

**Summer Training
at
BHAGWAN MAHAVEER CANCER HOSPITAL AND RESEARCH CENTRE,
JAIPUR**

From 10th May 2021 to 2nd July 2021

**A Report
by
MANSHU BUTTA**

Mentor Name – Dr. Piyusha Majumdar (Assistant Professor)



**MBA HOSPITAL AND HEALTHCARE MANAGEMENT
2020-22**

ACKNOWLEDGEMENT

The success and final outcome of this project required a lot of guidance and assistance from many people and I am fortunate to have got this all along the completion of my project work. Whatever I have done is only due to such guidance and assistance and I would not forget to thank them.

I respect and thanks **Dr. Subha Pathania (Medical Superintendent), Dr. Sonal Rai (Senior Executive-Quality)** and **Mr. Vansh Choudhary (Executive Quality)** for giving me an opportunity to do the project work in Bhagwan Mahaveer Hospital and Research Centre, Jaipur and I am also thankful to the hospital staff for providing me the support and guidance which made me complete the project on time.

Without them the project would have been a distant reality. I owe my profound gratitude to them who took keen interest in my project work and guide all along, till the completion of my project work by providing all necessary information.

I would thank my mentor **Dr. Piyusha Majumdar (Assistant Professor- IIHMR University)** for inspiring me to do internship and do couple of projects in Bhagwan Mahaveer Cancer Hospital and Research centre with full honesty, punctuality, hard work and dedication.

I would also thank **HR Head – Ms. Tapti Bhattacharya** and for giving me an opportunity to work as an intern.

ORGANIZATION CERTIFICATE



Bhagwan Mahaveer
Cancer Hospital & Research Centre
(Managed By K. G. Kothari Memorial Trust)

BMH/HRD /2021/672

Date: July 03rd, 2021

To whomsoever it may concern

This is to certify that **Manshu Butta**, MBA Hospital and Healthcare Administration student from **IHMR University, Jaipur** has completed his internship program from **10th May 2021 to 2nd July 2021**.

During the tenure of his internship he has assisted the hospital operation team in NABH preparation as per 5th edition guidelines.

He has done his work satisfactorily during internship period.

We wish him all the best for his future endeavors.

Bhattacharya

Tapti Bhattacharya

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INTRODUCTION

ABOUT BHAGWAN MAHAVEER CANCER HOSPITAL AND RESEARCH CENTRE.



BMCHRC is a state-of-the-art comprehensive cancer super speciality hospital and research centre where a competent team of specialists and sophisticated technology come together to deliver high quality medical aid.

The Bhagwan Mahaveer Cancer Hospital and Research Centre was established on 23rd October 1997 gaining reputation as the leading centre for cancer treatment.

The hospital is managed by K.G.Kothari Memorial Trust and it is Rajasthan's largest "NOT FOR PROFIT" state of the art fully equipped with latest technology Cancer Care Centre. The hospital is engaged in the field of Medical Research and Drug Trials appropriate to local conditions, managed through a Scientific Research Advisory and Ethical Committee.

HISTORY

Bhagwan Mahaveer Cancer Hospital and Research Centre, Jaipur (BMCHRC), a NABH accredited institution, was established in the year 1997 as a cancer speciality hospital offering cancer prevention, treatment, education and research centre. Started with just 50 beds at the initial stage, it grew into a super-speciality, 300-bedded hospital with leading-edge infrastructure housing several wards, laboratories, utility services and specialities after 23 years. Today, BMCHRC has its own Surgical Oncology, Medical Oncology, Radiation Oncology, Radiology, Nuclear Medicine, Pathology departments, and a huge Blood Bank.

From a 50 bedded facility to a 300 bedded super speciality hospital, BMCHRC has come a long way in patient care.

To facilitate more patients, a new IPD block is under construction.

The hospital aims to serve patients not only within Rajasthan but also from neighbouring states where top-notch cancer care facilities and treatments are not available. Besides this, BMCHRC under its objective of lending a hand to the underprivileged, not only treat patients under BPL category for free up to the extent of 25% but also offer subsidized cost of treatment for the patients belonging to the weaker strata.

BMCHRC PHILOSOPHY

To provide the possible treatment to patients irrespective of class, caste, creed and nationality. It makes the hospital unique not only in Rajasthan but in the whole northern part of India.

BMCHRC was established by Shri N. R. Kothari, a philanthropist and a visionary who played a key role in the setting up of this institution. As Chairman of BMCHRC, he is at the helm of affairs and is dedicated to improving standards of Cancer treatment through research, training and better management of cancer patients. His energy, enthusiasm, vision, dynamism, and determination giving momentum to the project in all earnestness.

VISION

To make BMCHRC comprehensive world class cancer treatment centre with cutting edge technology.

MISSION

To provide affordable care with human touch to all the sections of society irrespective of economical consideration.

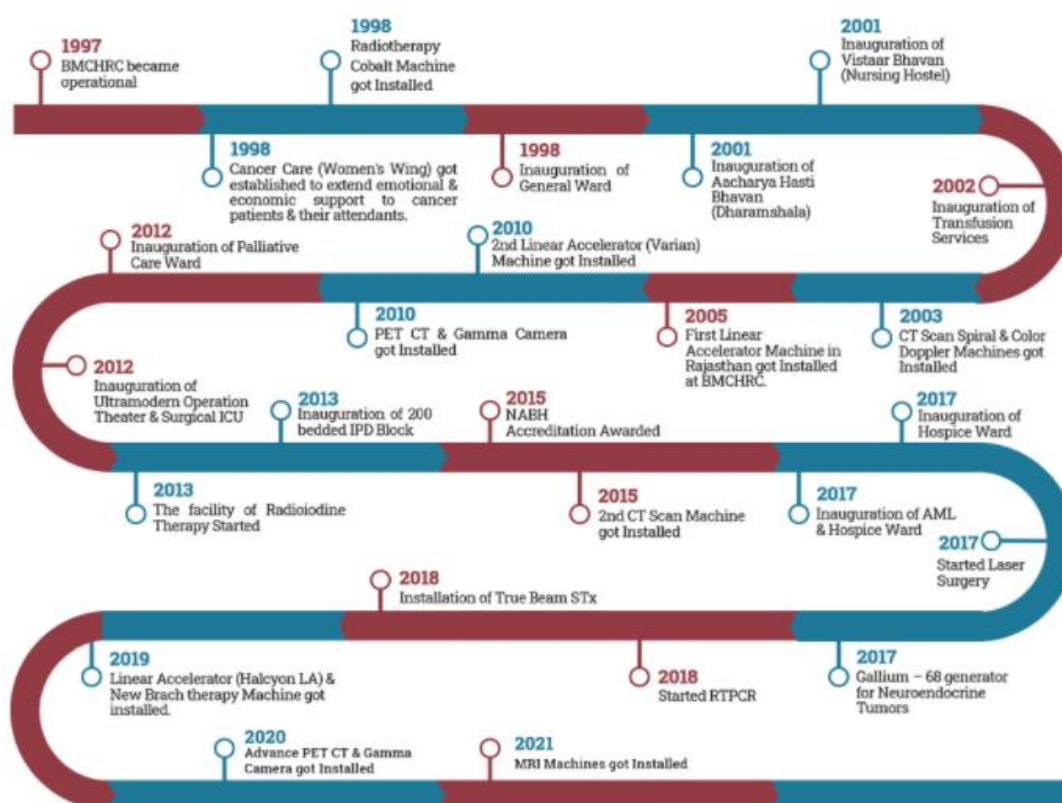
The service standards of BMCHRC are:

1. Professionalism
2. Communication
3. Priority Customer Service
4. Patient Privacy

Values

- Clinical Excellence
- Ethical Practice
- Patient centric approach
- Teamwork
- Integrity
- Loyalty

MILESTONES



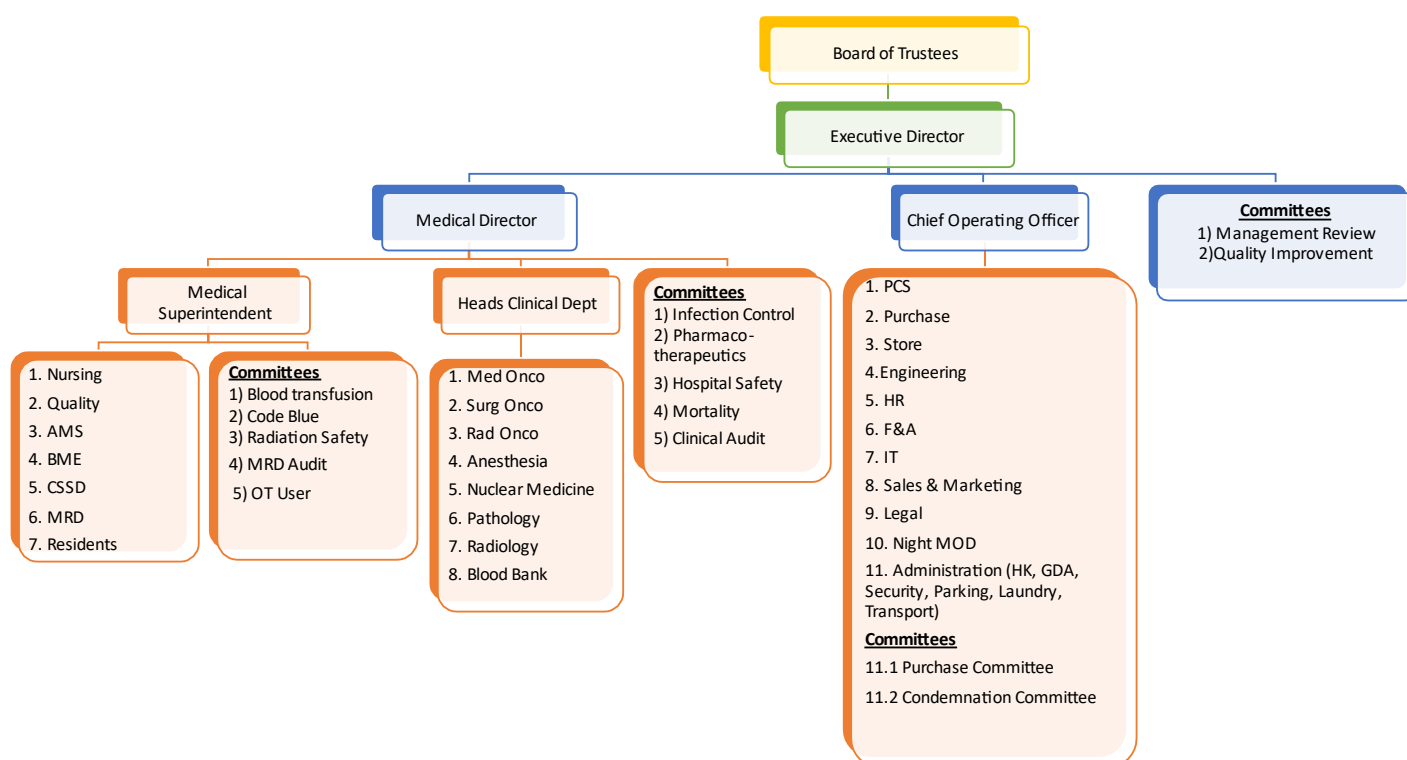
BMCHRC LOGO

Flames depict hope and destruction at the same time. Hope to end the darkness caused by cancer and destruction of the Crab, which depicts cancer. The Flame is arising from the torch hold by a doctor's hand with a red cross which symbolizes medical care.

SCOPE OF SERVICES

Clinical Services	Laboratory Services
• Anesthesiology • Critical and Intensive Care • Day Care Services (for Chemotherapy) • Emergency Medicine • General Medicine • Nuclear Medicine • Oncology (Medical, Surgical, Radiation) • Ortho Oncology • Neuro Oncology • Uro Oncology • Plastic and Reconstructive Surgery	• Clinical Bio-chemistry • Clinical Microbiology and Serology • Clinical Pathology • Cytopathology • Haematology • Histopathology
Diagnostic services	Clinical Support Department/Services
• CT Scanning • Gamma Camera • Mammography • PET CT • Ultrasound • X-ray • Radio Iodine Therapy • MRI Scan	• Ambulance • Blood Bank/ Blood Transfusion Services • Dietetics • Rehabilitation (Physiotherapy)
Non Clinical and Administrative Department	
• Pharmacy	

ORGANOGRAM OF BMCHRC



EMERGENCY CODES

The emergency codes are as follows:

EMERGENCY CODES	CODES FOR
RED	FIRE
BLUE	CARDIAC ARREST
YELLOW	EXTERNAL DISASTER
BLACK	BOMB THREAT
PINK	CHILD ABDUCTION
VIOLET	VIOLENCE
ORANGE	HAZMAT SPILL

NABH COMMITTEES AT BMCHRC

S. No	Committee Name
1.	Infection Control Committee
2.	Hospital Safety Committee
3.	Radiation Safety Committee
4.	Blood Transfusion Committee
5.	Mortality Committee
6.	Code Blue Committee
7.	Quality Assurance Committee
8.	Pharmacotherapeutic Committee
9.	OT user Committee
10.	Medical Record Committee
11.	Management Review Committee
12.	Clinical Audit Committee

To create a balance between the employee satisfaction and outcomes and the organization objectives, we have various HR committees:

1. Credential and Privileging Committee
2. Anti Sexual Harassment Committee
3. Grievance Handling Committee
4. Performance Appraisal Committee

FLOOR PLAN - BHAGWAN MAHAVEER CANCER HOSPITAL AND RESEARCH CENTRE

Floor/Building	Departments	Outer Building
Basement	Central Sterile and Supply Department (CSSD)	Central Store
	Laboratory	
	Laundry	
	Pharmacy (Main)	
	Medical Records Department	
	Engineering Department (Civil and Electrical)	
	Blood Bank	
	Medical Gas Plant	
Ground Floor	Help Desk	Fire Pump Room
	Empanelled Desk, Insurance, Discharge (Credit), IPD Billing (Credit), OPD Billing, Report Distribution Counters	Mortuary
	IT and EDP Department	Liquid Oxygen Gas Plant
	Blood Sample Collection Room	Electrical Sub-Station
	Bio-Medical Engineering	Diesel Tank
	Prayer Room	Biomedical Waste Management Room
	Dental Room	Sewage Treatment Plant(STP)
	Radiotherapy Department	Parking
	Sabhagar	Safe Assembly Area
	Nuclear Medicine	
	Day Care	A-Block (COVID Ward)
	Palliative Department	
	Cash Billing	
	PR Department	
	Pharmacy (Daycare Counter)	
	Food Court	
First Floor	Patient's Information Centre	
	Admission, Registration, BPL, Counselling Counters	
	Scanning Room/ Assistant Medical Superintendent Room	
	Initial Assessment Room	
	Administrator Office	
	Cancer Care	
	Medical OPD	
	Radio-Diagnosis Department	
	PAC Room	
	Physiotherapy	
	Endoscopy	
	Neuro Ortho OT	

	Surgical OPD and Procedure Room	
	COO Office	
	Medical Director Office	
	Treasure Trustee Office	
	Medical Superintendent Office	
	MD PA Office	
	Trust Office	
	Play Room for Pediatric Patients	
	Emergency	
	MICU	
	Cubical Ward	
	Hospice Care	
Second Floor	Main OT	
	Surgical ICU	
	Ward 2 (Palliative, Radiation, Surgery, HDU)	
Third Floor	Ward 3	
	AML Ward	
	Neutropenia Ward	
	Pharmacy (3rd Floor)	
Fourth Floor	Ward 4	
	ABMGRSBY Ward	
	Nursing Superintendent Office	
Fifth Floor (Administrative Block)	Executive Director Office	
	HR Department	
	AGM Commercial	
	AGM (Fin & Acc)	
	Quality Assurance Department	
	Library and Sabhagar	
	CCTV Surveillance	
	Clinical Research Department	
Sixth Floor	Ward 6 (SEMI DELUXE & SUPER DELUXE)	
	Pediatric Ward	
Seventh Floor	Ward 7 (Deluxe and Super Deluxe)	

TRAININGS HELD AT BMCHRC

1.	Admission, Transfer In/Out, Discharge, LAMA and Nursing Handover
2.	Near Miss, Adverse Drug Reactions and sentinel Events
3.	Nursing Documentation
4.	Restraint Policy, Vulnerable Policy and Narcotic Drugs Policy
5.	Handling Chemotherapy
6.	Complaint Handling
7.	High Risk Medications
8.	Basic Life Support
9.	Standard Protocol for Nursing process.
10.	Blood Transfusion
11.	Standard Protocol for nursing Process
12.	Blood Transfusion
13.	Pain Management
14.	Peri-operative Nursing Care
15.	Communication skills
16.	Nursing Empowerment
17.	Hospital Infection Control
18.	Medication Error
19.	Bed Sore Prevention
20.	Consent Policy
21.	Emergency Codes and their Procedure
22.	Dose Calculation- Drop Factor
23.	Nursing Procedure

DISTRIBUTION OF BEDS IN BMCHRC

Ground Floor			Day Care	34
			Brachytherapy	1
First Floor	Cubical Ward	15	Cubical Ward (Hospice)	1
	Cubical Ward (Isolation)	2	MICU (Dialysis)	1
	MICU	10	MICU (Isolation)	1
			Emergency	2
			Ortho-Neuro OT Recovery	2
Second Floor	Ward 2nd (including RT and Palliative)	43	2nd Floor OT Recovery	4
	HDU	7		
	SICU	15		
Third Floor	Ward 3rd (including Neutropenia)	39		
	AML	12		
Fourth Floor	Ward 4th	52		
Sixth Floor	Ward 6th	27		
	Pediatric Ward	11		
Seven Floor	Ward 7th	15		
A Block	Iodine Therapy	2		

QUALITY INDICATORS MAINTAINED AT BMCHRC

1.	Time taken for Initial Assessment of the Inpatient
2.	Percentage of cases wherein the care plan with desired outcomes is documented and counter-signed by clinician.
3.	Percentage of Cases wherein the screening for nutritional needs has been done.
4.	Percentage of Cases wherein nursing care plan is documented.
5.	Number of reporting errors per 1000 investigations
6.	Percentage of re-dos
7.	Percentage of reports co-relating with clinical diagnosis
8.	Percentage of adherence to safety precautions by employees working in diagnostic Department.
9.	Incidence of medication errors.
10.	Percentage of admissions with adverse drug reactions (ADR)
11.	Percentage of medication charts with error prone abbreviations
12.	Percentage of Pts receiving high risk medications developing adverse drug reactions.
13.	Percentages of modifications of anesthesia plan
14.	Percentage of unplanned ventilation following anesthesia
15.	Percentage of adverse anesthesia events
16.	Anesthesia related mortality rate
17.	Percentage of Unplanned return to OT
18.	Percentage of rescheduling of procedures
19.	Percentage of cases where the organization's procedure to prevent adverse events like wrong site, wrong pt. and wrong surgery have been adhered to.
20.	Percentage of cases who received appropriate prophylactic antibiotics within the specified time frame.
21.	Percentage of cases in which the planned surgery is changed intraoperatively.
22.	Percentage of transfusion reactions
23.	Percentage of wastage of blood and blood products
24.	Percentage of blood component usage
25.	Turnaround time for issue of blood and blood components
26.	Catheter associated Urinary Tract Infection rate
27.	Pneumonia rate
28.	Bloodstream infection rate
29.	Surgical Site infection rate
30.	Mortality rate
31.	Return to ICU within 48 hours
32.	Return to ER within 72hrs with similar presenting complaints
33.	Re-intubation Rate
34.	Percentage of research activities approved by ethics committee.
35.	Percentage of Pts withdrawing from study
36.	Percentage of protocol violations/deviations reported.
37.	Percentage of serious adverse events (which have occurred in the organization) reported to ethics committee within defined time frame
38.	Percentage of consumables procured by Local Purchase
39.	Percentage of stock outs including emergency drugs
40.	Percentage of drugs and consumables rejected before preparation of Goods Receipt Note
41.	Percentage of variations from the procurement process
42.	No. of variations observed in mock drill
43.	Incidences of falls
44.	Incidences of bedsores after admission

45.	Percentage of employees provided pre-exposure
46.	Bed occupancy rate and average length of stay
47.	OT and ICU Utilization
48.	Critical Equipment Down time
49.	Nurse Patient Ratio for ICU's and Wards
50.	Out Patient Satisfaction Index
51.	In Patient Satisfaction Index
52.	Waiting time for services (diagnostics and OPD)
53.	Time taken for discharge
54.	Employee Satisfaction Index
55.	Employee attrition Rate
56.	Employee absenteeism rate
57.	Percentage employees aware of employees rights, responsibilities and welfare schemes
58.	No. of sentinel events reported, collected and analyzed within defined time frame
59.	Percentage of near misses
60.	Incidences of blood body fluid exposures
61.	Incidence of needle stick injury
62.	Percentage of medical records not having discharge summary
63.	Percentage of medical record not having codification as per International Classification of Diseases (ICD)
64.	Percentage of medical records having incomplete or improper consent
65.	Percentage of missing records
66.	Appropriate Handover during shift change
67.	Incidence of Patient Identification errors
68.	Compliance to Hand Hygiene Practices
69.	Compliance rate to Medication Prescription in capital

**OBSERVATIONAL LEARNING OF VARIOUS
DEPARTMENTS AND FACILITIES**

PATIENT CARE DEPARTMENT

PATIENT FLOW FOR OPD CONSULTATION

1. COVID-19 Screening (Giving Registration Forms)



2. MAY I HELP YOU (Registration Form Filling)



3. Organ Allotment Procedure (Allotment of Doctor's Panel)



4. Registration – OPD Billing



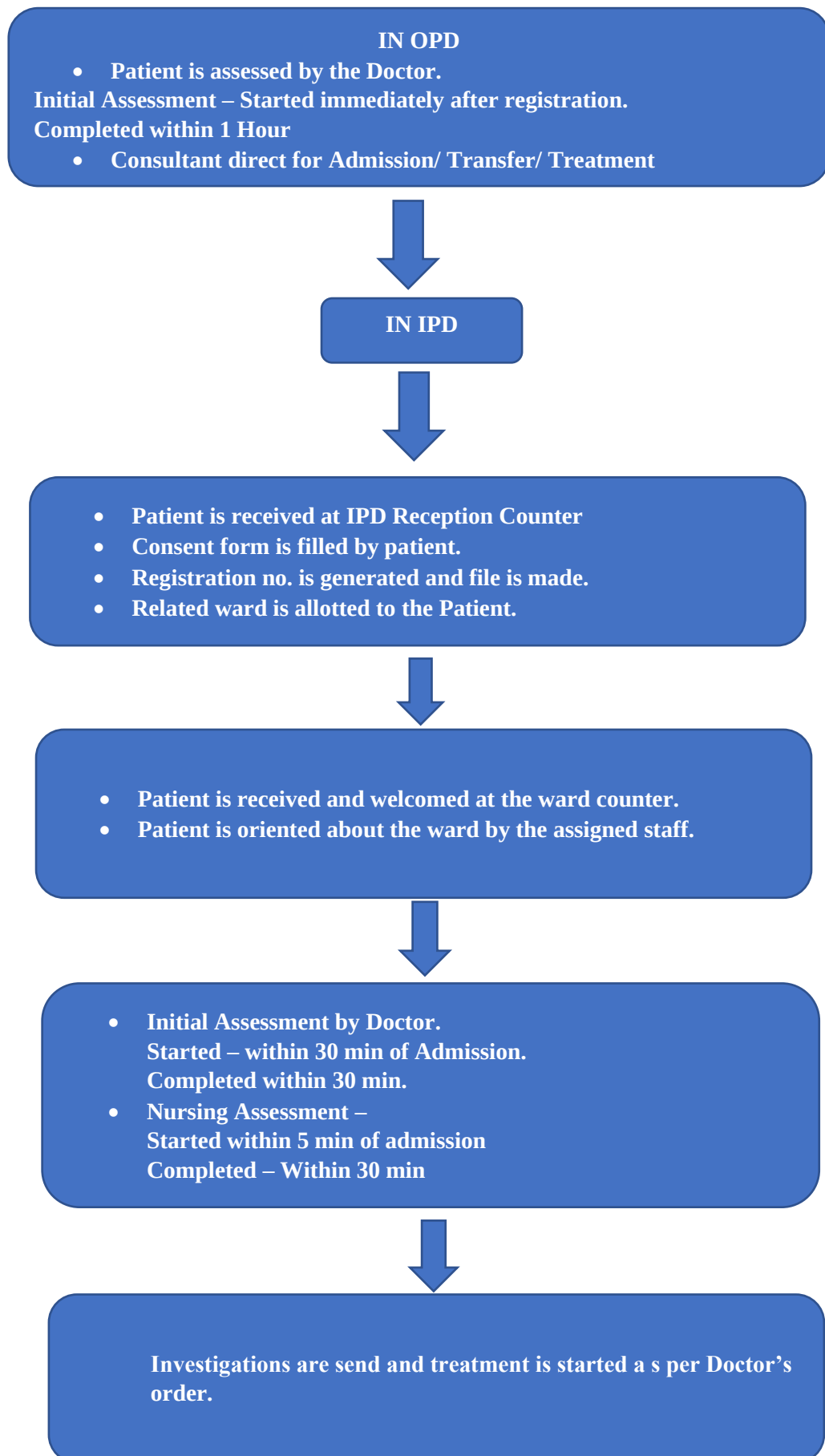
5. Initial assessment of Patients



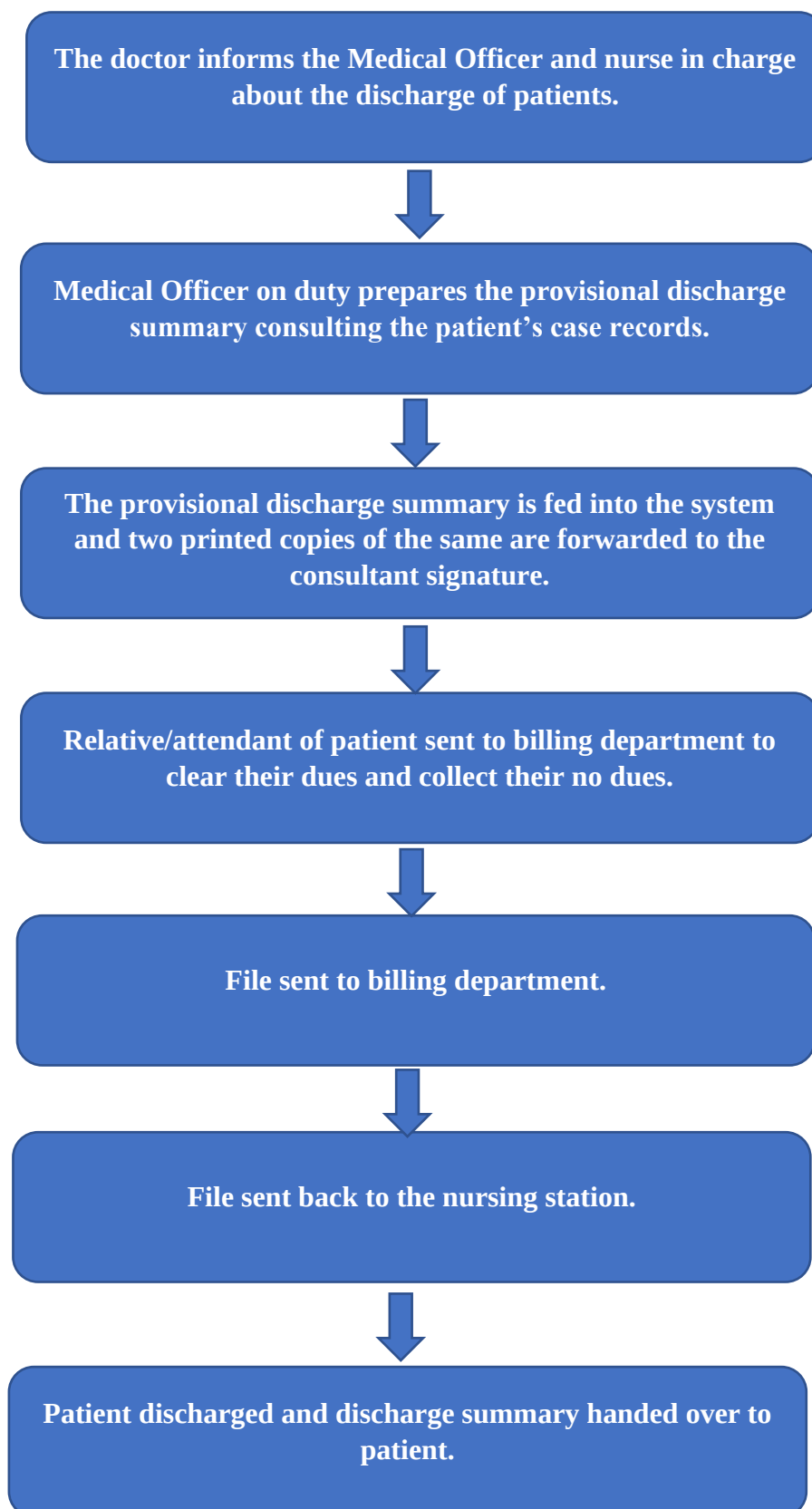
6. Visit to Consultant

The patient information centre staff assists the patient to fill the hospital registration form. After that the Assistant Medical Superintendent decides the panel of doctors as per organ specific unit system & refers the patient to registration counter. At the registration counter the patient is registered on HIMS and unique registration number for each patient is generated. The medical records are maintained & stored according to the registration number for all future references. Subsequently the patient is referred to the initial assessment team and then to the concerned consultant in OPD.

ADMISSION OF PATIENT IN IPD



DISCHARGE PROCESS



CENTRAL STERILE SUPPLY DEPARTMENT

Sterilizing medical equipment is of utmost importance in the hospital. Thousands of patients suffer medical complications by being infected through improperly sterilized instruments and items. Medical sterilization breaks the chain of infection, prevents growth of diseases, spread of diseases, prevents complications or sepsis. This not only depends on the effectiveness of sterilization but also on the unit design and proper packing. Thus, CSSD plays a vital role in hospital care and patient satisfaction.

INTRODUCTION – CSSD is a service unit in a hospital that processes, issues and controls the sterile store supply to all departments of the hospital.

The department is broadly divided into 3 zones:

Decontamination Zone –

The soiled instruments are received from various departments for initial or gross cleaning. These items are cleaned and decontaminated by means of manual or mechanical process.

Sterilization Zone –

After the instrument have been cleaned and inspected, they are assembled into sets and trays. Each set or tray is wrapped or packaged for terminal or final sterilization in this zone.

Storage and Distribution Zone –

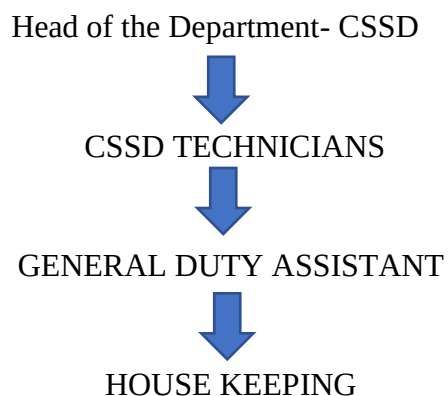
Sterilized instruments are stored in sterile storage area or sent to the appropriate departments.

The objectives of the CSSD departments are :

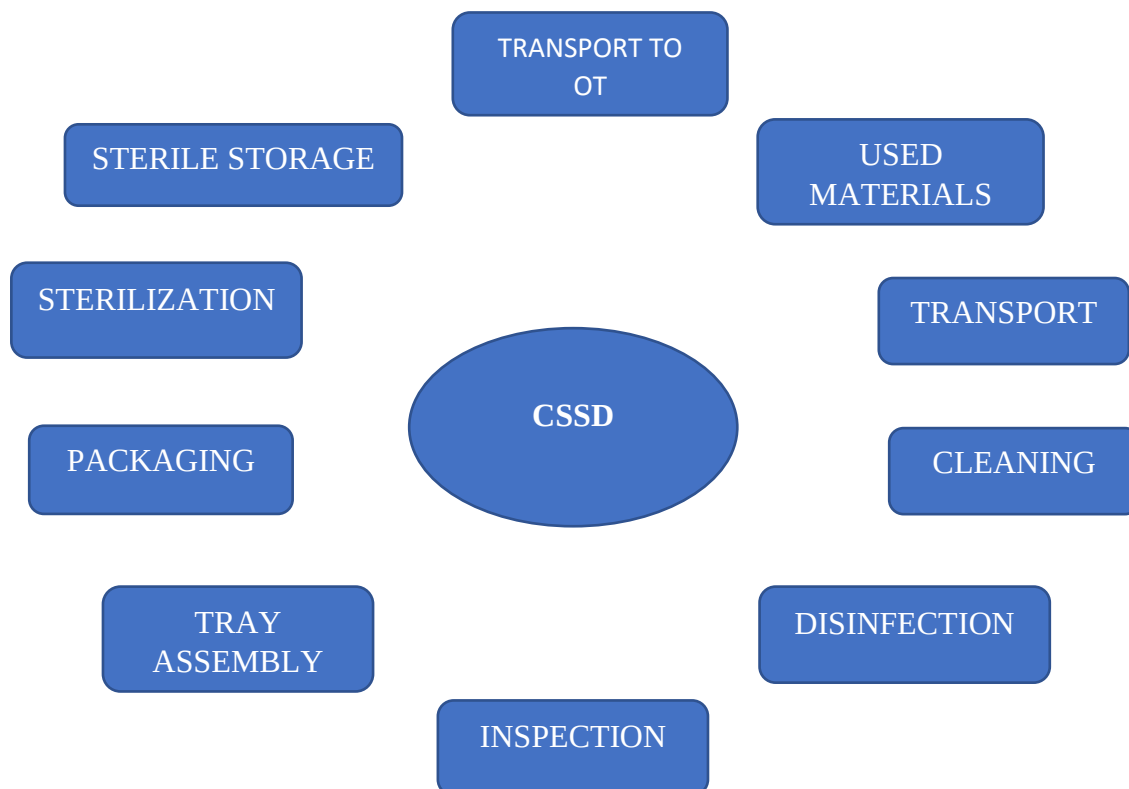
- To provide sterilized material from a central department where sterilizing practice is conducted under controlled condition.
- To avoid duplication of costly equipment's, which may be infrequently used.
- To maintain proper record of effectiveness of cleaning, disinfection and sterilization process.
- To maintain and enforce controls necessary to prevent cross infection according to infection control policy.
- To stay updated regarding developments in the field in the interest of efficiency, economy and accuracy.
- To provide a safe environment for the patients as well as staff.

Location of CSSD – Central Supply and Sterile Department is situated in the basement of the hospital.

ORGANIZATION STRUCTURE/ORGANOGRAM



WORK FLOW OF CSSD

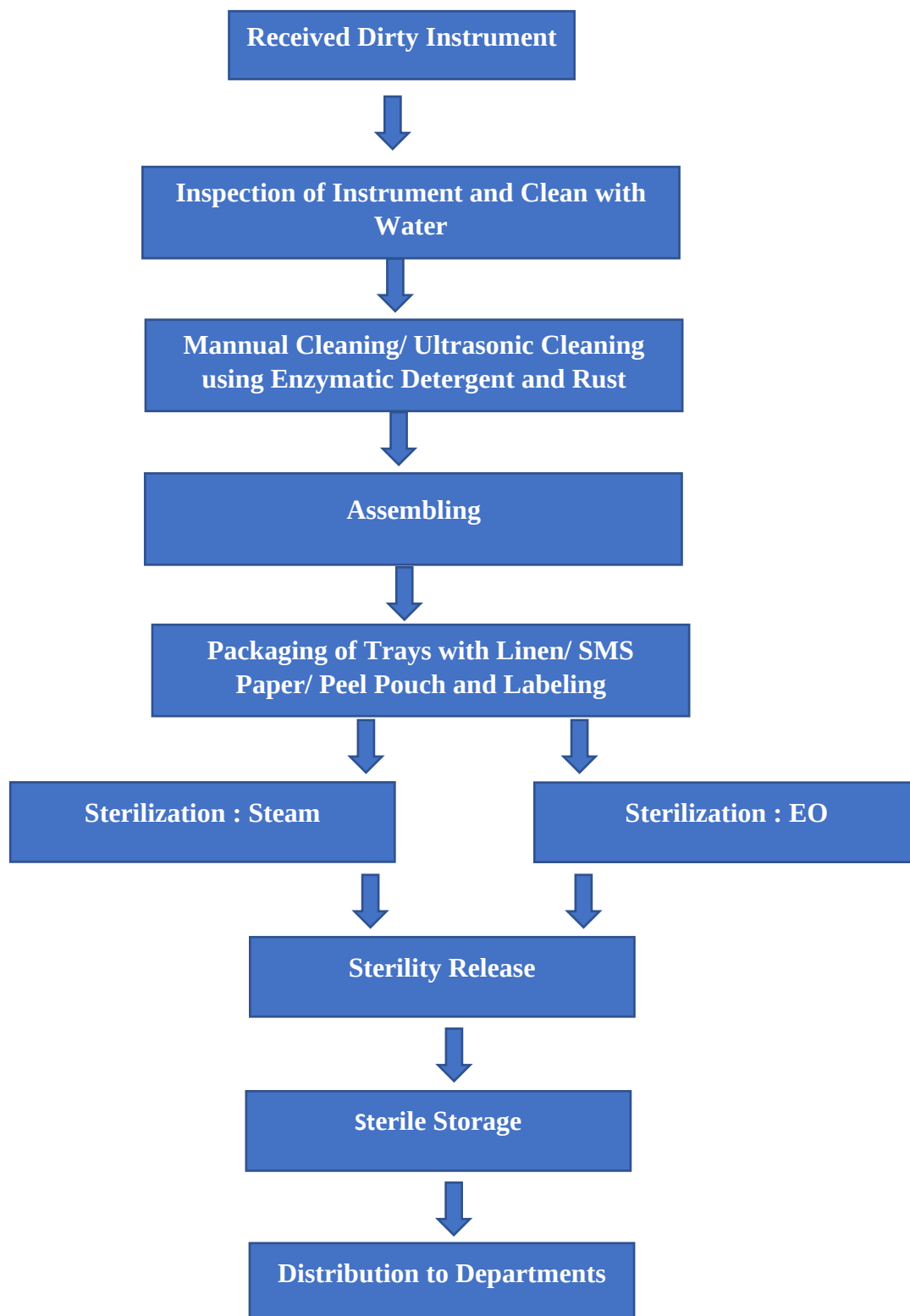


NUMBER OF MACHINES AVAILABLE

MACHINES AVAILABLE	NUMBER
Ultrasonic Cleaner	1
Washer Disinfectant	1
Autoclave Machine	2
ETO Sterilizer	1
Dryer Machine	1

TOTAL NO. OF STAFF IN CSSD

Designation	No. of person
HOD- CSSD	1
CSSD Technicians	4
General Duty Assistant	2
House Keeping	1

CENTRAL STERILE SUPPLY DEPARTMENT – Flow Process

Workflow of CSSD

1. RECEIVING AREA
2. DECONTAMINATION AREA
3. PREPARATION AREA
4. STERILIZING AREA
5. STORING AREA

DECONTAMINATION AREA: Only properly attired personnel may enter into the decontamination area.

Attire – Wear both a fluid resistant cover gown (tied in the back) and heavy duty gloves during the decontamination process.

Completely cover all head and facial hair with a surgical-type hair covering.

Hand Hygiene – Thoroughly clean hands (wash and dry hands or use an alcohol-based gel for hand cleaning) upon leaving a decontamination area and before performing any assignment in any other area.

RECEIVING AREA

Procedure for Receipt of Procedure Sets after use:

- Procedure sets will be received at the receipt counter in CSSD at the following timings:
- Morning: 9:00 AM to 11:00 AM
- Evening: 3:00 PM to 5:00 PM
- Procedure sets will be received only after the OT user has given a pre-wash to the instruments immediately after use.
- The OT user will discard used consumables immediately after use.
- Linen wrapper or any drapes inside the pack will also be received along with the pack.
- All the instruments will be checked for any blood or soil at the receipt counter by the CSSD personnel and will be handed over for ultrasonic cleaning.
- Number of instruments in the pack will be counted while receiving the set according to the standard list available at the counter.
- In case of any missing instruments, the set will not be received till the loss is confirmed by the OT In charge.
- Sets will be handed over for decontamination.

DECONTAMINATION AREA

Procedure for instruments Cleaning process:

Manual Cleaning –

- Table with sink will be used for manual cleaning.
- Hot water reservoir will be filled with 10 liters of water.
- Prescribed solution of disinfectant will be added to the water.
- Disassemble or unlock all the instruments and instrument tray immersed deep in water for 20 minutes.
- Instruments will be rinsed with abundant amount of running tap water to remove the traces of disinfectant.
- Dry the instruments with the help of dryer machine.
- Hand over the set for packing.

Ultrasonic Cleaning –

- Fill the tank of the ultrasonic cleaner with warm tap water of 44 degree Celsius.
- Add the multienzyme solution to the water for cleaning.
- Set the time and temperature.
- Parameters for general instruments.
Temperature at 44 degree Celsius for 10 minutes..
- Parameters for heavily soiled instruments.
Temperature at 44 degree Celsius for 20 minutes.
- Slowly lower the tray into the tank and activate ultrasonic machine. Do not stir.
- When the items are clean, press on/off once to deactivate the ultrasonic machine.
- Take the instruments out of the tray and rinse clean items with clean water.
- Dry the instruments with the help of a dryer.
- Hand over the set for packing.

Washer Decontaminator:

- It washes the instruments in thermal wash at 90 degree Celsius Steam.
- Maintain Standard Water Temperature.
- Add the multienzyme solution to the water for cleaning.
- Provides 100% disinfected instruments.

PREPARATION AREA

Procedure for packaging instruments set:

- Check all the instruments for proper cleaning. There should be no residues of blood, tissues or soil.
- In case not cleaned properly, sent the instruments back to the decontamination area for another cycle of decontamination.
- Packaging the instrument tray in double drapes for further sterilization.

STERILIZING AREA

- The sterilization of packaged instruments will be done in Autoclave machine.
- Following temperature and pressure conditions will be maintained in the autoclave machine.
- Temperature- 134 degree Celsius
- Pressure – 2.1kpal
- The person on duty in sterile area will check the air pressure after some time.
- The instruments will be sterile in autoclave at suitable temperature and pressure for 7 minutes.

STORING AREA - PROCEDURE FOR DISTRIBUTION OF STERILE PACKS

- Once the sterilization is done, the sterile packs will removed from autoclave from their opposite end and stored in the Sterile Storage Area.
- Sterile instruments and linen packs will be distributed through the issue counter located in the sterile area in CSSD.
- The responsibility of transportation of sterile goods was lie in the hands of the OT and wards users.
- The sterile packs will be issued at the following timings.
Morning – 9 A.M. to 11 A.M.
Evening – 3 P.M. to 5 P.M.
- Sterile instruments and linen packs will be transported from CSSD to OT through sterile covered trolley.
- Following information will be received from the OT nursing In charge.
 1. Name of the packs required
 2. Quantity of the packs required
 3. Priority, whether required immediately or for the next day.
- Sterilization date and Expiry date will be checked before dispatching the packs for use in the OT.
- The shelf life of sterilized items is seven days.

QUALITY DEPARTMENT

In quality department, we did various activities under the guidance of Quality Head.

- Internal Audit of admitted patient file (Open File Audit) as per NABH parameters for NABH Reaccreditation.
- Did Prescription Audit of Discharged Patient Files (Closed file Audit) to assess the compliance of prescription as per NABH parameters.
- Did Discharged File Audit in MRD.
- Collect data and calculate the rate of various Healthcare Associated Infections occurred in Hospital in past six months. Month-wise rate was calculated for CAUTI, VAP, CLABSI and SSI.
- Collect Data and calculate rate of Needle Stick Injury occurred in the Hospital.
- Did Root Cause Analysis of Various Indicators like –
 1. RCA for Increased waiting Time in OPD
 2. RCA for High TAT Time of Discharge
 3. RCA for Unplanned Return to OT
 4. RCA for Rescheduling of Surgeries
 5. RCA for High TAT Time of Radiology Department (Ultrasound, X-Ray, CT Scan, MRI Scan and Mammography).
 6. RCA for Unplanned Return to Emergency within 72 hours.
- Calculate the TAT Time of various diagnostic procedures (Ultrasound, X-Ray, CT Scan, MRI Scan and Mammography) in radiology department.
- Took Mock Interview of staff of various departments to get them prepared for NABH Accreditation.
- Collect the data from electrical and civil department for equipments breakdown and made a CAPA (Corrective and Preventive Actions) Chart.
- Learned process flows of various departments and facilities.
- Help the Hospital in NABH Reaccreditation-External Audit held on 3th and 4th June 2021.

MEDICAL RECORDS DEPARTMENT

Working of MRD

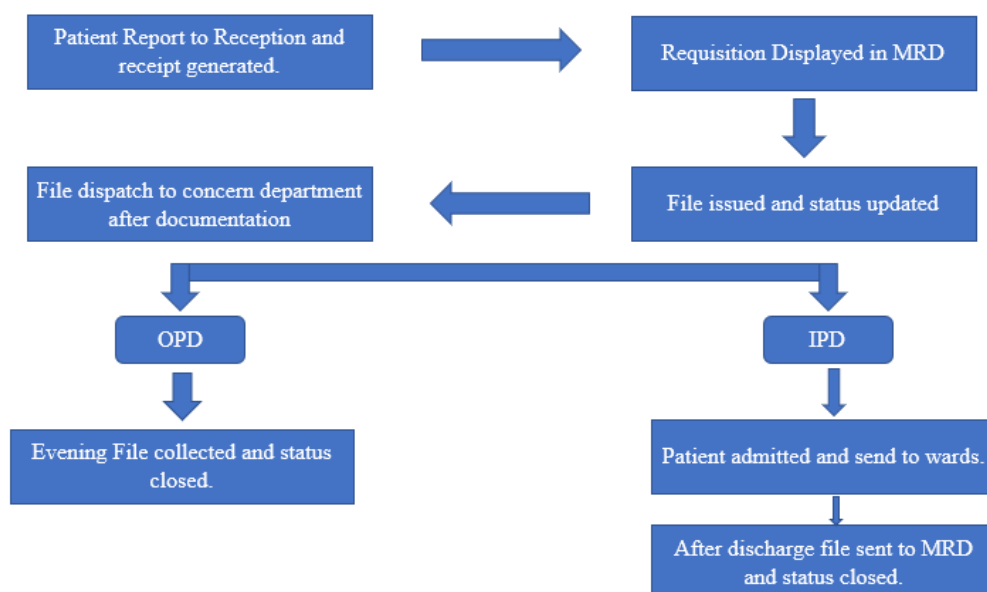
- Daily Receipt of patient files pertaining to discharge and expired patients from various wards, there checking and assembly.
- Issue and collect files from OPD.
- Dealing with Medico Legal Record.
- Arrangement and Supervision of enquiry and admission office.
- Forward Death form to municipal corporation.
- Reporting of Notifiable diseases.
- Issue photocopies to patient and TPAs.
- Provide data analysis and management information reports.
- Assist to patients to fullfill various forms, applications and other documentation related to assistance and reimbursement of various schemes.
- Maintain MRD Indicators as per NABH Guidelines.

Location of MRD

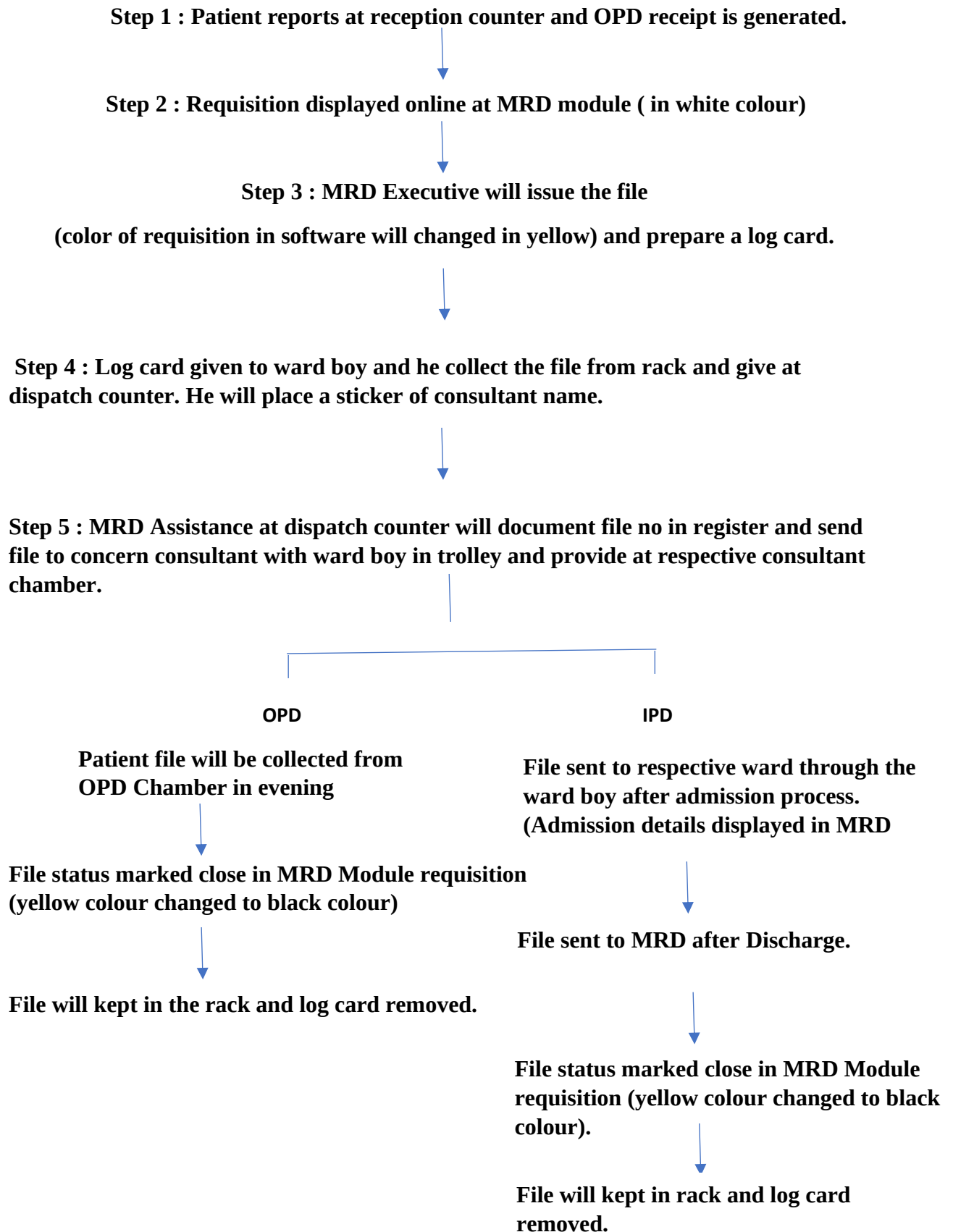
Medical Record Department of BMCHRC has three stores.

- One is situated in Basement of the Hospital.
- Another is in Dharamshala Store and Bagaru Store.

PROCESS MAP OF MRD



FILE ISSUE PROTOCOL



INDICATOR MAINTAINED BY MRD AS PER NABH

S. NO	INDICATOR
1.	Time for Initial Assessment of Indoor Patient
2.	Percentage of patients wherein care plan with desired outcomes is documented and counter signed by clinician.
3.	Percentage of cases wherein screening for nutritional needs has been done.
4.	Percentage of cases (Inpatient) wherein the nursing care plan is documented.
5.	Percentage of Medical Record not having Discharge Summary
6.	Percentage of Medical Record not having codification as per ICD.
7.	Percentage of Medical Record not having incomplete and / or improper consent.
8.	Percentage of missing records
9.	Mortality Rate
10.	Bed Occupancy Rate
11.	Average length of Stay

RETENTION OF DATA IN MRD DEPARTMENT

1. Hospital Software Data	Permanently as per sec 6, I.T. Act 2006
2. Death Files	Permanent
3. Medico legal Cases	Till settlement + 3 years
4. Requisition of investigation	3 months
5. General Files	Still not discarded any files
6. Request for Photocopy / Name Change	Not Discard

FIRE DEPARTMENT

Fire Department –

Fire Safety Equipments in Hospital – There are total 189 fire extinguishers comprising of four types in BMCHRC.

Types of fire extinguishers in the hospital – There are four types of fire extinguisher present in BMCHRC.

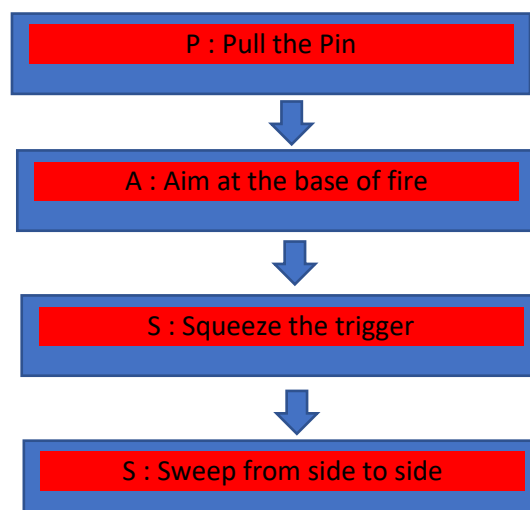
- CO₂ Type
- Chemical Dry Powder Type – They are suitable for use on fires involving burning liquids and electrical fire. CO₂ works by suffocating the fire and does not cause damage to the electrical items or cause the system to short circuit.
- Foam Extinguishers – They are most suited for extinguishing liquid fires such as petrol and diesel.
- Class K Fire Extinguisher – Class K extinguisher is designed to be used in the case of kitchen fire.

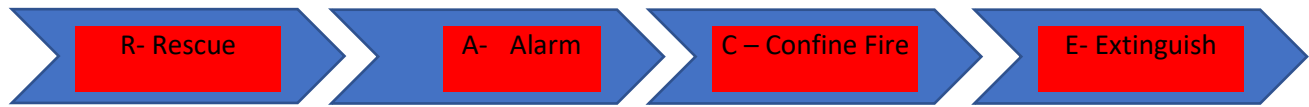
Water Tanks – The BMCHRC hospital has a underground water tank of storage capacity of 200000 litres and has a overhead tank of 40000 litres capacity.

Equipments

Jockey Pump, Hydrant, Sprinklers, Fire Alarm, Fire Hose Reel, Fire Extinguishers etc.

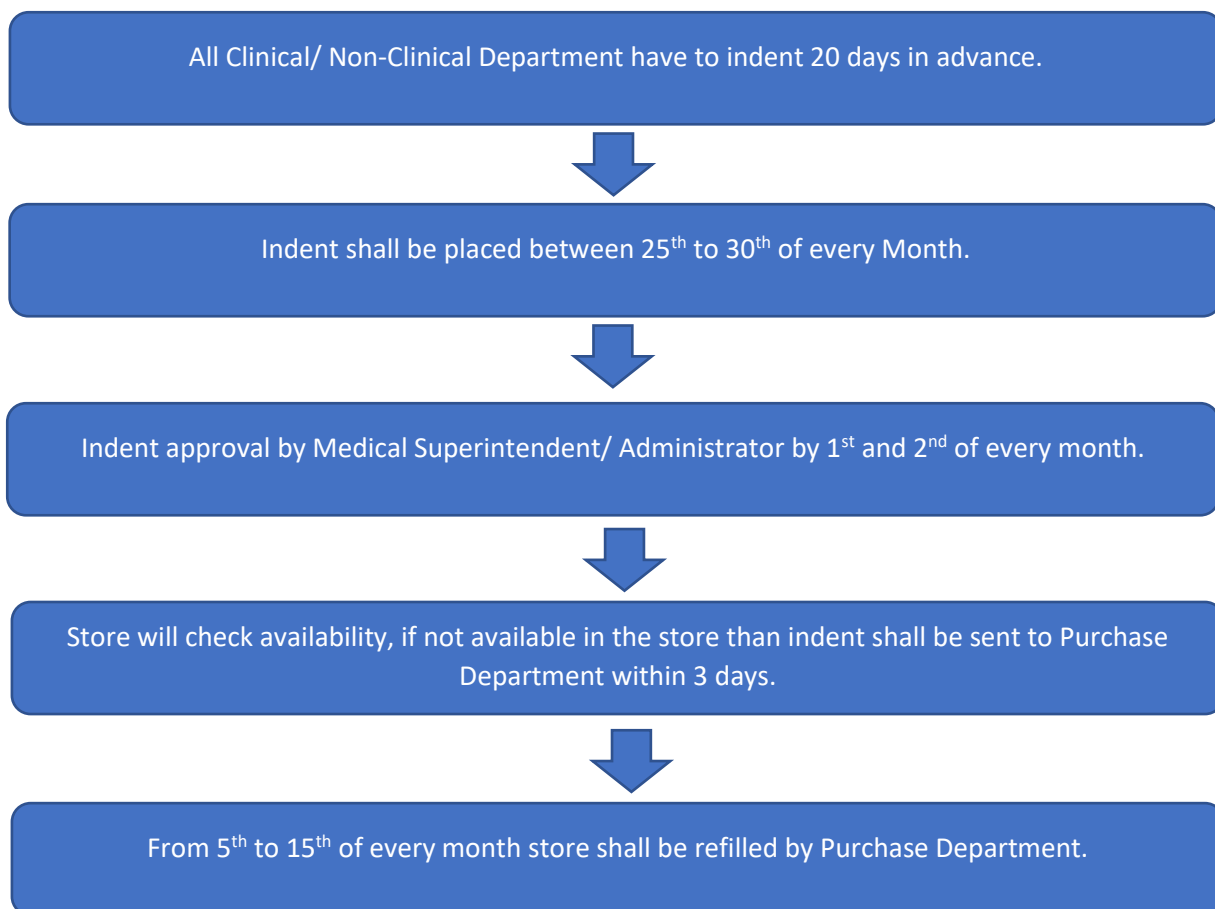
STEPS TO USE FIRE EXTINGUISHER : PASS



In case of Fire – RACE

CENTRAL STORE

INDENT PROCESS FLOW



OPERATION THEATRE

OPERATION THEATRE

BMCHRC has six operation theatres. Out of which five are major OTs and one is minor OT. One of the major OT is Neuro-Ortho OT.

Location – Second floor of the main building.

The 15 bedded Surgical ICU was also attached with Operation Theatre for the post operative care of the patient.

Operation Theatre consist of four zones (PCSD) -

1. Protective Zone
2. Clean Zone
3. Sterile Zone
4. Dirty Zone

OT Temperature – 20 Degree Celsius with a fluctuation of 2 degree Celsius as per need.

OT Humidity – 40 to 60

Types of Medical Gases and Colour of Pipe Used

Oxygen	White
Nitrous Oxide	Blue
Compressed Air	Black
Vacuum	Yellow
Carbon Dioxide	Grey

QUALITY INDICATORS MAINTAINED IN OT

S. No	INDICATORS
1.	Percentage of Rescheduling of Surgeries
2.	Percentage of unplanned return to OT
3.	Percentage of re-exploration of surgical-sites.
4.	Percentage of modification of anesthesia plan.
5.	Percentage of un-planned ventilation
6.	Percentage of adverse anesthesia events
7.	Percentage of Anesthesia related mortality
8.	Percentage compliance to WHO surgical safety checklist
9.	Surgical Antibiotic Prophylaxis
10.	OT Utilization

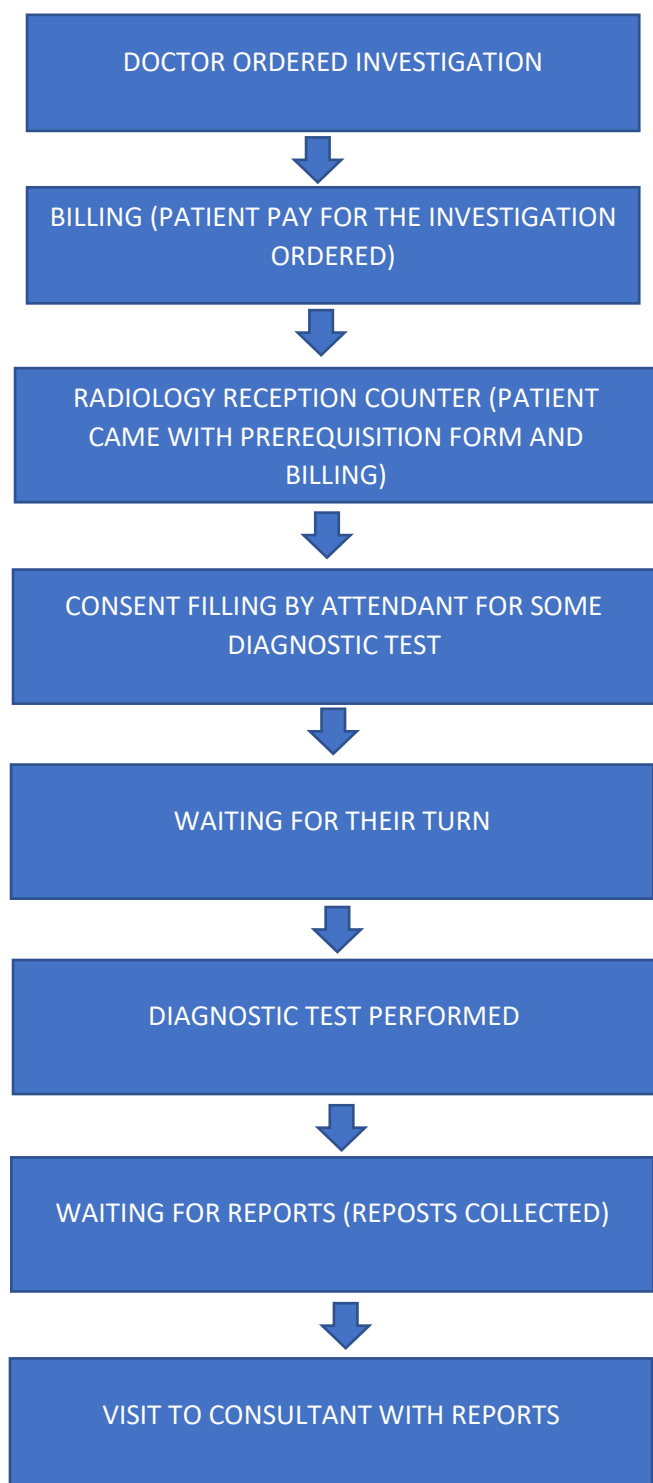
RADIOLOGY DEPARTMENT

OVERVIEW OF THE RADIOLOGY DEPARTMENT

BMCHRC Hospital consist of a highly equipped radiology and Imaging Department which provides a full range of imaging services such as X- Ray, Mammography, Ultrasound, CT, MRI etc.

Location – 1st Floor

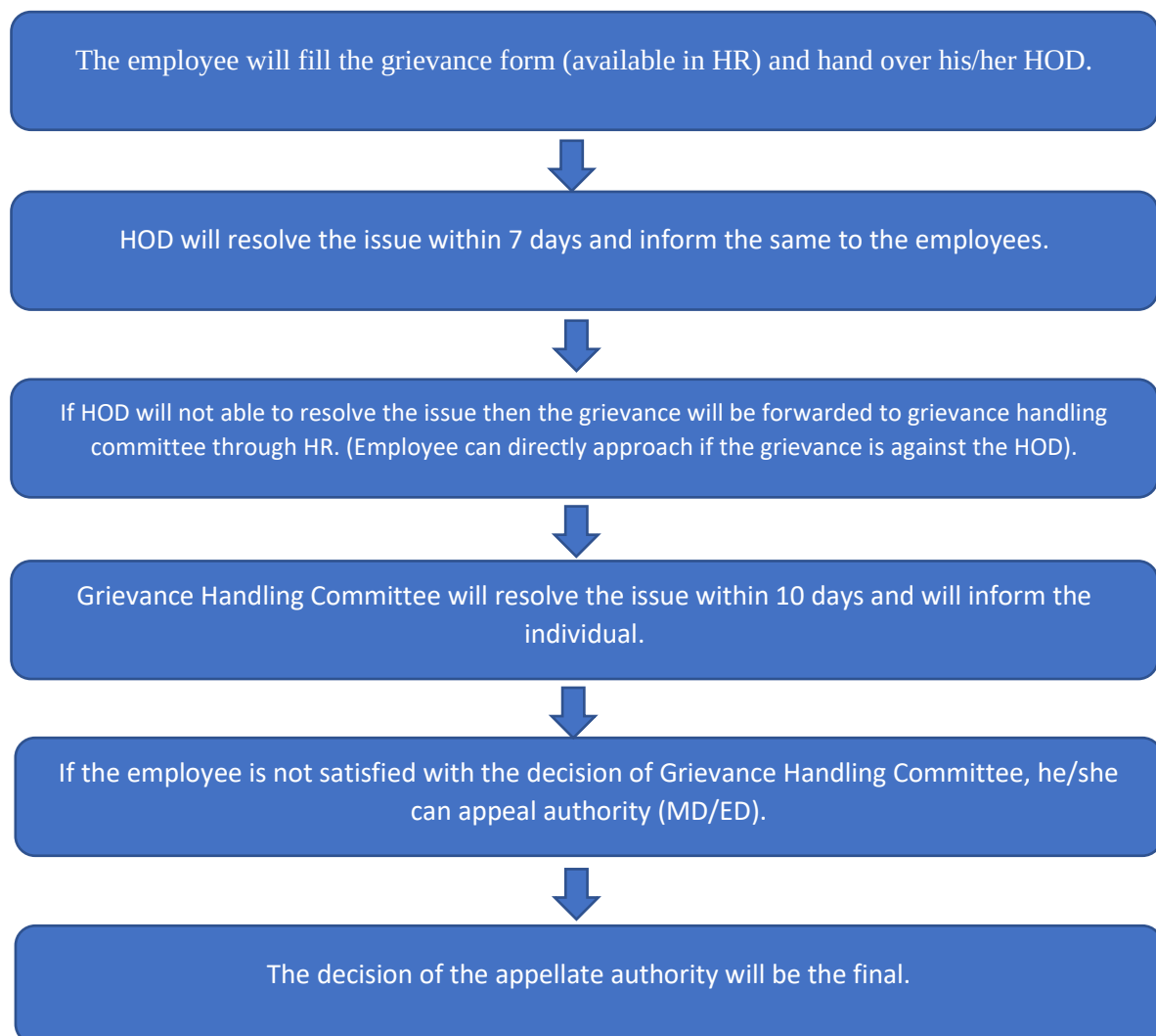
PROCESS FLOW OF RADIOLOGY DEPARTMENT



EMPLOYEE GRIEVANCE REDRESSAL PROCESS

A Committee has been constituted by the management in the hospital to consider and redress complaints. The procedure of complain and members of committee are as follows :

Grievance can include matters relating to leave, acting arrangements, Non-extension of benefits under rules, etc, of an individual nature.

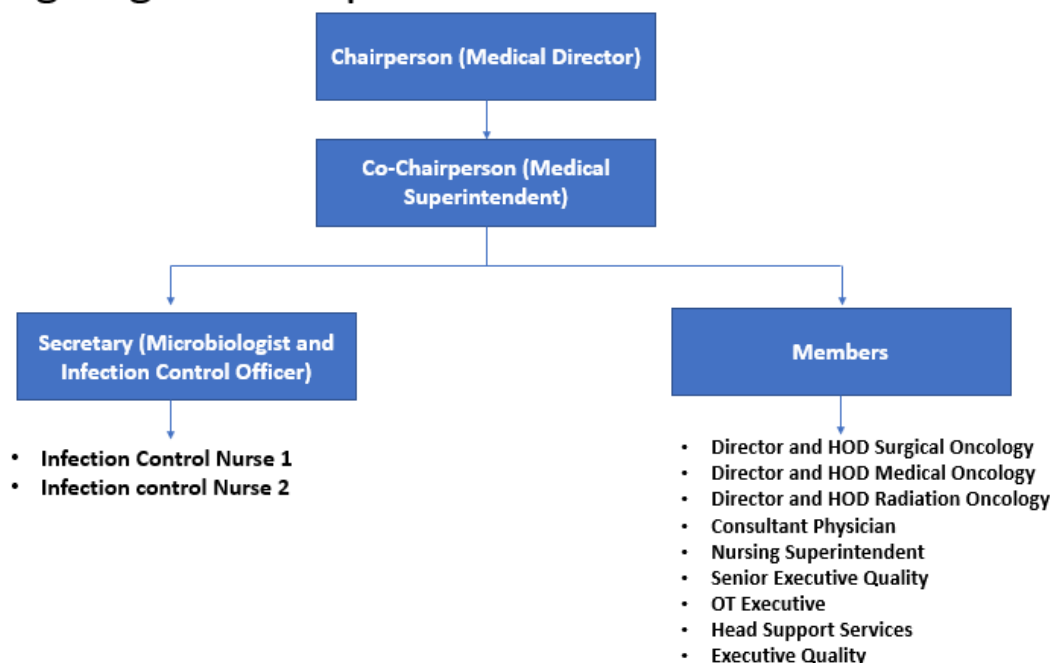


INFECTION CONTROL COMMITTEE

The management has formed the Infection Control Committee. Their scope of work is mentioned below.

1. Review and approved a yearly program of activity for infection surveillance and prevention.
2. Review epidemiological surveillance data and identify areas for intervention.
3. Assess and promote improved infection control practices at all levels of the health facility.
4. Ensure appropriate staff training in infection control and safety to review risks associated with new technologies, and monitor infectious risks of new devices and products, prior to their approval for use.
5. Review and provide inputs into investigations of epidemics/outbreaks.
6. Communicate and cooperate with other committees of the hospital with common interests such as pharmacy and therapeutic committee, safety committee and blood transfusion committee.
7. Plan, monitor, evaluate, update, and educate about patient and employee safety on infection control.
8. Set general infection control policy/guidelines and to provide input into specific infection control issues.
9. Develop infection control procedures for all departments.
10. Identify infection control education needs for doctors, nurses, staff and patients and devise an action plan.
11. Educate staff on biomedical waste management.

Organogram – Hospital Infection Control Committee



HEALTHCARE ASSOCIATED INFECTION

According to CDC, there are 13 types of Hospital Associated Infection. There are four majorly Hospital Associated Infection which occurs in Hospital and assessed as per NABH.

Catheter Associated Urinary Tract Infection

CAUTI Rate = No. of Urinary Catheter Associated UTIs in a month / No. of Urinary Catheter Days in that Month*1000

Month	Numerator	Denominator	Rate
Nov-2020	0	613	0
Dec- 2020	0	845	0
Jan- 2021	0	888	0
Feb- 2021	0	802	0
Mar- 2021	0	858	0
Apr- 2021	1	896	1.11

Ventilator Associated Pneumonia

VAP Rate = Number of “Ventilator Associated Pneumonia” in a month / No. of Ventilator days in that month*1000

Month	Numerator	Denominator	Rate
Nov-2020	1	92	10.68
Dec- 2020	0	142	0
Jan- 2021	0	110	0
Feb- 2021	0	74	0
Mar- 2021	0	92	0
Apr- 2021	0	58	0

Central Line Associated Blood Stream Infection

CLABSI Rate = No. of Central line-associated blood stream infection in a month / No. of Central line days in that month*1000

Month	Numerator	Denominator	Rate
Nov-2020	1	348	2.87
Dec- 2020	1	603	1.65
Jan- 2021	1	479	2
Feb- 2021	0	544	0
Mar- 2021	0	606	0
Apr- 2021	1	717	1.39

Surgical Site Infection

SSI Rate = No. of Surgical Site Infections in a given month / Number of surgeries performed in that month*100

Month	Numerator	Denominator	Rate
Nov-2020	4	174	2.29
Dec- 2020	6	228	2.63
Jan- 2021	2	237	0.84%
Feb- 2021	2	222	0.90%
Mar- 2021	2	271	0.73%
Apr- 2021	2	233	0.85%

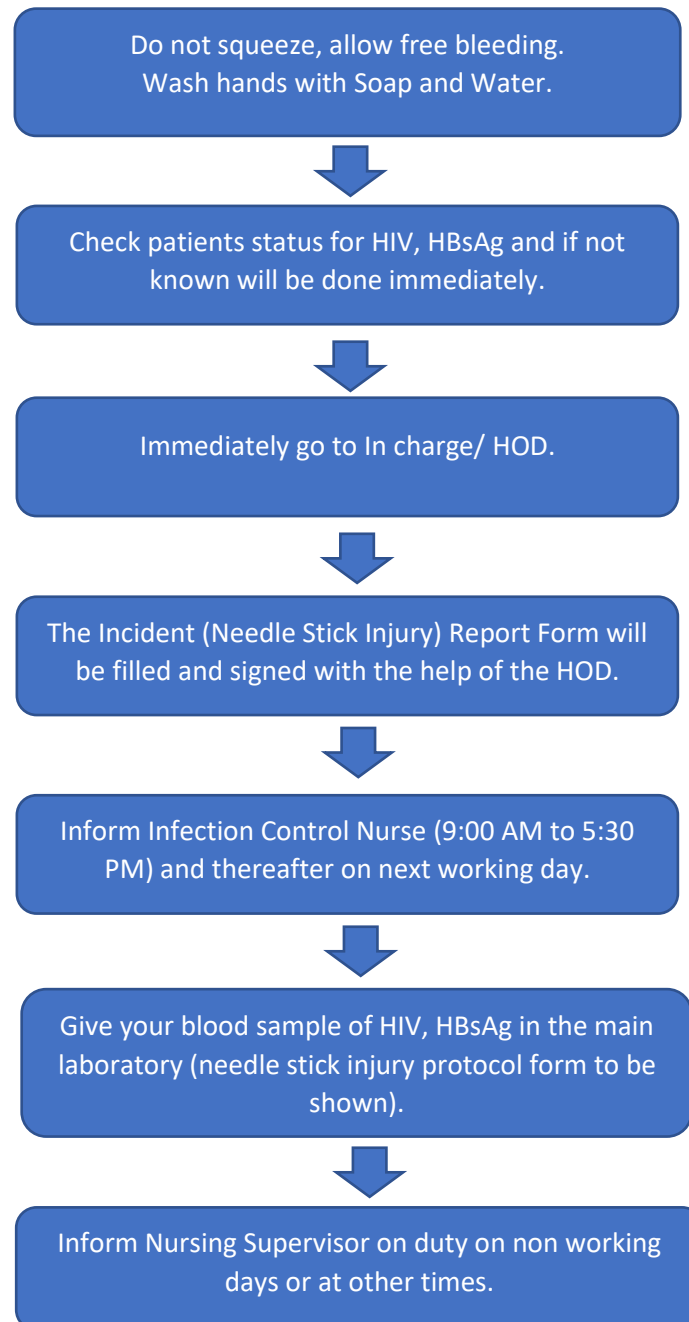
Needle Stick Injury

Month	Numerator	Denominator	Rate
Nov-2020	1	4286	0
Dec- 2020	0	4772	0
Jan- 2021	2	4208	0.47
Feb- 2021	0	5004	0
Mar- 2021	3	5838	0.51
Apr- 2021	1	5531	0.18

Hand Hygiene Compliances

MONTH	NURSE	DOCTOR	HOUSEKEEPING
Nov-2020	83.83%	82.43%	81.97%
Dec-2020	82.76%	80.05%	83.20%
Jan-2021	83.18%	82.57%	89.39%
Feb-2021	86.83%	84.27%	81.54%
Mar-2021	87.39%	85.90%	91.69%
Apr- 2021	86.54%	86.22%	80.78%

STEPS TO BE FOLLOWED AFTER NEEDLE STICK INJURY



NEEDLE STICK INJURY ALGORITHM

DOs	DONTs
Wash in running water	Do not squeeze
First Aid	Do not take the injured part into mouth.
Communicate and Document	

NEEDLE STICK INJURY EVENT

9:00 am to 5:30 pm



Departmental HOD

5:30 pm to 9am



Nursing supervisor on duty



INFECTION CONTROL NURSE
For further PEP and documentation

GREEN INITIATIVES TAKEN AT BMCHRC

BIO-METHANATION PLANT – Bio-methanation is the process of combining organic waste materials into biogas and in generating manure that could be used as fertilizers for plants at the hospital's garden.

- 1) Total Food Waste generated in the hospital in the month of May: 353 kgs
Total Compost received after getting processed in the month of May: 253 kgs.
- 2) Total Food Waste generated in the hospital in the month of June: 425 kgs
Total Compost received after getting processed in the month of June: 345kgs



SEWAGE TREATMENT PLANT - To maintain cleanliness and sanitation of the hospital, wastewater from different departments such as operation theatre, emergency ward, laundry, etc. is treated.

The treated water from this plant can be used for gardening purposes only since bacteria are still present in the treated water and organisms such as algae, fungi, flourish on it. Out of this 70,000 L of water is used by the water treatment plant for gardening.



SOLAR PANELS - BMCHRC has two Solar Panels, which show a certainty about sunlight-based boards and their maintainability. One is on the IPD Terrace (50KW) and the other one is in the Patient Parking Lot (120KW).

Total Power Generated by Solar Panels in the Parking Lot-

May: On an average 616.45 KWH (Out of which, solar was off for three days)

June: On an average 612.37 KWH

Total Power Generated by Solar Panels on the IPD terrace-

May: On an average 197.59 KWH.

June: On an average 262.7 KWH

According to The EnergySage Solar Marketplace in 2020, solar shoppers can achieve payback on their solar investment in about 8 years, before continuing to enjoy free electricity for the life of their solar panel systems, which can last between 25 and 35 years.

Total Electricity Consumption (kWh):

May : on an average 366520 (814.04 from the solar panels)

June : on an average 395920 (875.07 from the solar panels)



CHILLER PLANT - A chiller plant acts as the central cooling system for the building.

Chiller Plant uses the water coming from the 3 Borewells. The average consumption in-

MAY:

Borewell 1- 54,000 L

Borewell 2- 30,000 L

Borewell 3- 37,000 L

JUNE:

Borewell 1- 45,000 L

Borewell 2- 80,000 L

Borewell 3- 36,000 L



Out of this 35,000 L of water is used by the chiller tank in the centralized cooling system present in the corridors and rooms.

BIOPHILIA - Biophilic design is a concept used within the building industry to increase occupant connectivity to the natural environment through the use of direct nature, indirect nature, and space and place conditions.

The hospital knows that redesigning the hospital experience from a biophilic point of view can benefit patients. Exposure to natural elements; whether directly from nature or interpretations of it, can help to reduce stress and anxiety for both the patient and for his/her loved ones. It also reduces the carbon print.



NATURAL LIGHT - Light is a healing force that regulates the body's circadian rhythm, controls sleep-wake cycles, and plays a role in emotional health, heart function, body temperature, and other functions necessary for healing.

Benefits of Natural Light in the Hospital:

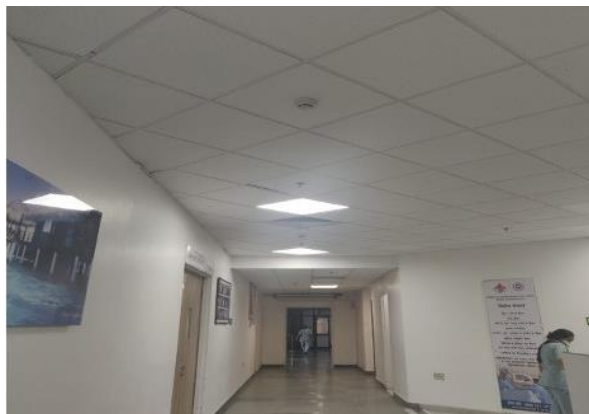
- 1) Reduced Length of Hospital Stay
- 2) Faster Postoperative Recovery
- 3) Increased pain relief
- 4) Improved employee morale



LED LIGHTINGS

With an estimated 80-90% energy efficiency compared to traditional lights, LEDs are a more efficient lighting option and significantly lower energy usage.

All the lights were changed to LED last year. This was done to prevent short-circuiting, fires, and to eliminate the problem of burnt-out light bulbs. The hospital has 700 LED lightings which consume about 15KW of power.



MATERIALS AND RESOURCES

Materials that are less energy-intensive, such as bamboo which grows very quickly, will make it possible to reduce the greenhouse gas emissions associated with traditional construction materials. Letting nature play an important role in your buildings makes everything seem more natural.

Paper products are made of organic materials that can be recycled. The Central Store at the hospital collects old paper products and then they donate them to be recycled. As a result of this recycling in total over 9600 kgs have been diverted from the landfill in just one year alone up to March 2021.



BIOMEDICAL WASTE

Our hospital has 10 wards, 5 major and 1 minor operation theatres (OT), an outpatient department (OPD), and emergency services as well as a laboratory. We also have a

waste treatment area that is approximately 500 meters away. In total (May and June), the hospital handled 8463.58 kilograms of BMW .

Waste generated during May and June 2021

- **Yellow Biomedical Waste: 2300.98 kgs**
- **Red Biomedical Waste: 3771.39 kgs**
- **White Biomedical Waste: 127.01 kgs**
- **Blue Biomedical Waste: 2264.20 kg**



AROGYA DHAM

The way to Arogya Dham building was refurbished by the hospital itself using leftover resources, paint and other supplies which made it extremely cost-effective to maintain. The hospital already had the manpower on hand and this arrangement allowed for a great saving of both time and money. Like a pretty painting, nature is an image that elicits a sense of euphoria in people, which can improve general well-being as well as your mood on any given day.

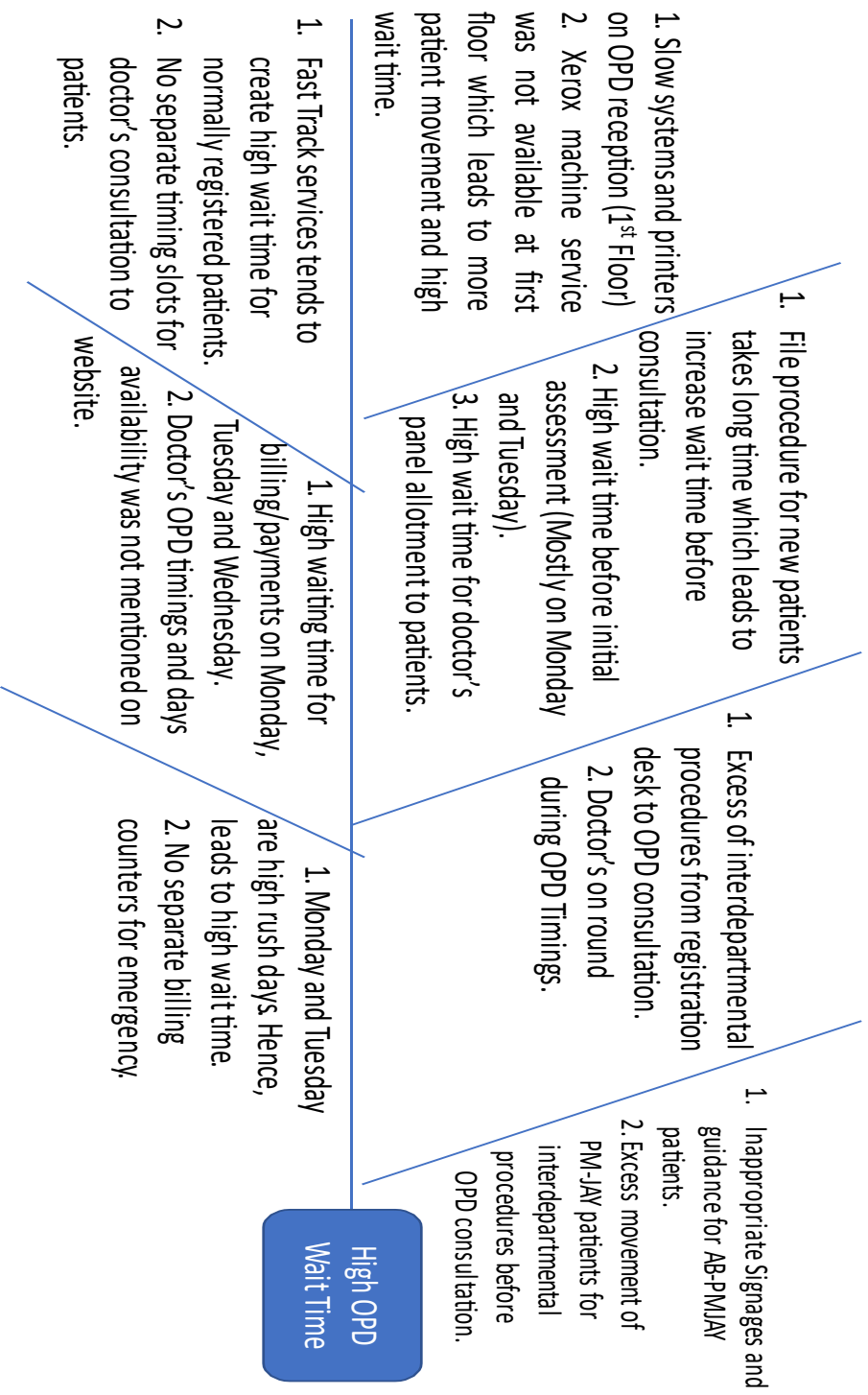


SUGGESTIONS FOR IMPROVEMENTS TO BECOME MORE GREEN

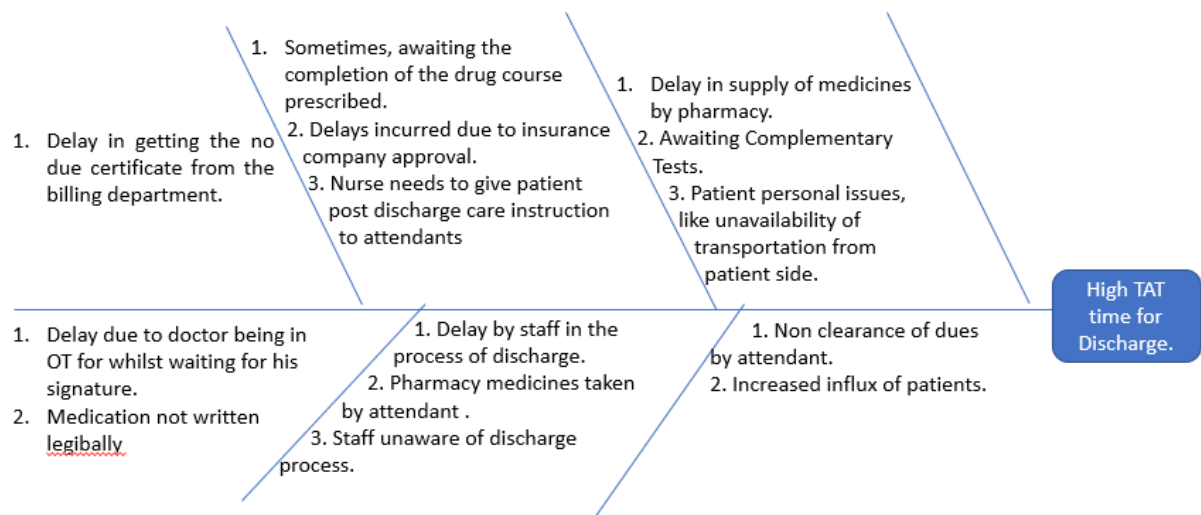
1. Replace round tap with a sensor/pressmatic tap, this will not only save the environment but will also prevent illnesses that one can get while sharing the same tap for hand washing.
2. Move the Bio-Methanation plant near the canteen. Bio-manure and biogas generated here can be supplied to cater to the waste disposal needs of both the canteen and onsite gardens. The biogas generated can be used to cook food, whereas the bio-manure can be used in gardening. This will help reduce the wastage of resources in our internal ecosystem.
3. The administration should take out the food waste generated per bed for better analysis.
4. Green buildings are unique in that they focus on minimizing risks and staying away from error-prone situations at all cost. That being said, navigation can also be very risky and potentially dangerous if the wrong kind of signage or wayfinding is involved with your Green Building's designs for example. Consequently, for best results when it comes to signage or wayfinding inside of a Green Building, consider implementing and using a strategy that prominently incorporates colour coordination schemes.
5. A shift towards e-prescriptions could save thousands of tons of paper each year. In addition to reducing paper, the move may also improve the sustainability of pharmacy practice and may reduce prescription errors caused by illegible handwriting notes – leading to better health outcomes for patients.
6. Hospital should implement the principles of Japanese manufacturing industry, 5S which is a highly effective lean manufacturing methodology to ensure workplace cleanliness, efficiency, and safety. By taking care of environmental issues such as workplace cleanliness and safety, the 5S method facilitates risk management, waste reduction, cost savings and employee engagement.
 - Sort - Remove unnecessary items from each area
 - Set-in Order - Organize and identify storage for efficient use
 - Shine - Clean and inspect each area regularly
 - Standardize - Incorporate 5S into standard operating procedures
 - Sustain - Assign responsibility, track progress, and continue the cycle

7. The hospital should celebrate Green Day, World Health Day, and World Environment Day. They can do this by planting trees to establish a greener environment as well as to raise awareness about the eco-friendly initiatives that the hospital has taken up in previous years.

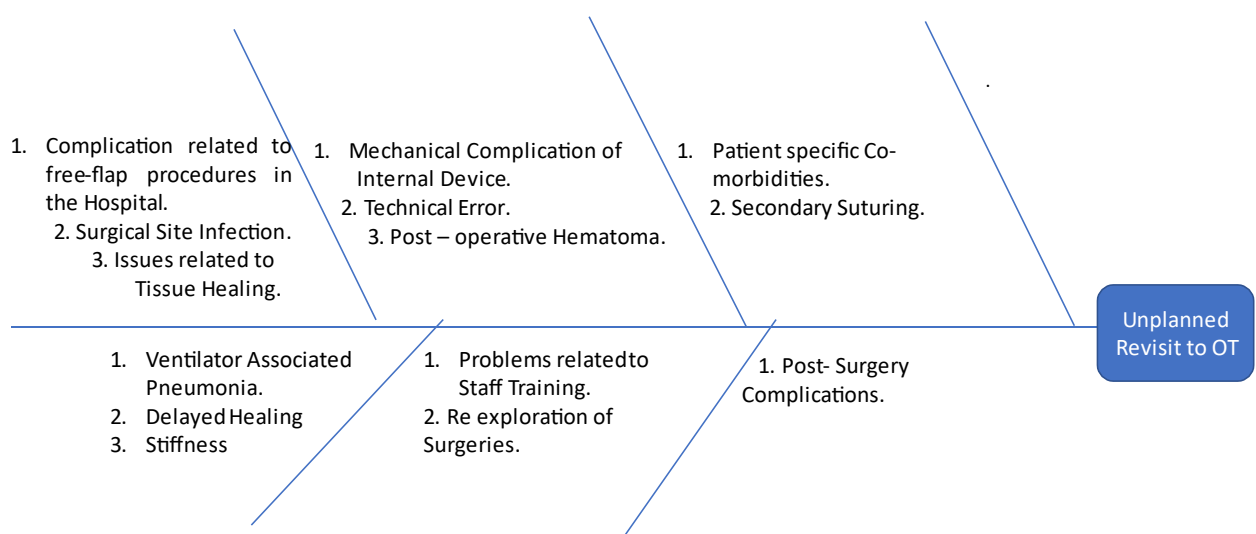
ROOT CAUSE ANALYSIS FOR HIGH OPD WAIT TIME



ROOT CAUSE ANALYSIS FOR POST DISCHARGE WAIT TIME



ROOT CAUSE ANALYSIS FOR UNPLANNED VISIT TO OT



NABH 5th Edition salient features for Consultants

1. Initial Assessment within time frame (within 60 mins)
2. Documented Care Plan
3. Countersigned by consultant
4. Regular Assessment at appropriate intervals.
5. Documented procedures to prevent wrong site, wrong patient and wrong procedure.
6. Anesthesiologist applies defined criteria to transfer the patient from the recovery.
7. Type of anesthesia (in PAC) and anesthetic medications used are documented.
8. Known Drug allergies to document in both OP and IP.
9. Departmental trainings with documentation of the same.
10. Ensure full use of PACS
11. Enter in the computer system for online capturing of OPD timings.
12. Medication orders and charts should not have any non-standard abbreviations.
13. Drug name in CAPITAL letters both in IP and OP.
14. Mention allergy both in IP and OP
15. Clear dose, route, frequency

Medical records of Patients who have undergone surgery should contain following documentation.

1. Pre-operative assessment
2. Type of anesthesia
3. Safety checklist to prevent surgical errors.
4. Informed consent prior to procedure.
5. Operative note by the surgeon or his/her team member.
6. Post-operative plan of care

Informed consent in medical records should contain

1. Surgical procedure, risks, benefits, alternatives, name of the doctor who will perform surgery.
2. Language that patient understand (having a bilingual consent form)
3. Signed by patient (or guardian if applicable)
4. Signed by the doctor taking consent
5. Signed by an independent witness

Each entry in medical records should be

- Signed
- Named
- Dated and Timed

NABH 5th Edition salient features for Nurses

1. Each entry in medical record should be named, Signed, Dated and Timed.
2. Medication letters is in CAPITAL LETTERS only.
3. Initial Assessment within time frame (within 30 minutes).
4. Regular assessment at appropriate intervals.
5. OPD follow-up
6. OPD Prioritization
7. Modified Early Warning Sign.
8. Discharge summary has patient/ attendant signature.
9. Implant stickers in discharge summary
10. Discharge/LAMA summary incorporates instructions about when and how to obtain urgent care.
11. Quality Assurance Programmes – Emergency, ICU, Blood Bank and OT
12. Ambulance equipments and medicines checked on daily basis using a checklist.
13. Staff training in CPR.
14. Verbal drug order
15. Near misses, medication errors and adverse drug events are reported and analyzed.
16. Nursing Audit
17. BLS, ACLS and PALS/ NALS.
18. Patient identification by patient's full name and unique identification number.
19. 'Safety First' for vulnerable patients.
20. Effective Hand-over communication.
21. LASA and High-Risk medications storage.
22. Patients receiving high alert medications developing adverse drug event.
23. Departmental trainings with documentation of the same.

Study Tittle – To Study the compliance of admitted patient files as per NABH Parameters.

AIM

To study the compliance of admitted patient files as per NABH parameters.

OBJECTIVE

1. To Assess the compliance of existing documentation procedures against the standard operating procedure established by hospital.
2. To identify gap against documentation and recommend possible solution.

METHODOLOGY

Study Setting – Bhagwan Mahaveer Cancer Hospital and Research Centre, Jaipur

Study Design – Observational and Cross-sectional study

The study is done on Active file.

Active File – The file which are in the respective wards and the patient are yet to be discharged from the hospital.

Study Duration – 1 month

Sample size – 300 total medically managed patient file.

Data Collection Technique – Primary data collected by checking files at the nursing stations of different wards (Active files).

Method of Data Collection – Standardized Audit tool was provided by the hospital.

Variable and their meaning – In this report two variable are taken – Compliance and Non-compliance.

Compliance as the name suggest is whether the parameter is being met with the requirement. In case the parameter is not up to the mark and does not satisfies the requirement, it is termed as **Non-compliance**.

The following parameters were observed and audited using checklist tool.

1. Emergency Assessment – Form Completeness

2. Doctor's OPD Initial Assessment

- Pain Score
- Plan of Care/ Treatment Plan
- Consultant Sign

3. Doctor's IPD Initial Assessment

- Timeliness (Initial Assessment within 60 mins)
- Form completeness
- Pain Score
- Plan of Care/ Treatment Planned
- MO sign, date and time
- Consultant counter sign (within 24 hours)

4. Nursing Initial Assessment

- Timeliness (Initial Assessment within 30 mins)
- Completeness of form
- Fall Assessment
- Vulnerable Scoring
- Pain Assessment
- Plan of care/ Treatment planned

5. Nutritional Assessment

6. Physiotherapy Assessment

7. Informed Consents

- Surgery Consent
- Anesthesia Consent
- Blood Transfusion Consent
- Restraint Consent
- High-risk Consent
- Chemotherapy Consent
- Viral Marker Consent
- Consent – Others

8. Progress Notes

- Date and Time
- Legibility / Capital Letter

9. Drug Order Sheet

- Allergies Documented
- Medications written in Capital Letters
- Clear Dose
- Clear Route
- Clear Frequency
- Verification of High Risk
- Resident Signature
- Mentioning of STOP Order
- Actual Time of Administration
- Nurse Sign

10. Anesthesia Record

- Pre Anesthesia Checkup
- Intra-operative Record
- Recovery Score
- Anesthetist Name and Sign

11. Surgery Record

- Post OP Notes
- Surgical Safety Checklist
- Pre-operative Checklist
- Blood Loss

12. Nursing Sheet

- Nursing – Nursing Notes
- Nursing – Nursing Care Plan
- Nursing – Legibility
- Nursing – Handover

13. Patient Safety

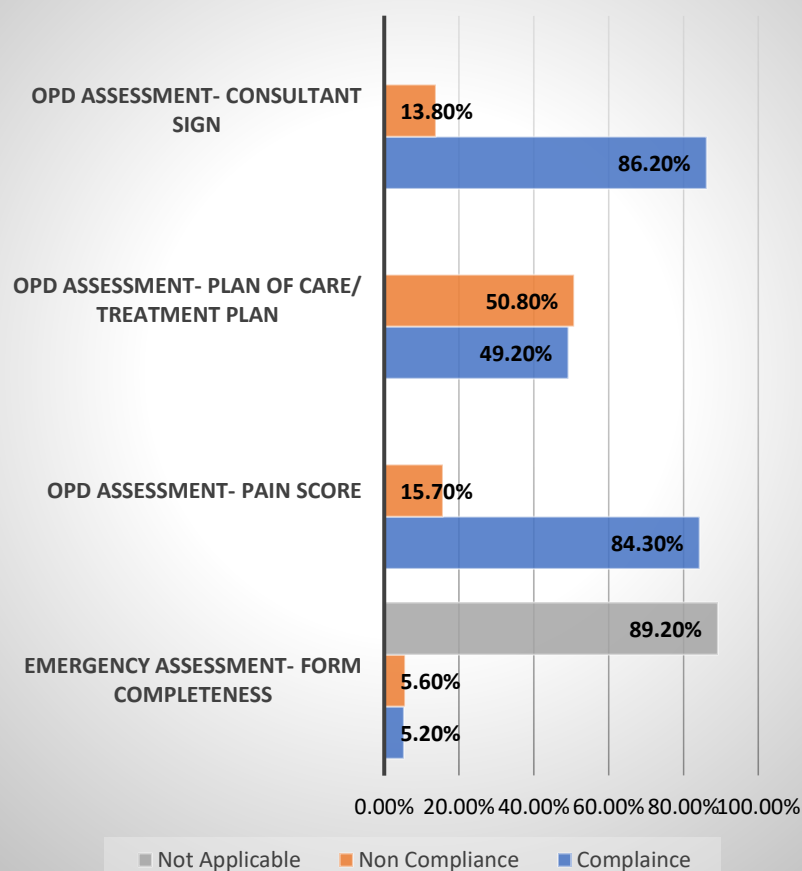
- Patient Safety – Two patient Identifiers
- Patient Safety – Side rail raised
- Patient Safety – Patient ID Band
- Patient Safety – Fall risk Assessment
- Patient Safety – Vulnerable Assessment

Data Analysis – 300 files were checked. Each and every parameters along with sub-parameters

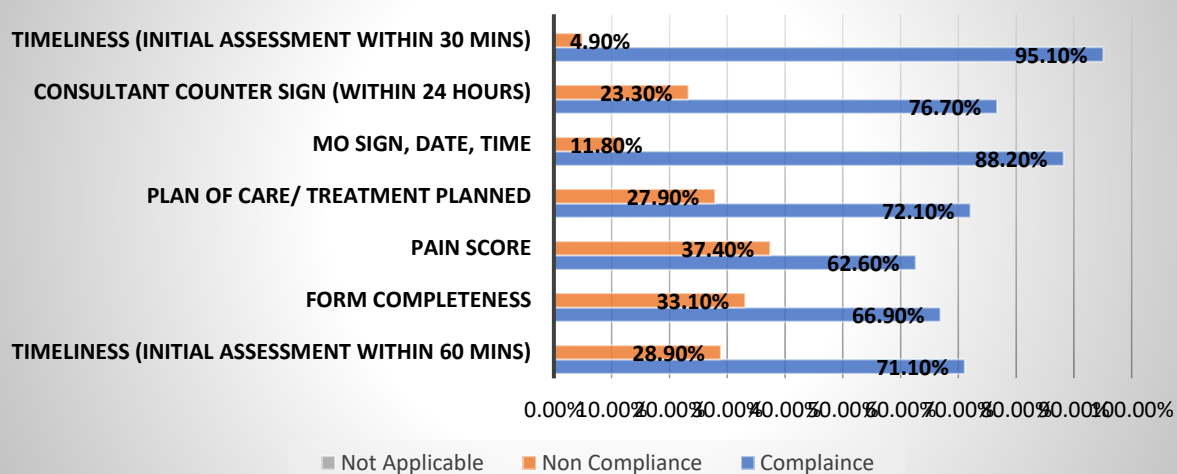
Turn Around Time for Initial assessment of Patient:

Nursing	within 30 mins
Resident	within 1 hour
Consultant	within 24 hrs
Dietician	within 24 hrs
Physiotherapist	within 24 hrs

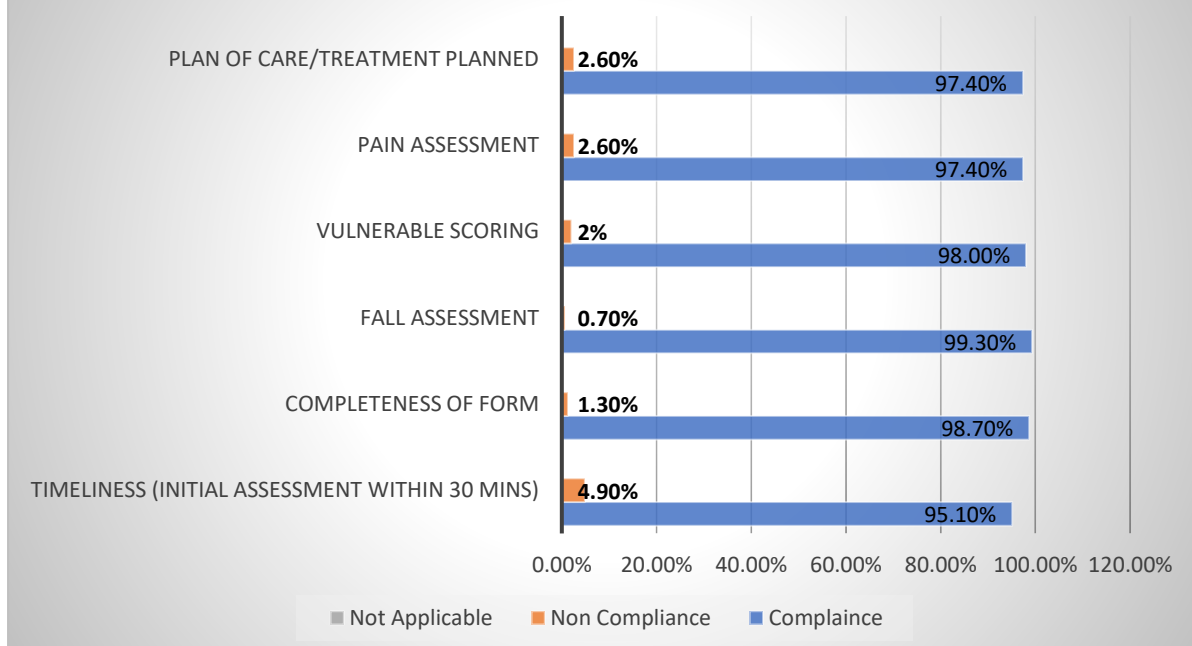
Emergency Form and OPD Assessment



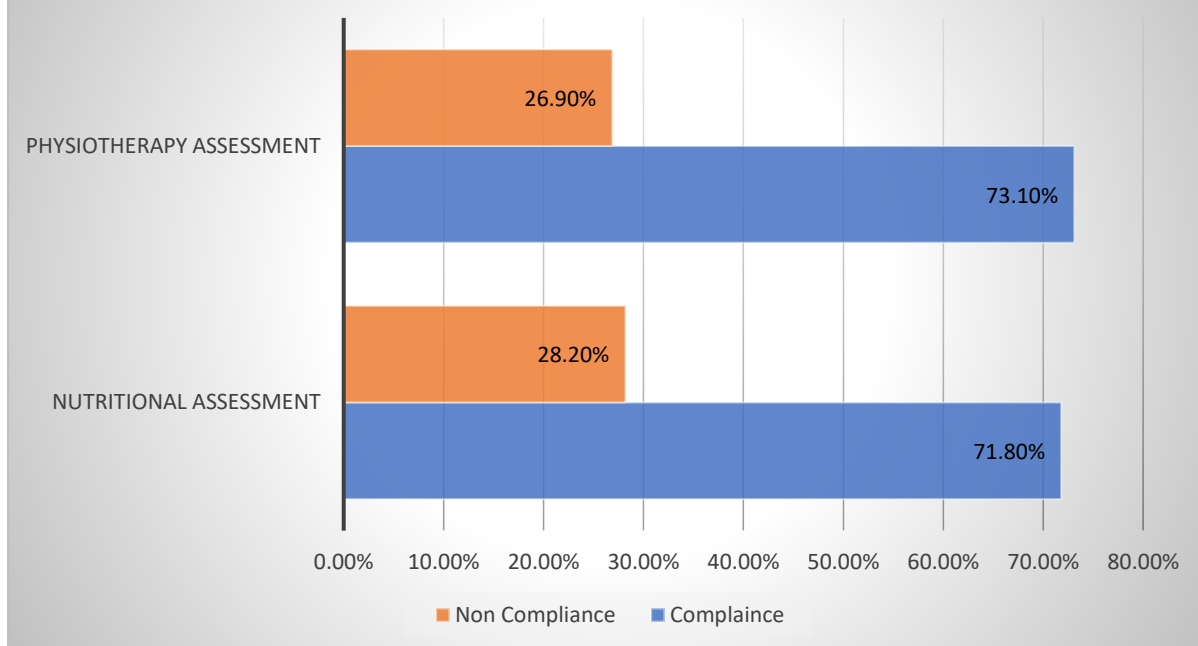
Doctor's IPD Initial Assessment

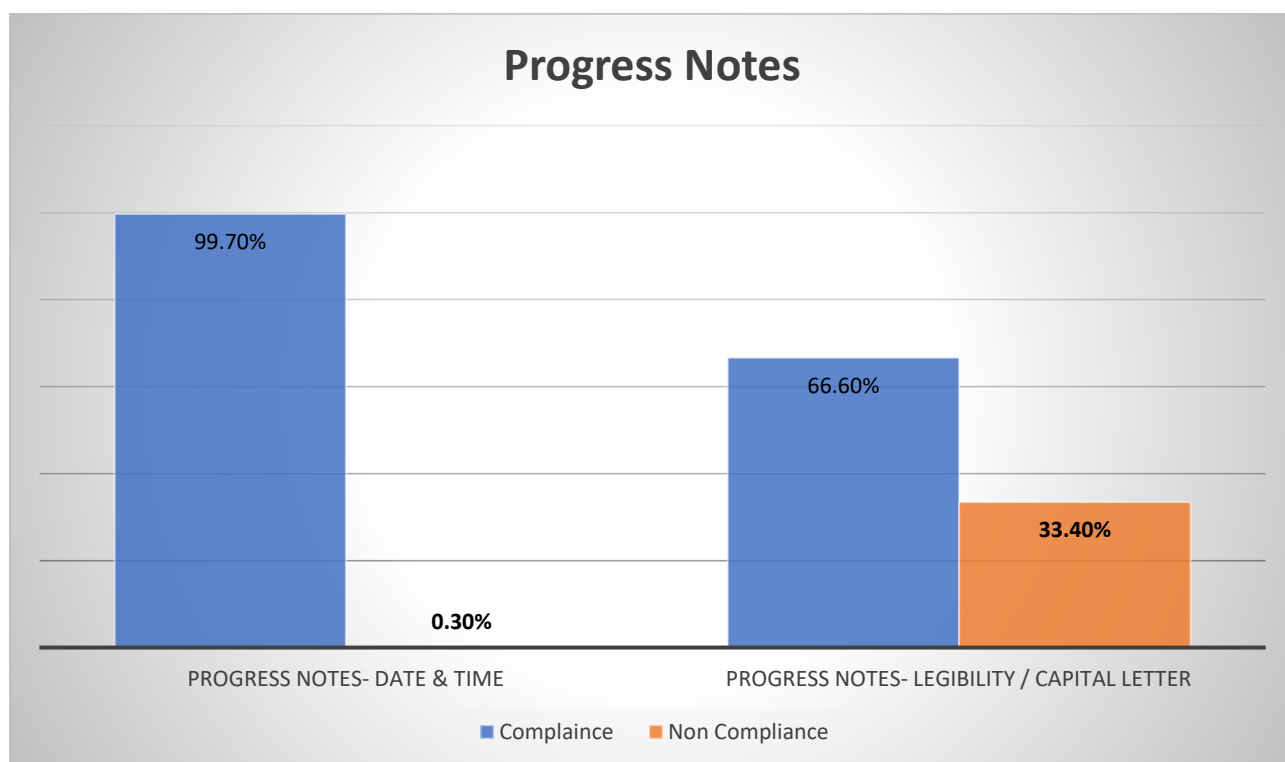
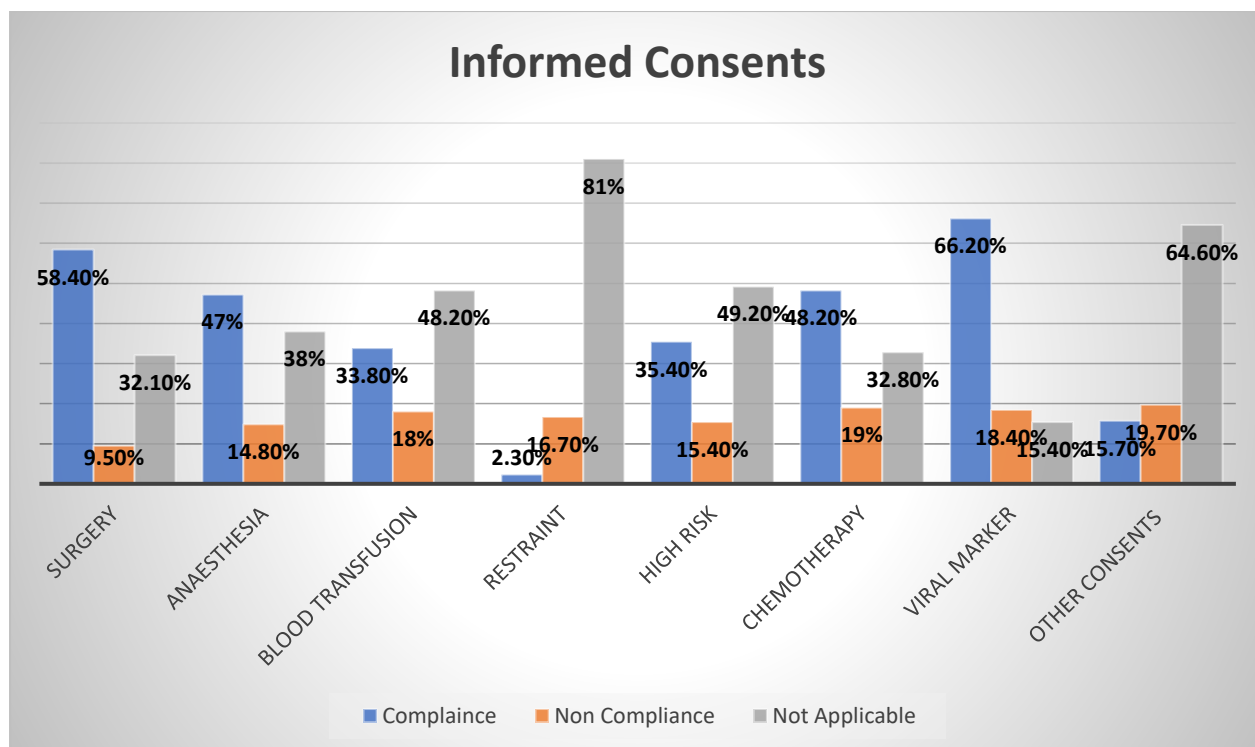


Nursing Initial Assessment

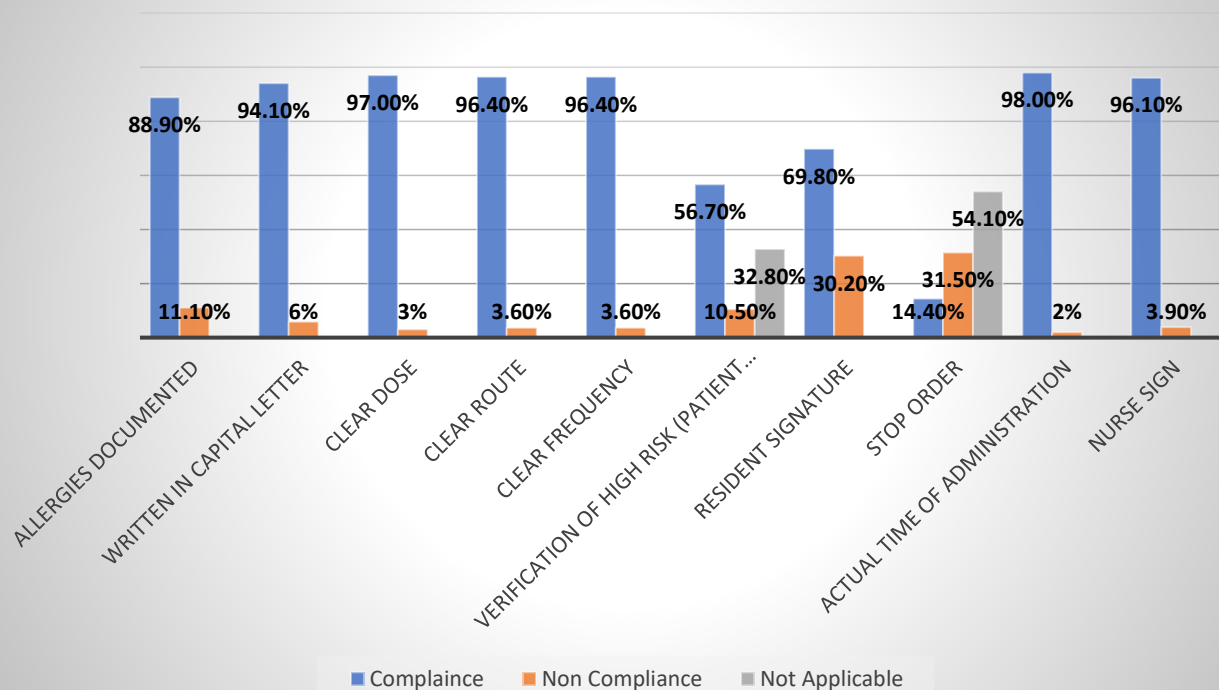


Nutritional and Physiotherapy Assessment

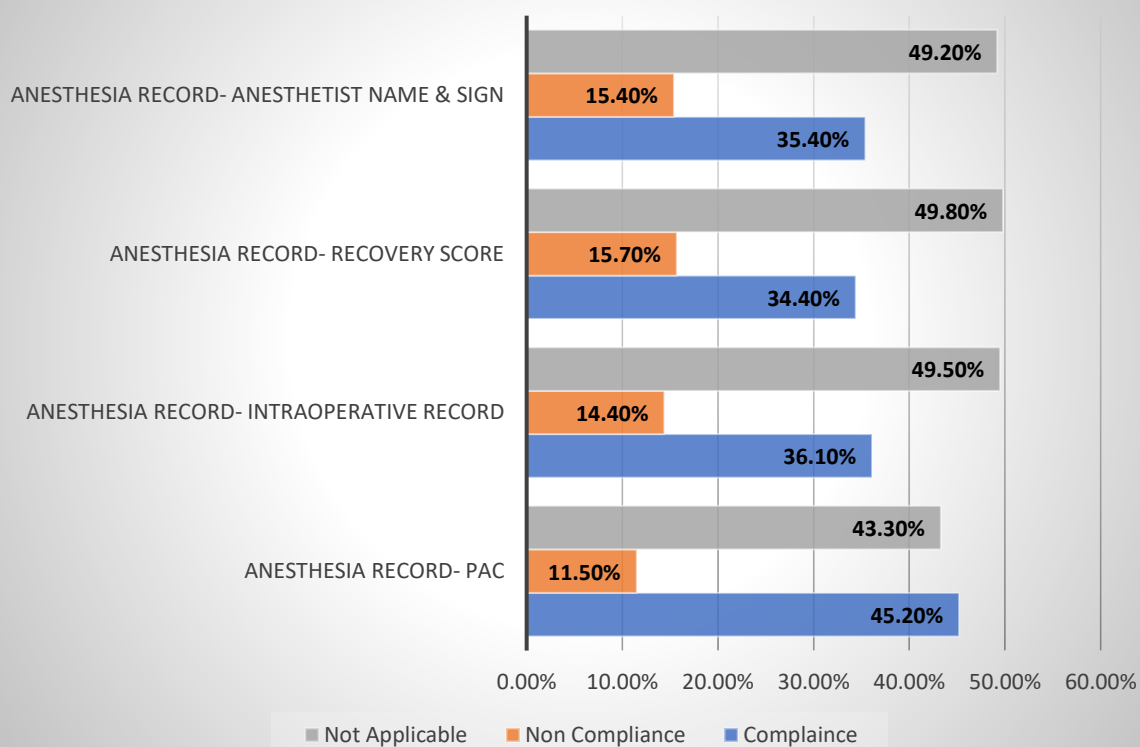


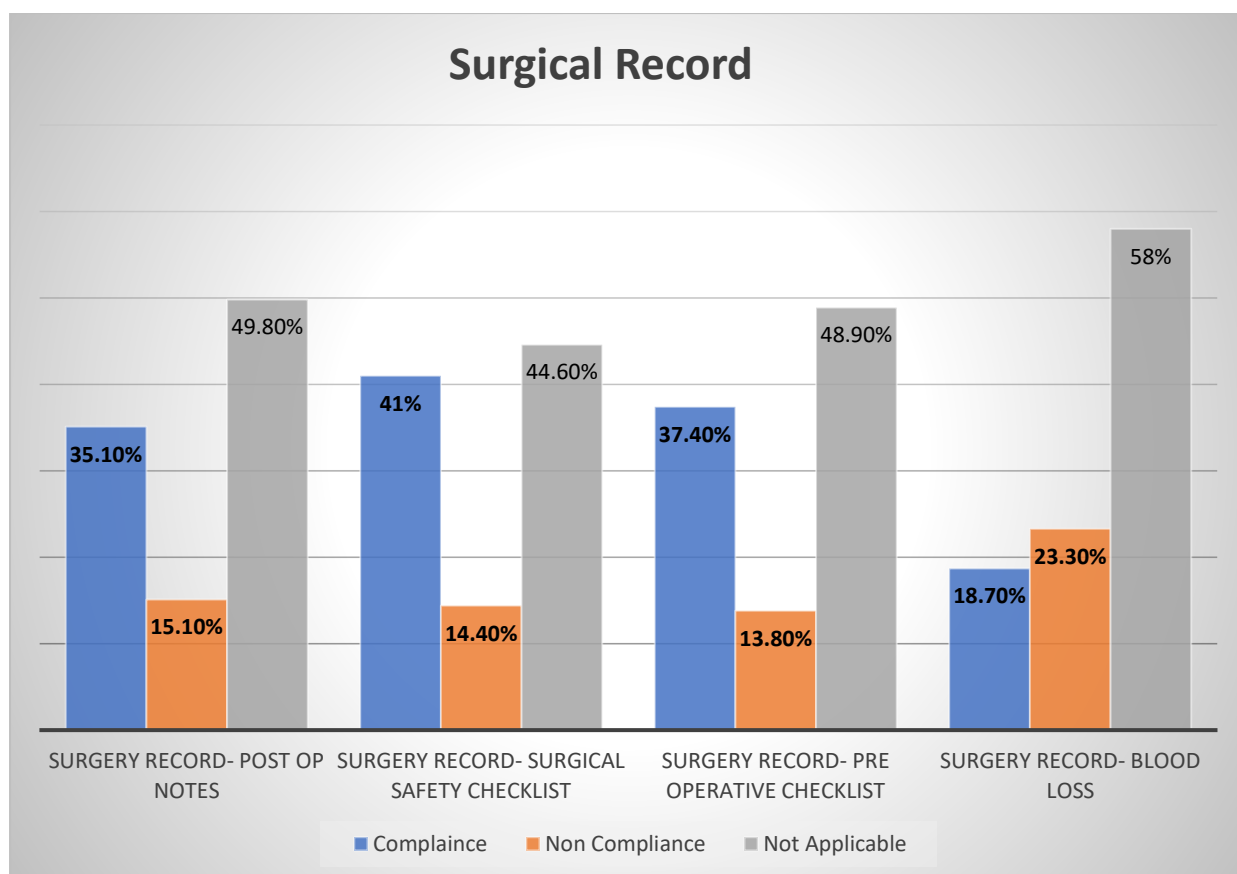


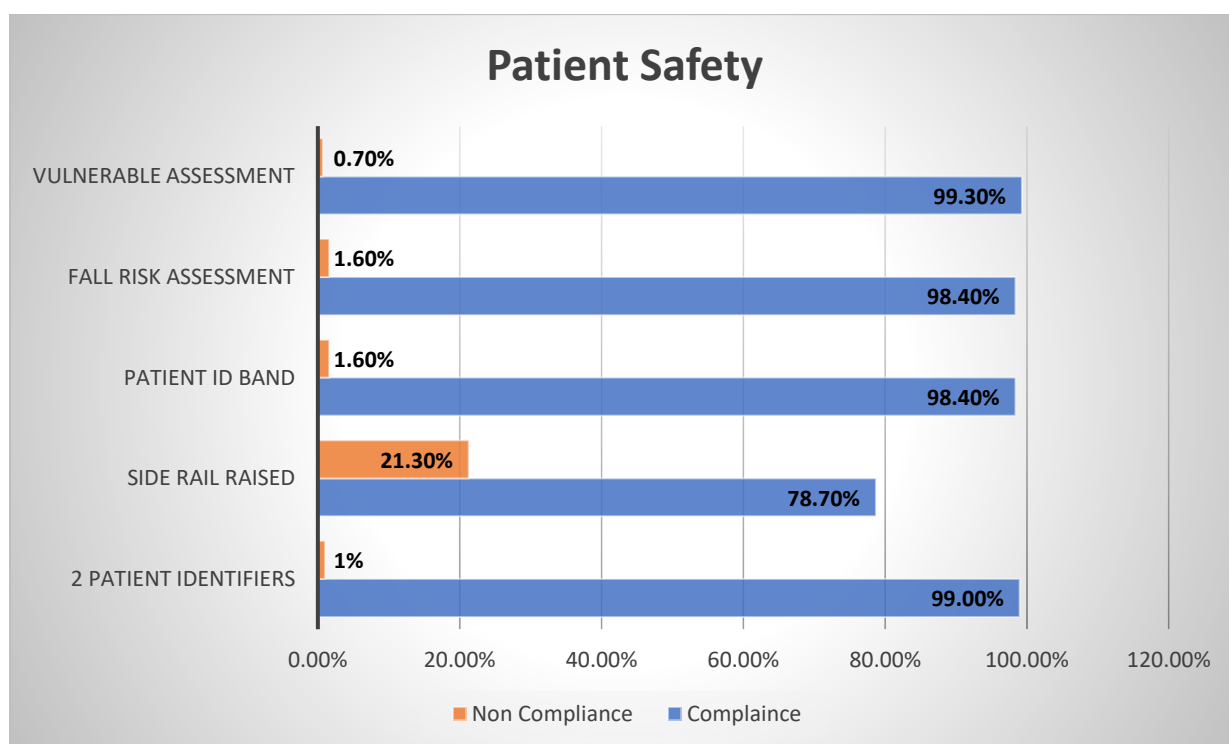
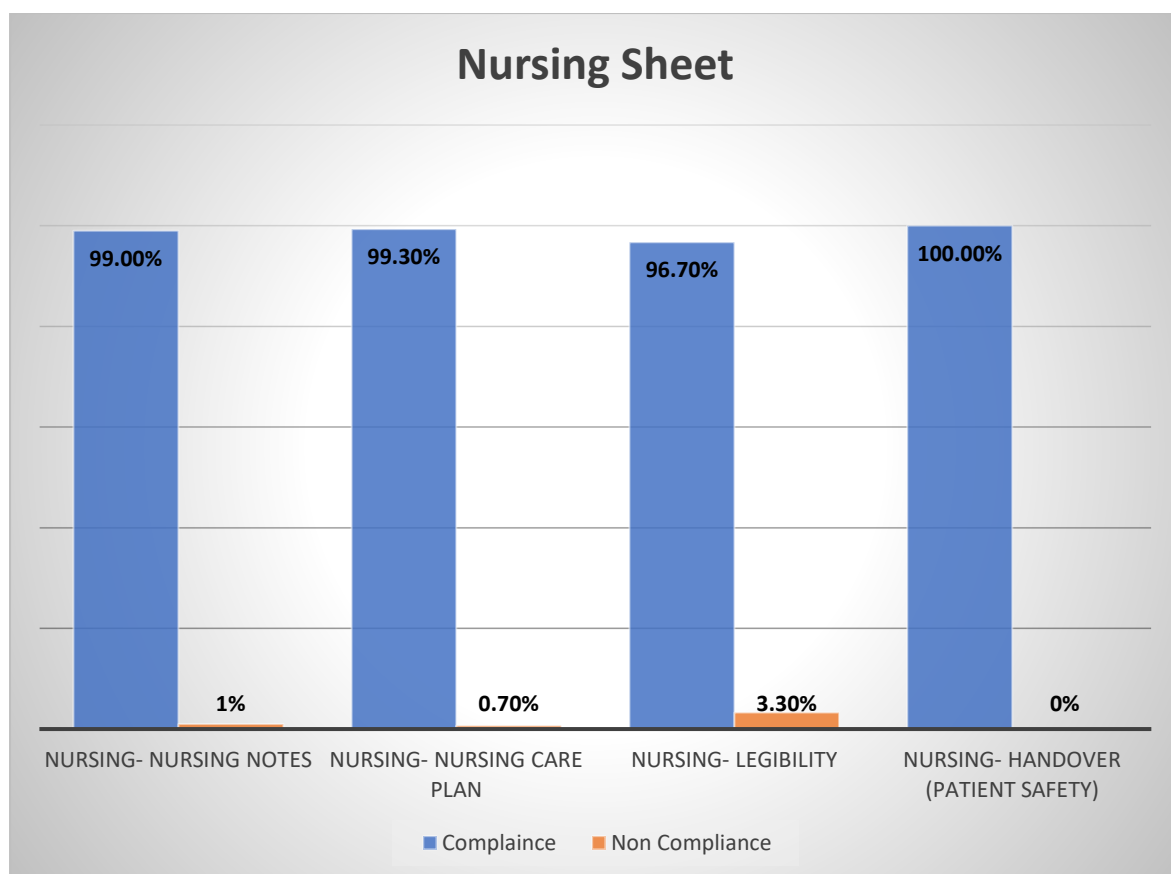
Drug Order Sheet



Anesthesia Record







DISCUSSION AND GAP ANALYSIS

The compliance and non-compliance rate was calculated as per NABH parameters of 305 patients files in various wards and rooms (deluxe, semi-deluxe and super-deluxe rooms) in BMCHRC Hospital. In total, compliance of 55 parameters were assessed of admitted patient files.

- **Emergency Form** - In case of emergency assessment, 5.6% of the files has not properly filled or partially filled their Emergency assessment form.
- **Doctor's OPD Initial Assessment** – Plan of care/ treatment plan shows a very high non-compliance rate of 50.8%. Mentioning of Pain Score is very necessary to assess the pain of patient and management of pain. Pain Score was not adequately filled in OPD Assessment Sheet of some patient's file with a non compliance of 15.7%.
- **Doctor's IPD Initial Assessment** – In 23.3% of the files, Doctor's Initial Assessment was not countersigned by the consultant within 24 hours. It is the duty of the admitting consultant to counter sign.
- **Nursing Initial Assessment** – Nursing Initial Assessment shows a non compliance rate of less than 5% in all the six parameters which was a good sign. Most of the part is under the control of the nursing department and as the result shows it has the high level of documentation compliance
- **Nutritional and Physiotherapy Assessment** – Nutrition and physiotherapist assessment shows a non compliance of 28.2% and 26.9% respectively which was very high. It should be done for every patient after the admission. A Nutritionist and Physiotherapist was on regular basis was hired by the hospital to improve on the non-compliance rate.
- **Consent Assessment** – Consents are written documents taken from the patient relatives for diagnostic and interventional procedures, where signature of a patient/relatives, doctors and a witness is mandatory. Consent are the most sensitive part of the entire patient files. It also plays an important role in the medico-legal cases. A complete and documented consent is necessary because sometimes it saves the organization and its staff from any legal actions. Consultants or his/her team always document the benefits and risks of the procedures and signs them appropriately from the patient's attendants.
- The non-compliance rate in consents was vary from consent-to-consent from 9% to 20%. Either the consent was not signed by the consultant or the patient/attendant sign was not taken.

- **Progress Notes Assessment** – Written in Capital Letter/ Legibility shows a high non compliance rate of 33.4%. Doctor's need to be educated for writing in Capital Letters.
- **Drug Order Sheet Assessment** –
 - Most of the documentation part is under the control of the nursing department. Drug Order Sheet filled by nursing department shows a high level of compliance in all the parameters.
 - The Mentioning Drug Allergies is the very vital point in drug order sheet that should not be missed. Many a times, patients are given medicines or medicinal compositions they are allergic turning the disease situation risky and fatal. Even though the documentation of drug allergies is so important, 11.1% of the files did not have any mention of the drug allergies that the patient is suffering from, neither marked as Not Applicable (NA).
 - The Compliance for drugs written in Capital letters was very good with a rate of 94.1% which is a very good sign.
 - Properly mentioning of the dose, route frequency of the drugs prescribed was very important. All the three parameters shows a high level of compliance.
 - Verification of High Risk medications was very important parameter which always should be documented. High risk medications are highlighted properly and a seal with three signatures must be done in the drug order sheet for verification. It shows a non compliance rate of 10.5%.
 - Resident Signature in Drug Order Sheet was very important. It shows a very high non-compliance rate of 30.2% which needs to be improved s it confirms that the drugs was written by the doctor and confirmed before administration. Mentioning of Stop Order is also very important because if not mentioned and administered in error, then it leads to Adverse Drug Reaction (ADR). It was frequently happened in hospital that a hand over was done from one nursing staff to another staff and due to not being mentioned of STOP Order, a drug was administered again.
 - Stop Order shows a non-compliance rate of 31.5% which was very high.
 - Actual time of administration and Nursing Signature shows a high compliance rate of 98% and 96.1% respectively.
- **Anesthesia Record** – Pre-anesthesia Record shows a non-compliance rate of 11.5% to improve on this, communicate with the anesthesiologist who is responsible for administering the anesthesia to the patients before surgery is required. They have to filled PAC before administering anesthesia.
- Also, they have to properly mention their name and signed in each anesthesia document and properly maintain the anesthesia intra-operative record and recovery score.

- **Surgical Record** – The four parameters of surgical record shows the non-compliance rate in between 13% to 23%. Post OP Notes must be mentioned as it is necessary and helps the patient's attendant in caring of the patient, about their medication.
- **Nursing Sheet** – Nursing Notes, Nursing Care plan, legibility of the document and patient handover are all the parameters of nursing sheet having a non-compliance of less than 3%.
- **Patient Safety** – Totally, five parameters were assessed in Patient Safety. Two patient Identifiers, Side Patient ID Band, Fall Risk Assessment and Vulnerable Assessment shows a very high compliance rate in between 95% to 99% and Side Rail raised shows a non-compliance of 21.3% which must needs to be improved. Majorly, the rails was not raised of general wards.

SUGGESTIONS

Based on the findings of the study and on the observations made in the hospital, the following suggestions can be taken up.

- Orientation of Doctors and staff – We need to sensitize the clinical staff regarding the importance of medical records and proper documentation of each form.
- Also, every time a new person joins he/she must be properly oriented about how and what are the things they need to fill up and the importance of filling up. Regular trainings should be taken on nursing and physicians documentation.
- Educate and train to nursing staff on NABH guidelines for documentation in medical records.
- Check whether the proper documentation was done of admitted patient file in a day or after a periodic interval of time.
- Also there should be a proper process of checking of each and every parameter before sending the file to MRD post patient care.
- Delegation of Work – The floor manager given a job of checking each patient file documentation. If not filled properly, then the floor manager can ask the nursing personnel and doctors to fill the remaining documentation or any part of it.
- Using of ‘NA’ – If some part of the documentation is not applicable for a particular patient, than that part should be mentioned as Not Applicable. Leaving the blank space implies, that the part has been overlooked or has not been documented.
- Since, a nurse prepares the patient for the procedures, explain the procedure to the patient and generally explains the consent form to the patients, the nursing staff can be given the responsibility of getting the consultant form signed by the doctors.
- With the Quality Department, we have to make a separate department for Internal Audit, which is responsible for doing monthly internal audit of documents and helps in continual quality improvement.
- Rewarding the best performing department /unit for documentation .

CONCLUSION

- Maintaining a complete documentation of records is not only important to comply with accreditation and licensing requirement, but also as a proof to establish that the adequate care a patient received in the organization.
- The audit was an attempt to understand the compliance of the IPD patient files to the quality indicators of NABH and analysing the results and introducing an intervention program.
- This report highlights the area of medical records of hospital that need more concern and attention. Overall study shows that the documentation standards in the hospital is satisfactory except a few parameters which needs attention for improvement.
- To keep the standard and to improve them, the non-compliances stated should be managed .
- The intervention programs consisted of counselling to the dept. HOD who would then percolate the same to the whole of the dept. and also capacity exercises to other staffs.

ANNEXURE

S.No.	Name of the Department	Date(s) of visit	Percentage of Time Spent	Interacted with (Name and Designation)
1.	Quality Assurance Department	10 th May- 5 th June	25 Days	Dr. Sonal Rai (HOD) and Vansh Chaudhary (Quality Executive)
2.	Operation Theatre	28 th June- 2 nd July	5 Days	Dr. Renu Joshi(HOD)
3.	Patient Care and Safety	9 th June – 16 th June	8 Days	Ambika Verma (HOD)
4.	Medical Administration	17 th June – 27 th June	10 Days	Dr. Subha Pathania (Medical Superintendent)
5.	CSSD	7 th June	1 Day	Mohammad Khalid (HOD)
6.	Central Store	8 th June	1 Day	Anil Kumawat (HOD)
7.	Blood Bank	9 th June	1 Day	Dr. K C Lokwani (HOD)
8.	Engineering Department	10 th June	1 Day	Shankar Kumar Jha (HOD)
9.	Medical Records Department	11 th June	1 Day	Radha Mohan Sharma (HOD)
10.	Support Services	26 th June	1 Day	Manish Goswami (HOD)
11.	IT	27 th June	1 Day	Deepak Talukdar (HOD)
12.	Bio-Medical Engineering	1 st July	1 Day	Manendra Belle (HOD)
13.	Marketing	28 th June	1 Day	
14.	Floor Manager	29 th June	1 Day	Karan
15.	Fire Department	30 th June	1 Day	Suresh