to furnishing of information related to parliamentary questions.
12. He/She shall ensure that applicable quality standards are implemented and maintained in the Hospital and College.
13. Any other work assigned by the Directorate General of Health Services and Ministry of Health & Family Welfare for time to time.

DUTIES AND RESPONSIBILITIES OF MEDICAL SUPERINTENDENT

Medical superintendent shall be the overall in-charge of the functioning of the hospital under supervision of the Director. She/He shall: -

1. Function as Head of Office of the hospital as per prevailing rules and regulations of the Government of India.
2. Exercise administrative and financial powers delegated to him. She/he shall exercise financial powers within provisions of rules and regulations of the hospital and Government of India except on matters involving academic and research activities.
3. Undertake planning, development and budget monitoring of the hospital in consultation and after due approval of the Director.
4. Undertake manpower planning as well as defining and delegating duties to the immediate subordinate doctors, Accounts Officer, Personnel/ Administrative Officer, Stores Officer, laundry and kitchen staff, nursing officers and staff members, paramedical officers/ staff and other staff posted under his charge to ensure smooth functioning of the hospital in consultation with the Director.
5. Shall ensure regular periodic meetings with clinical and ancillary staff to review clinical and other services.
6. Supervise health, hygiene and security of the hospital and supervise medical care and treatment of patients, both outdoor and indoor and issue instructions as deemed in consultation with the Director.
7. Undertake inspections of hospital, ensure proper utlilization/ maintenance/ disposal of equipment's / stores available in the hospital
8. Exercise overall supervision over service matters of officers and staff members of the Hospital as per delegation. She/He shall function as leave sanctioning authority as per delegation and recommend leaves of doctors, officers and staff members and shall exercise powers of initiating/ reviewing/ accepting authority for the APARs in respect of doctors, officers and staff posted under his charge and as per the channel of reporting.
9. Ensure an effective feedback and grievance redressal system for patients as well as staff.
10. Ensure proper maintenance of record of the clinical, administrative, financial processes in the hospital.

11. Monitoring of important patients /MP/ Government officials (Joint Secretary and above), Senior Judicial officers and foreign nationals admitted in Hospital which may attract attention of press, authorities, Government, Parliament or Courts.
12. Ensure optimal mortuary services including autopsy, medico legal or otherwise.
13. Any other work assigned by the Ministry, Directorate, DGHS, Ministry and Government of India for time to time.
14. He/she shall, directly and through heads of various clinical care units, ensure that quality and accreditation standards are maintained in all areas of the Hospital.

DUTIES AND RESPONSIBILITIES OF PRINCIPAL

1. The Principal will be in-charge of all academic activities of the Medical College under supervision of Director.
2. She/He shall ensure the following academic functions:
   i. Matters relating to admission of under-graduate/post-graduate/post-doctoral courses in various streams (medical/nursing/paramedical).
   ii. Plan and implement all academic programs of under graduate/postgraduate/post-doctoral – in accordance with regulation of associated university.
   iii. Convene regular periodic meetings of various curriculum committees in chairperson capacity.
   iv. Monitor training programs/proposals/ fellowships in different disciplines.
   v. He/She shall implement and monitor various academic and research collaborations with other Institutions and agencies.
   vi. Plan and implement internship postings and re-orientation programmes for interns and externs. He will also look after migration of interns as applicable.
   vii. Approve various sports and cultural activities of students including student's tour programmes, selection and purchase of sports and cultural materials within the budget allotment.
   viii. Administer and ensure maintenance of (including pristine matters) all under-graduate/post-graduate hostel assisted by hostel wardens. She/he will also ensure optimal nutrition for students and doctors through proper mess facility.
   ix. She/He shall scrutinize, approve/countersign and forward all scholarship applications of the students to the sanctioning authorities on behalf of the Head of the institution.
   x. She/ he will be the authorized signatory on all certificates issued in respect of students and residents.

3. She/He shall oversee the following research activities:
   i. Approve all the PG dissertation topics/ activities, submitted by the students as chairperson of Research Council.
   ii. Apprise all research projects submitted by staff members including those financed by ICMR/UGC/CSIR/Department of Science & Technology etc. and forward the same for consideration and final approval of by Director.
4. She/He shall exercise administrative and financial powers delegated to her/him in accordance with rules and regulations of the College and Government of India on the matters involving academic and research activities.

5. She/He shall be entrusted with manpower planning as well as defining and delegating duties to the immediate subordinate doctors /teaching faculties and officers/staff members, posted under his charge to ensure smooth functioning of the college and the hospital.
6. She/He shall exercise overall supervision over service matters of officers and staff members of the college as per delegation. She/He shall function as leave sanctioning authority as per delegation and recommend leaves of teaching faculties, officers, staff members as well as students and shall exercise powers of initiating/ reviewing/ accepting authority for the APARS in respect of faculties, officers and staff posted under his charge and as per channel of reporting.
7. She/He shall undertake regular inspections of the medical college, student labs, and research establishments.
8. She/He shall be Chairperson of the Selection Committee for Residents staff of all departments.
9. As Chairperson of Library Committee, she/he will be responsible for development and maintenance of reading room and library facility.
10. She/he shall ensure an optimum feedback and effective grievance redressal system for students and residents.
11. She/He shall ensure that adequate record of administrative maintenance in respect of college including financial and academic.
12. She/He shall function as Head of Office of the College as per prevailing rules and regulations of the Government of India.
13. Any other work assigned by the Ministry, DGHS and Director of the Institution from time to time.
14. He will be responsible to deal with all matter concerning university.

ADDITIONAL MEDICAL SUPERINTENDENT

1. Day to day administration of the area/department assigned by the Director / Medical Superintendent from time to time.
2. To take decisions pertaining to their area as per delegated powers to them, under the policy and guidelines issued by the Medical Superintendent. They will consult or have approval of Medical Superintendent on all policy issues or important matters or where it is obligatory under rules.
3. They will be responsible for all the officers working under them; day to day working of the area/department assigned to them and will ensure that department assigned to them is run smoothly and efficiently. They will keep the Director/M.S. informed about important events in these departments.
4. The Addl. M.S. who is designated as Head of the office will also discharge the function of Head of the Office under the rules.
5. They will attend all the meetings taken by Director/ M.S. on various administrative issues relevant to their assigned areas of work.
6. They will keep liaison with Ministry of Health and Family Welfare, Directorate General of Health Services, and other agencies, in respect of work assigned to them with the approval of the Director/M.S.
7. Any other work assigned by the Director/ Medical Superintendent from time to time.
8. All the Additional M.S.'s will report to Medical Superintendent.

DEPUTY DIRECTOR (ADMINISTRATION)

1. All establishment matters including unions.
2. Sanction of leave except casual leave to Group C.
3. Supervision and monitoring of deployment of all group C staff in the hospital.
4. Monitoring the recruitment, filling up of posts of category of Group C employees.
5. Maintaining the liaison and doing correspondence with the Die GHS/Min. of Health on all establishment matters including filling up of posts.
6. All legal matters relating to hospital.
7. Supervision of all the officers and staff working in the establishment section and accounts section.
8. Any other work assigned by the Medical Superintendent.
9. DDA will report to the Head of Office.

WELFARE OFFICER/LABOUR OFICER/PUBLIC RELATIONS OFFICER

STATUTORY FUNCTIONS

Staff Welfare and Reconciliation Comprising Inter Alia.

1. Establishing contacts and holding consultation for maintaining harmonious relations between hospital management and its staff.
2. Projecting before the management the individual and collective grievances of staff for securing expeditious redressal.
3. Acting as a negotiating officer with association and trade unions of staff and workers.
4. Assisting management in formulating labour polices and interpreting these polices to the workers.
5. Exercising restraining influence over staff going on illegal strikes and help in peaceful settlement of legal strikes.
6. Helping workers to adjust and adapt themselves.
7. Ameliorating their working conditions.
8. Promoting management staff relations, which will ensure productivity and efficiency.
9. Securing provision of staff amenities like canteen, drinking water facilities, etc.
10. Personnel matters relating to Group C staff.

Other Functions

1. Complaints redressal and assistance to patients.
2. Complaints against employees.
3. Liaison with police, local public administration, etc.
4. Personal problems and other difficulties of the staff.
5. TV shows, sports activities and get-together.
6. Call duty after office hours.
7. Any other duty as may be specified by Medical Superintendent from time to time.

ACCOUNTS OFFICER

1. Preparation of Hospital Budget.
2. Drawing & Disbursing officer for Pay & Allowance of the hospital establishment.
3. Processing of all cases of drawl, advances admissible and claimed by staff.
4. Maintenance of financial accounts.
5. Deduction of income tax at source and maintaining all accounts, filing of return to the respective authorities in time.
6. Detailed scrutiny of all files, bills pertaining to Purchase/Store Department as per GFR.
7. Maintenance of accounts relating to Government funds.
8. Pension Cases.
9. Joint custody of cash with the cashier (wherever applicable).
10. Endorsement of service books of staff in token of having checked with the pay bills.
11. Financial advice to M.S., Addl.M.S.'s, Head of Office and other officers.
12. Financial member in the Joint Purchase Committee, Maintenance Committee and other committees constituted by the Medical Superintendent.
13. Maintenance of accounts relating to Non-Government funds.
14. Any other work assigned by the Medical Superintendent.
15. Accounts officer will report to Head of Office.

DIETICIAN

1. Management of dietetic department.
2. Management of therapeutic kitchen.
3. Maintenance of Quality of food prepared and distributed in the hospital
4. Standardization of recipes and supervision of cooking.
5. Teaching dietetic trainees, nursing staff and others.
6. Maintaining duty roster of kitchen staff, leave record, six monthly health record of Class IV employees and other records required for personnel management.
7. Running nutrition clinic and to attend to Dietetic Clinic.
8. Taking surprise visits to ensure proper distribution of food to patients particularly therapeutic diets.
9. Ordering dietary articles (dry and fresh) and supervising the receipts and issues of all supplies.
10. Checking of purchase bills relating to dietary articles with regard to their specification, quantity and rates and passing them on to Accounts Section.
11. Maintenance of proper accounts for all dietary articles and inventory for dead stock articles.
12. Sanitation and cleanliness of kitchen areas.
13. Supervision of fire precautions in the department.
14. Any other duty that may be specified by the Medical Superintendent.

MEDICAL STAFF

HEADS OF CLINICAL DEPARTMENT

1. They will be responsible for the smooth and efficient functioning of their respective departments. They will be responsible for all the medical staff working in their respective departments.
2. They will ensure quality of patient care and academic activities in their respective departments; and shall implement and monitor all such activities necessary for the same. They shall be responsible for implementation of relevant quality and accreditation standards in their respective departments.
3. They will be responsible for the deployment and utilization of services of medical and clerical staff working under them. They will keep the Medical Superintendent informed/take his approval in important matters in this regard.
4. They will be responsible for maintaining the functional status of all equipment under their department and will promptly ensure that these equipment function smoothly/repaired, and without lengthy downtime. They will keep liaison with the company maintaining the machine, officer in-charge of Maintenance and Repair, officer in-charge of purchase in this regard.
5. They will be responsible for the proper segregation and collection of hospital waste in their respective departments as per the guidelines issued by Central Pollution Control Board and other authorities from time to time. They will ensure that proper record is maintained in the areas under their jurisdiction.
6. They will be responsible for sanction of casual leave of staff working under them and will a keep a record of all types of leave. They will make alternative arrangement in case an official proceeds on leave or their application is forwarded by them.
7. They will assign duties to the various Heads of Units and other faculty working under them from time to time and monitor the same.
8. They will ensure that all sensitive patients, M.P.s/VIPs and foreign nationals admitted in their department are well attended and will keep Medical Superintendent informed.
9. They will ensure that all records relating to patients especially the MLC cases are in order, complete and is kept in safe custody.
10. They will be responsible for the general upkeep, sanitation, cleanliness and availability of essential supplies in their respective departments.
11. They will be the designated authority on behalf of M.S. for issuing condemnation certificate to declare unserviceable, old and non-functionary equipment/furniture etc., where all other sources of condemnation certification is not possible or available.
12. Organizing teaching/training of UG/ PG. Students/other staff of the department.
13. Head of the Department shall ensure availability of adequate and appropriate facilities for subordinate staff for optimal functioning and care.
14. Any other duty assigned by Director/Medical superintendent/Principal.

HEADS OF CLINICAL UNITS/TEACHING AND NON-TEACHING SPECIALIST OFFICERS

1. They will be responsible for the proper medical care and due attention to all patients admitted in their units (Indoor, Emergency Wards and ICU)

2. They will be responsible for the smooth and efficient working in their units.
3. They will be responsible for the deployment and utilization of services of medical and support staff working under them. They will keep their Head of Department informed about important issues.
4. The Head of Units must see all patients as soon as possible after admission. Due attention should be given to all serious patients admitted under them. They will ensure that all serious or sensitive patients/MPs/VIPs are well attended, and keep their superiors informed about them.
5. Heads of Units should be easily available for consultation in case of need of patients in their units. No patient should ordinarily be discharged from the hospital except a clear cut instruction from the Head of the Unit.
6. They will ensure that patients records especially of the MLC cases are up to date, complete and kept in safe custody. It should be true and faithfully record various events in connection with treatment, referrals and progress of patients in the hospital.
7. They will be responsible for the general upkeep of their wards/ unit, sanitation, maintenance & functioning of equipment under their charge, adequate availability of essential supplies in their respective wards. They will keep regular liaison with the officer in-charge of maintenance & repair, sanitation, purchase, stores in this regard.
8. They will be responsible for the proper segregation and collection of hospital waste in their respective wards as per guidelines issued by CPCB and other authorities issued from time to time. They will also keep the necessary records.
9. Any other duty assigned by the Medical Superintendent/Principal or Head of Department.

GENERAL DUTY MEDICAL OFFICERS

1. Non-PG General Duty Medical Officers shall preferably be deployed in Emergency, Screening OPD, non-specialized areas as well as administrative duties as per the need of the administration.
2. Postgraduate GDMOs/SMOs shall be preferentially detailed in clinical areas of their specialties.
3. The General Duty Cadre Medical Officer of the unit will work in collaboration with the Registrar/Senior Resident of the unit and supervise the day-to-day work of Jr. Resident/ House surgeon and interns.
4. He will accompany the physician/surgeon in-charge for ward rounds.
5. On the day the physician/surgeon in-charge is not available for ward rounds, the next senior most faculty/specialist will take rounds of his own ward. He will scrutinize the clinical documents completed by the residents and make corrections where necessary.
6. Unit incharge will allocate night duties by rotation to residents in consultation with the respective registrars/Senior Resident of different units and will ensure that the respective staff is available for duty. The duty roster will be hung up in the duty rooms on the board indicating the name and unit. The next on duty will be shown in the same list. In case the duty officer is not available for urgent reasons, the next on duty will act for him.
7. He will also attend to referred cases whenever required. Thereafter Registrar/Senior Resident will take the responsibility of referred cases.
8. Any other duties assigned by the Competent Authority.

SENIOR RESIDENTS

1. The Senior Resident will be directly responsible for provision and supervision of patient care in his unit with the assistance of Junior Residents, specially the emergency cases.
2. He will be contacted by the Junior Resident on duty in case of emergency. If he thinks necessary, he should consult the physician/surgeon in-charge of the unit or specialist when available.
3. He will go through all the case notes written by Junior Resident and will make corrections where necessary and approve the same.
4. Besides taking rounds in the wards during day time, he will daily take round late in the evening, with the Junior Resident on duty.
5. On admission days, he will attend to cases referred for medical opinion from other wards. If necessary, he may contact the physician/ surgeon in-charge for necessary advice.
6. In case of death, it is his responsibility to scrutinize that case documentation is complete in every respect and will write a brief summary of the case, before it is sent to the Medical Records Section.
7. He will maintain a book to indicate the patients in his charge who would need attention after the night rounds and he will apprise the junior resident of such cases.
8. He will maintain a register to indicate that the relatives of seriously ill patients have been informed through the central registration office of the hospital. This is applicable in case of patients absconding from the ward and also in case of death.
9. He will oversee the general upkeep and sanitation of the wards earmarked to him with the help of nursing staff.
10. Doctor on duty providing clinical care at the time of death of a patient shall complete the death notes.
11. They will conduct teaching session for undergraduate, post graduate and Junior Residents. He will assist the HOD/HOU in research work.
12. Any other duty related to academics and patient care services given by the HOD/HOU.

JUNIOR RESIDENT (NON-PG)

1. His shall be equated with first year PGs in the Department.
2. He will take advice from Sr. Resident for guidance and efficient execution of professional care of his patients.
3. In OPD, Junior Resident will refer the case to the Senior Resident with a short history and physical findings of the case written on the OPD card, if required.
4. Junior Resident is primarily responsible for the case allotted to him. Besides, he would have a general idea of all the cases in the ward. As soon as a case is admitted, patient will be examined by the Junior Resident who will complete the case sheet in all details. He will then show the case to the Senior Resident. He will see that all necessary investigations are done in time, and entered in the case sheet.
5. In case of acutely ill patients, it is his responsibility to show the case immediately to the Senior Resident/GDMO or Specialist for advice.

6. He will enter the daily follow up of the case in case-sheet. In case of any seriously ill patients, the progress of the case will be recorded every time the patient is examined.
7. On admission days, Junior Residents will be physically present on duty in Emergency Department as per duty roster and will not leave the deptt. unless permitted by the Senior Resident/GDMO/Specialist on duty in the emergency deptt. and his/her substitute has arrived for attending to cases admitted there.
8. On other days the Junior Resident on duty should be present in the wards allotted to them.
9. On Sundays and gazetted holidays Junior Residents will perform the duty according to roster prepared by the Unit or sister unit.
10. Night Emergency duty in ward (From 21.00 to 9.00 next day) - Junior Resident from each unit/sub-unit will be on emergency duty in the night for the respective units in addition to one Junior Resident staying in Emergency department. The Junior Resident on night call will apprise himself by direct contact with the Senior Resident who need special attention.
11. Requisite forms for laboratory and X ray investigations should be filled in the previous evening with full clinical notes for routine cases. In emergency, it should be done immediately. The reports of investigations should be collected and recorded in time to be useful. Any critical reports received shall be informed to senior colleagues and directions followed.
12. To carry out any other duties as assigned by the Senior Resident/ Head of the Unit.

POST GRADUATE STUDENTS

1. They will attend the OPD on the scheduled OPD days of the unit to which they are attached.
2. They will go through and examine all the cases admitted in their respective units and record the review of the case on a separate sheet of paper. They will go through the recent medical literature available on all aspects of the case and add it to the review of the case. During ward rounds they will discuss the case with the physician/surgeon.
3. They will attend the clinical meetings and post-graduate teaching programs of the department and present cases for the same.
4. For other purposes they will work in collaboration with the senior resident.
5. They will not discharge a medico-legal case independently.
6. They will assist in arranging duties and carrying out duty with Jr. Resident/Sr. Resident.

INTERNS

1. They will work in collaboration with the Junior Resident/PGs under the supervision of Senior resident.
2. They will attend OPD on the admission days of the units to which they are attached.
3. They will examine the patients on the allotted beds and complete their case sheets.
4. They will work in the clinical side-room and do routine bed-side investigations for patients under their care as per the departmental policy.

5. They will be on emergency duty in Accident and Emergency Department according to the duty roster prepared by the Department.
6. They will attend special clinics, run by their units on the respective days.
7. Interns will neither independently prescribe treatment nor certify deaths.
8. They will assist seniors in day to day patient care activities and attain the prescribed competencies.

NURSING PERSONNEL

CLINICAL RESPONSIBILITIES OF NURSING CADRE IN HOSPITAL

1. Nursing/ Patient care is the fundamental responsibility of all nurses.
2. Nursing knowledge, skills and attitude learned in Nursing course to be practiced throughout his/her career.
3. 90% of the nursing workforce should be available for nursing care of patients.
4. Adequate number of Nursing personnel should be available in each shift as per workload dependent on the area of deployment.
5. Number of Days Off should be decided as per the number of functional days. Any kind of leave should not be clubbed together while counting functional days, as per shift duty norms of DOPT.
6. The workload of bedside/OT/Emergency/ Clinical procedures should be distributed equally among all nursing personnel.

CHIEF NURSING OFFICER (CLINICAL RESPONSIBILITIES)

1. Should ensure safe delivery of standard nursing care.
2. Ensure regular/annual competency and performance appraisal of nursing personnel and remedial measures as required. (Assessment tool)
3. Ensure administrative discipline
4. Ensure quality of nursing services through regular audits and monitoring of processes through nursing KPIs.
5. Ensure timely nursing resource planning and recruitment as per Govt. of India guidelines
6. Ensure soft skills of nurses, leadership qualities and professional competencies at all levels of nursing care delivery.
7. Feedback about nursing care and services communicated to the nursing personnel on a monthly basis.
8. Initiate and participate in nursing research
9. Participate in professional and communicate activities
10. Maintain cordial relations with public and volunteer workers.
11. Provide inputs for improving services of the institution.
12. Report to the Head of Office and Medical Superintendent.

ASSISTANT NURSING SUPERINTENDENT (ANS)

Responsible for the procedures related to;

1. Admission, discharge, LAMA, abscond and death records of the patients
2. Prepare shift wise report and census
3. Supportive supervision of handing over and taking over of patients by the nurses in each shift.
4. Ensure initial and daily assessment admitted patients

5. Responsible for keeping the Unit clean and tidy all the time, implement 5S at workplace for bringing an aesthetic and therapeutic environment in the respective department.
6. Responsible for Hospital Management Information System.
7. Allocate patients to Nursing Officers and Senior Nursing Officers without overlapping, as the job responsibility remains same for both.
8. Ensure that assigned nurse able to share the details of patient's name, diagnosis, time patient was seen, time of initial assessment and re assessment, details of treatment.
9. Ensure nurses' documentation for completeness and legibility
10. Ensure that every clinical record entry identifies the date and name of the person who made the entry .Time of entry is must in case of admitted patients .
11. Ensure Infection Control Practices and Bio medical waste management is done by the HCPs.
12. Ensure adequate number of nurses are available in each shift as per the patient load .Follow the formula for distribution of nurses in each shift.
13. Ensure that duty roster is finalized well in advance .
14. Plan and implement patient assignment to Nursing officers /Senior Nursing Officers .
15. Medicine indent and stock -updated indent, stock and out of stock drugs.
16. Inventory of equipment -Preventive maintenance of equipment is updated and documented .Register complaints and follow up of complaints.
17. Ensure cleaning, disinfection and sterilization of equipment -Syringe pumps, Oxygen, air, suction panels, CPAP/BiPAP machines, ventilators etc.
18. Ensure that terminal disinfection of beds done after every discharge /death.
19. Maintaining interpersonal relationship with patients, relatives and health care team members.
20. Ensure that aseptic techniques are followed by doctors and nurses where ever applicable .
21. Maintain staff development record of nurses in the department .
22. Supervision of domestic staff, Housekeeping and MTS staff .
23. Report about the medico-legal cases if any admitted in the ward.
24. Keep the NS/CNO/HOD/Director informed of the happenings in the ward like fire, accidents, violence, theft etc.
25. Check competency of nurses regularly and document the same for training purpose .
26. Involve in bedside teaching activities by taking daily nursing rounds with nurses in the department .
27. Report incident reports, medication errors and near miss .
28. Ensure all staff wear name tags and clean, decent prescribed uniform.
29. Ensure that job description is available for all staff.
30. Conduct departmental audits)internal audit (regularly eg .Prescription audit, nursing audit, IPC audit, BMW compliance audit, hand hygiene audit, HR audit etc .
31. Initiate Quality Improvement Projects to improve nursing care constantly

Implement International Patient Safety Goals (IPSG) in the Department .

1. Identification of patient correctly using minimum 4 identifiers ie name, age/date of birth, gender, and UHID/ABHA ID

2. Effective and therapeutic communication with patients, relatives and within the healthcare team.
3. Safe custody of all medications and high alert drugs.
4. Ensure correct procedure, site, surgery and position.
5. Assess and reduce Healthcare Associated Infections.
6. Assess risk of patient harm, falls.

NURSING OFFICER & SENIOR NURSING OFFICER

(Nursing Officers and Senior Nursing Officers responsibilities are combined together for optimum nursing care provision to the patients).

Responsible for ensuring;

1. Personal hygiene needs of non-ambulatory patient. These unskilled jobs can be delegated to MTS under strict supervision .
   - ✓ Bed making
   - ✓ Sponge
   - ✓ Mouth care
   - ✓ Back care
   - ✓ Hair care
   - ✓ Elimination needs /urinals
2. Nurse on duty should be able to share the details of patient's name, diagnosis, time patient was seen, time of initial assessment and reassessment, details of treatment .
3. Implement International Patient Safety Goals)IPSG (in the department .
   - Identification of patient correctly using minimum 4 identifiers.
   - Effective and therapeutic communication with patients, relatives and within the healthcare team
   - Safe custody of all medications and high alert drugs
   - Ensure correct procedure, site, surgery and position
   - Assess and reduce HAIs
   - Assess risk of patient harm, falls, near miss, medication error.
4. Vulnerable patients are identified, assessed and reassessed frequently.
5. Injection transcription, preparation and administration by IM, IV, SC, and ID routes.
6. Medication transcription, preparation and administration by oral, nasal, eye, rectal routes .
7. IV fluid transcription, preparation and administration of bolus and maintenance doses .
8. Oxygen administration, nebulization, steam inhalation.
9. Feeding parenteral, OG/NG feeding, Jejunostomy feeding .
10. Care of pressure points and pressure ulcer management .
11. Wound dressing .
12. Insertion of orogastic and nasogastric tubes
13. Soap and Water enema Proctoclysis enema
14. Initial assessment of patients on every point of contact or on admission - recording, reporting and documentation of vitals and pain assessment .
15. Reassessment of patients -recording, reporting and documentation of vitals and pain assessment .

16. Carry out technical procedures, such as, gastric gavage and lavage, Oxygen Therapy, Dressing, Irrigation, Enema, Catheterization hot and cold applications, suction etc.
17. Assist doctors in procedures.
18. Posture change of bedridden patients as per the unit protocol.
19. Care of catheters –Foleys, drainages etc.
20. Care of tubes - ET tubes, tracheostomy tubes etc .
21. Care of cannulas -disinfect IV cannula site before each contact.
22. Ostomy care as per unit protocol .
23. Collecting, labeling and dispatch of specimens.
24. Care of dying and dead –Ensure dignity of the dying and dead throughout .It also includes dead body packing and hand over of the body to bystanders . Always take help from Orderly/MTS whoever available .
25. Department can have contact numbers of ambulance services /hearse van for dead body transportation, displayed .
26. Preparation for /and assistance in clinical tests and medical/surgical procedures.
27. Urine testing for sugar, and albumin.
28. Observation, recording and reporting of all procedures and tests.
29. Escorting serious patients to and from the department/wards for investigations.
30. Routine care and cleaning of dressing trolleys, cupboards apparatus, mackintosh etc.
31. Maintain aseptic techniques /Aseptic Non-Touch Technique (ANTT) where ever applicable .
32. Practice 5 S technique all the time .
33. Care of clean and soiled linen.
34. Ensure disinfection of linen, beds, floor and bed pans, and fumigation of rooms etc.
35. Preparation of room, trolleys, and sets for procedures.
36. Preparation of surgical supplies.
37. Maintaining interpersonal relationship with patients, relatives and health team members.
38. Participation in staff education and staff meetings.
39. Participation in professional activities.
40. To keep the senior nursing officials informed of the incidents in the ward like accidents, fire, absconding patients, theft etc.

Infection Control Nurse

1. Work within the multi-disciplinary infection control committee, lead and coordinate the work to support the development of long terms infection prevention and controlled strategies and annual infection prevention and control program .
2. Implement the policy and procedure laid down in infection control manual in all area of hospital .
3. Monitor and evaluate the impact of the infection prevention and control strategies and working practices.
4. Lead the program of infection prevention in hospital premises as per national and regional guideline and documented .Also update it annually with updating of guidelines .

5. Identify and take appropriate action to control the outbreak infection and documented .
6. Oversee the delivery of effective infection prevention and control education program .
7. Monitor service delivery system of organization to implement quality infection prevention practices using multidisciplinary approach to empower staff and challenge poor practices and behaviour which compromises patient care .
8. Coordinate with head of organization committee member and nursing superintendent to lay-down the strategies on infection prevention and control guideline and implement it in organization .
9. Coordinate the committee member and set strategies and operational meetings internally and externally for infection prevention issues .
10. Perform surveillance activity to capture and monitor infection, prevention and control data .
11. Monitor and document, report the HAI to infection control officer and also take appropriate action to prevent and control HAI in patients also analyze the data on quaternary basis .
12. Investigate outbreaks and episodes of cross infection)HAI (with reference to their source mode of spread and means of control .Investigate HAI using analytical tool; and on the basis of Root Cause Analysis, design CAPA and train the concerned staff .
13. Utilize and implement the resources provides by organization for prevention and control of infection
14. Coordinate with management and multidisciplinary infection control committee to plan and implement training programs in hospital .
15. Plan, organize and coordinate audit and monitoring of wards, hospital environment to ensure the infection prevention and control practices.
16. Implement set polices and procedure of sterilization activities in hospital premises and randomly audit on them .
17. Monitoring process of biomedical waste segregation, handling, transportation and implement the national guidelines in hospital premises and perform randomly audit on them also update it annually as per updating of national guidelines .
18. Implement and document the infection prevention guideline on air, water domestic, pest control activity in hospital to prevent the spread of infection .
19. Develop the training program on Infection prevention activity to both for staff and visitor .
20. Infection control nurse act a source able to educate, advice, inform patients relatives and general public about the infection prevention control related issues .
21. Monitor and advise on the equipment cleaning and maintenance protocol to prevent the infection.
22. Coordinate with head of organization and all departments, update them about data of infection control on monthly basis and give advice to improve practices for infection prevention.
23. Coordinate with the Head of the Organization in designing the staff safety protocols and implement them within the premises .
24. Monitor and implement the kitchen sanitation, heath checkups, and disinfectant protocols and scheduled for hospital infection prevention activity.
25. Develop and communicate infection prevention and control indicators to Quality Assurance Cell of the hospital .

Continued Nursing Education Coordinators

1. Plan staff development program and arranges for in service education and orientation program etc.
2. Develop and communicate annual training calendar to the CNO Office.
3. Prepare annual report of CNE activities and communicate to the CNO Office.
4. Mentor and hand hold nurses at the bedside whenever there is no formal workshop or any other teaching activity taking place as per the calendar.
5. Devote extra time for the low performing nurses .
6. Conduct monthly institutional level kayakalp assessment and submit the report to Quality Assurance Cell .
7. Implement quality assurance programs in the hospital .
8. Develop competency parameters and nursing audit checklists for nursing personnel.
9. Regular assessment of knowledge, skill and attitude of nurses .
10. Competency assessment scores should be communicated to the Office of CNO.
11. Initiate nursing audit in various departments.
12. Integrate evidence based practice in nursing care and monitor for the same.
13. Disseminate the guidelines issued by Govt .of India to the nurses.
14. Develop/revise /review Standard Operating Procedures)SOP (for all nursing processes and evaluate its implementation at all levels.
15. Teach best practices in nursing care at the bedside .
16. Initiate nursing research activities.
17. Conduct quality improvement projects.
18. Plan CNE activities as per the identified needs of the nurses .
19. Take regular rounds with the aim of assessing competency of the clinical nurses.
20. Prepare and capture department wise performance indicators for nursing services .

Professor / Head of Department

1. Organise Nursing led clinics and provide evidence based Nursing care
2. Participate in determination of educational philosophy purposes and policies
3. Utilise opportunities to initiate evidence based teaching and learning practices for improvement of educational programme
4. Plan, develop, implement and evaluate educational programmes
5. Identify need of learners in terms of objectives of the programme by utilising previous records, personal interviews, tests and observations
6. Direct the activities of staff working in the department
7. Select and organise learning experience as per the learning objectives
8. Ascertain, select and organise facilities, equipments and material necessary for learning
9. Recognise individual differences in appraising the learners programme
10. Participate in formation and maintenance of comprehensive record system

Tutor /Assistant Professor/Associate Professor

1. Provide nursing care using Nursing process

2. Monitor indicators of infection control practices, adverse events and quality of care
3. Implement standard operating procedure to ensure patient safety and safe care environment
4. Prepare, administer and evaluate Nursing care protocol as per treatment guidelines
5. Organise Nursing rounds along with Nursing team
6. Assist in selection and admission of students in the institute
7. Plan, implement and evaluate curriculum
8. Prepare lesson plan, unit plan, course plan and Master rotation plan as per the curriculum
9. Prepare teaching learning material and administer under the guidance of senior faculties
10. Plan, implement and evaluate clinical rotation as per the competency requirements of the curriculum
11. Assist the learner in identifying their needs and problem solving process
12. Mentor, guide and counsel Nursing students and junior nurses
13. Supervise student health, welfare and security
14. Organise clinical teaching and demonstrate Nursing procedures to students and junior Nurses
15. Supervise living condition of students in the hostel
16. Conduct test and evaluation of student competencies and performances
17. Supervise the student in hospital /community settings
18. Maintain classroom equipments, supplies, teaching aids, Library and laboratory / simulation lab with the assistance of Lab attendant
19. Maintain and use adequate and accurate records

MEDICAL RECORD STAFF

Medical Record Officer

1. Management and maintenance of Medical Record Department (including Central Admitting and Enquiry Office).
2. To ensure safety and confidentiality of medical records.
3. Verification of completeness of clinical records.
4. Timely coordination of medico legal responsibilities.
    i. Timely completion of medicolegal records
    ii. Security and confidentiality of medicolegal records
    iii. Providing medicolegal records to concerned medical professionals whenever required for legal matters
    iv. Attending courts for verification of medicolegal documents whenever summoned
5. Development and maintenance of secondary statistics (i.e. indices of various types).
6. Preservation of medical records according to records retention schedules.
7. Technical guidance to the staff.
8. Locating and providing records to all departments whenever required.
9. Keep himself and his staff updated in MRD related technology.
10. Organising of regular training for doctors and staff in International Classification of Disease (ICD).

Statistical Assistant (OR Assistant Medical Record Officer)

1. Timely response to correspondence received in the department.
2. Maintenance of files for different subjects dealt with in the department.
3. Supervision of Incomplete Records Control Desk
4. Scrutiny of Statistical returns compiled by the Admission and Discharge Analysis Desk and the Medical Statistics Desk.
5. Regular forwarding of statistical returns to the competent authorities.
6. Control of furniture, linen and stationery items through proper inventory, preparation of monthly indents for these items.
7. Supervision of the department work in the absence of Medical Record Officer.
8. Participation in the training programmes of the department.

Medical Record Technician

1. Compilation of data for records.
2. Preparation of statistical reports.
3. Review of medical records to ensure presence of all component.
4. Ensuring of proper ICD Coding and operations according to the accepted classifications.
5. Maintenance of indices according to the planned procedure.
6. Preparation of periodic Hospital Census from records.
    i. Admissions and discharges
    ii. Compilation of daily, monthly and annual statistics, and generate reports as required.
    iii. Timely Reporting of births and Maintenance of Birth Registers.
    iv. Timely reporting of deaths and Maintenance of Death Registers.
    v. Ensuring completeness of Birth and Death Reports received.
    vi. Supervision of Filing Area.
    vii. Instructing new employees in the procedures of their jobs.
    viii. Checking the work of employees directly under his Supervision
    ix. Receiving summons/notice (including medico legal for verification of records)
    x. Forwarding the summons to the concerned Officer for compliance.
    xi. Attending summons (including medico legal for verification of records), and producing records there, as and when are received.
    xii. Attending to medico-legal works while working in the Medical Record Department, as under:
        - Receiving medico-legal registers from the Casualty Medical Officer when such registers are complete.
        - Getting those medico-legal reports which are left incomplete by the doctors, duly completed in all respects.
        - Preparing a list of all those medico-legal reports which are not completed in spite of best efforts, doctor-wise and submitting the same to MRO for necessary action.
        - Controlling issue of medico-legal registers by maintaining a register/Records.
        - Issuing medico-legal reports to the police authorities as and when required.

- Providing assistance to police officials in obtaining X-ray films and other documents required by them.
- To provide numbered and certified new medico-legal registers to the Casualty Medical Officer on demand.
- Keeping all the medico-legal documents in safe custody
- Participation in the training programmes of the department.

Receptionist /Registration Clerk

1. Guiding patients to various OPDs/Clinics/Departments in relation to their diseases.
2. Preparation of Admission Records of all patient to be admitted.
3. Attending to enquiries.
4. Maintenance of Central Admission Records.
5. Attending to requests for ambulances and hearse vans (if available).
6. Providing assistance in locating kith and kin in case of unattended patients.
7. Maintenance of furniture, equipment, stationery medical record forms, etc., lying in the Central Admitting and Enquiry Office.
8. Announcement on Public Address System.

Junior Medical Record Technician

1. All duties performed by Receptionist on Central Admission Counter as well as Enquiry Counter in the absence of Receptionist.
2. Hospital Census work, viz.:
   i. Collection of daily ward census reports prepared by night nursing staff.
   ii. Tallying number of admissions recorded in the wards with the duplicate copies of admission advice.
   iii. Collection of records of discharged patients.
   iv. Preparation of consolidated Hospital Census Report.
3. Assembling of Medical Records of discharged patients according to a specific order.
4. Typing of daily discharge list.
5. Proper filing and maintenance of records of discharged patients.
6. Typing work of the department.
7. Assisting the Medical Record Technicians working in the incomplete as well as completed records control areas.
8. Attending courts for production of medico-legal registers and medical records, etc. 10. Assisting Medical Record Technician in admission and Discharge Analysis.
9. Registration of out-patients in various OPDs and Clinics.
10. Assisting the Medical Records Technician Incharge of Out- patient Statistics in the collection and compilation of data on attendances and diseases.

Medical Record Attendants

1. Filing of medical records of discharged patients.
2. Retrieval of medical records.
3. Checking medical records for missing files.

4. Proper maintenance of medical record files in the incomplete as well as completed records areas.

LABORATORY STAFF

JOB DESCRIPTION OF LABORATORY STAFF

Junior Medical Lab. Technologist (JMLT): An entry level technical post of the Lab Cadre.

1. Collection of samples.
2. Sample handling
    i. Ensures relevant required information is on the requisition form received
    ii. Verifies specimen suitability including adequate amount/volume and integrity.
    iii. Registered specimens into laboratory information system i.e. register/computerized system.
    iv. Check all pre analytical variables
3. Sample processing as per SOP; Preparation of blood and biological sample /smear for analysis as per requirement of laboratory
4. Sample testing; perform all the routine investigations in various departments/divisions of laboratories under supervision of senior Laboratory Professionals. i.e. in Haematology, Biochemistry, Clinical Pathology, Histopathology, Immunology, cytology Microbiology and Blood Bank.
5. Making reagents required for tests
6. Run quality assurance programme in laboratory
7. Assist senior lab technical staff. in special tests & other lab works
8. Should apply principles of standard precautions in lab & use personal protective equipment's e.g. gloves, mask, gown etc.
9. Sterilization and autoclaving of various laboratory materials.
10. Records keeping of lab results and other records.
11. Cleaning and maintenance of various sophisticated medical laboratory-testing instruments
12. Guidance subordinate auxiliary staff (MTS) in laboratory.
13. Any other duty including emergency or Shift duties independently round the 'clock as assigned by the Head of the unit/ department.
14. Courteous behaviour with patients as well as other health care workers
15. Use and maintenance of light microscope
16. To ensure compliance with Bio-medical waste regulations and policy of MOEFCC
17. Desirable: Knowledge of Computer
18. Knowing the correct procedure of phlebotomy and Assisting in phlebotomy procedure with nursing /assigned personnel.

Medical Laboratory Technologist (MLT)

1. In addition to the routine duties and responsibilities of the Jr. Medical Technologist, the Medical Lab. Technologist will also perform the specialized work as per their place of posting in different labs in various departments.
2. Assists in training teachings of UG/PG Medical Students whenever required
3. Guide the Junior Technical Staff and auxiliary staff in their day to day work

4. Maintenance of reagents and consumables inventory to ensure uninterrupted function of the laboratory.
5. Any other duty as assigned by the Head of the unit/ department, including shift duty
6. Assist senior lab technical staff. in special tests & other lab works.

Technical Officer

1. In addition to all the duties handled by the Medical Laboratory Technologist (MLT), the Technical Officer will perform the following duties:
2. Act as person in charge (PIC) of a division of a laboratory department as well as a resource person as per guideline determined by laboratory management system.
3. Monitor Quality Control, Quality assurance, safety and Infection Control practices to assure compliance with internal and external regulations.
4. Oversee specimen collection area- ensuring all pre analytical variables are taken care off.
5. Oversee operation and maintenance of different types of instrument: and equipment used in Medical testing Laboratories
6. Processing and analysis of samples for highly special investigations.
7. Maintenance of laboratory manuals, SOPs and supervision of maintenance and upkeep of laboratories.
8. Monitor workflow, assessment of staffing levels and reassignment as needed, helping in making duty roster
9. Maintenance of departmental records.
10. Any other duty as assigned by the Head of the unit/ department, including shift duty.
11. To assist the senior staff in the supervising the work of Technical staff
12. To make indent as per requirement in the lab
13. To conduct training programme on Hospital Waste Management for subordinate staff.

Senior Technical Officer

1. In addition to all the duties handled by the Technical officer, STO will also perform the following duties:
2. Work as a Technical In-charge in particular Department of Lab.
3. Maintain the inventory and assist the Head of the department/ unit in procurement of Lab. Requirements, consumables and correspondence regarding maintenance, repair and upkeep of equipments.
4. Assist the Head of the Department / unit for maintenance of leave records, posting of staff etc.
5. Vigilance against misuse of laboratory materials, equipment's or reagents.
6. Interact with doctors, nurses and other health providers when answering questions or providing other information about a patient results.
7. Maintenance of laboratory manuals and supervision of maintenance and upkeep of laboratories.
8. Any other duty including posting in Emergency duties as assigned by the Head of the department/ unit.

Chief Technical Officer

1. Will function under the supervision of Medical Officer Incharge of the laboratory.
2. Oversee Quality management and a nodal post for coordination of different division/ departments of Laboratory in a hospital.
3. Overall technical in-charge of laboratory services in hospital and will be responsible for quality assurance programmes and implementation of other policy decisions of authorities related to lab services.
4. Resource person for various academic activities/scientific activities-Seminar/conferences of lab departments in a hospital.

Multitasking Staff

1. To maintain the cleanliness of laboratory workstation including equipment.
2. To wash reusable laboratory glassware.
3. To assist TO/STO, in bringing the laboratory reagent, equipment etc .from stores.
4. To assist JMLT/MLT in receiving of samples, preparation of reagents and media as per requirement.
5. Dispatch of reports, if required
6. Transportation of samples.
7. To perform shift duties and any other work assigned by seniors/ unit Head or HOD

LIST OF TESTS DONE IN VARIOUS LABS (CAN VARY AS PER REQUIREMENT OF COLLEGE/ HOSPITAL)

Clinical Pathology and Haematology

1. Haemogram
2. Should be able to run Semi/fully automated analysers and also, manually perform Hb, TLC, DLC, ESR, platelets count. Peripheral smear staining-for RBC morphology, DLC and parasites e.g. Malarial parasite microfilaria etc.
3. Coagulation studies-
   i. Proper collection, storage and analysis, use of auto-analyzers,
   ii. Routine tests- PT, aPTT, D Dimer
   iii. Special tests: Tests for thrombophilia, Factor assays Fibrinogen etc.
4. Iron profile,
5. Haemoglobin Electrophoresis/HPLC
6. Flow cytometry.
7. Semen analysis- Making of smear, PAP/ Giemsa Staining and microscopic examination
8. Urine analysis
9. Knowledge of ELISA & Chemiluminescence

Blood Bank

1. Should be able to perform blood grouping by tube/ gel card method and cross match
2. Direct & indirect coombs test
3. Antibody screening & identification

4. Tests for transfusion transmitted infections by ELISA/ appropriate method.
5. Making blood components
6. Performing Aphaeresis
7. Ensures proper storage and quality of blood products Also evaluates the appropriateness of blood product for patient clinical condition.
8. Quality Conntrol of all tests ,
9. Record maintenance
10. Screening of donor before blood donation.
11. Giving reports with his or her own signature for the treatment of patient.
12. Able to recognize and investigates the adverse effects of transfusion according to established protocol & initiates follow-up action.
13. Should have patient friendly communication skill.

Clinical Biochemistry

1. Kidney function Tests, Liver function tests, Serum Electrolytes, Blood gas analysis
2. Various type of Diabetes monitoring tests (in Blood and urine), ketoacidosis,
3. Cardiac Enzymes, Lipid profile
4. Hormonal assay, like Thyroid, FSH, LH, Prolactin, Cortisol, Testosterone and other hormones.
5. Knowledge of autoanalysers, Chemiluminescence, PCR

Histo- Cyto Pathology

1. Receiving samples from operation theatre like gall bladder, uterus, intestine, stones, other body organs or tissues and deferent types of body fluids etc.
2. Participating in grossing, processing, embedding, and section cutting- making slide Routine H & E staining & mounting,
3. Making of buffered formalin & other fixatives
4. Frozen sectioning
5. Special stains –AFB Lepra, PAS, mucicarmine, Silver methnamine, VG, Reticulin PTAH etc.
6. Operating & maintaining common laboratory equipment
7. Prepares blood, body fluids and other clinical specimens for microscopy
8. Running of Cytospin & knowledge of LBC
9. Routine staining like H & E, Giemsa, PAP

Museum Curator in Histopathology

1. Surgical specimens for display, Making & changing formalin
2. Helping in photo-micrographic work,
3. Indexing surgical specimens in register/ computer
4. Maintaining and furnishing the museum. Compiling statistical data etc.

Immunology

1. Applies principles of immunology to detection of antigens & antibodies
2. Knowledge of ELISA, FISH, immunostainer, PCR
3. Immunohistochemistry

Microbiology

1. Various hazardous specimens receiving and keeping them in appropriate
2. Temperature.
3. Making deferent types of agar (media for bacterial growth).
4. Sterilization of various equipments used in testing,
5. Making culture and sensitivity for specimen
6. Knowledge of Autoclave-used blood culture bottles and Petridishes
7. Reporting and identification of deferent type of infections (bacterial growth), Micros- copic examination where-ever it is applicable, to rule out various type of infectious diseases like Septicemia, Meningitis, Tuberculosis, Typhoid, Cholera, Leprosy, etc.
8. Knowledge of ELISA, Chemiluminiscence & PCR for serological tests and viral infection diagnosis.

BLOOD BANK

Blood Centre Technician (JMLT/ MLT/TO)

Primary duty of Blood centre technician is to perform all the laboratory tests to ensure safe and quality assured blood and components. Technicians shall be posted in different areas of blood centre.

1. Blood/Component requisition: To receive blood samples for grouping and compatibility testing, along with requisition forms from wards /OT/labour room/ ICUs etc. and others
    i. Technician has to check that complete details have been mentioned on the requisition forms and patient identifiers on form match with those on sample, as per the SOPS.
    ii. To ensure that samples are adequate, not hemolysed, in proper vacutainers, properly labeled and signed by the phlebotomist. All the details on forms and vials should match and requisition forms should be signed by the clinicians.
2. To perform Grouping, antibody screening and cross matching of all blood samples of patients for routine, emergency and urgent demands. All the proper checks and procedures shall be followed for issue of blood and blood components as per SOPs for routine/ emergency / urgent issue.
3. To issue blood/ Components as per the regulatory requirements and as per the SOPs of blood centre. This also includes massive transfusions, neonatal transfusions, incompatible transfusions, etc., as per the SOPs of Blood centre
4. To perform Rh Kell profiling, Antibody screening and identification in patient samples, immunohematological workup or other tests, as and wherever required and to maintain the record in the register.
5. To maintain documentation of grouping, compatibility testing and issue of blood /components with signature.
6. Workup of adverse transfusion reactions: To ensure proper receipt of post transfusion sample and blood bags along with duly filled forms , in cases of transfusion reactions and complete work up of the same.

7. Keeping all the pretransfusion samples of patients for at least 7 days, as per the guidelines/SOPs
8. To assist Medical officer in screening, physical examination and basic investigations of donor, including blood grouping, hemoglobin estimation of donor etc.
9. To provide predonation information, counselling and post donation counselling.
10. To perform phlebotomy of donors for blood collection, labelling of blood bags & sampling in pilot tubes along with proper documentation.
11. To manage adverse donor reactions as and when required.
12. To perform all the tests required for Donated blood including blood grouping, antibody screening etc.
13. To assisit in screening and evaluation of apheresis donor and to perform apheresis procedures including plateletpheresis, plasma pheresis, leucocytapheresis etc. To perform,CBC & other biochemical investigations of apheresis donors.
14. To participate in Voluntary Blood Donation Camps and perform duties, as allotted in blood donation camps.
15. To perform transfusion transmitted infectious disease testing (TTI testing) for HIV, HBsAg, HCV, Syphilis and Malaria of all donated blood bags, as per the SOPs and to maintain daily documentation and Quality control of the same.
16. To process whole blood for component preparation.
17. To ensure proper labelling of components and to ensure proper storage conditions of components, including cold chain management, with documentation.
18. To prepare components for the purpose of Double Volume Exchange Transfusion/ IUT etc.
19. Ensuring maintenance of cold chain/ appropriate temperature of blood/ components/ reagents.
20. To perform tests as per the requirements of particular blood centre; these may include Molecular tests, HLA testing, NAATs, Platelet serology etc.
21. To prepare stock on daily basis of all blood /Components and to ensure adequate supply of blood/ components. To ensure that components are issued on ‘First in, first out (FIFO) basis, unless required otherwise.
22. To ensure minimum wastage of components.
23. Ensure adequate availability of stock for patients and arrange for bulk transfer , whenever required
24. Arrange for Issue of unutilized/ excess plasma for fractionation.
25. Ensure Quality assurance in respective laboratories. This includes training, reagents, equipment (Maintenance and calibration), SOPs, etc.
26. Participate in Induction and refresher trainings and to provide trainings to junior colleagues.
27. To assist Medical officer in Continuous quality improvement and proficiency testing.
28. Maintaining stock of consumables/reagents of respective laboratories.

29. Perform QC of all reagents received in respective laboratories.
30. Ensuring daily, weekly and monthly maintenance of equipment at respective seat and maintain equipment log books.
31. Ensure calibration of equipment, as per guidelines and SOPs.
32. Maintaining documents, registers and records of respective labs
33. Compilation of daily, weekly and monthly data on several aspects including units collected, percentage components prepared, wastage, issue etc. and to assist Medical officer in reporting of same.
34. To supervise laboratory attendants in performing their duties.
35. To perform shift duties / emergency duties on rotational basis.
36. Maintain 'Material safety data sheet'(MSDS) for all hazardous reagents / consumables used in different laboratories of blood centres.
37. Ensuring proper waste disposal as per Biomedical Waste Management guidelines
38. Ensuring Biosafety norms and GMPs in all the laboratories of blood centre
39. Any other work as assigned by Doctor in charge

Senior Blood Centre Technician (TO/ST/CTO)

1. Technical Supervisor has to ensure that all processes and procedures are performed in quality assured and timely manner, with good manufacturing practices.
2. Technical Supervisor shall perform all the duties as stated for Blood centre Technician and also assists Medical Officer with supervisory and administrative responsibilities. (Work may vary as per needs of individual blood centre and number of technicians.

In addition to working in different parts of Blood Centre (duties as listed for technicians), additional duties involve

1. To act as Quality manager and to supervise all the Quality aspects of running of blood centre.
2. To act as Technical manager and to supervise all the technical aspects of running of blood centre.
3. To monitor quality indicators in Blood Centre in continuous quality improvement measures being taken in Blood Centre.
4. Assisting MO in endeavours towards continual quality improvement and staff training
5. To make rosters of technicians for 24* 7 shift duties
6. To supervise the cleanliness of whole department through Gr. D staff and to supervise daily and periodic disinfection of laboratory surfaces, equipment etc.
7. To monitor the work of newer Blood Centre Technician and to guide them in performing blood test through newer techniques.
8. To maintains inventory of blood bags on daily basis.
9. To maintain documents of all equipments, along with their Warranty, CMC/AMC details, Calibration, Functional status, Condemnation and Log Books, etc.
10. To maintain stores and ledger register of chemicals, equipment and inventory of all items in the department.

11. To prepare monthly /annual indent.
12. To prepare monthly report.
13. To assist Medical officer-in-charge in administrative work of the department, to do e Rakt kosh entries
14. To assist Medical officer in getting the licensing inspections and other inspections done by regulatory bodies.
15. To do root cause analysis of any adverse events and to take corrective and preventive actions under supervision of Medical Officer.
16. To Assist Medical Officer in standardizing and validation of newer tests and techniques
17. Ensuring Biosafety practices and proper biomedical waste disposal practices in blood centre.
18. To perform all the duties of Blood Centre Technician, as the need may be or any other work assigned by the Medical Officer Incharge.

OPERATION THEATRE

Operation Theatre Supervisor

1. Administrative responsibilities in addition to technical work under the supervision of Medical Officer In-charges of the respective OT.
2. Ensure deployment of available technical staff (including self) in their respective functional areas (Routine & emergency OTs).
3. Supervision of the work of all Technical staff working in respective OTs.
4. Ensure maintenance and functioning of OT equipment (both anesthetic and surgical) for uninterrupted function of OTs.
5. Maintenance of inventory of drugs and consumables, in respect of anaesthetic equipment to ensure uninterrupted supply.
6. To ensure maintenance and functioning of Theatre Sterile and Supply Unit (TSSU) in the OT.
7. To ensure maintenance and functioning of medical gas pipeline system and check alternative supplies on regular basis.
8. To ensure patient safety measures/ falls in OT including fire safety.
9. Biomedical Waste Policy

Senior Operation Theatre Technician

1. All the work done by Operation Theatre Technician.
2. To assist Operation Theatre Supervisor in administrative work
3. To store and maintain all instruments, apparatus and other appliances belonging to the main operation theatre, recovery room and emergency operation theatre.
4. To see that all emergency outfit is kept functioning in functional order at all times.
5. To supervise the subordinate staff.
6. To prepare monthly statistics of operation (Major+Minor) performed.

Operation Theatre Technician

1. To maintain functioning of OT equipment (both anesthetic and surgical) for uninterrupted function of OTs.

2. To maintain functioning of Theatre Sterile and Supply Unit (TSSU) in the OT.
3. To maintain functioning of the medical gas pipeline system and check alternative supplies on regular basis.
4. To maintain patient safety measures /falls in OT including fire safety.
5. Timely reporting of downtime of equipment to the superiors.
6. To ensure proper positioning of the patient on the table as per the requirement of the surgeon and anaesthetist.
7. To assist doctor in induction and reversal of anaesthesia.
8. To ensure safe transfer of patients to and from the operation area.
9. To ensure cleanliness and sterility of operating area before surgery.
10. Ensure universal precautions while handling biological materials.
11. To ensure compliance with Bio-medical waste regulations and policy of MOEFCC.

Operation Theatre Assistant

1. Assist OT Technician in all his responsibilities.

RESPIRATORY MEDICINE

Respiratory Technician

1. He will be responsible for the maintenance, upkeep and repair of all equipments used for respiratory and oxygen therapy.
2. He will be incharge of the Central Oxygen supply at the paediatric block at the central console. He will however check the ward flow meters and suctions points as to their state of repair and function.
3. Any misuse of gas or the equipment will be brought to the notice of the Asstt. Nursing Superintendent (Paediatric).

Respiratory Lab Technician

1. Must be able to clean and sterilise fibre-optic bronchoscope.
2. To assist the doctor in various procedures such as Bronchoscopy, Intercostal intrabronchial, Transthoracic FNACs, pleural biopsy etc.
3. Cleaning and maintenance of various lung function test machines.
4. Must be able to perform various non-invasive lung function test independently.
5. Cleaning and sterilisation of masks and tubings.
6. Exposure to handling the computers.
7. Change of various reagents in machine and preparation of various mixtures and disinfectants.
8. Maintenance of log books and liaison with various stores.

Respiratory Lab. Assistant

1. Must be able to clean and sterilise fibre optic bronchoscope.
2. Cleaning and maintenance of lung function test machine.
3. To assist the technician in various procedures.
4. Cleaning and sterilization of mask and tubings

5. Should be able to assist in performance of bronchoscopy and other diagnostic procedures in the respiratory laboratory.

CARDIOTHORACIC AND VASCULAR SURGERY DEPARTMENT

Senior Perfusionist

1. Managing sub-ordinate perfusion staff.
2. Following the instruction of superior staff/faculty
3. Indenting essential disposables, equipment and maintaining their records as well.
4. Maintaining, perfusion related highly sophisticate equipment wiz their installation, AMC, service, Repair and their report to superior.
5. Assign of man power for Post-operative management, if required with the discussion with superior staff/faculty.
6. Extending routing duties in emergency and attending on call duties in case of emergency.
7. Assisting and inter-departmental patient shifting patients in advance life support like ECMO & VAD.
8. Close communication and planning with superior staff/faculty of heart transplant team and organ retrial for heart transplant.
9. Management and running cardiopulmonary bypass /Extra Corporeal Membrane Oxygenator etc.
10. Maintaining & assisting superior staff to maintain perfusion related inventories.
11. Responsible for checking, maintaining sterility of disposable and their records.
12. Running and maintaining highly sophisticated equipment related to Perfusion.
13. Post-operative emergency duty and assignment of staff.
14. Any other work assign by superior staff /Faculty/Medical Superintendent.

Junior Perfusionist

1. Running cardiopulmonary bypass in patient undergoing cardiac surgery or any other medical procedure in which it is necessary to artificially support or temporarily replace a patient's circulatory or respiratory function.
2. Running of Extra Corporeal Membrane Oxygenator and keeping full records of perfusion.
3. Assisting superior for insertion of LVAD, RVAD, BIVED etc used in cardiac patients.
4. Follow the instruction of faculty, senior’s staff in respect of quality patient care and best patient outcome and keep close communication with the surgical and anesthesia team to keep high stander patient care and safety.
5. Maintaining, assisting superior staff to maintain perfusion related inventories their maintenance and repair of perfusion related equipment.
6. Responsible for checking, maintaining sterility of disposable their inventories and selection prior surgical procedure
7. Running and maintaining highly sophisticated equipment related to Perfusion.
8. Running of blood salvage equipment use of autologous blood transfusion technique to minimize blood transfusion,

9. Post-operative management if required.
10. Attending on call duties during emergency apart from routine duty.
11. Any other perfusion related work assign by HOD or Medical Superintendent.

CARDIOLOGY DEPARTMENT

Echocardiography Technician

1. Handling of Echocardiographic machine/ECG machines and other duties assigned by the Medical Officer I/C.
2. To assist the clinician in the operation of the machine.
3. To keep the transducer sterile, clean to be used in patients.
4. To maintain the ledger and store register.
5. Any other duty assigned by the medical officer in-charge of cardiology department.

Electrocardiography Technician

1. Handling and maintenance of ECG Machines.
2. To take E.C.G. of patients as advised by the doctor.
3. To maintain record of ECG done and compilation of monthly report,
4. To take ECG of seriously ill patients at bed side whenever called by ward doctor.

CENTRAL STERILE SERVICE DEPARTMENT (CSSD)

Senior Technician (CSSD)

1. Supervision of CSSD including equipment and supplies under guidance of the Medical Officer In charge
2. To ensure optimal deployment and supervision of available technical staff.
3. To ensure Regular calibrations of sterilization equipment.
4. To ensure quality control of sterilization process.
5. To ensure Universal precautions
6. To ensure compliance with Bio-medical waste regulations and policy of MOEFCC.

CSSD Technician

1. All responsibilities allotted to CSSD Assistant.
2. Maintain functioning of sterilizer.
3. Regular calibrations of sterilization equipment.
4. Ensure quality control of sterilization process.
5. Universal precautions
6. To ensure compliance with Bio-medical waste regulations and policy of MOEFCC.

CSSD Assistant

1. Receiving of used instruments and defined reusable disposables.
2. Receiving of washed linen and dressing materials for sterilization.

3. Washing and cleaning instruments and defined reusable disposables as per hospital policy.
4. Packing of materials as mentioned in points 1-3.
5. Loading and unloading of the sterilizers.
6. Ensuring proper storage of sterilized articles in the sterile zone.
7. Maintenance inventory of received and sterilized material.
8. Dispatch of sterilized materials to the respective areas.
9. Maintaining the cleanliness of sterilization and issuing area.
10. Universal precautions
11. To ensure compliance with Bio-medical waste regulations and policy of MOEFCC.

DEPARTMENT OF ENT

Senior Audiometry Technician

1. To perform/ supervise routine audiological assessment e.g. Pure tone Audiometry, Immittance Audiometry. Behavioural Observation Audiometry, Conditioned Play Audiometry, Speech Audiometry
2. To perform/ supervise electrophysiological tests of hearing e.g. ABR, ASSR
3. To perform/ supervise neonatal hearing screening programme in the institution
4. To aid in assessment & fitting of hearing aid /implantable device/Assistive listening device
5. To perform/ supervise Speech therapy
6. Care and maintenance of equipment used in audiology
7. Member of Medical board for assessment & certification of Hearing & Speech language disability (as per latest Gazette notification for assessment of disabilities)
8. Assessment of cases for medical examination
9. Any other duty assigned by the Head of Department

DEPARTMENT OF NEUROLOGY

EEG Technician

1. To be able to use Digital electrophysiology machines and well versed with recording EEG on it.
2. To check the working of machines every day.
3. To record the electrophysiology test whether EEG or Nerve conduction study or other tests of patient on the advice of doctor.
4. To check the impedence of electrodes taking EEG.
5. To check grounding on regular basis to minimize artifacts.
6. To maintain ambient temperature in the laboratory during summers and winters which changes the results of the tests.
7. To maintain the records of EEG tracings and other tests graphs.
8. To repair the electrodes, testing them daily and rechloriding them.
9. To eliminate minor troubles in machines which may arise during tests
10. To attend emergency EEG tests whenever required.
11. Regular updation of software and machine
12. To Maintain the record of all the test (Back up in hard disc or elsewhere)

13. Marking the montages and other clinical details in the EEG for the purpose of better interpretation by the senior staff and Neurologist.
14. Should be able to do special EEG studies as during sleep (natural or drug induced), sphenoidal and nasopharyngeal electrodes
15. Should know the normative data for the various tests done.

Stereotaxy Technician

1. Acquires, prepares and manages cortical strip/grid electrodes and related suppli es for surgical procedures.
2. Operates ancillary equipment utilized during stereotactic procedures.
3. Provides support for imaging and radiological procedures.
4. Assists neurologist with seizure evaluation of surgical candidates.
5. Assists with neurophysiological testing research and follow-up.
6. Assists with application of stereotactic frame prior to tests or procedures.
7. Assists neurological exam for other neurological disorders.

EMG Technician

1. To be able to use Digital electrophysiology machines and well worsed with recording on it.
2. To check the working of machines every day.
3. To record the electrophsiology test EMG on the advice of doctor.
4. To check the impedence of electrodes.
5. To check grounding on regular basis to minimize artifacts.
6. To maintain ambient temperture in the lab during summers and winters which changes the results of the tests.
7. To maintain the records of EMG tracings and other tests graphs.
8. To repair the electrodes, testing them daily and rechloriding them.
9. To eliminate minor troubles in machines which may arise during test.
10. Should be able to put correct markings on EMG graph.
11. Should know the normalative data for the various tests done.

Neurotechnician can undertake all the electrophysiological tests namely EEG,NCV,EMG,VEP,SSEp,BAER,RNST done on these machines as basic qualification of the technician who does these tests are same.

DENTAL AND MAXILLOFACIAL DEPARTMENT

Senior Technician (Maxillofacial Prosthesis)

1. To assist in maxillofacial prosthesis fabrication techniques and in keeping up standard of prosthetic work.
2. To be responsible for maintenance of all the equipment used in maxillofacial / Prosthodontics laboratory.
3. To be responsible for keeping proper accounts of all the stores items both expendable and non-expendable pertaining to the maxillofacial/prosthodontic laboratory.
4. To assist the Head of Dept. / Dental surgeon in research work, if any regarding maxillofacial prosthetic problem.

5. Any other duty assigned by the Head of Dept. / dental surgeon of the department from time to time.

Dental Hygienist

1. He is responsible to maintain and guide the oral hygiene aspect of dentistry.
2. To assist the surgeon in Dental & Oral surgical procedures.
3. He does pre and post-operative dressing as well follow up of surgical dental procedures in the oral cavity.
4. He is responsible for proper maintenance, functioning of electro- medical and non-electric machinery used in dental department.
5. To maintain account of expendable and non-expendable items required for various dental operative procedures.
6. Any other duties assigned by the Head/Dental surgeon of the department from time to time.

Dental Mechanic

1. To make denture, other prosthodontic and orthodontic appliances in accordance with directions of the dental surgeon.
2. Proper maintenance of all laboratory equipment and machinery.
3. To maintain account of expendable and non-expendable items used in the laboratory.
4. Any other duties assigned by the Head/Dental surgeon of the department from time to time.

Senior Dental Technician

1. To assist the dental surgeon for various dental and oral surgical procedures
2. During the absence of Dental hygienist looking after the job of dental hygienist also under the supervision of dental surgeon
3. To be fully conversant with instruments, equipments and drugs used in Dental Surgery.
4. To maintain stock register of the equipment and dental stores.
5. Supervising the work of dental technicians
6. Any other duties assigned by the Head/dental surgeon of the department from time to time.

Dental Technician

1. To assist the dental surgeon for various dental and oral surgical procedures
2. During the absence of Dental hygienist looking after the job of dental hygienist also under the supervision of dental surgeon
3. To be fully conversant with instruments, equipments and drugs used in Dental Surgery.
4. To maintain stock register of the equipment and dental stores.
5. Any other duties assigned by the Head/dental surgeon of the department from time to time.

Dental Chairside Assistant

1. A chair side assistant is basically a person who assists dental surgeon in his routine work.
2. His main duties are to keep everything ready for the surgery before the start of the OPD hours.
3. Sterilization of instruments, maintaining adequate stock of the materials required for various dental and oral surgical procedures.
4. He is responsible for maintaining the cleanliness of the dental chair and operating room.
5. Any other duty assigned by the head from time to time

X-RAY DEPARTMENT

Junior Technical Officer (JTO) Imaging Services

To look after the following administrative work.

1. Maintenance of x-ray machines.
2. To prepare duty roster of all subordinate staff.
3. To maintain discipline in the department.
4. To supervise and guide the junior staff in performing their work.
5. To prepare monthly statistics of the department.
6. To maintain stores, stock and ledger register of various equipments and machinery.

Technical Supervisor (Radiography) and Senior Technical Supervisor (Radiography):

1. Provides radiology services by directing and coordinating the services of radiology and diagnostic imaging procedures; overseeing staff in operation of imaging equipment, such, as x-ray machines, fluoroscopes, mammography machines, computerized tomography (CT) scanners, or magnetic resonance imaging (MRI) equipment.
2. Daily account of the X-ray and other films expense is kept by entries in the stock book and whenever film packets are taken out of stores.
3. Maintaining the consumable and nonconsumbable stores and maintaining their respective records.
4. Accomplishes radiology human resource objectives by orienting, training, assigning, scheduling, coaching, counselling, and disciplining employees.
5. Meets radiology operational standards by contributing information to strategic plans and reviews; implementing production, productivity, quality, and patient-service standards; resolving problems; identifying system improvements.
6. Supports patient care by resolving radiology issues with physicians, radiologists, radiology technologists, and ancillary staff; improving and maintaining quality assurance program for department functions.
7. Improves quality results by evaluating accuracy and quality of images; providing technical assistance; implementing new techniques, equipment, and procedures.
8. To provide statistical records of various imaging investigations.

9. To provide the Radiology records as and when required by the Administration.
10. Provides a safe environment by monitoring radiation exposure of staff and patients; keeping staff and patients safe; maintaining radiation exposure records.
11. Whenever required, should be able to undertake routine radiography work in the department including radiographs, special investigations, CT, mammography and MRI.
12. Whenever required, should be able to take care of various imaging equipment (& accessories), such, as x-ray machines, fluoroscopes, mammography machines, computerized tomography (CT) scanners, or magnetic resonance imaging (MRI) equipment.
13. Prepares students for technical responsibilities by coordinating clinical rotations and training for radiology technology students, if BSc/MSc/etc. course is running.
14. Serves and protects the hospital community by ensuring adherence to professional standards, hospital policies and procedures, federal, state, and local requirements and standards.
15. Updates job knowledge by participating in educational opportunities; reading professional publications; maintaining personal networks; participating in professional organizations.
16. Work related to radiation monitoring of personnel in Radiodiagnosis
17. Work related to AERB and eLORA for various radiological equipments
18. Should be able to work effectively as part of a department / unit / team inter and intra departmentally to facilitate the department/unit's ability to meet its goals and objectives.
19. Should be able to demonstrates respect and regard for the dignity of all patients, families, visitors and fellow employees to ensure a professional, responsible and courteous environment.
20. Any other duty/task/work assigned by any higher authority like Director, Dean, Medical Superintendent, Head of the Department from time to time; either in "Public Interest" or in the interest of upkeep/development of the Department/Institution
21. Other duties as defined by 'Model Curriculum Handbook for Medical Radiology & Imaging Technology' by Ministry of Health & Family Welfare, Govt. of India (Allied Health Section 2015-2016): Available to download on MoH&FW official website http://mohfw.gov.in

Radiographer (Grade II & Grade I):

1. Should be able to undertake routine radiography work in the department including radiographs, special investigations, CT, mammography and MRI.
2. Should be able to carry out emergency radiography, bed-side x-rays in wards, ICU, CCU, etc.
3. Should be able to handle all radiological and imaging equipment independently.
4. Should be able to do the image processing.
5. Should ensure radiation protection and quality assurance
6. Should be able to evaluate images for technical quality, ensuring proper patient identification is recorded.
7. Taking care of various imaging equipment, such, as x-ray machines, fluoroscopes, mammography machines, computerized tomography (CT) scanners, or magnetic resonance imaging (MRI) equipment.

8. Ensure safe custody of all the accessories of the imaging unit of which he/she is in charge. Keeps the X-ray room locked when not in use.
9. To assist in dispatch of various radiological reports to respective departments.
10. Understands and observes health and safety precautions for self and others. He/she should wear dosimeter during duty hours.
11. Provides a safe environment by monitoring radiation exposure of staff and patients.
12. Record imaging identification and patient documentation quickly and accurately and observes protocols.
13. Should be able to provide empathetic professional patient care.
14. Supports patient care by resolving radiology issues with physicians, radiologists, radiology technologists, and ancillary staff; improving and maintaining quality assurance program for department functions.
15. Improves quality results by evaluating accuracy and quality of images; providing technical assistance; implementing new techniques, and procedures.
16. To provide radiological record & statistical report of respective area(s) of posting.
17. Prepares students for technical responsibilities and helps in training of radiology technology students, if BSc/MSc/etc. course is running.
18. Serves and protects the hospital community by ensuring adherence to professional standards, hospital policies and procedures, federal, state, and local requirements and standards.
19. Updates job knowledge by participating in educational opportunities; reading professional publications; maintaining personal networks; participating in professional organizations.
20. Assisting in work related to radiation monitoring of personnel in Radiodiagnosis
21. Assisting in work related to AERB and eLORA for various radiological equipments
22. Should be able to work effectively as part of a department / unit / team inter and intra departmentally to facilitate the department/unit's ability to meet its goals and objectives.
23. Should be able to demonstrates respect and regard for the dignity of all patients, families, visitors and fellow employees to ensure a professional, responsible and courteous environment.
24. Any other duty/task/work assigned by any higher authority like Director, Dean, Medical Superintendent, Head of the Department from time to time; either in "Public Interest" or in the interest of upkeep/development of the Department/Institution.
25. Other duties as defined by 'Model Curriculum Handbook for Medical Radiology & Imaging Technology' by Ministry of Health & Family Welfare, Govt. of India (Allied Health Section 2015-2016): Available to download on MoH&FW official website http://mohfw.gov.in

RADIOTHERAPY DEPARTMENT

Jr. Technical Officer

1. To supervise and coordinate work of all radiotherapeutic techniques and equipments.
2. To maintain liaison with companies/suppliers for maintenance of Radiotherapeutic equipment.

3. To look into service contract etc. with companies for repair and maintenance.
4. Any other duty that may be assigned by the concerned head of the department/Medical Superintendent.

Sr.Radiotherapy Technician (Supervisor)

1. To supervise all the Radiotherapy technicians.
2. To work in various Radiotherapy Units and mammography x-ray unit, treatment planning.
3. To be overall responsible for administrative work in relation to maintenance of all the sophisticated teletherapy and x-ray units.
4. To contact the respective companies for repair and maintenance of all the units in the department.
5. Any other radiotherapeutic work assigned by the Head of Department.

Sr. Radiotherapy Technician

1. To work in each unit of the Radiotherapy department.
2. To carry out the treatment of cancer patients, checking the treatment planning calculations, dose, field, markings, checking the position on patients during treatment.
3. To check brachytherapy patients undergoing intracavity implants.
4. To keep a liaison between the patients and doctor.
5. Any radiotherapeutic work assigned by the Head of the Department

Radium Curator

1. To handle radioactive sources for Brachytherapy
2. To work in the radium/other radioactive sources room and record of all material to be maintained.
3. To maintain storage, supply and safe movement and return sources.
4. All duty assigned to Sr. Radiotherapy technician from time to time.
5. Any radiotherapeutiac work assigned by Head of the Department.

Mould Room Technician

1. To carry out and supervise the Mould Room work.
2. To work on simulator for Radiotherapy Technician.
3. To work in Radiotherapy centre as and when necessary.
4. Any other duty assigned by the HOD/Medical Superintendent.

Radiotherapy Technician

1. To carry out Radiation treatment on Radiotherapy Medicine for cancer patients.
2. To help the Radiotherapist and Physicist in Brachytherapy work in cancer patients in Radium room, Radium OT and ward of the department.
3. To help in treatment, planning of patients with dosage calculation, check films, mould room work and radiation dosimetry.
4. To maintain the tock of radioactive source and other radioactive equipment with their accessories in the department.

5. Any other duty assigned by Head of the Department in public interest.

Duties and Responsibility of the officials posted in the Prosthetics and Orthotics Section

Workshop Manager (Training) / Workshop Manager (Prosthetics)

1. Plans and supervises the education and training of Prosthetics & Orthotics student.
2. To deliver lectures to the students of BPO program in the disciplines of Prosthetics Science, Orthotics Science, Bio-Mechanics, Assistive Technology, Management & Administration and Workshop Technology, Tools & Material Science.
3. To act as paper setter, evaluators and examiner for the university examination.
4. To assess and provide comprehensive prosthetic and orthotic management to the individual and the community appropriate to his / her position as a member of the health care term.
5. Competent to take preventive, supportive, corrective and rehabilitative steps in respect to the commonly encountered problem of the Prosthetics and Orthotics section.
6. Management and supervision of clinical services of Prosthetics & Orthotics, BPO training and store related work.
7. To submit the demand of materials, tools and equipment for the procurement after receiving from the subordinates.
8. Maintenance of Machinery and equipment in the section
9. Supervise the work of subordinate
10. Take part in research and development
11. Any other work assigned by the superiors

Tutor (Prosthetics) & Tutor (Orthotics)

1. Responsible for smooth implementation of Bachelor of Prosthetics & Orthotics Program.
2. To assist the Workshop Manager (Training) in the administration of Bachelor of Prosthetics & Orthotics Program, clinical services of the section and procurement of appropriate material, machinery & equipment for the section.
3. Conduct the theory and practical classes for prosthetic & orthotic students.
4. Take part in research and development and guide the students for prosthetic &orthotic program for their project work / dissertation.
5. To act as paper setter, evaluators and examiner for the university examination.
6. To ensure maintenance of Machinery and equipment and to ensure that all themachines and equipment are in good working condition
7. To deliver lectures to the students of BPO program in the disciplines of Prosthetics Science, Orthotics Science.

Instructor Prosthetics / Instructor Orthotics

1. To demonstrate prosthetic & orthotic techniques to the students and train them.
2. To create general awareness about machines, tools & equipment among the BPO students

3. To create awareness amongst the students about safety precautions to be taken in the lab While using different machinery and equipment and to ensure safety of students while Performing different operations on the machinery and equipment
4. To look after general maintenance of machinery, tools & equipment in the prosthetics & Orthotics training lab.
5. To indent the materials, tools etc. from the store and maintain the stock.
6. To maintain the inventory of tools, materials, equipment& disposable under his possession.
7. To take the patient job from the clinical services, distribute it to the students and get the job done from them
8. To ensure that all the prosthetic & orthotic devices prepared by the students are completed as per the schedule.
9. To check the correctness and accuracy of the work carried out by the students
10. Maintenance of machinery and equipment
11. Make necessary arrangement to conduct practical examination of the students.
12. To act as technical assistant during the practical exams of the students.
13. Any other work assigned by the seniors from time to time
14. To ensure smooth disposal of BMW as per prescribed guidelines
15. Any other work assigned by the superior.

Senior Technician (Leather Technology)

1. To train and supervise the work done by junior technician (Leather technology).
2. Indenting raw materials, tools &equipment from the store.
3. Maintenance of machines in the leather section.
4. Preparation of different leather / plastic jobs required for Prosthetic & Orthotic devices.
5. To maintain discipline in the section.
6. Getting work done from junior technicians (Leather Technology).
7. Any other work assigned by the seniors from time to time
8. To ensure smooth disposal of BMW as per prescribed guidelines

Senior Technician (Prosthetics)

1. To train and supervise the work done by junior technician (Prosthetics).
2. Indenting raw materials and tools from store.
3. Maintenance of machines in the Prosthetics Section.
4. Preparation of different jobs in total required for prosthetic devices.
5. To maintain discipline in the section.
6. Getting work done from Junior technicians (Prosthetics)
7. Any other work assigned by the seniors from time to time
8. To ensure smooth disposal of BMW as per prescribed guidelines

Senior Technician (Orthotics)

1. To train and supervise the work done by junior technicians (orthotics).
2. Indenting raw materials, components and tools from store.
3. Maintenance of machines in the orthotics section.
4. Preparation of different jobs in total required for orthotic devices.

5. To maintain discipline in the section.
6. Getting work done from junior technicians (Orthotics).
7. Any other work assigned by the seniors from time to time
8. To ensure smooth disposal of BMW as per prescribed guidelines

Senior Technician (Foot Wear Technology)

1. To train and supervise the work done by junior technicians (Footwear Technology).
2. Indenting raw materials and tools from store.
3. Maintenance of machines in the Footwear Section.
4. Preparation of different footwear jobs required for prosthetic & orthotic devices.
5. To maintain discipline in the section.
6. Getting work done from junior technician (Foot Wear Technology)
7. Any other work assigned by the seniors from time to time
8. To ensure smooth disposal of BMW as per prescribed guidelines

Junior Technician (Orthotics)

1. Assembly, preparation of orthoses and repairing of the orthoses.
2. To fabricate different types of orthoses in total
3. Trial and final fabrication of different types of orthoses required in the treatment of the patients.
4. Any other work assigned by the superiors from time to time
5. To ensure smooth disposal of BMW as per prescribed guidelines

Junior Technician (Prosthetics)

1. Assembly, preparation of Prostheses and repairing of the Prostheses.
2. To fabricate different types of Prostheses in total
3. Trial and final fabrication of different types of the prostheses required in the treatment of the patients.
4. Any other work assigned by the superiors from time to time
5. To ensure smooth disposal of BMW as per prescribed guidelines

Junior Technician (Foot Wear Technology)

1. Fabrication and repair of orthotic footwear.
2. Measurement and fabrication of special footwear required in the treatment of various Disorders / disease / deformity.
3. To build the cast as per the measurement received from the Orthotics / Prosthetics section
4. Any other work assigned by the superiors from time to time
5. To ensure smooth disposal of BMW as per prescribed guidelines

Junior Technician (Leather Technology)

1. Padding of various types of prosthetics and orthotics devices.
2. Measurement and fabrication of LS Belt and abdominal support required in the treatment of various disorders / disease.

3. Measurement and fabrication of various types of straps, belts required to hold the orthoses / prostheses
4. Any other work assigned by the superiors from time to time
5. To ensure smooth disposal of BMW as per prescribed guidelines

PHARMACY

Pharmacist

1. Dispensing prescriptions according to the hospital formulary or prescriptions of doctors in the hospital.
2. Being responsible for initiating the indents, storage and maintenance of stocks and accounting of medical supplies and appliances under his charge.
3. Compiling statistics of hospital in accordance with the instructions of the hospital authorities.
4. Assist hospital administration and clinicians in quality improvement activities
5. Assist in medication safety activities like prescription audits
6. Performing such other duties as may be assigned by the hospital authorities.

SANITATION STAFF/DOMESTIC STAFF

Chief Sanitary Superintendent

1. Over all responsible for supervision of subordinate staff in maintenance of cleanliness in hospitals.
2. Preparation of duty roster of Sanitary Supdt., Sanitary Inspector and Sanitary Supervisors.
3. Deployment of Nursing Attendant and Safai Karmachari taken as casual labours and to supervise their work.
4. To certify the work done during contract period and preparing payment bills for daily wages.
5. To take regular rounds of wards/departments to ensure proper sanitation.
6. Liaison with CPWD Civil for opening of blocked sewage lines, drains, W.C. etc.
7. To organise pest control programme in the hospital at regular interval.
8. Liaison with NDMC:
    i. Daily removal of garbage by NDMC truck.
    ii. Opening of main sewage lines.
    iii. Removal of stray dogs, monkey's and cattle in the premises of the hospital.
9. IEC- To educate sanitary staff on Hospital Waste Management and it must be stressed that Safai Karamchari follow guidelines on Hospital Waste Management rules and take universal precautions while handling bio-medical waste.
10. Stores - Indenting, maintenance of stores of sanitation item and inventories of expandable and non-expandable items.
11. Any other duty assigned by senior officer/Medical Supdt.

Sanitary Superintendent

1. To supervise the work of sanitary inspectors working in the area assigned to sanitary superintendents.
2. To take regular round of the area for cleanliness.

3. To assist Chief Sanitary Supdt. in administrative work.
4. To take responsibility of Chief Sanitary Supdt. in his absence.
5. To maintain discipline amongst the sanitation staff.
6. Any other duty assigned by senior officer incharge of Sanitation.

Sanitary Inspector

1. He is incharge of Sanitation of the area assigned.
2. To supervise and guide sanitary supervisors in their work.
3. To report to Sanitary Supdt. regarding administrative constraint faced by Safai Karamchari's of the area.
4. To take surprise round of ward/OT etc. for cleanliness of floor and toilet etc.
5. Any other responsibility assigned by Sanitary Superintendent.

Sanitary Supervisor

1. To supervise the work of Safai Karmacharis.
2. To provide replacement of Safai Karmacharis if regular Safai Karmachari is on leave.
3. To maintain the cleanliness and proper sanitation of the area under his/her supervision.

Caretaker

1. To look after the maintenance of building including Hostel and Dharmashala.
2. To maintain proper record of furniture and other items in Hostel & Dharmashala.
3. Allotment of accommodation in consultation with Hostel Warden.
4. To ensure fire protection and security arrangement in building.

Steward

1. He will receive indents from the wards compile them and make consolidated indent for daily requirements of food articles.
2. He will indent, receive, store, issue and account for bulk supplies of food articles when store keeper is not provided.
3. He will receive the daily supplies of raw food from the contractor issue it to Head cook of the kitchen according to scale and keep proper accounts when store keeper is not provided.
4. He will check the monthly bills of the contractor regarding the correctness of the supplies made with reference to ledgers and other documents.
5. He will arrange for local purchases of food articles not supplied by the contractor.
6. He will supervise the cooking to see that food is cooked as required by the Dietician/Catering Officer.
7. He will see that the cooked food is stored temporarily under hygienic conditions till it is distributed to wards. 8. He will supervise the distribution of food to the wards
8. He will supervise the proper cleaning of utensils, maintain the cooking appliances in good condition and see to the general cleanliness of the kitchen.
9. He will supervise the disposal of food wastes.

10. He will report to the Dietician/Catering Officer or other higher authorities regarding:
    i. problems of food service;
    ii. problems of maintenance of buildings and appliance, and
    iii. problem of staffing of the department.
11. He will do any other duty assigned to him.

Store Keeper

1. He will receive, store and issue supplies according to scales whenever prescribed or with reference to orders issued by the officer incharge kitchen.
2. He will report to the officer incharge kitchen about inadequacy or delay in supplies,
3. He will show all supplies received to the officer incharge of the kitchen for approval.
4. He will maintain stock registers satisfactorily.
5. He will verify supplier's bills.
6. He will properly arrange his stores and to physical checking of store every week or month and submit his report regarding surpluses losses etc.
7. He will perform such other duties as may be specified by the officer incharge kitchen.

Head Cook

1. He will supervise the work of kitchen staff working under him.
2. He will see to the care and maintenance of the equipment.
3. He will see to the sanitation and cleanliness of the department.
4. He will open and close the kitchen.
5. He will maintain and improve standards of food preparation and service.
6. He will represent kitchen staff to the dietician.
7. He will supervise the food service.
8. He will check wastage, spoilage of food, etc.
9. He will assign duties of the kitchen staff whenever necessary.
10. He will report about gas requirements to the store keeper.
11. He will do any other duty that may be assigned to him from time to time.
12. The Head Cook and Cooks should see that the various meals are supplied to the hospital according to the following timings:

Cook

1. He will receive food articles according to indents from the steward/ store keeper.
2. He will prepare food as required by the Dietician and according to the menu.
3. He will store cooked food in hygienic manner till distribution.
4. He will distribute the food to the various wards for further distribution by the ward staff and prevent wastage of food.
5. He will maintain the cooking ranges and other cooking appliances in good clean condition.
6. He will supervise the duties of other auxiliaries working in the kitchen and in their training.

7. He will observe personal hygiene and use the special clothing of aprons provided while performing his duties.
8. He will maintain cleanliness of the kitchen and utensils.
9. He will take safety precautions to prevent fire and injuries to those working in the kitchen.
10. He will perform such other duties as may be assigned to him from them to time.

Multitasking Staff (Kitchen)

1. He will clean grains, wash and cut vegetables, make dough and balls for chapatis.
2. He will help cooks in the filling of water.
3. He will do dusting and arrange equipment in the kitchen.
4. He will give a helping hand to the cooks while cooking.
5. He will bring back food trolleys, cans, etc., from wards.
6. He will serve food to the patients.
7. He will wash pots, pans and all other kitchen utensils.
8. He will do any other duty that may be assigned to him by the Head Cook.

Multitasking Staff (Peon)

1. He will be on duty half an hour before the working hours of the office in which he works and leave half an hour after the office hours.
2. He will attend to dusting of the tables and walls, and furniture in the area of the office allotted to him and see that the stationery items kept on the desk are always ready for use.
3. He will see that the sweeper allotted to the area cleans floors. walls, toilet, etc., daily before the office hours.
4. He will be on call during the allotted time.
5. He will announce the arrival of visitors to the officer concerned and help them to the officer concerned in an orderly manner.
6. He will attend to the telephone calls when the officer is not in his seat.
7. He will carry correspondence and files from the assigned office to other Offices or desired persons.
8. He will run errands on official business within the hospital and outside, if necessary.
9. He will bring tea and other refreshments from the Canteen to the officer concerned whenever required.
10. He will assist in moving stores from one place to another within the hospital when ordered by responsible personnel. He will move stores from and to the hospital.
11. He will assist in packing parcels, closing and stamping of letters.
12. Whenever necessary and authorized by the responsible personnel, he will also do the duties of a chowkidar or a gate peon.

Nursing Attendant/Orderly (Need To Check RR)

1. He will be doing dusting of the department and will also assist Nursing Personnel for dis-infection of the rooms.

2. He will assist Nursing Personnel in patient care.
3. He will get the indent from stores and also bring sterilized items from C.S.S.D.
4. He shall distribute various meals to patients as per schedule.
5. He will take referred call to various departments.
6. He will provide first-aid to patients when required.
7. He will transfer patient from ward to other supportive departments for investigations and diagnostic procedure.
8. He will assist Nursing Staff in packing the dead body & their transportation to mortuary.
9. He should be courteous and polite to patients and their attendants.

Security Guard

1. He should be polite, sympathetic, courteous and honest under all circumstances.
2. He will perform his duty as per roster prepared by Security Officer with a copy endorsed to CMO Casualty.
3. He shall ensure queue management and entry restrictions as per hospital policy.
4. He will allow one attendant with one patient. He will perform his duty with patience and will give no room for complaint.
5. He will be responsible for security of the area under his charge and is answerable to Officer Incharge Security/CMO Incharge Casualty for any untoward incidence.
6. He shall follow/implement all disaster/ emergency codes (Code Red/Code Yellow/Code Code Pink) as per hospital policy
7. He will perform any other duty as required by his supervisor/security officer.

Multitasking Staff (Strecher Bearer)

1. He will be on duty round the clock as per duty roster.
2. He will assist in transferring the patient from ambulance/car to the stretcher or wheel chair or from one patient care areas to another.
3. He will ensure safe transport of the patient
4. He will be prompt in carrying out his duties while transferring the patient.
5. He should be trained in first aid treatment.
6. He will do any other duty as assigned by Doctor/Sister Incharge of the Ward.
7. He should be polite and sympathetic to patients/. care givers

Multitasking Staff / Out Sourced

1. He will be on round the clock duty as per the roster.
2. He will keep the assigned area neat and clean using three bucket system.
3. He will maintain records of housekeeping in prescribed format.
4. He will give urinals and bedpans as and when required by patient after thoroughly cleaning with antiseptic lotion.
5. He will carry stool, urine samples, blood and other body fluid and tissues samples to respective laboratories and bring back reports from there.
6. He will transport dead bodies to mortuary and dispose of dead fetus and amputated limbs or other parts of body to incinerator as final disposal.

7. He will be cleaning the soiled linen with water and after treatment with 1% bleach solution or Sodium Hypochloride, he will send it to laundry for further washing of linen.
8. He shall dispose the biomedical and civil waste as per guidelines.
9. He will take all personal precautions while handling infectious bio-medical waste of the hospital.
10. He will be courteous to patients and their attendants.
11. Any other duty assigned by the officer incharge.

Quality Manager

1. Quality Initiatives and ensure implementation of QIPs in the Institute.
2. Establishing meticulous documentation as Per Quality standards (Policies, Procedures, work instructions etc.) in coordination with departmental / institutional heads.
3. Identifying quality- related training needs and imparting regular training to staff.
4. Collecting & Analyzing data on various process & protocols and Outcome thereof through indicators developed.
5. Conduct periodic Internal Audits and ensure compliance to NABH Standards.
6. Coordination meetings of Quality committee and other essential committees ensuring compilation of minutes, circulation thereof and monitoring accomplishment of decision.
7. Streamlining and improving of processes for better outcomes.
8. Coordination of Clinical Audits.
9. Taking Day to day Quality Initiatives
10. Effective intra and interdepartmental coordination
11. Coordinate with senior consultants, HODs and other staff and liaise with any other agency or organization for benchmarking practices.
12. Collate, analyze and use the data for further quality improvement
13. Monitor the process of Accreditation implementation in the Institute
14. Prepare for and facilitate continuous surveillance audit by the external agency.
15. Attend to any external training on Quality
16. Attend meetings on quality improvement in the Institute
17. Implementation of Accreditation/ Certifications NABH standards in the Institute.
18. Analyzing Patient feedbacks & Grievance redressal.

Information Technology Manager

1. Manage information technology and computer systems
2. Plan, organize, control and evaluate IT and electronic data operations
3. Manage IT staff by recruiting, training and coaching employees, communicating job expectations and appraising their performance
4. Design, develop, implement and coordinate systems, policies and procedures
5. Ensure security of data, network access and backup systems
6. Act in alignment with user needs and system functionality to contribute to organizational policy
7. Identify problematic areas and implement strategic solutions in time
8. Audit systems and assess their outcomes
9. Preserve assets, information security and control structures
10. Estimate annual budget and ensure cost effectiveness

11. Analyze IT specifications to assess security risks
12. Design and implement safety measures and data recovery plans
13. Install, configure and upgrade security software (e.g. antivirus programs)
14. Secure networks through firewalls, password protection and other systems
15. Inspect hardware for vulnerable points of access
16. Monitor network activity to identify issues early and communicate them to IT teams
17. Act on privacy breaches and malware threats
18. Serve as a security expert and conduct trainings when needed
19. Draft departmental and security related policies and guidelines
20. Taking Day to day IT Initiatives
21. Effective intra and interdepartmental coordination
22. Collate, analyze and use the data for further improvement
23. Assist in monitoring and development of IT protocols for accreditation activities in the Institute
24. Prepare for and facilitate continuous surveillance audit by the external agency
25. Attend to any external training on IT
26. Attend meetings on various committees in the Institute
27. Analyzing Patient feedbacks & Grievance redressal in collaboration with quality team.

Biomedical engineer

1. Overall responsibility for the maintenance of medical equipment.
2. Designing systems and Standard Operating Procedures.
3. Scheduling preventive and routine maintenance.
4. Training and motivating staff for energy and resource conservation.
5. Conducting detailed rounds to ensure proper functioning of medical equipment.
6. Ensuring the timely repair of defective/faulty equipment during the warranty period.
7. Checking serviced/repaired equipment for satisfactory performance.
8. Giving satisfactory reports for new medical equipment installations.
9. Demanding spares material required for general maintenance.
10. Keeping updated History Sheets of Medical Equipment during warranty/AMC period.
11. Planning & carrying forward AMC's and CMC's of equipment's
12. Following NABH/ISO standards & procedures and maintaining proper records.
13. Calling surveyors during breakdowns of medical equipment.
14. Managing alternate equipment's in case of delayed repair or prolonged breakdown
15. Assigning and keeping records of Biomedical IDs for Medical equipment.
16. Calibrating and keeping records of all Medical equipment.
17. Insuring all Medical equipment under AMC.
18. Selecting vendors for proper purchase/service.
19. Reporting breakdowns and important incidents to the Medical Superintendent.
20. Planning and conducting annual training programs for staff.
21. Attending calls regarding breakdowns/failures of equipment any time of the day.
22. Maintaining records to meet ISO 9001 & 14001 & NABH Standards.
23. Undertaking any other tasks assigned by management or H.O.D.

Fire Safety Officer

1. Lead and coordinate emergency response teams during fire incidents, ensuring prompt and effective actions to safeguard lives and property.
2. Conduct regular drills and simulations to test the readiness of hospital staff in responding to fire emergencies.
3. Develop and implement fire prevention strategies, including conducting comprehensive fire risk assessments and implementing measures to mitigate identified risks.
4. Ensure compliance with relevant fire safety regulations and standards through regular inspections and audits.
5. Conduct fire safety training sessions for hospital staff, focusing on fire prevention measures, evacuation procedures, and the proper use of firefighting equipment.
6. Organize awareness programs for patients and visitors to promote fire safety practices within the hospital premises.
7. Oversee the maintenance, inspection, and testing of firefighting equipment, including fire extinguishers, alarms, sprinkler systems, and emergency lighting.
8. Ensure that all firefighting equipment is in good working condition and readily available for use in case of emergencies.
9. Stay updated on fire safety regulations, guidelines, and codes applicable to healthcare facilities in India.
10. Ensure that the hospital's fire safety systems and procedures comply with all relevant regulatory requirements.
11. Conduct thorough investigations into fire incidents, documenting findings, and preparing detailed reports for submission to relevant authorities.
12. Implement corrective actions and recommendations to prevent recurrence of fire incidents.
13. Review and update fire safety policies, procedures, and protocols based on lessons learned from incidents and emerging best practices.
14. Conduct regular reviews of the hospital's fire safety program to identify areas for improvement and enhancement.
15. Manage budgets allocated for fire prevention and response activities, optimizing resource utilization while ensuring operational effectiveness.
16. Collaborate with other emergency response agencies such as police, medical services, and disaster management authorities to ensure a cohesive response to emergencies.
17. Evaluate potential fire hazards and risks in various settings such as residential, commercial, and industrial areas, and recommend measures to reduce the likelihood of fires.

Dialysis Technician Responsibilities

A dialysis technician works closely with patients and other medical professionals and is responsible for a wide variety of duties, some of which include:

1. Assemble, prepare, prime, and preset dialysis and pheresis equipment and materials in the dialysis lab and at patient bedside according to nephrology orders
2. Ensuring dialysis machines work properly before treatment begins
3. Prepare patients and give local anaesthesia

4. Operate machines and perform dialysis on patients with acute or chronic kidney failure
5. Function under the direction of physicians and nurses to administer the correct treatment for each individual
6. Coordinate with Nursing Staff to determine prioritization and timeliness of procedures
7. Maintaining a sterile treatment environment
8. Monitor technical/ clinical vitals during the treatment for signs of medical emergencies
9. Making alterations to treatment to maintain safe application
10. Reprocess and disinfect hemodialysis equipment per policy and procedure
11. Aseptically dispense dialysis solution to include calculating, measuring pre-weight of dry chemicals, and verifying through chemical analysis for accuracy
12. Make changes in dialysis composition by compounding any additions such as potassium, calcium, urea, and magnesium
13. Explaining the dialysis process to patients and their families
14. Teaching patients about additional health care to enhance positive dialysis results
15. Create written reports on patient progress for doctors
16. Demonstrate knowledge of the hospital safety plan and acts accordingly during codes/drills
17. Follow biomedical waste disposal protocols, infection control policies and procedures
18. Monitor and assure quality

Radiation Safety Officer

1. Implement the safe procedure for operation of the device specified below, on first time receipt
2. Ensure that source containment has all of its components intact and in an acceptable condition..
3. Radiation dose rate profile in the vicinity of the source containment conforms to the limits specified by AERB
4. Shutter or source control mechanism, source assembly and retraction mechanism and any other safety features operate correctly and safely radiation warning signs and labels are intact, appropriately marked and legible
5. Device performs satisfactorily when used in accordance with manufacturers instructions.
6. Location of the gauge has not been altered without the approval of the Competent Authority.
7. Ensure Implementation of Safe Work Procedure

SAFE WORK PROCEDURE

1. Stay close to the gauge except when necessary to observe the operation of these gauges and the number of persons operating the gauge is kept to a minimum,
2. A radioactivity symbol and a warning sign reading “RADIATION KEEP AWAY” in English, Hindi, the local language and any other language deemed necessary is

conspicuously displayed and properly located and maintained in a clean and legible in the vicinity of the NG.

3. The source(s) are kept locked in the shielded position whenever the NG are not in use,
4. Shutter 'ON/OFF' operation is checked periodically, particularly for continuous process monitoring gauges, which may require the shutter to be kept open for long duration, that is, days/months (since during operation, dust may be accumulated and cause the shutter to get jammed),
5. A swipe test is carried out on those gauges containing radioactive source(s) at regular intervals not exceeding 12 months
6. The results of all radiation protection surveys and examinations of the equipment are recorded and retained,
7. All tools necessary for the safe operation of the NG and the handling of emergency are in good working condition
8. When not in use, the NG should be securely stored in a designated storage location.

INSTRUCT CO-EMPLOYEES TO

1. Acquaint themselves with radiation symbols and warning signs
2. Report to the RSO any difficulties with working procedures or defects in equipment which may have caused or are likely to cause a radiation hazard, including the actual or potential loss of a radioactive source and any accident or potentially hazardous situation that may come to their notice;
3. Use any personal protective equipment provided to them and devices or equipment to assess their personal radiation dose, where applicable;
4. Not remove or in any way interfere with the radiation source(s) .
5. Require that a female worker, on becoming aware that she is pregnant, notifies the employer, licensee and Radiological Safety Officer in order that her working conditions may be modified, if necessary
6. During installation of the NG, conduct a radiation protection survey of the device, record the readings in a log book and learn from the installation staff about the details of operation of the IRGD, particularly the safety features;
7. Source(s) are brought to the exposure 'ON' only when required
8. Issue and collect any personnel monitors which may be used
9. Furnish the safety status report in the prescribed form

Appendix- II

DOCUMENTATION IN MEDICAL RECORDS

GENERAL INSTRUCTIONS

1. Every medical record in OPD and IPD has a unique identifier. A unique identification number is generated at the end of registration using 3-4 identifiers as per Institutional policy. ABHA ID should be documented on the Registration card.
2. Confidentiality, security and integrity of records, data and information should be maintained. All measures should be taken to safeguard data/ record against loss, destruction and tampering should be implemented at all levels.
3. All entries in the medical record should be made by authorized health care personnel and should be legible, named, signed, dated and timed.
4. No overwriting should be done in medical records. Any deletions should be cleared struck out, written freshly and authorized by the personnel making the alteration.
5. All prescriptions should be in conformance with the guidelines as given by competent authority from time to time.
6. Only approved abbreviations should be used in medical records. Error prone abbreviations in medical records and prescriptions should be avoided.
7. Initial assessment as per institutional norms for the out-patients, in-patients and emergency patients should be documented.
8. The record provides a complete, up-to-date and chronological account of patient care, investigations and procedures.
9. Medical records should be numbered in chronological order and identified by name of the patient and the unique identifier on each page.
10. Operative and other procedures performed are incorporated in the medical record.
11. Known drug, food or other allergies should be ascertained and documented.
12. All adverse events, sentinel events and near-miss events should be documented.

CONSENT

1. General consent for treatment is obtained when the patient enters the organisation. Patient and/or his family members are informed of the scope of such general consent.
2. Independent Informed consent is taken for
    i. Surgical procedure
    ii. Invasive procedure including endoscopy
    iii. Anaesthesia
    iv. Procedures under moderate sedation
    v. Transfusion of blood or blood products
    vi. Restraint- physical or chemical
    vii. Specialized radiological procedures

viii. Enrolment in research projects

3. Informed consent process should adhere to statutory norms and should include includes information regarding the procedure, it's risks, benefits, alternatives and as to who will perform the procedure in a language that they can understand.
4. Any refusal of the prescribed treatment or consent by the patient or legally authorized representative should be documented and signed by patient and the member of the treating team.

OUTDOOR PATIENT RECORD

1. Initial assessment of the outdoor patients should include heart rate, respiratory rate, temperature and pain. Blood pressure and sPO2 should be documented in selected cases**.**
2. Nutritional assessment should be documented for paediatric patients.
3. All prescriptions, investigations, prescriptions, follow-up and danger signs should be documented.
4. All age-specific immunizations given and advised should be documented.

INDOOR RECORD

1. The medical record contains information regarding reasons for admission, diagnosis and care plan.
2. The initial assessment for in-patients should be documented at the earliest but within 24 hours as per the patient's condition.
3. Initial assessment of in-patients includes nursing assessment which is done at the time of admission and documented.
4. Initial assessment includes screening for nutritional needs.
5. The initial assessment results in a documented care plan which should reflects desired results of the treatment, care or service.
6. Nutritional assessment and planned nutritional therapy should be documented.
7. Initial assessment of paediatric patients should include detailed nutritional, growth, developmental and immunisation assessment.
8. The care plan is countersigned by the clinician in-charge of the patient within 24 hours of admission.
9. Reassessment of the patients done at appropriate intervals should be documented.
10. Hand-over notes during change of shift should be documented.
11. Critical results from laboratory and radiology should be documented along with action taken in response.
12. Appropriate pre-natal, peri-natal and post-natal monitoring record should be chronologically maintained for obstetric cases.
13. Family education on medication, food-drug interaction, diet and nutrition, immunization, safe parenting should be documented.
14. Counselling of patients and families are by the treating medical professional at periodic intervals and when there is a significant change in the condition of the patient, and same is documented.
15. Patients with pain undergo detailed assessment and periodic reassessment which should be documented.

PRESCRIPTIONS

1. All prescriptions should be in prescribed format.
2. Orders should be written in a uniform location in the medical records which also reflects patient's name and unique identification number.
3. Medication orders are clear, legible, dated, timed, named and signed.
4. Medication orders contain the name of the medicine, route of administration, dose to be administered and frequency/time of administration.
5. Documented policy and procedure on verbal orders is implemented.
6. Reconciliation of medications occur at transition points of patient care.
7. Documented policies and procedures guide the monitoring of patients after medication administration.
8. Documented procedure exists to capture near miss, medication error and adverse drug event.
9. A proper record is kept of the usage, administration and disposal of narcotic drugs and psychotropic substances which are in consonance with local and national regulations.
10. The batch and serial number of the implantable prosthesis and medical devices are recorded in the patient's medical record, the master logbook and the discharge summary.

DISCHARGE SUMMARY

1. All patients should be given a discharge slip summary duly signed by appropriate and qualified personnel whenever being discharged or going against medical advice (LAMA).
2. Discharge summary should contain
3. Patient's name, unique identification number, date of admission and date of discharge.
4. Reasons for admission, significant findings and diagnosis and the patient's condition at the time of discharge.
5. Investigation results, any procedure performed, medication administered and other treatment given.
6. Follow-up advice, medication and other instructions in an understandable manner.
7. Instructions about when and how to obtain urgent care.
8. In case of death, the summary of the case also includes the cause of death.
9. When patient is transferred to another hospital, the medical record contains the date of transfer, the reason for the transfer and the name of the receiving hospital.

PROCEDURES DOCUMENTATION

1. The events during a cardiopulmonary resuscitation are recorded. A post-event analysis of all cardiopulmonary resuscitations is done by a multidisciplinary committee. Corrective and preventive measures are taken based on the post-event analysis.

2. Monitoring for the transfusion of blood or plod products should be done. Any reaction/event should be recorded in post-transfusion form and reported to blood centre.
3. Intra-procedure monitoring for any procedure under moderate sedation should include at a minimum the heart rate, cardiac rhythm, respiratory rate, blood pressure, oxygen saturation, and level of sedation. Patients should be monitored after sedation and same should be documented.

ANAESTHESIA

1. Pre-anaesthesia assessment by a qualified anaesthesiologist with proposed anaesthesia plan should be documented.
2. An immediate preoperative re-evaluation should be documented.
3. Informed consent for administration of anaesthesia is obtained by the anesthesiologist.
4. Monitoring during anaesthesia shall monitoring includes regular recording of temperature, heart rate, cardiac rhythm, respiratory rate, blood pressure, oxygen saturation and end tidal carbon dioxide which should be documented.
5. The type of anaesthesia and anaesthetic medications should be documented in the patient record.
6. Monitoring of the patient's post-anaesthesia status should be documented. Decision by the anaesthesiologist to transfer the patient from the recovery area based on defined criteria to transfer the patient from the recovery area.
7. Any change in anaesthesia technique should be documented along with the reasons thereof.
8. Adverse anaesthesia events are monitored and documented.

SURGERY

1. Surgical patients have a preoperative assessment and a provisional diagnosis documented prior to surgery.
2. An informed consent obtained by a surgeon prior to the procedure should be documented.
3. Surgical safety checklist to prevent adverse events like wrong site, wrong patient and wrong surgery should be evidenced.
4. An operative note including postoperative care plan by the operating surgeon should be documented prior to transfer out of patient from recovery area. The policies and procedures include both physical and chemical restraint measures. Consent, reason for restraint should be documented. Monitoring should be done.
5. Any change in surgical plan, adverse surgical events and counselling of the patient and family on the same should be documented.

RETENTION POLICY

The destruction of medical records, data and information is in accordance with the laid-down policy. (Reference)

NURSING DOCUMENTATION

1. Nursing clinical assessment including pain at admission and re-assessment
2. Nursing care plan

3. Assessment for vulnerability
4. Vitals signs monitoring at defined intervals
5. Daily intake-output record
6. Weight and diet
7. All medications prescribed including name, dose, route, frequency
8. Hand over records during shift change
9. Nursing procedures performed
10. Any pressure sore, thrombophlebitis or other adverse events

APPENDIX- III

STANDARD OPERATING PROCEDURES (SOP'S) FOR I.V. FLUIDS PROCUREMENT, HANDLING, STORAGE, TESTING, ADVERSE REPORTS

Intravenous fluids are one of the most common drug used in the hospital for resuscitation, fluid management, carrier for medications.

Intravenous fluids can be classified as crystalloids and colloids. These can be isotonic, hypotonic, or hypertonic.

Commonly used IV fluids in the hospital are

i. Dextrose 5%
ii. Dextrose 10%
iii. Dextrose 25 %
iv. Dextrose 50%
v. Dextrose in Normal Saline
vi. Normal Saline
vii. Ringer's lactate
viii. N/2 Saline
ix. N/3 Saline
x. N/4 Saline
xi. Mannitol
xii. Isolyte P
xiii. Isolyte G
xiv. Isolyte M

Intravenous fluids to be procured in the hospital should be decided by a multidisciplinary committee consisting of clinicians from all from specialities.
These should be a part of Hospital Formulary and Essential Drugs List issued by the Government.

PROCUREMENT OF IV FLUIDS

i. These items should be procured as per pattern of past consumption, based upon demands given by store keeper/ pharmacists and approved by officer in charge stores.
ii. These should be procured by the procedure mandated by Government of India ie essentially through GeM followed by Hospital's rate contract if the item is not available on GeM.
iii. In case of annual indents to GeM for supply of IV fluids, the annual indents must be placed keeping in consideration the lead time and stock in hand. Suitable scheduling of the supplies should be specified.
iv. Store management software may be used for keeping check on stock available, expiry dates etc.
v. In other cases, in case of non-supply of IV fluids from the GeM, the concerned store keeper/pharmacist should initiate the demand when he/she

has a stock of at least 3 months in hand, keeping mind the external and internal lead times, to avoid its stock out.

vi. The Purchase Section will initiate the purchase process and place the supply orders at least two months before the total exhaust of stores of that variety of IV fluid.

vii. Emergency purchases of IV fluid should also be restricted to IV fluids manufactured by these approved firms only

RECEIPT OF IV FLUIDS

i. The pharmacist/ store keeper will receive goods against a proper indent/supply order and with the permission of officer in-charge Stores/Store Officer only.

ii. If the consignment is suspected to be exposed to harsh adverse weather conditions during transportation should be segregated & informed to the supplier

iii. The goods should be purchased from manufacturers approved by the Ministry of Healthy & Family Welfare as mentioned in point Number 2 (v).

iv. The goods received from GeM are pre-tested by the and a proper statement to this effect should be recorded on the body of the delivery challan. Only tested goods and declared of standard quality are to be accepted by the store keeper/pharmacist

v. In came of supply received frown other sources, the samples for testing of goods are to be sent in all cases to the Government approved testing laboratories before taking them into stock, issue and passing of bills. The samples for testing should invariably be sent immediately but no later than 4 working days, to the laboratories approved by the hospital for the purpose The samples should be taken on a random sampling basis, Each batch should be got accordingly tested separately. In case, due to some unforeseen circumstances, emergency procurement of limited supply is resorted to when there is total stock out of particular items, it may not be feasible to get the material pre-tested before issue. In such circumstances. officer in charge (Store) may use his discretion to issue store without test at the hospital level as the manufacturing firm before marketing has already tested these materials. However, every effort should be done to avoid such situation.

vi. The quantity of stores received should be tallied with the indent/supply order, delivery challan. The butch number, date of manufacturing, date of expiry should be thoroughly checked and recorded in the respective ledgers/inspection registers

vii. The inspecting officer should also check the quantity, batch number, DOM, DOE, etc., before giving clearance for acceptance of goods. The inspections should be completed immediately but not later than a working days after the receipt of goods

STORAGE

i. The floor of the warehouse should be made of hard floor (Concrete /Kota/Epoxy) and must be in a good state of repair and appearance at

all times. The floors are kept clean and free of trash, dirt, seepage of water, drain water etc. The area must be kept clean and free of refuse.

ii. Ensure adequate pest control program in place and shall be carried out at a minimum frequency of a year.

iii. Temperature of the storage area should be regulated as per the manufacturer's recommendations.

iv. The fluids should be stored in proper shelves, batch wise. and away from direct sunlight and arranged according to the principle of First In-First Out (FIFO)

v. The IV fluids cartons should be placed in upright direction with easily visible batch number, Date of Manufacture (DOM), Date of Expiry(DOE) . The number of cartons should not he more than three over the bottom most layer to avoid development of minor cracks due to pressure.

vi. Proper pesticide control and anti-rodent measures should be taken to avoid destruction/damage of IV fluid bottles

vii. IV fluids, which are under test, should be stored separately.

viii. The expired items/IV fluids declared not of standard quality/ items reported to have adverse reaction or having particulate matter, defective and deformed bottles should he kept in a separate enclosure. Labelling them accordingly ensures a proper identification of such material to avoid its use for patients.

ix. Record of expiry date of all items should be maintained.

ISSUE

i. Only items declared of standard quality on testing should be issued except in case of emergency and with the approval of officer In-charge store (vide supra)

ii. Each and every bottle should be checked against light with white and black background, for any particular matter present the bottle before issue. No bottle, having such matter should be issued in any circumstances. This should be properly recorded on the issue vouchers by the storekeepers/pharmacists.

iii. All the issue of material should be made against a proper indent from the concerned department with relevant entries of batch number, DOM, DOE, quantity issued, made in each indent

TRANSPORTATION OF BOTTLES

The supplies of intravenous fluids must be carried from stores to ward in a proper trolley or container with utmost care to avoid any damage or cracks to the same due to fall/overpressure.

STORAGE IN WARDS/OTHER USER AREAS

i. The user department should stock the optimum quantity of stores only at a time and in any case not more than the estimated consumption in 2 weeks.

ii. The storage should be done in racks in upright position, in a cool and dark place, away from sunlight and having minimum moisture/humidity. The cartons should not have more than three layers on top of the bottom most layers to avoid development of pressure cracks.

iii. Before using IV fluid on patients, each and every bottle of IV fluid should be re-checked against light by the user and no bottles should be used for patients if it contains any particulate matter/fungus the shape of bottle is deformed.

iv. The sister in charges of the ward should keep a record of all the IV fluids received in their wards with details of batch Number. DOM, DOE, Name of manufacturer, etc.

REPORTING AND FOLLOW UP ACTIONS ON REPORTS OF POOR QUALITY OF IV FLUIDS, IF ANY

i. Any user, if finds any particulate matter in a boule while rechecking it before infusion, the use of that batch of bottles should he stopped immediately and a written complaint, in the prescribed proforma, along with the unused bottles having particulate matter, should be sent to the officer in charge store, immediately, without any delay.

ii. The store in charge will get a circular issued for return of the IV fluid of that batch number from all the users for exchange of fluids of other batch

iii. All the bottles received hack should be got rechecked physically against light for any particulate matter. The number of bottles found defective should be noted down.

iv. The officer in charge More will inform the Drug Controller authorities to draw the samples out of defective hatch in test For suitability of use. The information will also be sent to the manufacturing firm and DGHS for information and necessary action at their end.

v. The further use/disposal of this material will be based upon the advise of the Drug Controller Authorities

vi. In case of replacement from supplier, the fresh batch should be taken.

FOLLOW UP ACTION ON REPORTS OF ADVERSE REACTION/ POOR QUALITY OF IV FLUIDS

The following procedure is to be adopted by all concerned when an adverse reaction is reported due to administration of IV Fluids/other drugs in the wands/other areas of the hospital

i. The use of IV. Fluid (or any drug) which has caused adverse reaction in a patent should be stopped forthwith and the Doctor In charge should be informed immediately.

ii. Immediate steps should be taken to manage the patient against the adverse drug reaction

iii. After noting the label details of I.V. Fluid drug which has have caused adverse reaction, empty/unused bottle and used vial/ampoule, etc., should be sealed and kept in safe custody

iv. A proforma attached should be filled by the reporting physician and sent to the Head of the Department of the ward. This should be sent immediately to the A.M.S. Office Proforma can be obtained from his office.

v. The Medical Superintendent/Store In-charge should issue immediate instruction to various wards so as to recall the unused stock of drugs if any lying with the ward and order immediate stoppage of the drug from circulation in the hospital

vi. Immediate steps should be taken to report the matter to the State Drug Control Authorities along with the information in the Proforma for further investigations by them.

PROFORMA FOR IV FLUID ADVERSE REACTION REPORT

Date: Place of reaction (Ward/OT/Emergency)

Name of Officer reporting:
Designation:

Details of IV Fluid, which caused adverse reaction

Name of IV fluid Batch Number DOM DOE Manufacturer

Date of adverse reaction Name of Patient
Reg Number

Type of reaction noticed:
How the adverse reaction was managed:
State of the patient now:
Further details of the IV Fluid under reporting:

Name of IV Fluid	Qty. indented	Date of Indent	Qty. consumed	Balance Qty in hand

I certify that use of the above butch of IV Fluid has been stopped in my department and quantity left has been kept separately under safe custody.

Signature of Head of Department

Signature of Complainant

APPENDIX- IV

STANDARD OPERATING PROCEDURES (SOP'S) FOR MATERIALS MANAGEMENT

ITEMS COVERED UNDER THESE SOP'S

i. Disposable & Rubber goods, Instruments.
ii. Equipment
iii. Furniture
iv. Injections
v. Tablets & Capsules
vi. Syrups & Ointments
vii. Surgical Stores
viii. Linen, Liveries & Contingency Store
ix. Stationary items
x. X-ray films; contrast and chemicals

DEMAND FORECASTING

i. The demand should be placed as per pattern of past consumption and based upon demands given by user department /store keeper/pharmacists duly approved by the officer in charge stores.
ii. All the demands of the user department should be routed through concerned store keeper/pharmacists and officer in charge stores. Annual demand should be prepared by each store keeper and put up to officer in charge stores well before the start of new financial year so that the annual indents may be placed to concerned agencies like GeM at least three months in advance by the purchase section and given proper scheduling of supply dates.
iii. In rest of the cases demand should be put up at least 3 months in advance, keeping in mind the internal lead time (time taken for placement of purchase order) external lead time (time taken for supply of goods to avoid its stock out
iv. The purchase section should initiate the purchase process well in time and place the supply orders at least two months before the total exhaust of stores
v. The store keeper will give urgent reminder to the purchase section when he is left with stock of one month consumption and also bring it to the knowledge of CMO Stores for follow up with the Officer in charge purchase.
vi. Each storekeeper will maintain a list of essential and critical (items stocked by them and will make every effort to make it available without interruption by keeping constant liaison with the purchase section, user department and suppliers.

RECEIPT OF STORES

i. A copy of supply order placed by purchase section should invariably be endorsed to the CMO Store who would mark it to the individual store keeper/pharmacist.

ii. The store keepers/pharmacists will receive goods against a proper indent/supply orders and with the authorization of CMO store

iii. The quantity of stores received should be tallied with the indent/supply orders and delivery challans. The batch number, date of manufacturing, date of expiry should be thoroughly checked and recorded in the respective ledgers/inspection registers.

iv. The inspecting officer detailed for each store, should be informed in writing shout the receipt of goods at the earliest but not later than two working days

v. The inspecting officer should verify the goods in the stores only. They should check the of Quantity, Quality, Batch number. DOM, DOE, comparison with approved sample, if available, before giving clearance for acceptance of goods. The inspection should be completed immediately but not later than two working days after the receipt of intimation

vi. A copy of delivery challans would be sent to the purchase section by store keepers/pharmacists through CMO stores, duly recorded by LDC posted in stores, who would maintain a master register for all such records

TESTING OF GOODS

i. Only tested goods and declared of standard quality by the competent authority are to be accepted by the store keepers/pharmacists on the basis of their reports.

ii. In case of all drugs supply received from other sources, the samples for testing of goods are to be sent in all cases to be Government approved testing labs, before taking them in stock, issue and passing the bills. The samples for testing should invariably be sent immediately but not later than four working days, to the labs approved by the hospital for this purpose. The samples should be taken on a random sampling basis. Each batch should be got accordingly tested separately

iii. In case, due to some unforeseen circumstances, emergency procurement of limited supply is resorted to or local purchases when there is total stock out of a particular item, it may not be feasible to get the material pro-tested before issue. In such circumstances, CMO stores may use his discretion to allow issue of such store without getting tested at the hospital level as these materials are already get tested once by the manufacturing firm before marketing. However, every effort should be made to avoid such situations

VERIFICATION OF BILLS

i. The bills of the goods received, shall be received directly by the LDC of stores, who would enter them in a register & will put up to the Officer in charge stores, who would then forward these to the store keepers/ pharmacists for verification.

ii. The store keeper/pharmacist would verify the bills and put up to the CMO in charge stores for signatures as early as possible but not later than seven working days from the date of receipt of bills/receipt of test reports, whichever the case may be, would then be entered in the master register and sent in the account section by the LDC

iii. Those bills for which formal sanction have not been used should be sent to purchase section for sanctions/re-validation

ISSUE

i. Only items declared of standard quality on testing should be issued except in case of emergency and with the approval of CMO stores (also refer to 4(ii) 4(iii)

ii. All the issue of material should be made against a proper indent from the concerned department duly signed by and officer working in the stores. The relevant entries of batch number, DOM, DOE, quantity issued should be made in cach indent by the store keepers/pharmacists.

REPORTING AND FOLLOW UP ACTIONS ON REPORTS OF POOR QUALITY GOODS

i. In case of any complaint from the user regarding adverse reactions by any of the drug items, CMO stores will inform the Drug Controller Authorities to draw the samples out of the reported defective batch to test for suitability of use. The information will also be sent to the manufacturing firm. The use of the above said batch of drug will be stopped immediately and all issued stocks withdrawn. The further use/disposal of this material will be based upon the advise of the Drug Controller Authorities. In case of replacement from supplier. the fresh batch should be taken against the defective lot. I

ii. In case of non-drug items the reported poor quality items should be got re-checked by inspecting officer / any other authority for taking appropriate and relevant decision in the case, in consultation with Officer in charge purchase section

RECORD KEEPING

Expiry Date Register

An expiry date register should be maintained and periodically reviewed by all store keeper/pharmacists for all items having a shelf life. The format should be as follows, month wine.

MONTH OF EXPIRY ..... YEAR.....

Date of expiry	Name of items	Quantity Received	Suppliers name PSO Number

Stock Ledger Register

i. The stock ledgers should be maintained by all store keepers/ pharmacist, All pages should be numbered and certified from the officer in charge of stores in the beginning of the register.

ii. All the entries in this ledger should he initialled by store keeper/ pharmacist and same should be checked and verified by gazetted officer working in store. All cutting should be similarly got initialled and attested.

iii. All the hills verified should be entered in the stock ledger register after making due entries in the relevant pages, preferably with red ink.

iv. No new stock ledger should be opened without prior permission and approval of officer working in store. In case a new register is opened, all entries should be carried forward to the new register and should be certified by store keeper/ pharmacist and countersigned by officer in charge stores.

MISCELLANEOUS

i. All the individual stores have to be sealed by the individual seal of store keeper/pharmacists and the main gates to be scaled by the hospital seal in custody of the CMO Stores Officer working in stores at the closure time.

ii. Duplicate keys of all the stores are to be kept (in sealed. envelope) in custody of the Additional Medical Superintendent stores, to be used in exigencies of services Such events are to be entered in an Events Register to he maintained by CMO Store/Officer working in store. In such case, stores should be opened in the presence of at least two gazetted officers.

iii. All the administrative matters pertaining to stores will be decided by the CMO Stores, who in turn will keep informed the Additional Medical Superintendent stores about any important matters.

iv. All leaves will be sanctioned by the CMO stores et Additional Medical Superintendent (stores & purchase). The record of leave to be maintained by the LDC (stores).

v. All correspondence outside the stores should be through the office of CMO stores only.

Appendix- V

GUIDELINES FOR MEDICOLEGAL WORK

1. INTRODUCTION

Medicolegal investigation has been an essential part of forensic investigation. The hospitals role starts at the first contact of patients with health care providers, in cases which have further legal consequences. Both alive and dead patients may be required to be handled while keeping medicolegal aspects in mind. While dealing with live medicolegal cases, first and foremost priority of the treating doctor should be provisioning of life saving treatment and stabilising the patient; meaning by patient care must be the priority over medicolegal formalities, although they must not be ignored and be done as per the established guidelines.

After death investigations by trained medical professionals have significantly contributed in the administration of justice. The place where such investigations are conducted is called mortuary. This is the place of convergence of interests of different stakeholders like community, family members of the deceased, autopsy surgeon, police, judiciary and media. Mortuaries occupy a special place in the perceptions of the society. Facilities and the staff involved in mortuary services have a clear obligation to look after the deceased in accordance with society's expectation. Recently dignity has found a special place in ethical management of dead.

Adherence to the standard procedures and guidelines set out in this manual will inspire confidence in this important component of health and justice system. Absence of standard manual paves a way for unfair practices. The aim of these guidelines is to give a realistic orientation to all the stakeholders including doctors, supporting staff & police personals. The proper understanding of standard practices is critical for effective, smooth, fair and transparent medicolegal services.

2. MEDICOLEGAL CONSIDERATIONS REQUIRED FOR HANDLING OF CASES COMING TO EMERGENCY

2.01 What cases are MLC (Medicolegal) cases?
Medical Officers should prepare the MLR (Medicolegal Report) in all cases brought in the emergency by the police, those coming of their own for medico legal examination or any other case in which foul play is suspected. Further, the Medical Officer on duty shall write the medico-legal report (MLR). The following categories of cases admitted in the hospital are to be treated amongst others as medico legal cases-

1. Cases of injury including grievous injuries (See definition under 320 IPC), drowning, hanging, sexual offences, attempted suicide, Suspected or evident Homicides or suicides, including attempted. etc.

2. Cases of suspected or evident poisoning even if accidental.
3. Cases of injuries due to traffic accidents even when an accident had occurred due to patient's mistake and nobody else is to be blamed. Traffic collisions, road-side accidents, railway accident, factory accidents or any other unnatural mishap.
4. Suspected or evident sexual offences.
5. Injury cases where there is likelihood of death in near future.
6. Burns even, if accidental.
7. Cases of grievous injuries even if accidental including fall from a height, burial under earth mound etc.
8. Cases of grievous injuries caused by electric shock or lightening, natural disaster etc.
9. Cases of attempted abortion by unauthorized person, suspected or evident criminal abortions
10. Cases of bites/injuries caused by animals.
11. All unconscious patients with injury of any nature especially where cause of unconsciousness is not clear
12. Cases brought dead with improper history.
13. All patients brought to the hospital in suspicious circumstances.
14. Person under police custody or judicial custody with suspicion of foul play
15. Cases referred by court or otherwise
16. Cases which require age certificate
17. Person under police or judicial custody
18. Domestic violence, Child/elderly abuse
19. Alleged medical negligence

2.02 What to do?

1. The doctor will make a note in the file of the patient as to the time and date of informing the police. He will then make a complete record of all injuries and also note the date and time of admission of the case therein. Name and addresses of the attendants who brought the patient should also be recorded in the file and admission/OPD register if possible.

2. The Medical Officer will also mark with red pen on the top of first page of the file of the patient the letters "M.L.C." or put the stamp "Medicolegal case". The stamp should be kept with the staff nurse on duty in the emergency. The iii. Medical Officer will also see that the card of the patient is marked/stamped "Medicolegal case" by the duty staff nurse on duty.

2.03 Discharging a medico legal case

No medico legal case shall be discharged or leave against medical advice (LAMA) without informing the police.

Suspecting foul play in cases admitted as ordinary non-medicolegal patients. Cases which are admitted as an ordinary non medico-legal case but in which the Medical Officer suspects foul play should be immediately brought to the notice of the police in writing so that they may take necessary action in the

matter. In the event of death of such a case, a written report should be sent to the police so that a medicolegal post mortem could be arranged. The body of such a case should be sent to the mortuary and not be handed over to the relatives.

2.04 Procedure for declaration of Brought dead

1. Take present/past history
2. Look/ask about any suspicious sign
3. Note (presence/absence) any Poisoning smell
4. Note any(presence/absence) Strangulation/ligature mark
5. Expose the complete body and look for any sign of injury
6. Palpate and look for any injury/haematoma
7. If female, ask h/o married life, if <7 years, register MLC case
8. Register all brought dead case as MLC
9. In all suspicious deaths register MLC
10. After complete examination and confirmation by clinical evaluation death is confirmed
11. Record immediate and early changes of death if present (like: Insensibility and primary flaccidity of muscles, signs of permanent stoppage of circulation (on auscultation & ECG), signs of permanent stoppage of respiration and brain functions, Changes in the eyes (reflexes, cornea loses lustre, pupil, flaccidity) Tache-noires, muscular flaccidity, contact flattening or rigor mortis etc.
12. Inform the police immediately in writing

2.05 Documentation of Injuries

1. In cases of assault, following history should be taken
   - Time of infliction of injury
   - Pain/tenderness at any site
   - Weapon used
   - Handedness of the victim & accused
   - Pre-existing illness
   - Whether injuries have been treated?
   - Drug/alcohol abuse
2. Twelve-point Wound descriptions (injury should be mentioned while using these headings wherever relevant)
   - Type of wound (abrasion, bruise, laceration etc)
   - Number
   - Size
   - Shape
   - Pattern
   - Location
   - Measurements from two anatomical landmarks

- Orientation of the wound
- Stiffness/loss of the movements
- Colour and healing signs/ bleeding
- Any foreign body or material
- Tailing of the wound

3. The following parameters which should be included in firearm wound description
   - Firearm Ammunition injury (title of injury should be used as)
   - Anatomical position
   - Number
   - Size
   - Pattern
   - Entry/exit
   - Margins
   - Edges
   - Burning
   - Scorching
   - Singeing
   - Blackening
   - Wound tract: Direction, damage to anatomical structures
   - Any foreign material: bullet/pellet, cloth, wad

2.06 While recording opinion, the doctor should specify whether the injuries are:

1. Fresh (within 4 to 6 hours) /recent (within one day) /old (If more than one day, be specific if possible)
2. Caused by sharp/ blunt objects / rough surface/ burning objects or smouldering objects like cigarettes, teeth, fire, heat, poison, corrosive, explosive, animal, etc (324/326 IPC)
3. Simple / grievous / dangerous in nature.
4. Injuries are suggestive of impulsive or planned (systemic) physical torture.
5. While giving opinion, multiple injuries if any, may be clubbed according to their nature. The nature of each injury such as, simple / grievous / dangerous, should be specified both individually and collectively.
6. If an injury is not consistent with the history given, question it at the time of examination.
7. Victims may be unaware of the site of the injury- In many cases.
8. Re-examine injuries after 24-48 hours if necessary (particularly bruises with blunt force impact)
9. Pre-treatment and post-treatment examination (Re-view if necessary).
10. In case no external injury appreciable, remark as “not applicable” should be used against category of hurt in such cases.
11. Bodily pain is also covered in simple hurt. Tenderness or restriction of movements must be noted. Better to review after 1-2 days if required.
12. Doctor may specify that an injury is self-inflicted / self-suffered only in those cases in which this is quite obvious, preferably with justifiable reasons. They

should, however, refrain from committing themselves on this point in doubtful cases.

2.07 Additional information

1. Medical Officer who first examines the case, shall prepare the medico legal report. However, in case of difficulty, the Medical Officer may take the help of his colleague or senior.
2. If a medicolegal report has already been issued elsewhere, it is not permissible to issue a second MLR unless specific orders regarding re-examination are received.
3. The medico-legal report (MLR) shall be prepared legibly, shall have number. The name, designation, registration number of the examining doctor will be stated, preferably in capital letters, at the bottom of the report.
4. In some cases, the police ask for medicolegal report after the case has been discharged / expired. It is not advisable to issue a medicolegal report on medicolegal form in such cases. The police, however, can ask for any specific information (including details of injuries) which may be supplied to them from the record of the case and the medical officer supplying the information should write on top of such report that the same has been noted from the file of the case. Such report should never be back dated.

2.08 Recording of Statement and dying declaration

1. If a patient is likely to expire as a result of injuries (including burns) or alleged criminal act, immediate arrangement should be made to get his/her dying declaration recorded.
2. The Medical Officer will ask the police officer on duty in writing to call a magistrate or if there is no time to call a magistrate, the Medical Officer may himself record the dying declaration keeping in view the legal provisions in this regard.
3. The dying declaration should be recorded in the presence of two disinterested witness (like another doctor or staff member on duty etc.) who will witness the statement and will append his signatures at the bottom of the declaration.
4. The Medical Officer recording the statement (either in question/answer form or narrative) should also certify that the patient was conscious and in sound state of mind when the statement was recorded and remained so till the statement was completed.
5. The signature or thumb impression of the patient be obtained on the dying declaration after the same has been read over to him/her.
6. No other person be allowed to interfere during the recording of dying declaration.
7. In case of a patient who is not fit to make a statement, the reason should be noted and duly explained in the file.

2.09 Death of Medico-Legal Case

1. Whenever a person (medicolegal case) dies, the police officer I/C of the police post/police station of the area should be informed immediately and a note to the effect be recorded on the file of the deceased.
2. When the body of a medicolegal case is sent to the mortuary, clear instructions should be given to the mortuary staff, not to hand over the body to the relatives.
3. Complete chain of custody of the dead body shall be maintained at all times until the time the body is finally handed over to the police.
4. The body shall be transported to the mortuary with dignity.
5. Dead bodies should be shifted to mortuary with proper body identification tag. The request should include details of case, name, age, sex, address, CR No., ward, etc.
6. Name of the ward attendant or any other employee/ police staff transporting the dead body shall be recorded in the mortuary register / file / OPD register.
7. Once the information is received by the police and the police official has arrived at the hospital, he shall be responsible along with the hospital staff for the safety of the dead body.
8. Death certificate should not be issued in Medico-legal cases by the doctor conducting the Post-Mortem examination. Only the Issuing Authority (Registrar / Sub-Registrar as per The Registration of Births and Deaths Act) should do so.

2.10 Discharge summary

The discharge summary shall at the least contain the following information in an understandable language and format:

1. Name & Registration number of treating doctor
2. Name, demographic details & contact number of patient, if available
3. Date and time of admission and discharge
4. Relevant clinical history, assessment findings and diagnosis
5. Investigation results
6. Details of medical treatment, invasive procedures, surgery and other care provided
7. Discharge advice (medications and other instructions).
8. Instruction about when and how to obtain urgent care.
9. Before discharging a MLC Case, police should be informed.

2.11 Referral cases

If patient is serious and proper arrangements are not available, then it may be referred to higher centre for treatment with full details clearly stating the status of police information and MLR whether prepared or not. If MLR has been prepared, a copy is sent along with the referral. Unnecessary referral only to escape medicolegal formalities must be avoided.

Taking away a patient or body of a medicolegal case forcibly by the attendant
The Medical Officer cannot forcibly detain a medicolegal case or the body. In case the attendants want to take away a medicolegal case/body, the implication of their action should be explained to them politely. If they still insist, the Medical Officer should get it in writing from the attendants that they are taking away the patient/body against medical advice. If they refuse to write anything and take away the patient/body, the Medical Officer should record the same on the file of the patient. In such cases MS/SMO/Police Station of the area and security staff be informed immediately.

Drunkenness cases: Record the following information along with other

1. Whether accused under arrest or not with date & time of arrest (to be specified in requisition), take consent if possible, note two identification marks and thumb impression
2. History relevant to consumption of alcohol
3. Smell of alcohol in breath; General appearance & behaviour; skin: dry/moist/dirty stained etc. Clothing : Decently dressed / Disordered / Soiled / Torn; General disposition : Calm / Talkative / Abusive / Aggressive; Speech : Normal / Thick and slurred / incoherent; Conjunctiva : Normal / Congested; Pupils : Normal / Dilated / Sluggishly reacting; Self-control : Normal / Impaired; Memory : Normal / impaired; Orientation of time & space : Normal / impaired; Reaction time : Normal / Delayed; Muscular co-ordination: Gait : Normal / Unsteady / Unable to stand upright, Finger nose test : Positive / Negative, Picking of pencil, Ability to write name/signatures (take hand writing sample), Buttoning/Unbuttoning shirt, Systemic examination findings : Pulse, B.P, Reflexes : Normal / Exaggerated / Sluggish; Romberg's sign : Positive / Negative; other systemic findings to exclude any existing illness, Any other findings / Injuries on the body; Special examination (Blood & Urine) : Preserved / Not preserved.
4. Opinion : (furnish whichever is relevant)

- There is nothing on examination to suggest that the person has consumed alcohol.
- The person examined has consumed alcohol, but is not under the influence of alcohol.
- The person examined has consumed alcohol and is under the influence of alcohol.

GUIDELINES FOR PRESERVATION, TRANSPORT AND HANDLING OF BODIES

3.01 Categories of bodies preserved

The mortuary in the department of Forensic Medicine provides facility for preservation of the following categories of dead bodies.

1. MLC deaths at Hospital during treatment or brought dead

2. Bodies brought by police for post-mortem falling in the jurisdiction of the hospital
3. Bodies brought by police as multi-institutional board case
4. Non-MLC deaths in the hospital
5. Any other body (in specific circumstances) as decided by appropriate authority

3.02 Custody of MLC Bodies

1. The jurisdictional police are the ultimate custodian of dead bodies for safe legal custody in all cases of death where further legal investigations are required.
2. The hospital acts as a facilitator for preserving the dead bodies till the body is required for police investigations. The FMT department provides logistics like space, mortuary cabinets, assistance for local shifting within the Hospital.
3. The request for preservation is entertained by authorized doctors of the hospital who after ensuring the particulars and requisite documents writes as “allowed to be preserved in mortuary under the police custody”. Specific time period for which body is allowed to be preserved must be clearly mentioned.

3.03 Preservation of MLC dead bodies dying outside the hospital

1. The police officer depositing the dead body must ensure that tag/label indicating the identity of the person with name of police officer, police station with FIR/DD Number has been put on the dead body by the police for the purpose of identification.
2. No dead body will be received and stored in the mortuary without any identification tag/label.
3. The permission for preservation of the body has to be taken from the officer in-charge on duty by filling a request form.
4. In case of unknown bodies, the police should get the post-mortem examination conducted as soon as possible since the mortuary has no legal obligation to keep the dead body after 72 hours and also to avoid decomposition changes which may hinder the determination of identity, cause and manner of death as well as to avoid indignity to human corpse.

3.04 Procedure for release of dead bodies of the patients (MLC & NON-MLC) dying at hospital

1. In a MLC case, death occurring in any of the clinical area, the dead body will be mandatorily sent to the mortuary.
2. In case of death of a non-MLC patient, if relatives of the patient want to receive the dead body without delay, then sister in-charge or senior most sister on duty will hand over the body to the relatives after taking receival in death register along with the dead body receipt slip of the patient after

receival of clearance from central admission office. After the death of the patient, the relative/attendant will go to central admission and enquiry office after clearing bills etc) from where he will get a dead body receipt with stamp "body may be handed over". The ward sister will keep one copy of dead body receipt slip from one of the death report forms before sending the 2 copies of the death report form to the central admission.

3. The ward sister will keep the dead body receipt slip (with stamp from central admission officer) in her records and will give dead body receipt slip kept with her from the second copy of death record form (which is otherwise taken by the mortuary attendant along with the dead body and is given by him to the patient's attendant along with the body) while retaining the dead body receipt slip (with stamp from central registration) in her record.
4. However in all such cases the relatives have to be gently advised to complete the formalities and remove the patient's body within one hour of the declaration of the death; otherwise the body may be sent to the mortuary. This discretion will remain with the ward sister, who may request the mortuary to take dead body of non-MLC patients as well.

3.05 Preservation of NON-MLC dead bodies (dying outside hospital)

1. Due to limited availability of space in the cold chambers, the department cannot preserve the bodies of NON-MLC cases dying outside the hospital.
2. However in exceptional circumstances, the relatives in such cases should submit a written application with supporting documents (valid ID of the deceased, blood relatives, witness, death certificate, NOC from police as per the case specific etc.) to the Senior Resident on duty who after considering the availability of space, rational and need of the relatives, may take decision in consultation with consultant on duty/mortuary in-charge or Head of the department for preservation of the body. In such cases the responsibilities for issues other than provision of storage facility would lie upon the applicants and body will be handed over to applicant only.

3.06 Transport of dead body from clinical areas of the hospital to mortuary

1. After death of the person, the nursing staff on duty shall properly label and tag the body mentioning Name, father's name, admission number, ward, date and time of death etc.
2. In addition, in Medico-legal cases, the letters "MLC" should be prominently put on the label.
3. Nursing staff on duty in the ward should insure that operation/drainage sites if any should be properly dressed before body is wrapped in leak-proof plastic bag before it is handed over to next of the kin or mortuary attendant.
4. The mortuary attendant on duty is informed that a pick-up or removal is necessary from the ward.

5. The hearse van service is provided free of cost for transportation of body within the hospital to mortuary.
6. The mortuary attendant will receive the body in a courteous, sensitive and professional manner along with the records including death slip.

3.07 Intake procedure and maintenance of mortuary register

1. The mortuary attendant will receive the death slip along with the dead body after matching and confirming the information mentioned in death slip and the label on the dead body.
2. The morgue attendant will note the complete details of the death slip in the register.
3. Following column should be there in Body register

- Serial number
- Name
- Age
- Sex
- Address
- Hospital registration number
- MLC/NON-MLC
- Date & time of death
- Date & time of receiving the body in mortuary
- Body brought from
- Signature of on duty mortuary staff receiving the body
- Date and time of handing over the body to the next of kin/police officer
- Particulars of the person receiving the body like name, signature, contact number, address, relation with the deceased, copy of identity card.
- Signature of on duty mortuary staff handing over the body

3.08 General guidelines for the storage of dead bodies

1. The bodies are stored in cold chambers at the recommended temperature.
2. It is made sure that there is no access for rodents/pests into the body storage area.
3. Body storage area is kept clean and free from any such matter which may attract rodents/pests. The body is not to be placed on the floor or otherwise kept carelessly.
4. There is power back-up round the clock.
5. The cold storage room/cabinet is kept under key and lock by the on duty morgue Attendant/authorised person.
6. The opening of cold storage and releasing of body is only permitted by authorized person.
7. It should not be treated in a way that might hurt the sentiments of the next of kin.
8. The morgue attendant will match the tag of the dead body with details of the death slip.

9. The identification of the dead body by relatives will be ensured by the morgue attendant.
10. Special precaution must be taken when two stored bodies having identical features like, same name, age, sex and physical appearances.
11. In case of any exchange of dead bodies, the incidence must be reported to officer in-charge mortuary/ head of hospital /head of the department /local police immediately and action must be initiated for correction. The detailed report must be kept in record.
12. It must be ensured that body should not be piled up and male & female bodies should be kept separately while maintaining the dignity of the dead.

4. PROCEDURE FOR SUBSEQUENT OPINION

The department of Forensic Medicine offers subsequent expert opinions. Subsequent opinion cases are those cases in which MLC is already prepared and police investigations have started. The person/ and documents are brought by police to the department for further clarification or final opinion. Such cases can be hospital admitted cases which are referred to Forensic medicine or directly brought by police for opinion.

The following procedure is adopted.

1. The I.O. is required to submit the application (duly signed with seal) for subsequent opinion and should be forwarded by SHO. If I.O is not available due to unavoidable reason, in such cases an authorization letter should be issued in the name of police officer accompanying the request for subsequent opinion.
2. All the documents are required to be well arranged, legible and duly signed with seal.
3. The following documents need to be attached (which ever relevant)
    - Inquest papers
    - Court order
    - Copy of FIR/DD
    - Post-mortem report
    - MLC Report
    - FSL/Viscera report
    - Histopathology report
    - Hospital record
    - Crime scene photographs etc.
4. The documents are then checked by the doctor on duty and further forwarded to the medicolegal record clerk who again rechecks it and an opinion number is allotted so as to put forward for the perusal of HOD. The HOD then deputes the doctor who has been involved in the investigation of that particular case from the starting.
5. In case if the doctor who originally prepared the report is currently not available, following procedure is adopted.

- If the doctor is known to be working in any government hospital in Delhi, the I.O. is told to get the opinion from the concerned doctor.
- If the doctor is known to have left Delhi, the case is deputed to another available doctor.

6. If required, the I.O. may be called by the doctor to discuss the case.
7. The opinion is prepared in two copies (original & office copy), signed and stamped. Both are submitted to the medico-legal record clerk.
8. The I.O. is called upon by the concerned and the Opinion in original is dispatched after making proper entries in the receival register.
9. The office copy is kept in record.

5. AGE ESTIMATION & FORENSIC RADIOLOGY

5.01 Age estimation of living person

1. First a request need to be placed before HOD, FMT for age estimation in writing along with certified copy of FIR/DD, Court/Juvenile Justice board order, two pass port size photograph of the subject. A date will be fixed after receival of such request. On the fixed date I.O. has to appear along with all the documents and the subject.
2. Depending on circumstances of the case a board of doctors may be constituted including Radiologist, Dentist, and Forensic Medicine Specialists. In case of examination of Female is required then the lady doctor should preferably be part of the board.
3. Any old certificates showing age, produced by the person/FIR may be consulted.
4. Physical examination, Height, Weight, chest & abdominal circumference: General build; Voice; Adam's apple; Hair: scalp, facial, pubic, body, axillary, Breast, External genitalia, Menarche / Ejaculation, Date of last menstrual period (for females).
5. Dental examination, number, Temporary, Permanent, eruption, root formation are noted.
6. Radiological examination of following regions may be required: Shoulder, Elbow, Wrist, Pelvis, Skull & jaw, knee, ankle, sacrum, sternum, clavicle etc
7. Opinion: Based on physical, dental, radiological findings and my experience, I/we am/are of the opinion that the age of this person is above ____ and below ____years.

5.02 Radiological investigation of the body (autopsy cases)

1. Generally, radiographs will be taken after the external examination and before the dissection, except in medicolegal investigation of bombings and charred bodies.
2. In natural death cases as well as in investigations of assumed medical malpractice, the implementation of various imaging techniques is the most

adequate method for detecting pathological features such as pneumothorax, pneumo-peritoneum, barotrauma injuries, and air embolisms.

3. When the body to be examined is badly decomposed, for instance, in exhumed cadavers, it is highly recommended to conduct a full body radiographic study that might help to visualize otherwise hidden injuries and pathological findings.
4. In all gunshot wound cases it is strongly recommended that whole body x-rays are to be taken.
5. The cases which require estimation of age at death of unidentified victims may also be sent for x-ray, if required.
6. Any case which autopsy surgeon thinks fit for radiological investigation as per the case specifics (in case x-ray facility is not available at mortuary) may be sent to Department of Radiology. Forwarding of the request to HOD, Department of Radiology, in the prescribed format (along with seal) by consultant in-charge is mandatory in such cases. The receiving department has to make convenient necessary arrangement for conducting investigation while considering the sensitivity of the case. (as for a post-mortem usually more than 100 relative keeps on waiting for getting the body and making necessary arrangements for transport and cremation)

6. MEDICOLEGAL RECORD MAINTENANCE

6.01 Department of FMT

1. The FMT department preserves the record of post-mortem reports, subsequent opinions and age estimation report.
2. The record section is headed by one faculty in-charge. One record clerk is deputed for proper preservation, maintenance and retrieval of records.
3. All the summons pertaining to the department is received by record clerk and subsequently the same is presented to the Head of department for further processing.
4. At the end of every year the copy of post-mortem report are bound in the form of a book.
5. Ordinarily the copy of PM report and other reports are not to be issued to the relatives or general public.
6. Any person desirous to obtain the same have to submit an application with identity proof along with supporting documents stating the purpose in the HOD Office, where the decision will be taken as per the case specific.

6.02 Additional information for Hospital Record

The minimum recommended period of retention of record is 10 years except MLC record which is pending in court. The retention period for medical record is stated in DGHS letter no. 10-3/68-MH dated 31.08.68 and is as under

	Type of Record	Minimum Retention Period
1	Inpatient medical record (case sheet)	10 years
2	Medicolegal register	10 years
3	Out patient record	5 years

7. RESPONSIBILITIES OF DOCTORS AND OTHER PERSONNEL AT MORTUARY

The job responsibility of various officers and staff involved in mortuary services is under.

7.01 Faculty Members

There are faculty members posted in the department of Forensic Medicine. Everyday one faculty acts as Consultant on duty for post-mortem and other medicolegal work. The consultant guides, supervises and carry out the medicolegal work on their respective days according to the sensitivities of the case. One faculty is designated as Mortuary in-charge by the Head of the Department for day to day supervision and administrative work of mortuary.

7.02 Senior Resident and Junior Resident Doctors

There are Senior Resident and Junior Resident doctors in the department. They conduct the medicolegal work while following the procedures and guidelines for post-mortem work as per their duty roster.

7.03 Supporting Staff at Mortuary

Supporting staff includes Mortuary Technician, Morgue Attendant and Sanitary staff. The supporting staffs carries out their responsibilities as a team work to facilitate the post-mortem work.

1. Technical Procedures -- The morgue attendant generally carries out the following procedures in connection with the actual autopsy:
    - Makes the primary incision to open body cavities; removes breastbone; together with the prosector or another autopsy assistant, removes thoracic and abdominal contents; removes, cleans and opens intestines.
    - Removes the skull-cap, the brain and excise ribs and other bones as directed.
    - May remove other organs; excision and taking of sample, weighs them and places them in solutions or containers, as appropriate, for laboratory examination under close supervision of the prosector.
    - Closes the body, replacing organs and performing procedures necessary for the subsequent embalming process.
2. Preparatory Duties -- The morgue attendant typically is required to carry out the following functions in preparing for the autopsy:

- Assures that all necessary documentation is available and prepares any additional documentation, i.e., verifies that proper authorization for autopsy is at hand, and records all information necessary for autopsy records.
- Verifies that the body of the deceased is, in fact, the body to be autopsied, and makes all arrangements to schedule the autopsy.
- After reading the autopsy authorization to ascertain the extent of the autopsy, selects the appropriate instruments, devices, containers, solutions, and other equipment for use during the autopsy.

3. Monitoring duties of Mortuary Technician
   The mortuary technician (along with other supervisory roles) in their shift daily checks for:

   - Total number of bodies as per cold chambers and Body Register
   - Temperature of cold storage.
   - Cleanliness and hygiene of mortuary and surroundings.
   - Availability of water and electricity.
   - Any drainage related issue.
   - Any sign of presence of rodents/pests/animals in the mortuary.

4. Miscellaneous duties
   - Is responsible for maintenance of an aseptic autopsy area, including instruments, equipment, and clothing, and for proper asepsis in the handling of specimens.
   - Is responsible for proper assembly, routing or holding of specimens for laboratory investigation, further demonstration, or processing. He/she files specimens retained for study.
   - Transmits instructions from the prosector to the photographer on placement and locations to obtain useful photographs of designated specimens.
   - Is responsible for maintaining equipment in readiness for use (sharpening knives, for instance), for preparing and maintaining the stock of fixative solutions, for maintaining adequate supplies, and for replenishing supplies.
   - Is responsible for transfer of autopsy and/or surgical specimens to other laboratories, as directed by the prosector, using the appropriate techniques for packing and preserving to insure safe arrival of specimens.
   - May be responsible for taking care of clothing and valuables, recording receipt, and properly disposing of them.

7.04 Ethical responsibilities of All Mortuary Personnel

1. General behaviour: They should treat their colleagues with due respect and avoid making unwarranted critical remarks.
2. Confidentiality: Information of confidential nature should be treated with due regard.
3. Mistakes: Mortuary personnel should promote an environment of open discussion and corrective action to ensure that the mistake is not repeated.

4. Conflict of interest: Mortuary personnel should not use any work related procedure or situation for personal gain.
5. Corrupt conduct: Mortuary personnel should adhere to non-corrupt practices.
6. Harassment: Harassment of any kind should be condemned.
7. Working with others: Mortuary personnel should make an effort to understand the working procedures and constrains of other working groups such as police officers, health professionals etc.
8. Media: Mortuary personnel should not encourage the media association of their names with specific cases as a mean to gain undue publicity.

7.05 Security Guard

1. Security guards should be present round the clock in Mortuary.

2. In view of sensitivity of medicolegal cases, no unauthorised vehicle should be allowed to park in the mortuary complex except for doctor or staff working in the department of Forensic Medicine.

3. No out siders are allowed to sit /enter the complex without prior authorization.

7.06 Supporting staff at Main Department of FMT

1. To make entry of cases for post-mortem in the PM register.
2. To assist medico legal record work of the post-mortem.
3. To maintain the PM records.
4. To maintain all the files and records pertaining to mortuary.
5. To ensure the availability of daily usage items through Hospital or Departmental store.
6. To supervise and monitor the work of Morgue attendants.
7. To coordinate and keep liaison with the engineering departments for any problems.
8. Any other as directed by the Head of Department

8. MORTUARY INFRASTRUCTURE

Special efforts should be made to maintain the serenity and the calmness in the mortuary complex with provision of green belt. The constructed area should be encircled by a broad road which gives an added advantage of free vehicular movement for hearse/police/doctors van. Main entrance should be gated and guarded day & night.

8.01 Other requirements for modern mortuary complex are as under:

1. Cold Room: One cold room should be directly attached to the main autopsy hall, which is used for preservation and storage of dead bodies that are brought for autopsy. The capacity of the chamber should be sufficient for 20 bodies (or as per case load) and the temperature is maintained in the range as per the technical specifications.

2. Waiting area: One covered waiting area should be dedicated to the public suitable for comfortable sitting for about 50 people which should be well lit installed with ceiling fans.
3. Police booth (sitting area) should be available for documentation purpose.
4. Morgue attendant room
5. Record room
6. Autopsy hall: A large autopsy hall with two dissection tables should be available for autopsy. The design of autopsy hall should provide for natural light from the top. The hall should be equipped with exhaust facility and practically an odourless mortuary. Observation area for under-graduate students and trainees should be available on both sides of dissection tables. The hall must be also equipped with two commercial grade air purifiers. One separate autopsy table should especially be dedicated for decomposed bodies. Insect catcher must be installed to control the entry of insects.
7. Doctor's duty room: The room is of use for consultant and resident doctors which have computer facility for report writing. It should be attached with washroom and toilet.
8. Change rooms with shower facilities for staff
9. Store room is used to keep all the consumable items.
10. Forensic samples sealing area

8.02 Equipment and Instruments for autopsy

1. Cold chambers
2. Autopsy tables
3. Electric autopsy saw
4. Surgical operating lights
5. X-ray machine
6. Microscopic Loup
7. Air purifiers
8. Split/window air conditioners
9. Automatic shoe cover dispenser
10. Dissection instrument sets
11. Body weighing machine
12. Good quality audio-visual recording system for photography and video filming
13. Digital organ weighing machine
14. Computer with printers
15. Instrument trolley
16. Height adjustable hydraulic stretcher
17. Embalming machine
18. Autoclaving machine
19. Fly catcher
20. Crash carts
21. Exhaust fan

22. HIV protection metallic gloves
23. Magnifying glasses
24. Electric hand air dryer
25. Automatic liquid soap dispenser
26. Digital p H meter
27. Vis-Spectrophotometer
28. Anthropometry set
29. Grossing station,
30. Ventilated Storage Cabinets for forensic Specimens,
31. Evidence Drying Cabinet,
32. Floor Scrubbers cum wet Drier (Walk- Behind Type),
33. Air curtain

9. POST- MORTEM EXAMINATION

9.01 Purpose of autopsy

The importance of autopsies can be illustrated by knowing what information may be obtained through this procedure. A number of things that may be determined from an autopsy are (includes but not all):

1. Establish decedent's identity.
2. Establish the cause of death.
3. Determine the mechanism of death.
4. Confirm the manner of death.
5. Confirm medical history.
6. Separate complicating medical factors.
7. Rule out disease or factors harmful to public health.
8. Facilitate adequate photography of wounds.
9. Establish direction of force.
10. Correlate wounding and object producing the wounds.
11. Determine time interval between wounds received and death.
12. Establish sequence of events.
13. Retrieve an article involved in mode of death, such as a bullet.
14. Obtain and examine trace evidence such as hairs, stains, and seminal fluid.
15. Obtain specimens for toxicology
16. Establish order of death in situations where more than one family member has been killed.
17. To document all injuries in order to answer any future questions that is unknown at the time of the autopsy.

9.02 Cases that Require an Autopsy (includes but not all)

There are some cases that always require an autopsy. The circumstances that mostly require an autopsy are:

1. Fire deaths, when the body is altered by fire.
2. Homicides or any cases in which another person is in anyway a possible factor in the death.

3. Apparent suicides that are without clear evidence of intent, such as those without a note.
4. Road traffic accidents.
5. Aircraft crashes.
6. Occupation related deaths.
7. Un-witnessed “accidents.”
8. Accidents in which natural disease cannot be ruled out as a factor.
9. Cases where civil litigation may evolve.
10. Deaths of persons in government custody.
11. Sudden, unexpected deaths.
12. Deaths during medical or surgical intervention.

9.03 Procedure of autopsy

1. After receiving the complete inquest papers along with filled prescribed requisition form and identification of body by I.O., post-mortem examination (autopsy) is started. Usually it takes up to 1-2 hours to complete the autopsy but it may take many hours in complicated cases/board cases which require other specialized investigations.
2. Complete autopsy is done which includes examination of whole body while opening up of all the cavities including head, chest and abdomen. All the soft tissues are put back in the body after examination except the samples which are taken to be sent for histopathology/Forensic science laboratory/microbiology etc.
3. After the examination all the incisions are stitched back to nearly natural appearance. The body is only handed over to the I.O, from whom it is released to the near relatives.

9.04 Opinion

Whenever viscera are preserved for chemical or histo-pathological examination (CE/HPE), the cause of death may be reserved and the final opinion regarding cause of death should be furnished on receipt of the Chemical Analysis report and/or Histo-pathological report. However if the cause of death is apparent/clear, then the cause of death should not be kept pending just for the want of CE/HPE report. Opinion must be based on scientific facts. The Medical Officer shall opine about injuries whether ante-mortem or post-mortem, time since death, cause of injuries and type of weapon used, if possible.

9.05 Information for general public

1. All precautions are taken to maintain the body presentable.
2. Viscera box/Linen sheets are provided through the hospital only.
3. The copy of the reports will not be given to any other person. If the relatives want the copy of Post-mortem report, they should obtain the same from investigating officer

4. Mortuary complex is a restricted entry zone. It is expected from public that they should observe the rules and abide by the law. They should not roam or gather unnecessarily in the mortuary complex.
5. Their cooperation will help us in delivering better mortuary services.
6. In case of any grievance HOD/Consultant In-charge can be informed.

9.06 It is the duty of the IO/Police

1. To observe courtesy, display their identity and follow the hospital rules
2. To timely prepare the inquest papers
3. To maintain peace, law and order during post-mortem examination.
4. To identify the body
5. To maintain safety and security of the body of deceased.
6. To urgently act upon the directions given towards submission and preservation of viscera and other exhibits.

9.07 Waive-Off of Post-mortem

1. The autopsy surgeon has no authority/jurisdiction regarding waiving off of the post-mortem in MLC Deaths.
2. The police only, being the principal investigating agency and the rightful custodian of the body, have the authority to waive-off the post-mortem in a MLC death.

9.08 Inquest papers

The following documents are required to be submitted to the autopsy surgeon for conducting the Post-mortem. Written request / requisition from police or competent authority like executive or judicial magistrate along with all documents mentioned in the inquest papers check list must be provided so that the autopsy surgeon can begin post-mortem examination.

The police official making the request should not be below the rank of ASI.

1. Request for conducting Inquest – Must
2. Request for Post-mortem – Must
3. Medico Legal Certificate, if any- desirable
4. Police Form 86 as per need of case- Must
5. Seizure memo (items seized at scene) – Desirable
6. Crime Scene assessment by CSI team / Photographs – Desirable (overall scene can be provided in CD/ Pen drive). Overall scenario information is very helpful otherwise precious time of medical man and investigator is lost in speculations and confabulations.
7. Statements of public/ panch / relatives – desirable
8. Death Summary in hospital death /treatment summary – most desirable if hospitalization was there.
9. Copy of First Information Report filed at the Police Station – desirable.

9.09 Pre Requisites for Conducting the Post-mortem/Autopsy

1. Post-mortem inquest papers are received as per the official prescribed timings..
2. The presence of Investigating officer (IO) of the case or the person who is filling the Post-mortem request form (Not Below the rank of ASI) is compulsory, as the Post-mortem Examination involves many procedure like identification of the body before Post-mortem by the Investigating officer, giving detailed history to the autopsy surgeon, receiving of important samples etc.
3. In cases where inquest is done by the Judicial or Executive Magistrates, it is advisable for him/her to be present and have an interaction with the autopsy surgeon regarding the case. If they are unable to do so because of work exigency, the police officer (Not Below the rank of ASI) concerned with the case may be authorized in writing to conduct the PM proceedings.
4. The Investigating officer will report to the doctor on duty with the complete inquest papers.
5. The doctor on duty will go through the papers for any discrepancy and will then receive the case.
6. In cases of MLC death outside the hospital, the Investigating officer have to go to Central Admission Registry near police Post for getting the case registered in the central database after the necessary formal request.
7. The Investigating officer will then submit the inquest papers in the mortuary office after which the Post-mortem is started.
8. If the Investigating officer needs to constitute a Medical board for the Post-mortem examination, he has to proceed according to the procedure and guidelines described in relevant section.
9. If the Videography/Still Photography of the case is needed, the Investigating officer has to take due permission from the HOD/ Mortuary In-charge. The procedure and the guidelines regarding the Videography and still photography have been detailed in the relevant section.
10. The identity of the dead body must be confirmed by the relatives and the police before the start of the Post-mortem.
11. There should be signature of at least two relatives and police regarding identification of the body.
12. In case of Unknown bodies, responsibility of the identification of the correct body lies with the Investigating officer.
13. The autopsy surgeon should study all available facts of the case prior to Post-mortem examination from inquest report, statement of witnesses, hospital record etc.
14. No unauthorized person is allowed in the mortuary to watch the Post-mortem proceedings.

9.10 Procedure after Autopsy

1. After Autopsy the body is stitched, reconstructed and cleaned, wrapped in hospital clothing and handed over to the Investigating officer by morgue attendant for further handing over to the next of kin of the deceased.
2. The clothing/plastic sheets to cover the body are provided by the police of the concerned case.
3. The Post-mortem report is given in the prescribed Performa.
4. The viscera and other specimens preserved during the autopsy are handed over to Investigating officer through the mortuary technician/Morgue Attendant and the receipt of same is taken in the PM register.
5. The viscera is given with a forwarding letter and the inside jars are duly labelled.
6. The samples are sealed and marked by seal of the department. The specimens are duly signed by the Doctor and the relevant details are written on the samples.
7. Investigating officer should make sure before receiving the samples that they are duly signed, sealed with intact seals, the details are correct and sample of seal is issued.
8. The sample once received by the Investigating officer will be deemed assumed to be fulfilling all the above conditions.
9. If the dead body has to be preserved in cold storage after conduction of post-mortem, the same has to be submitted in a requisition form.

9.11 Procedure of Receiving of PM Reports

1. The PM reports are finalized by the doctor at earliest, preferably within 48 hrs. However, due to scientific deliberation with faculty/Board member as well as time constraints due to court evidences, etc. some more time may be essentially required in finalizing the reports in certain cases.
2. The doctors after completing the post-mortem reports hand them over to record clerk. The police officer who has given request for the post-mortem will receive the report from record clerk.
3. The reports can be received on prescribed official timings.
4. Due to the confidentiality of PM reports, if the Investigating officer is not available then the police person coming for report collection should bring an authority letter duly forwarded by the concerned Investigating officer/SHO.
5. If the report is not ready, then the Investigating officer should contact the Head of Department.

10. GUIDELINES FOR FORWARDING OF POST-MORTEM EXHIBITS

(Investigating officers should deposit exhibits of all cases for examination on urgent basis)

10.01 Burn Death Cases:

The burnt or partially burnt materials from the scene of fire should be taken from different places and packed polythene packets (Air tight glass jars is preferred) and then packed in paper envelope/cloth bag with proper labelling, sealing and signed by the competent authority.

The container, suspected to contain the inflammable liquid, should be taken into possession and its mouth be made Air-tight, using suitable means, and then packed in paper envelope/cloth bag with proper labelling, sealing and signed by the competent authority.

In such cases, clothes and hairs of the victim/deceased be got preserved/ sealed separately in the similar fashion from the doctor attending the victim/deceased.

The seized material/sample should be sent to FSL along with sample of seal at the earliest possible with proper forwarding letter from competent authority with details of the sample(s) being sent.

10.02 Cases involving crimes using Acids/Alkalies:

Common physical evidences encountered in such cases are: (a) Container used to throw the chemical (b) Clothes of the victim (c) Clothes of the Accused (d) Swabs from the scene of crime etc.

The clothes, swabs etc should be placed separately in glass containers and which should be then put in duly labelled cloth bags and sealed.

The acid or alkali recovered (if any) from the Scene of crime must be taken in an all glass container, duly labelled with and must bear a caution in bold letters "CONTAINS ACID/ALKALI" and sealed by the I.O.

10.03 Explosion Case Investigation

Types of Evidence	**Types of Containers used for preservation**
Components not requiring residue testing	Polyethylene Zip-top bag
Materials requiring residue testing (swabs, etc.)	Nylon zip-top or heat sealed bag, non-corrosive plastic or glass container
Liquids samples	Glass container or non-corrosive plastic container
Soil, loose materials	Interlocking-type polythene bag or plastic container
Dried clothing or cloth containing dried blood stains	Paper bag, polythene bag
Fragments/parts of bomb	Tight cotton from all sides in a plastic container with a transparent lid

1. Label each container of evidence with information like FIR no./Crime no., police station, date and time of collection, point of collection, etc., along with

proper numbering of containers. The collected evidence should be marked “dangerous substances” as per requirement.

2. Initiating and detonating devices should be packed separately with cotton packing. Samples should be packed in a padded wooden box in the condition in which they are received. The space between the samples and the box should be stuffed with cotton or strips of paper and the box should be closed with a lid secured by screws or by string. Nails should not be used to secure the lid.
3. Plastic Bags should not be used for packing evidence suspected of containing explosive residues since some explosives may seep through the plastic.
4. Detonators should not on any account be packed with other explosives in the same box.
5. In case of suspected radioactive device and/or biological device, concerned authorities like Atomic Energy Regulatory Board and/or National Centre for Communicable Diseases may be called and consulted.

10.04 Cases pertaining to Toxicology

For collection and forwarding of samples pertaining to various types of poisoning cases following points may be observed.

1. The physical evidences commonly encountered in Toxicological cases are: (a) Vomit of the effected person available at Scene of Crime. (b) vomit stained soil (c) Container of the poison (d) Tumbler, cup or similar utensil suspected to have been used to consume/administer the poison (e) Bottles of water, cold drinks & liquor etc. (f) Clothes of the effected person suspected to have poison/vomit stain (g) Empty injection vial/ampoules, hypodermic syringes and needle etc (h) Gastric lavage and blood sample taken by the doctor [in cases where effected person was taken to hospital for treatment] (i) in case of death due to suspected poisoning visceral organs of the deceased viz Stomach & small intestine with their contents; Parts of liver, spleen, kidney, lungs, brain; Blood sample from heart; urine, hairs, nails etc and (j) sample of preservative used to preserve the visceral organs, all collected by the doctor at the time of post-mortem examination of the deceased (k) burnt bones & ashes for detection of common metallic poison.
2. Lungs, brains and cerebrospinal fluid are ideally required in case of poisoning by inhalation and Narcotic drugs.
3. Urine and blood are required in case of suspected alcohol poisoning. The blood whatsoever collected for Toxicology examination should be sent in single air-tight container.
4. Hair and nails are required in case of suspected chronic poisoning.
5. Adipose tissues are ideal in cases of suspected pesticide poisoning.

6. Skin with underlying tissue from the site of injection and venous blood is ideal exhibits in case of suspected poisoning by injections. (Skin with underlying tissue from nearby body area of deceased as control is also required.)
7. The exhibits recovered from the scene of crime viz vomit, vomit stained soil, poison container, tumbler, cup, injection vial, syringe needle etc should be packed in clean & air-tight glass containers separately at the earliest possible time.
8. A control sample of soil, from a nearby place, must be collected and sent to the laboratory along with the vomit stained soil.
9. The visceral organs taken during the post-mortem examination of the deceased should be taken in clean & air tight containers (preferably glass containers) and the visceral organs should be preserved in: (a) Saturated solution of common salt for detection of common poisons. (b) Rectified spirit in case of suspected corrosive poisoning (c) 1% Sodium hydroxide in case of suspected cyanide poisoning. (d) Blood should be preserved with 1 gm of sodium fluoride per 20 ml of blood. (e) Blood with liquid paraffin or any other vegetable oil in carbon monoxide poisoning.
10. The containers containing the exhibits lifted from scene of crime should be kept in separate cloth bags, properly labelled and sealed by the competent authority.
11. All the containers containing the visceral organs and/or Biological material collected by the doctor during post-mortem examination should be packed properly/tightly in wooden boxes. (Plastic boxes with their covers fixed using adhesives are not recommended)
12. All the exhibits pertaining to one case should be sent to Forensic Science Laboratory at one time.
13. The forwarding letter signed with stamp by the competent authority should be addressed to the Director, Forensic Science Laboratory. It should include: (a) Copy of the FIR and/or DD entry. (b) Details of all the exhibits sent indicating the impression of the seal. (c) Nature of examination required on each exhibit. (d) Sample seal. (e) Copy of Medico-legal examination, if any. (f) Copy of Post Mortem Report in cases of death (g) Copy of statements of relatives and/or witnesses. (h) Copy of all medical treatments given before death, if hospitalized. (i) Road certificate.

10.05 Crime exhibits which can be sent to ballistics division of FSL

1. Regular/Improvised firearms or parts of firearms, Air guns/Toy guns/Zip guns/Gas operated guns.
2. Manufacturing tools used for firearms and ammunition.
3. Live and misfired cartridges, fired cartridge cases and parts of cartridge (cap, base, wad, powder, projectile, shots/pellets etc.).
4. Tools used for loading and reloading of ammunition.

5. Fired bullets, pulled out bullets, shot, pellets, jacket/part of jacket of a bullet, lead/ steal core/tip of the bullet etc.
6. Apparel of the victim or accused.
7. Gun Shot Residue swabbing from body parts of suspect shooter or victim lifted.
8. Smokeless powder, black powder and or its containers.
9. Inanimate object(s) in and around shooting place, which might have been hit or pierced by bullets, shots pellets/powder charge.
10. Un-burnt/partially burnt powder charge.

Precautions to be observed

1. Garments with suspected gunshot holes are to be handled carefully to prevent the loss of gunshot residues and its distribution around the hole. For this, handling should be minimum and the cloths of accused /victims bearing suspected bullet holes should be kept separately with preserving gunshot/bullet in cardboard box. New & clean polythene/paper may be kept under and above the suspected hole.
2. All the exhibits for ballistics examination like firearms, live cartridges, fired bullets and empty cartridge cases and target materials like clothing, window pane etc., should be sent in separate sealed covers with labelling on the cover instead on the exhibits.
3. Swabs in 5% HNO3 for shooter identification are to be collected from hands of suspects (preferably upper left hand, palm of left hand, upper right hand and palm of right hand) and one control sample should be taken for GSR particle analysis on Atomic Absorption Spectrophotometer.

10.06 Crime exhibits which can be sent to biology/DNA division

General precautions to be observed:

1. Wear hand gloves with all the precautions being taken to avoid any contamination of the specimens.
2. Label the sample with information including type of specimen, (e.g. Blood/urine/vaginal swab/anal swab etc.), case number, name, age and sex of the patient, date of collection, site of collection, name of concerned police official and name with designation of the doctor.
3. Blood samples collected by the doctors during MLC or Post-mortem should be preferred on gauze cloth piece thoroughly dried in shade not in direct sunlight and packed in paper or cloth and should never be packed in damp/wet conditions and never be packed in polythene/plastic Container/ Air-tight Container. Use syringe to collect into EDTA tubes or on gauze or cotton. Transfer onto cotton cloth & Air dry.
4. Collect clotted blood in test tube & add equal volume of saline. Transfer onto cotton cloth & air dry.

5. Wet Clothing: Air dry at room temperature & package in a paper bag. Also avoid direct heat/ ironing to dry the stains as heat destroys the samples. Do not accelerate drying and take care to avoid contamination.
6. Semen on Victim: Collect sample with saline swab and should be air dried and packed in paper envelopes. Smear preparation on slide is more suitable than swab for sperm examination.
7. Hair: Samples of hair complete with roots should be taken. Collect in a paper packet.
8. Aborted Foetus: Tissue samples and Foetus should be stored in normal saline. Formalin should never be used as preservative. Glass container should not be used. Blood sample of the mother should be sent along with Foetus.
9. Bones/ teeth: Air Dried at room temperature. Seal the items in suitable cloth or paper.

11. UNKNOWN/ UNIDENTIFIED DEAD BODIES

Death is not the end to the sufferings of human being, especially when the death is sudden and where the family members or friends or relatives have no idea about the whereabouts of the said individual. Thus labelled as UNIDENTIFIED BODY where there is no claimant.

11.01 Details of physical appearance/evidence that should be collected from the body:
Age, colour , Gender, Height, Birth mark , Any other injury mark , Tattoo , Racial features ,Any cut/burn mark , Broken teeth , Hair dyed/natural , Other Items , Clothing , Footwear , Watch , Glasses , Any jewellery item , Hearing aids , Key/purse/wallet/ticket , Mobile , Bank card , Driving license , Passport , Identity card , Finger print

11.02 Check list (to establish identity) for doctor at the time of post-mortem:

1. Major injury/scars on the body
2. Time since death
3. Age from scientific methods (if sample required)
4. Distinctive feature of nose eyes ear teeth chin
5. Circumcision
6. Dental Structure/impressions/procedure
7. In case of women details about hysterectomy tummy
8. Pregnancy detail
9. Dental finding like (crown/implant/denture)
10. DNA specimen (bone/teeth/hair/blood/tissue)
11. In case of poison or if cause of death is not certain: Viscera preservation

11.03 The various biological exhibits to be used are:

1. Blood in liquid form but better is to make stain of this and dried properly so that it can be stored at room temperature for indefinite period of time without using any preservative.

2. Long bones preferably femur or humorous or even sternum. The tissues may be removed from these and wrapped in blotting sheets before putting them in poly bags.
3. Teeth the best exhibits which again does not require any preservative. Should be dried and packed in blotting sheet and then stored in plastic container for years together at room temperature.
4. Hair roots after proper drying, can be packed in blotting sheet and then in plastic container. It can be stored at room temperature for years together.

11.04 Preservation of tissues for histopathology (autopsy cases)

1. Samples for histopathology are only sent when the gross findings are not sufficient/justifying the cause of death or the autopsy surgeon is of the opinion that histopathological findings are essentially required to confirm the diagnosis.
2. Desired and relevant tissue/organ section from the dead body is preserved in 10% formalin or in case of brain 30% formalin.
3. After preserving the tissues/organ during post-mortem duly label the jars. The histopathology request form is filled with details like history of case and proper labelling. The request form should contain the name of the faculty on duty of the day of the case. The form will be forwarded by faculty in-charge or HOD.
4. The formalin jar containing tissue shall be sent to pathology lab for further processing and reporting.
5. A register shall be maintained in the mortuary office for maintaining such entries.
6. While submitting a sample it should be clearly written on the form that whether sample is for Medico-legal use/Thesis/Academic purpose/ Research Project.
7. The histopathology report shall be forwarded to the department of FMT.

12. PROCEDURE FOR SAMPLE RESEALING

1. The samples that are preserved in any case, whether post-mortem or MLC are sealed and marked by Lac seal of the department. The specimens are duly signed by the Doctor and the relevant details are written on the samples.
2. The IO should make sure before receiving the samples that they are duly signed, sealed with intact seals, the details are correct and sample of seal is issued.
3. A receiving in written is given by the IO for the samples either in the Mortuary register or in the MLC/autopsy report.
4. The sample once received by the IO will be deemed assumed to be fulfilling all the above conditions.
5. If the doctor of the respective case has left the hospital, the request is forwarded to the head of the department, who then deputes a competent doctor for further perusal.

6. Resealing is the process done for the samples in the following conditions:
   a) Seals are broken.
   b) Leaking sample.
   c) Tearing of Label.
   d) The Label details are blurred due to leakage of fluids.
   e) Damaged sample of seal.
   f) The encasing is damaged.
   g) Objection if any from CFSL/FSL.
7. For resealing/Duplicate sample seal purpose, the following procedure will be followed:
   a) A written application by the IO forwarded by the SHO of respective police station mentioning the reason why resealing is required.
   b) Objection if any, in written by CFSL/FSL.
   c) Relevant post-mortem report of the case in original.
   d) Inquest papers if required.
   e) The doctor who performed the case will carefully check the documents.
   f) The sample including the outer casing as in viscera samples is carefully examined and any variation if seen is duly noted.
   g) The outer casing including the seals and the condition is noted.
   h) In viscera leakage, the case is opened and then individual sample cases are inspected for any damage or leakage.
   i) If the labelling papers of samples are damaged a new form is duly filled in the present date mentioning the resealing date.
   j) The samples are then resealed.
   k) A note is made on the application regarding the findings observed during the process. The noted details are duly signed and a seal of department is put up.
   l) All the resealing work will be done in the current date.
   m) The covering letter and other relevant documents are then attached to the respective case report in the departmental record
   n) The IO is given the Copy of the application.
   o) The sample is handed over to the IO after proper receiving and is instructed to take proper care of the samples.

13. POST- MORTEM VIDEOGRAPHY

13.01 Guidelines for videography and photography of post-mortem examination

1. The arrangement for videography shall be made by the I.O.
2. I.O. shall take the permission (two copies; one to be attached to the Inquest papers & another to be kept in mortuary record) in writing from the autopsy surgeon.
3. The responsibility of maintaining privacy, confidentiality and chain of custody shall be of I.O. and the legal heirs will be communicated the same.

13.02 Aim of video-filming and photography is to

1. Record the findings of detailed post-mortem examination which may suggest custodial torture.
2. Supplement the finding of post-mortem examination (recorded in the post-mortem report) by video graphic evidence.
3. Facilitate an independent review of the examination at a later stage if required.

13.03 NHRC Guidelines are:

1. The photographs should be taken after incorporating post-mortem number, date of examination and a scale for dimensions wherever relevant.
2. All post-mortem examination done in cases of custodial deaths or in encounter deaths should be video-filmed and cassettes be sent to the National Human Rights Commission along with the post-mortem reports.
3. Clothing over the body of deceased should be removed, examined, preserved as well as sealed by the doctor conducting the autopsy.
4. In cases of alleged firearm related deaths, body should be subjected to radiological examination before autopsy.
5. During videography of the post-mortem examination, the voice of the doctor should be recorded and must narrate his prima-facie observation while conducting the examination.
6. The video-filming and photography of the post-mortem examination will be done by a person trained in forensic photography and videography with a good quality camera with 10X optical zoom and minimum 10 MP will be used.
7. The photographs should be taken after incorporating post-mortem number, date of examination and a scale for dimension in the frame of the photographs itself and the camera must be held at right angle to the object being photographed
8. It also said that a total of 20-25 coloured photographs covering the whole body should be taken and some photographs should be taken without removing the clothes.
9. The photographs should include profile photo, face (front, right lateral, left lateral views), back of head, front of body (up to torso-chest and abdomen) and back, upper and lower extremity-front and back, focusing on each injury/lesion-zoomed in after properly numbering the injuries, internal examination findings (two photos of soles and palms each, after making incision.

14. GUIDELINES FOR CONSTITUTION OF MEDICAL BOARD IN MEDICOLEGAL CASES

Boards (Penal of doctors) are constituted on the request of police/magistrate/court in any of the following scenarios:

	Request submitted to	In which conditions	Examples **(includes but not restricted to)**
1.	Department of Health & Family Welfare, Govt Of NCT Delhi (copy to Home Department)	In matters which deems fit	Custodial Deaths
2.	Head of Institution/hospital	In matters related to the institution/hospital	Where ever it deems fit, in cases where different department specialists involvement is required (treatment related matters)
3.	Head of the Department (HOD, FMT) of Forensic Medicine & Toxicology	Where the request is specifically made for internal board (Doctors of Forensic Medicine) through •Department of Health & Family Welfare, Govt Of NCT Delhi (Through Home Department) or through MOHFW, Govt of India	Alleged Medical negligence cases or in any other case
4.	HOD, FMT	In matters where the HOD, FMT is of the opinion that the case needs to be investigated through Internal Board	
5.	Consultant on Duty	In matters where the Consultant on duty is of the opinion that the case needs to be investigated through multiple doctors as per the case specifics.	

Note: Other types of boards may also be constituted by the competent authority as per the case specifics.

15. DEALING WITH AUTOPSY HAZARDS: PREVENTIVE GUIDELINES AT MORTUARY

15.01 Physical Injuries: Preventive measures

1. Proper lifting techniques: Rolling the body instead of lifting.
2. Wearing proper back supports.
3. Hardwearing, impervious, non-slippery floor is essential:
   a. Mopping the floor to keep surfaces dry.
   b. Wearing protective shoes.
   c. Proper ventilation and adequate lighting to keep floor dry and room well-lit.

15.02 Sharp Injury

Safe handling of needles and sharp instruments:

1. Should not be left lying around the work area.
2. Habit of putting scalpels on a firm, stable surface (table) by one prosector and then picked up by the second.
3. Do not hold tissues with the fingers of the non-cutting hand.
4. Surgical towels should be placed over the cut edges of the ribs to protect against a scrape injury.
5. Non-pointed (blunt-tipped) scissors should be used wherever possible.
6. Disposal of entire syringe and breaking the needle with needle shredder.
7. Wear cut-resistant gloves (finely woven stainless steel fabric) on the non-dominant hand.
8. Use a thick (3-inch) sponge to stabilize the organ with the non-cutting hand for organ slices.
9. Pre autopsy whole body radiography to locate bullet fragments and irregular bone fragments

15.03 Electrical Injury

1. Properly installed ground fault interrupters (GFI electrical receptors).
2. Implanted cardioverter-defibrillator should be deactivated before manipulation.
3. High-quality latex surgical gloves can protect from inadvertent shock.

15.04 Chemical Exposure

1. Adequate ventilation:
2. Air-exhausted and air-conditioned mortuary
3. Negative-pressure isolation room
4. Wear chemical protective gloves, visors and glasses for protection of face and eye.
5. Mandatory training for employees exposed to formaldehyde above 0.1 ppm.

15.05 Radiation Exposure

1. Detailed information of the radioisotope (the amount given and the time of administration) should be attached to the medical record and death certificate.
2. Pathologist and the radiation safety officer to be alerted by the attending physician if the body contains more than 5mCi.
3. Wearing radiation-monitoring badges and Standard procedures for X-ray safety techniques should be followed.
4. Wearing protective rubber gloves can reduce [beta]-radiation very much, but not the [delta]-radiation from the isotopes.
5. A team of pathologists may be required to limit individual exposures to prosector by performing limited portion of the autopsy.
6. Female pathologists and assistants of childbearing age should consult radiotherapist and/or oncologist before commencing the autopsy on a body having implanted radiation materials.
7. Autopsy room should be monitored for radioactive contamination and de-contaminated if necessary

15.06 Preventive Measures from Contaminants of Infectious Diseases in Mortuary

1. Any high risk infectious diseases like AIDS, etc should be informed to the autopsy surgeon and special precaution should be followed depending upon the disease.
2. Any dead bodies infected /suspected to be infected with infection beyond bio safety level 2 pathogen autopsies should be conducted at the centres where such facility exists.

    - In suspected/documented cases of indigenous or exotic agents with a potential for respiratory transmission, and which may cause serious and potentially lethal infection e.g. CCHF, Influenza viruses etc.
    - That poses a high individual risk of life threatening disease, which may be transmitted via the aerosol route and for which there is no available vaccine or therapy. (e.g. Ebola & Marburg viruses etc).

15.07 Blood borne Pathogens

1. Vaccination against hepatitis B.
2. Prevention of access of immunosuppressed or immune deficient individuals and individuals who have uncovered wounds, weeping skin lesions.
3. 10% formalin should be introduced into the lungs after appropriate microbiological specimens have been taken and before the lungs are examined.
4. Standard universal precautions do not apply to faeces, nasal secretions, sputum, sweat, tears, urine and vomitus unless they contain visible blood.

15.08 Agents spread by aerosols e.g. Mycobacterium tuberculosis, COVID-19 Virus etc.

1. Adequate ventilation in the post-mortem room.
2. Unauthorized entry & free movement within mortuary should be restricted.
3. Bone surfaces should be moistened before sawing in order to cut down the dispersion of bone dust.
4. Plastic cover or a vacuum bone dust collector attached to the vibrating saw.
5. Immunization with BCG.
6. In case of tuberculosis infection, surgical masks have proven insufficient, in such cases, wearing of N-95 respirators should be made mandatory (High-Efficiency Particulate Air (HEPA) masks.

16. GUIDELINES FOR CADAVERIC TRAINING PROGRAM

1. The Forensic Medicine department receives several requests from different departments and institutions for providing cadavers for conduction of various hands-on training programs.
2. The providing of cadavers for teaching/training/hand-on worshop is merely an extension of mortuary services by the department of Forensic Medicine.
3. It consists of certain legal requirements for which the whole responsibilities lie with the department conducting the training.
4. The following procedure need to be followed

    - Any department/faculty desirous of holding any training program will make a written request at least one month in advance indicating proposed date depending upon requirement of cadaver or particular part of the body. The request should be forwarded by the concerned HOD.
    - The department will act as joint organize of the proposed training program. This need to be included in brochures, pamphlets, banners etc.
    - The department will take care of proper preservation so as to avoid any decomposition after preservation procedure at mortuary itself.
    - The bodies/part of will be shifted on the same day of training.
    - After completion of the training the bodies/part of will be shifted back to mortuary.
    - The proper disposal and completion of several other legal formalities by coordinating with various agencies will be taken care by the department.
    - A cadaver register having various details will be maintained at the mortuary.
    - All the expenditure incurred has to be borne by the Department desirous of holding such training.

17. ORGAN DONATION

1. The mortuary provides support and infrastructure for cadaver organ donation services.
2. One technician cum counsellor should be present to pursue the relatives for the organ donation.
3. The mortuary in-charge, resident doctors, other faculties and mortuary staff are available for any queries and counselling of the relatives, if needed.
4. The organs are harvested, taking care not to interfere with the medicolegal case in issue.
5. The kin of the deceased are the rightful custodian of the body and for any organ/tissue donation, their consent is mandatory.
6. The staffs of the mortuary involved has been awarded certificate of appreciation for their activity.

18. EYE DONATION

Technician available in mortuary for eye retrieval can be immediately contacted after counselling and completing all the formalities. Donating eyes (or indeed any other organ) does not affect the appearance of the deceased. After harvesting the eyes, the eye doctor places a plastic prosthetic eye in the socket, before gently closing the eyelids. Eyes can only be harvested for up to six to eight hours after death (sometimes up to 24 hours).

Critical precautions to be taken to preserve the eyes:

- Close the eyes of the deceased gently, and place a piece of moist cotton over them.
- Raise the head with great care by about six inches with a pillow, to lessen the incidence of bleeding during removal of the eyes.
- Ensure that all fans, where the dead body is laid to rest, are switched off. It reduces desiccation and drying of the eyes and corneas.
- If acceptable to the family, try and put a polythene cover with few ice cubes on the forehead, especially in the summer months.
- If possible instill antibiotic eye drops periodically to prevent infection and drying of the cornea.
- Inform eye bank immediately after getting consent from the next of kin of the deceased.

19. EMBALMING

The embalming service in medicolegal cases is required for transportation of dead body to distant places in India and abroad or to keep the body preserved for longer duration. It is also done to preserve bodies for future teaching purpose. In rare occasions the embalming is done on the dead body of important personality for public view.

Verification of following documents is required

1. Requisition form for embalming with consent.
2. Post-mortem conduction certificate/Post-mortem report.
3. No objection certificate/ Body handover receipt for transportation of body by Police.
4. Identification of dead body (Photo identity).
5. Communicable disease (documents).
6. Embassy-High commission requisition form/Information to embassy, if foreign national.
7. Payment slip (if applicable).

20. UPHOLDING THE DIGNITY AND PROTECTING THE RIGHTS OF THE DEAD: NHRC ADVISORY

There is no specific law in India for protecting the rights of the dead. However, the courts have time and again reiterated to uphold the dignity and protect the rights of the dead. The Apex Court of India in the landmark case of Parmanand Katara v. Union of India in 1989 recognized that the right to life, fair treatment and dignity, extend not only to a living person but also to his dead body.

These rights have been derived from Article 21 of the Constitution of India. Further, recognition of posthumous legal rights gives the dead significant moral standing within our legal system. The law also strives to honour a decedent's wishes and to protect his interests. In both natural and unnatural deaths (accident, suicide, homicide, etc.), it is the duty of the State to protect the rights of the deceased and prevent crime over the dead body.

20.01 Basic Principles for Upholding the Dignity and Protecting the Rights of the Dead

1. No discrimination in treatment of the body in any form -To ensure that the dead body is properly preserved and handled irrespective of religion, region, caste, gender, etc.
2. No physical exploitation- Any form of physical exploitation of the body of the dead violates the basic right of the deceased person.
3. Decent and timely burial/ cremation-The deceased person has the right to a decent and timely burial/ cremation.
4. To receive justice, in case of death due to crime-The dead have the right to receive justice in cases where death occurs due to crime.
5. To carry out a legal will-The will, if any, left by the dead must be respected and honoured.
6. No defamation after death-The deceased person should not be defamed by any kind of statement or visible representation, made or published intending to harm his/her reputation.
7. No breach of privacy-The deceased person has the right to privacy, i.e., the right to control the dissemination of information about one's privacy.

20.02 Advisory related to mortuary services

1. Mortuary hygiene: Regular mopping and cleaning of mortuary should be undertaken so that dead body remains are preserved in a proper, clean environment, thereby maintaining its dignity.
2. Secured information: The facility should maintain confidentiality of clinical records and must have a mechanism for guarding information related to the deceased, especially for cases that are stigmatized and socially criticised, such as that of HIV and suicidal cases.
3. Maintaining privacy of premises: Post-mortem room should not come under the direct line of sight of the general public/visitors. To ensure the same, provision of curtain, screen or buffer area may be made in a post mortem room.
4. Removing physical/ infrastructural barriers: The facility must have infrastructure for delivery of assured services, to meet the prescribed norms. All basic requirements must be available and maintained as per the Indian Public Health Standard Guidelines for District Hospitals for management of the dead bodies.
5. Sensitization of the staff: The mortuary administration may sensitize the staff from time to time to train them in handling of the dead body and deal with the attendants of the deceased with sensitivity.

21. Conduct of Post-mortem in Hospitals after sunset- Ministry of Health and Family Welfare, Govt. of India: Office Memorandum: F. No. H-11021/07/2021-H-1 Dated 15.11.2021

Highlights

1. Post-mortem after sunset can be conducted at hospitals which have the infrastructure for conducting such post-mortem on a regular basis. The fitness and adequacy of infrastructure etc. shall be assessed by the hospital In-Charge to ensure that there is no dilution of evidentiary value.
2. However, cases under categories such as homicide, suicide, rape, decomposed bodies, suspected foul play should not be subjected for post-mortem during night time unless there is a law and order situation.
3. Post-mortem for organ donation should be taken up on priority and be conducted even after sunset, if adequate infrastructure is available.
4. It is also to be ensured that video recording of post-mortem shall be done for night time post-mortem to rule out any suspicion and preserve for future reference for legal purposes.

References

1. Govt. of India, Hospital Manual 2002
2. Medicolegal Manual, Govt. of Punjab.
3. Haryana Medicolegal Manual
4. Autopsy Practice, Potential Sources of Occupational
5. Hazards: A Review for Safety and Prevention, Sunil S. Kadam, Swapnil Akhade, Keith Desouza , J Indian Acad Forensic Med. April-June 2015, Vol. 37, No. 2.
6. National Human Rights Commission, India Guidelines
7. Kerala Medicolegal Code
8. MANUAL 2018, Department of Forensic Medicine and Toxicology, JIPMER.
9. Mortuary Manual 2018, AIIMS, New Delhi
10. Department Of Health Research (DHR) Guidelines, Forensic Medical Care for Victims Of Sexual Assault.
11. Guidelines for forwarding crime exhibits, FORENSIC SCIENCE LABORATORY, (Government of NCT of Delhi), 2016.
12. https://nhrc.nic.in/sites/default/files/NHRC%20Advisory%20for%20Upholding%20Dignity%20%26%20Protecting%20the%20Rights%20of%20Dead.pdf
13. https://mohua.gov.in/upload/whatsnew/619f7df242767post-mortem_0001.pdf

Web links for other relevant guidelines:

1. https://dshm.delhi.gov.in/mis/%28S%28mr4go54ormtlapcdwm1vhxux%29%29/orders/Guidelines_for_cadaver.pdf (Govt. of NCT of Delhi guidelines for cadaver donation)
2. https://main.mohfw.gov.in/sites/default/files/953522324.pdf (Medico-legal care for survivors/victims of sexual violence)
3. https://ncdc.gov.in/showfile.php?lid=500 , COVID-19:GUIDELINES ON DEAD BODY MANAGEMENT, Government of India, Ministry of Health & Family Welfare, Directorate General of Health Services (EMR Division), DATED 15.03.2020

APPENDIX- VI

IT SERVICES & E GOVERNANCE

PURPOSE

To provide & document the method of System Administration to ensure:

System related details and its requirements are adequately defined and executed

Required data / records are maintained.

SCOPE

Provision of all Information Technology needs and Network Related infrastructure and services

Collection, Storage, Protection and Dissemination of data.

OVERALL RESPONSIBILITY:

Chairman e-governance or IT Head is responsible for effective implementation of this process.

Specific Job Responsibilities:

S.No	Scope of Software engineer
1	Hospital Information Management System (HMIS) eg ehospital of NIC
2	File Tracking System (FTS) eg e-Office of NIC
3	Online Registration System
4	Payment Gateway
5	Telemedicine
6	Lab Information Services
7	Hospital Website
8	NIC Email ID
9	“Mera Aspatal” patient feedback data management
10	HMIS module/application Testing,
11	e-Office Server & DB Management
12	Training of staff on e-hospital and e-Office
13	Coordination with NIC to maintain HMIS and FTS
S.No	**Scope of Work Network Engineer**
1	Biometric Server Management, Installation & Configuration
2	Security Firewall Management & Configuration
3	Antivirus Server Management & Client Installation
4	Router & Switch Management
5	End User IT infrastructure Management
6	Troubleshooting of network infrastructure at user end
7	IP Configuration & Management
8	Coordination with user and CPWD to provide and maintain network

Following Policy, Documentation and Records must be maintained

- Anti Virus Policy
- Infrastructure List
- Back Up Policy (On Site)
- Network Configuration & its connectivity
- Network Lay Out
- Software Inventory
- Hardware Inventory
- E-mail& Internet Policy, & its control
- Server Checklist
- Maintenance of IT hardware
- Preventive Maintenance Schedule
- Back Up Document (On Site)
- Server Checklist.

A centralized IT helpdesk or support desk manned by a service engineer should be in place TO receives complaints from various areas, preferably through online ticketing system with details like

- Date
- User name
- Call in time
- Complaint description
- Status
- Action taken
- Feedback

DATA MANAGEMENT POLICY

The purpose of an overarching data management policy is to provide clear direction, support and commitment to data management that can be applied across the Hospital.

It covers the overlapping areas of data protection compliance, information/ data security, data quality, confidentiality, records management, IT system security and 'freedom of information/ data' compliance.

The intention is to promote and build a level of consistency in how information/ data are handled across the hospital.

SECURITY PROTOCOL

The hospital must have a laid down policy to protect the network and servers of organization. Latest version of antivirus software and Certificates must be installed on the server. The antivirus must block application, internet and Universal Serial Bus (USB) and protect the network and systems. Renewal of license should be regularly done

All IT equipment should have original licensed software and operating system and the same should be regularly updated.

An Unauthorized Access Policy should guide the organization from unauthorized access and protection from outside the world

An Anti Spyware and Firewall should be in place for an integrated intrusion prevention and malware protection of the organization server through application intelligence and Control with real-time visualization through the Firewall. There should LAN to LAN, LAN to WAN, LAN to SSL VPN, WAN to LAN, WAN to SSL VPN, SSL VPN to LAN and SSL VPN to WAN policy to block the unauthorized and unwanted traffic to the network. There should provision for monitoring the IP traffic and block downloading and unwanted sites accessing.

Information Security Officer

The organization should preferably have an Information Security Officer with following capabilities: (a) Management capabilities; (b) Strategic planning abilities (c) Knowledge of relevant legislative or regulatory requirements such as IT Act and associated Rules and (d) Competence/exposure in the field of information security.

Responsibilities of Information Security Officer:

1. Developing, maintaining, reviewing and improving strategic organization wide information security and risk management plan.
2. Disseminate information security policies, procedures and guideline to all concerned.
3. Enforce implementation of approved information security policies, procedures, guideline and ISMS etc.
4. Integrate information security procedures with organization's business processes.
5. Ensure that information security considerations are integrated with IT system planning, development / acquisition life cycle.
6. Periodically evaluate and review effectiveness of information security policies, procedures, standards, guideline and processes, ISMS etc.
7. Issue alerts and advisories with respect to new vulnerabilities / threats to all concerned.
8. Perform risk assessment steps like:
    (a) Identify and make inventory of assets within the scope of information security plan;
    (b) Identify and document threats to those assets;
    (c) Perform vulnerability analysis;
    (d) Perform impact analysis;
    (e) Evaluate level of risk;
    (f) Determine acceptability or treatment of risk based on risk acceptance criteria.

9. Perform risk treatment like:
    (a) Identify appropriate controls for treatment of risk ;
    (b) take approval from senior management for implementation of identified security controls;
    (c) Oversee implementation of information security controls;
    (d) Evaluate residual risk;
    (e) Take approval from senior management for residual risk.
10. Implement automated and continuous monitoring of security incidents.
11. Maintain a record of information security incidents and breaches.
12. Take remedial action to reduce / diminish the impact of information security incidents and breaches.
13. Share management approval report on information security and breaches

SYSTEM FAILURE POLICY

The organization must have laid down policies for all types of system failures i.e. Hardware Failure, Software Failure and Network Failure. For Hardware and Software failures the organization must have additional replication server to shift the applications on real time basis. For Network failure provision of cascaded switching between the networks should be available.

BACKUP POLICY

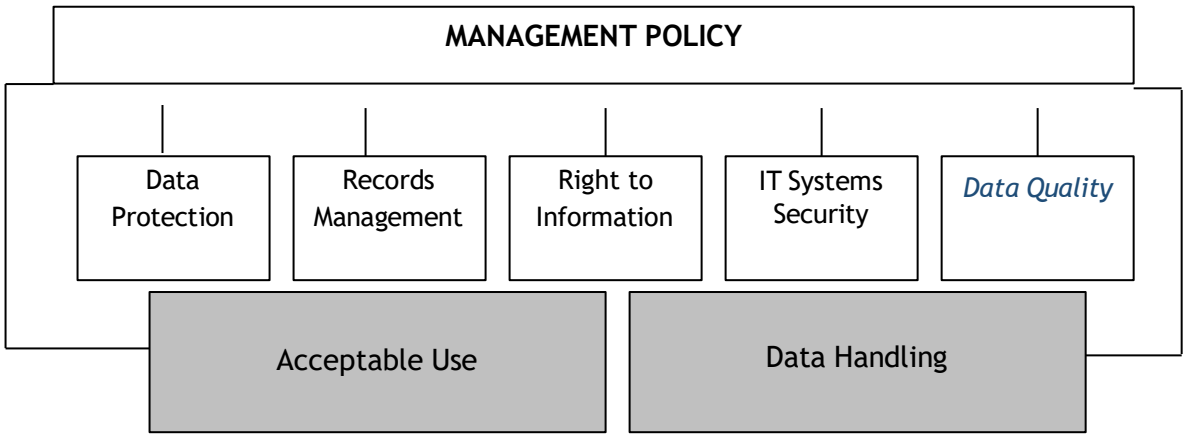
The organization should have policy for backup of all databases with a laid down schedule of automatic backup in additional storage to take the data backup.

POLICY OF DATA MANAGEMENT

1. The Hospital must recognize the need for an appropriate balance between openness and confidentiality in the management and use of information/ data.
2. The Hospital fully must follow the principles of data management laid down by the Digital Personal Data Protection **Act 2023 and** recognizes its public accountability. The organisation must have processes and security arrangements to safeguard personal information/ data about patients, staff and Hospital sensitive information/ data.
3. The Hospital must have policies as per the provision of Digital Personal Data Protection **Act 2023** to share patient information/ data with other health organizations and other agencies in a controlled manner consistent with the interests of the patient and, in some circumstances, the public interest.

Scope of Data Management Policy

This policy covers all forms of information/ data held by the Hospital, including (but not limited to) patient/client/service user information/ data, staff related information/ data, organisational/business/operational management, research/audit and reporting information/ data.



LEGAL AND REGULATION FRAMEWORK:

This policy sets out to comply with the following acts of legislation.

1. Human Rights Act 1998
2. Right to Information Act
3. Digital Personal Data Protection **Act 2023**

Appendix- VII

GUIDELINES ON INTERDEPARTMENTAL TRANSFERS (MOHFW 2024)

BACKGROUND & INTRODUCTION

1. Good Patient care services need to be comprehensive. A patient can have multiple co morbid medical conditions and a single medical condition can have multi system manifestations. For comprehensive medical care, inputs from different departments are essential, which requires a Robust referral policy.
2. Inter-departmental referrals typically occur when a patient requires services or expertise beyond scope of an admitting department. This may include specialized consultations, diagnostic procedures, therapeutic interventions, or ongoing management by a different specialty. Referrals can originate from various departments within the hospital, including primary care, emergency medicine, specialty clinics, and surgical services.
3. A robust and efficient referral mechanism should be an essential part of training of residents as well. After residency as they enter a healthcare setup to practice, this training will be very useful for them.
4. Inter-departmental referrals also serve as opportunities for interdisciplinary collaboration and sharing of knowledge among healthcare providers.
5. By leveraging expertise and resources available across different specialties, hospitals can optimize patient care outcomes, enhance diagnostic accuracy, and improve treatment effectiveness. Moreover, referrals enable continuity of care by promoting coordinated management of complex medical conditions and facilitating follow-up care after discharge or treatment completion.
6. However, problems can arise in any inter-departmental referral process, including:
    - Delays in processing/attending of referrals,
    - Breakdown in communication, and
    - Variations in referral practices across departments.

7. To address these challenges, hospitals must implement standardized referral protocols, streamline referral workflows, and provide education and training to healthcare providers and staff involved in the referral process. Additionally, ongoing quality assurance and monitoring mechanisms are essential to evaluate the effectiveness of the referral process, thereby identifying areas for improvement, and ensuring compliance with regulatory requirements and best practices.
8. Currently, with no clear guidelines in place, it has been observed that there exist heterogeneous referral mechanisms. Every department and individual have their own way of sending and attending referrals. The documentation is also variable and inconsistent. There are delays in attending to referrals which can affect patient care adversely. Mostly junior residents (first- or second-year post-graduates) see referrals where higher order inputs may actually be required. There are conflicts between departments regarding referrals which are mostly rooted in lack of communication.

GENERAL PRINCIPLES

1. Referral for Consultant's opinion should only be written by Consultants.
2. PG residents should not close referrals on their own without discussing with Senior Resident/Consultant.
3. Consultant on call should review the referral record of referrals attended to by his team the previous day. (This is expected to improve patient-care and enhance learning of residents)
4. After seeing the referral, a clear need for review should be indicated by the attending team. In case of such a need one may not wait for a formal call and see the referral on one's own as well, in interest of patients care.
5. Departments can prepare a roster with names of officers in various units with contact numbers & availability of units on different days, time; place where referral needs to be sent. This should be available on website as well as well circulated within the Institution. Surgical units may also indicate availability of alternate unit(s) on OT days. These lists are a living document and should be updated periodically.

6. The case record file of patients should have a sheet listing the various referrals taken in a chronological manner for ease of review.
7. The process of referral should be clearly explained to the patient and attendants/family by the referring department.
8. After seeing a referral, the patient and family should also be explained about the advice.
9. Referral should help patient management without burdening the referring department with a huge list of investigations. Any investigation by the referral team should be completely justified from the diagnosis offered.
10. When a team goes to see a referral, they should communicate (discuss with the doctor available/call the concerned Consultant/SR) of the referring team and vice versa. Such clear communication will improve patient care, enhance learning, and improve working relationships.

DO'S AND DON'TS FOR INTER-DEPARTMENTAL REFERRALS AT HOSPITALS

Do's

1. Initiate referrals promptly as and when patients require specialized care, diagnostic evaluations, or consultations beyond scope of admitting department.
2. Document referrals accurately and comprehensively, including relevant clinical information, expected outcome from referral, patient preferences, and any other specific instructions.
3. Communicate clearly and effectively with receiving departments, providing necessary clinical information and patient context to facilitate appropriate evaluation and management.
4. Acknowledge receipt of referrals promptly and provide timely updates to referring providers on status of referrals and patient appointments.
5. Collaborate with receiving departments and specialists to ensure continuity of care, shared decision making and optimal treatment outcomes for patients.
6. Follow up on referrals and coordinate care transitions, ensuring that patients receive necessary follow-up appointments, treatments, and interventions.
7. Respect patient confidentiality and privacy when sharing patient information with other departments or healthcare providers.

8. Seek feedback from referring providers and receiving departments to identify areas for improvement and enhance the efficiency and effectiveness of the referral process.
9. Adhere to hospital policies, regulatory requirements, and best practices governing inter-departmental referrals to ensure compliance and patient safety.
10. Prioritize patient-centered care, considering patients' preferences, values, and treatment goals in referral process and treatment planning.

Don'ts

1. Don’t delay referrals unnecessarily, as this may compromise patient care and lead to adverse outcomes.
2. Don’t omit essential clinical information or documentation when initiating referrals, as this may impede the receiving department's ability to provide appropriate care.
3. Don’t assume that all referrals are routine or non-urgent; carefully assess each patient's clinical presentation and urgency to determine appropriate level of prioritization.
4. Don't overlook communication with patients regarding the referral process, including informing them of the reason for referral, expected next steps, and any necessary follow-up appointments.
5. Don't rely solely on verbal communication for referrals; ensure that all referrals are documented in the patient's medical record or electronic health record (EHR) for accuracy and accountability.
6. Don't hesitate to escalate urgent referrals or seek assistance from senior colleagues or hospital administrators if there are delays or barriers to timely referral processing.
7. Don't breach patient confidentiality with unauthorized individuals or departments without proper consent or authorization.
8. Don't ignore feedback or concerns from referring providers or patients regarding the referral process; address any issues promptly and implement corrective actions as needed.
9. Don't overlook importance of ongoing education and training for healthcare providers and staff involved in the referral process to ensure competency and adherence to best practices.

10. Don't lose sight of patient's overall well-being and experience throughout the referral process; prioritize patient-centered care and advocacy at every stage of care delivery.

SPECIAL SITUATIONS

Special situations may arise during follow-up of referrals that require particular attention and handling. Here are some special situations and strategies to address them:

1. Referral Denial or Rejection

- If a referral is denied or rejected by the specialist or receiving department, communicate the reasons for such denial to the referring department with alternative options for care.
- Providing additional information or documentation to support the referral request and address any concerns raised by the specialist.

2. Patient Non-Attendance

- If the patient fails to attend the scheduled referral or is not on the bed, follow up with the patient/treating team to determine the reasons for non-attendance and address any barriers or concerns.
- Reschedule the visit if necessary and provide reminders and support to ensure the patient is available at rescheduled time.

3. Urgent or Emergent Referrals

- For urgent or emergent referrals requiring immediate specialist evaluation, expedite the referral process by directly contacting the specialist or receiving department and communicating the urgency of the referral.
- Prioritize appointment scheduling and coordinate with ancillary services to ensure rapid access to necessary diagnostic tests or procedures.

5. Complex Care Coordination

- In cases involving complex medical conditions or multidisciplinary care needs, engage in comprehensive care coordination involving multiple providers, specialties, and support services.

- Establish a multidisciplinary team approach to develop and implement a coordinated care plan that addresses the patient's physical, psychological, and social needs.

6. Discharge Planning

- For referrals made in the context of hospital discharge planning, ensure seamless transitions of care by coordinating post-discharge follow-up appointments, medications, and support services.

7. Referral for Transfer from one department to another

- This situation occurs when patient from one department is transferred to another citing reason that no major active intervention is required in the referring department and/or patient primarily needs intervention in the referred department. (This leads to frequent arguments between the two departments)
- During such transfer referrals, reason for transfer needs to be clearly mentioned.
- Referring department should note down the progress of patient since admission and the notes and reports should be arranged chronologically before transfer.
- Referring department should ensure that the patient is regularly reviewed after transfer without waiting for a referral call (at least once a day).
- Should the patient require transfer back, that should be done without creating problems or hurdles.
- Discharge of such patients should be done in a coordinated manner by the two (or more) departments with clear explanation to the patient regarding further course and outpatient follow-up.

8. Death of a patient

In case of death of a referred/transferred patient e.g in ICU/Dialysis Room/CCU, department where patient is in (at the time of death) should complete documentation and required paperwork required before handing over of mortal remains of patients.

9. Referral in Outpatient Department

- An EXIT counter can be set up or utilized if already present for this purpose.

- A patient referred from Dept A to Dept B should visit the designated EXIT counter to get an OPD slip of Dept B.
- Such patient should not be made to stand in normal counters' queue to make an OPD slip.
- This will save man-days of patient as well as associated expenses of transport and loss of wages of another visit (OPE).
- The power of making OPD slips ONLY FOR INTERDEPARTMENTAL OPD REFERRALS during routine OPD registration time and after the time of registration is over has to be given to the EXIT counter up to a specified extended time (9:30 AM to 1:00 PM could be an indicative time).

PERFORMAS

REFERRAL FORM FOR INTERDEPARTMENTAL REFERRAL Department_____Location of patient _____
Name of the patient: Age and gender: UHID:
Referral from: Unit:
Date of admission: Date and time of referral:
Type of Reference: **Immediate**/Urgent Routine Bedside- Yes/No Medico-legal- Yes/No
Consultation required from: Faculty/ Senior resident, Unit-_____, Department of
Admission diagnosis and procedure (if any)
Indication for Reference & Expected Outcome:
Consultation required for: Fresh Opinion Follow-up opinion/**Transfer**
Sent by: _____(Faculty/ Senior resident) Signature/Name/Date/Time/Stamp
Reminder sent on (date and time): Noted by: Name, date and time

POST REFERRAL ADVICE

Reference Seen by _____at _____(date and time)

History and Examination:

Diagnosis:

Advice:

Signature:
Name/Stamp:

To follow up on _____(Date)
with_____(Name, Unit)

Repeat referrals to be sent to_____(Details of the unit)

REGISTER TO BE MAINTAINED BY NURSING STAFF

Referring Department	Receiving Department	Patient Information	Reason for Referral	Urgency	Date of Referral	Status Completed (with time) /Pending

Indicative List of some medical conditions classified as Immediate/Urgent/ Routine

(This is not a comprehensive list; this is just to guide the clinicians)

Immediate (Attend within 30 minutes)	Urgent (Attend within 6 Hours)	Routine (Attend before next working day preferably within 12 hours)

Medical Conditions

Any hemodynamic instability	All MLC	Clearance before elective OT*
Delirium	All in-patients	Any other
Seizures		
Stroke		
Respiratory failure		
Organ Failure		
Active bleeding		
PTE/DVT		
Sepsis		
AKI		
Any decompensated chronic condition		
Metabolic complications- hypoglycemia, DKA, severe hyperglycemia		

Obstetrical and Gynecological Conditions

Cardiogenic shock- in pregnancy		From OPD for any high risk - pregnancy - Heart disease, thyroid disorder, Gestational diabetes, Renal disorders, seizure disorders, jaundice etc
Pulmonary edema		From OPD for radiology evaluation
ARDS in pregnancy		From OPD for surgical help in complicated elective surgery
Emergency CS		From wards for same as above
Acute liver failure- AFLP		Psychiatry referral for postpartum depression, psychosis
Maternal collapse		
□Refractory seizures		
□CVA in pregnancy		
Vessel injury on OT table		
□Bladder/ uretur injury on OT table		
Gut injury on OT table		
small girls with Sexual assault especially from Pediatric Surgery		
□Urgent dialysis in pregnancy or postpartum patients		
□Urgent CTPA - suspected embolism		
□urgent NCCT CECT and USG in above conditions		
□Purpura fulminans		
□necrotising fasciitis		
□cellulitis/ abscess		

Orthopedic Conditions

Polytrauma associated with Head injury, Chest injury, Abdominal injury, Perineal injury, Pelvis fractures, Other visceral injuries	Open limb injuries	Includes Ortho cases posted for semi-emergency / Elective surgeries in next 48 hours

Injuries with Vascular Insult	Ortho cases posted for Emergency surgery	Orthopaedic cases admitted for Evaluation and diagnosis
		Cases with multiple comorbs planned for surgery in next 4-7 days

*Many references are received in emergency for clearance before elective OT which is invariably scheduled on the next working day. This should be avoided.

Appendix- VIII

LAWS AND ACTS APPLICABLE TO HEALTHCARE ORGANIZATIONS

All Healthcare Organizations are required to follow all applicable laws/acts and their amendments. Indicative lists are provided in the Annexure.

Table 1: Laws Governing the Commissioning of Hospital

1. Atomic Energy Act 1962
2. Delhi Lift Rules 1942, Bombay Lift Act 1939
3. Delhi Lifts and Escalators Bill 2007
4. Companies Act 1956
5. Indian Electricity Rules 1956
6. Delhi Electricity Regulatory Commission (Grant of consent for captive power plants) Regulations 2002
7. Delhi Fire Prevention and Fire Safety Act 2019, and Fire Safety Rule 2007
8. Delhi Nursing Home Registration Act 1953
9. Electricity Act 1998
10. Electricity Rules 1956
11. Indian Telegraph Act 1885
12. National Building Act 2005
13. Radiation Protection Certificate from BARC 2003
14. AERB Approvals for Radiology and Nuclear Medicine
15. Atomic energy (Safe disposal of radioactive waste) rule
16. Society Registration Act
17. Urban Land Act 1976
18. Indian Boilers Act 1923
19. The Clinical Establishment (Registration and Regulation) Act 2010

Table 2: Laws Governing to the Qualification/Practice and Conduct of Professionals

1. The Indian Medical Council Act 1956
2. Indian Medical Council (Professional Conduct, Etiquette, and Ethics Regulations 2002)
3. The National Medical Commission Act, 2019
4. Indian Medical degree Act 1916
5. Indian Nursing Council Act 1947
6. Delhi Nursing Council Act 1997
7. The ICN Code of ethics for nurses 2012
8. The Dentist's Act 1948
9. AICTE Rules for Technicians 1987
10. The Paramedical and Physiotherapy Central Councils Bill 2007
11. The Pharmacy Act 1948
12. The Apprenticeship Act 1961

Table 3: Laws Governing to Sale, Storage of Drugs and Safe Medication

1. Blood Bank Regulation Under Drugs and Cosmetics
2. (2nd Amendment) Rules 1999
3. Drugs and Cosmetics Act 1940 and Amendment Act 1982
4. Excise permit to store the spirit, Central Excise Act 1944
5. IPC Section 274 (Adulteration of drugs), Sec 275 (Sale of Adulterated drug), Sec 276 (Sale of drug as different drug or preparation), Sec 284 (negligent conduct about poisonous substances)
6. Narcotics and Psychotropic Substances Act
7. Pharmacy Act 1948
8. Sales of Good Act 1930
9. The Drug and Cosmetics Rule 1945
10. The Drugs Control Act 1950
11. GST Act
12. Central excise Act (for permit to use and store sprit)

Table 4: Laws Governing Management of Patients

1. Birth and Deaths and Marriage Registration Act 1886
2. Drugs and Magic Remedies (Objectionable) Advertisement Act
3. Guardians and Wards Act 1890
4. Indian Lunacy Act 1912
5. Law of Contract Section 13 (for consent)
6. Lepers' Act
7. PNDT Act 1994 and Preconception and Prenatal Diagnostic Tech (prohibition of sex selection) Rules 1996 (Amendment Act 2002)
8. The Epidemic Disease Act 1897
9. Transplantation of Human Organ Act 1994, Rules 1995
10. The Medical Termination of Pregnancy Act 1971
11. Medical Termination of Pregnancy Rules 2003
12. The Mental Health Act 1987

Table 5: Laws Governing Environment Safety

1. Air (prevention and control of pollution) Act 1981
2. Biomedical Waste Management Handling Rules 1998 (Amended on 2000, 2016)
3. E-waste management rules 2022
4. Environment Protection Act and Rule 1986, 1996
5. NOC from Pollution Control Board
6. Noise Pollution Control Rule 2000
7. Public Health Bye Law 1959
8. Water (prevention and control of pollution) Act 1974
9. Delhi Municipal Corporation (malaria and other mosquito borne diseases) Bye Law 1975
10. The Cigarettes and Other Tobacco Products (prohibition of advertisement and regulation of trade and commerce, production, supply and distribution) Bill 2003
11. Prohibition of Smoking in Public Places Rules 2008

12. IPC Section 278 (making atmosphere noxious to health), Sec 269 (negligent act likely to spread infection or disease dangerous to life, unlawfully or negligently).

Table 6: Laws Governing to Employment and Management of Manpower

1. Bombay Labor Welfare Fund Act 1953
2. Citizenship Act 1955
3. Delhi Shops and Establishment Act 1954
4. Employee Provident Fund and Miscellaneous Provision Act 195
5. Employment Exchange (compulsory notification of vacancies) Act 1959
6. Equal Remuneration Act 1976
7. ESI Act 1948
8. ESI Rules 1950
9. Minimum Wages Act
10. Indian Trades Union Act 1926
11. Industrial Dispute Act 1947
12. Maternity Benefit Act 1961 and amendments

Table 7: Laws Governing to Medicolegal Aspects

1. Consumer Protection Act 1986
2. Indian Evidence Act
3. Law of privileged communication
4. Law of torts
5. IPC Section 52 (good faith), Sec 80 (accident in doing lawful act), Sec 89 (for insane & children), Sec 90 (consent under fear), Sec 92 (good faith/consent), Sec 93 (communication in good faith).

Table 8: Laws Governing the Safety of Patients, Public and Staff Within the Hospital Premises

1. The Radiation Surveillance Procedures for the Medical Application of Radiation 1989, Radiation Protection Rules, 197
2. AERB Safety Code no. AERB/SC/Med-2(rev-1) 2001
3. Arms Act 1950
4. Boilers Act 1923
5. Explosive Act 1884 (for diesel storage)
6. Gas Cylinder Rules 2004
7. Insecticide Act 1968
8. IPC Section 336 (act endangering life or personal safety of others), Sec 337 (causing hurt by act endangering life or personal safety of others), Sec 338 (causing grievous hurt by act endangering the life and personal safety of others).
9. NOC from chief fire office
10. Periodic fitness certificate for operation of lifts
11. Petroleum Act and Storage Rules 2002
12. Prevention of Food Adulteration Act 1954
13. Food Safety and Standards Rules, 2011

14. The Indian Fatal Accidents Act 1955
15. Disaster management Act 2015

Table 9: Laws Governing Professional Training and Research

1. NMC rules for MBBS, PG and internship training
2. National board of examination rules for DNB training
3. ICMR rules governing medical research
4. NCI rules for nursing training
5. Ethical Guidelines for Biomedical Research on Human Subjects, 2000

Table 10: Laws Governing the Business Aspects

1. Cable Television Network Act 199
2. Charitable and Religious Trusts Act 1920
3. Contracts Act 1982
4. Copyright Act 1982
5. Custom Act 1962
6. FEMA 1999
7. Gift Tax Act 1958
8. Income Tax Act 1961
9. Insurance Act 1938
10. Sales of Good Act 1930

Table 11: Licences/Certifications Required for Hospitals

Sr. No.	Licences/certifications	Frequency
1	Registration under societies registration act	Initially
2	Inspection for electrical installation/substation	Initially
3	NOC from local municipal office for any bye law	Initially
4	License to Establish	
5	License to operate	
6	Building Occupancy certificate	
7	Licence for storage of petrol/diesel on form XV under the petroleum rules 2002	2 yearly
8	Income tax exemption certificate	3 yearly
9	NOC for Chief of Fire Service	Before implementation
10	Registration for operation of radiological installations with AERB	Every 2 years
11	Drug Licence for medical store, IPD pharmacy, OPD pharmacy	Every 5 years
12	Licence to operate blood bank/storage centre under rule 122G of drug and cosmetic act	Every 5 years
13	Registration under PNDT Act 1994	Every 5 years

14	Income tax registration/PAN	Once only
15	Registration for GST	Once only
16	Registration for EPF	Once only
17	Registration for ESI coverage of employee	Once only
18	Registration under rule 34, sub rule (6) of MTP Act 1971	One time
19	Registration under Delhi nursing Home Act 1953	Yearly
20	Indemnity insurance policy	Yearly
21	Standard fire and special perils policy	Yearly
22	Authorization for generation of BMW under BMW handling rule 1996	Yearly
23	Licence for operating lift under Sect 5 and 6 and Rules 4 and 5 (inspector of lift, state govt)	Annual
24	License for storing and usage of Narcotic Drugs and Psychotropic Substances (NDPS)	Annual
25	License to operate Kitchen /canteen (FSSAI)	Annual
26	RSO Level I , II & iii certificate for recruitment	
27	License for radioactive substances License to procure Radioactive Material (Diagnostic/Therapy)	
28	License to Store Compressed Gas	
29	License for possession and use of Rectified / denatured spirit	
30	Permit for storing Diesel	
31	Ambulance vehicle registration/Pollution certificate/Fitness	

Table 12: Periodic Reports and Return as Legal Commitment for Hospitals

1	Biomedical waste generation	Monthly (Website)
2	Income Tax Return	Annual
3	TDS	As per Income Tax Act
4	Blood bank	Monthly
5	MTP Report	Monthly
6	PC-PNDT	Monthly
7	EPF	Annual
8	ESI Act	Annual
9	GST Act	Monthly/Annual
10	Registration of birth and death	Each occurrence
11	Post polio paralysis	Each occurrence
12	AEFI (vaccination)	Each occurrence

13	Communicable diseases	Each occurrence
14	Tuberculosis	Each occurrence
15	Caesarean rate	Each occurrence
16	Radiologist registration under PNDT	Each occurrence
17	USG registration under PNDT	Each occurrence
18	TLD batches	As per AERB policy

References

1. Singh MM, Garg US, Arora P. Laws applicable to medical practice and hospitals in India. International of Research Foundation of Hospital and Healthcare Administration. 2013; 1: 19-24.
2. *Sharma A, Gamta V, Luthra G.* Ensuring Patient Safety and Trust: The Critical Importance of Regulatory Compliance in Healthcare *J. Pharm. Res. Int. 2023:35(18):1-15.*

Appendix- IX

ORGANOGRAM