Summer Training

At

Bhagwan Mahaveer Cancer hospital & Research Centre (BMCHRC)

From 10th May,2021 to 2 July,2021

A Report on

Adherence of the closed patient files to the NABH guidelines in BMCHRC

By

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MBA in Hospital and Healthcare Management

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IIHMR UNIVERSITY

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

BMH/HRD /2021/673

Date: July 3rd, 2021

To whomsoever it may concern

This is to certify that **Dr. Munir Susham,** MBA Hospital and Healthcare Administration student from **IIHMR University, Jaipur** has completed his internship program form **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

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Finally, I appreciate my family and friends' unwavering support, which motivates me to do my best.

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ACRONYMS/ ABBREVIATIONS

- **AMS –** Assistant medical superintendent
- **BMCHRC-** Bhagwan Mahaveer Cancer Hospital and Research Centre
- **CSSD –** Central Sterilization and Supply Department
- **Dept.-** Department
- **HOD –** Head of Dept.
- **IPD –** In-Patient Files
- **ICU -** Intensive care unit
- **MRD –** Medical records department
- **MS –** Medical Superintendent
- **MO –** Medical Officer
- **NABH –** National Accreditation Board for Hospitals
- **OPD –** Outpatient Files
- **POST OP. –** Post Operative

Part – 1 Observational Learnings

I. BRIEF DESCRIPTION OF THE ORGANISATION

FIG. – 1 BMCHRC

The Bhagwan Mahaveer Cancer Hospital and Research Centre (BMCHRC) is a not-for-profit super specialty cancer hospital in Jaipur, Rajasthan, India, run by the K G Kothari Memorial Trust. It was founded with the goal of providing comprehensive cancer care to patients at an inexpensive cost, regardless of their financial situation. Shri Navrattan Kothari inaugurated the hospital in 1996. The NABH-accredited Bhagwan Mahaveer Cancer Hospital and Research Centre (BMCHRC) in Jaipur was founded in 1997 as a cancer specialist hospital that provides cancer prevention, treatment, education, and research. After 23 years, it has grown from a 50-bed hospital to a 300-bed super-specialty hospital with cutting-edge infrastructure housing multiple wards, labs, utility services, and specialties. BMCHRC now has its own departments of Surgical Oncology, Medical Oncology, Radiation Oncology, Radiology, Nuclear Medicine, Pathology, and a large Blood Bank. BMCHRC has grown from a 50-bed facility to a 300-bed super specialty hospital in terms of patient care.

A new IPD block is being built to accommodate more patients. The hospital aspires to serve patients not just from Rajasthan, but also from surrounding states where high-quality cancer care and therapies are lacking. Furthermore, as part of its mission to help the poor, the BMCHRC not only treats patients in the BPL category for free up to a quarter of the time, but also offers

subsidized therapy to patients from lower socioeconomic strata.

Services at BMCHRC

To achieve its goal of delivering comprehensive cancer treatment to patients, the BMCHRC provides a variety of services. Surgical oncology, neuro oncology, ortho oncology, plastic and reconstructive surgery, medical oncology, radiation oncology, hematology - oncology, gynecologic oncology, and anesthesiology are among the services provided at the institute.

Additional to the foregoing, the hospital offers a wide range of clinical services to patients from all walks of life. Palliative care, psycho-oncology, ostomy clinic, food services, physiotherapy, dental care, and preventive oncology are among the services provided.

II. SPECIFIC OBJECTIVES

Mission

To provide “Affordable Care with a Human Touch” to all members of society, regardless of their financial circumstances.

Vision

To transform Bhagwan Mahaveer Cancer Hospital and Research Centre (BMCHRC) into a modern, world-class treatment of cancer institution equipped with cutting-edge technologies.

Values

- Excellence in Clinical Practice
- Ethical Conduct
- a patient-centered strategy
- Team spirit
- Morality
- Devotion

Service Standards

- Professionalism
- Communication
- Priority Customer Service
- Respecting privacy

ORGANOGRAM OF THE BMCHRC

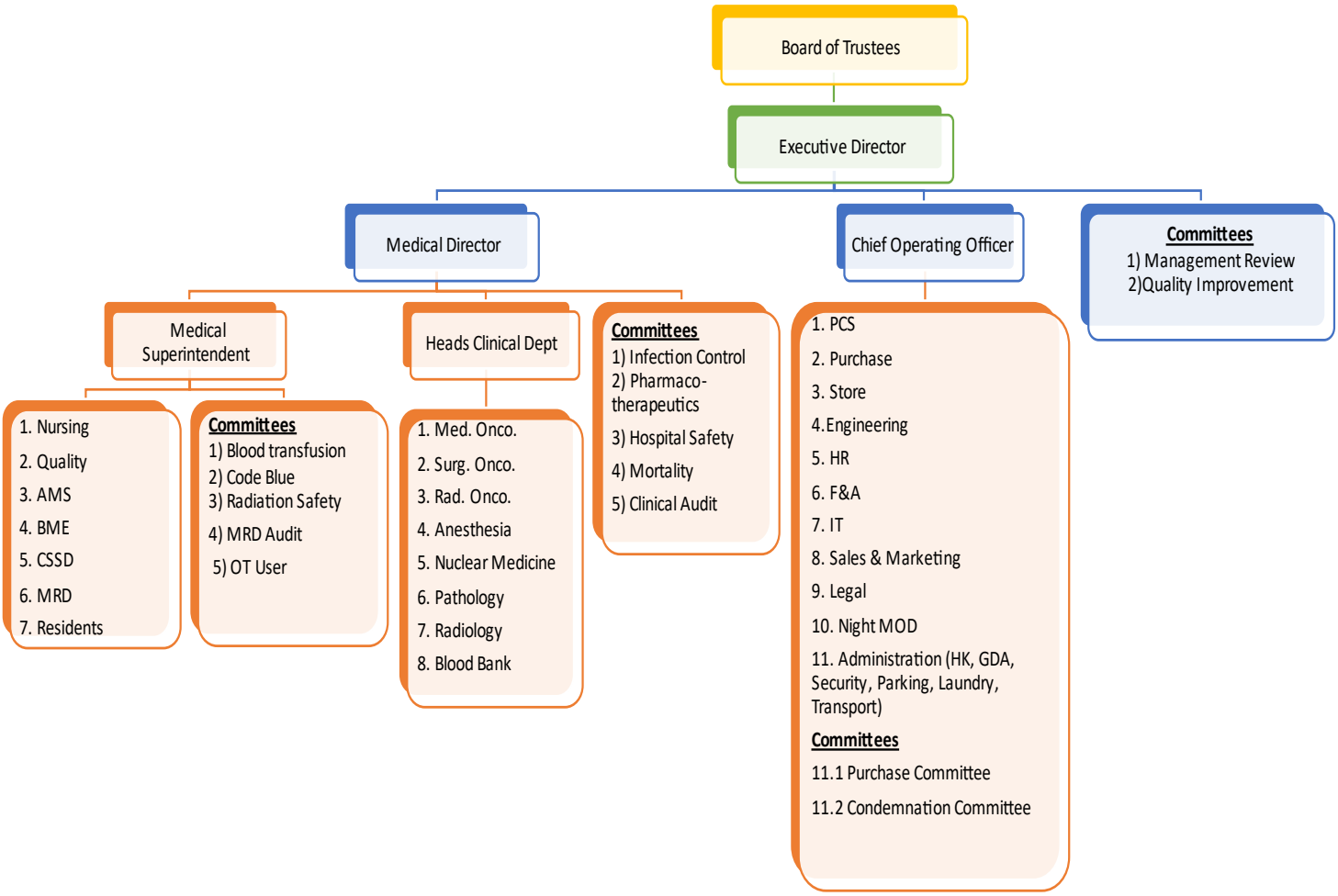

FIG. – 2 Organogram

III. MODE OF DATA COLLECTION

- Methodology for this project is entirely based on personal observation of the Medical Record Department and other departments at work.
- THE TYPE OF DATA: - Data from the field Personal observation was used to gather the primary data.

- Medical Admin- Manual noting of time while measuring TAT time and/or use of google forms.
- Operation Theatre - Checking of input of times of stages of surgery by manual noting and anti-biotic and surgical checklist audit was conducted via google forms.

IV. GENERAL FINDINGS ON LEARNINGS

Department wise observations and learnings

- ✓ Clinical unit
- ✓ Clinical support unit
- ✓ Clinical admin units
- ✓ Administrative/ Non- clinical unit

CLINICAL UNIT:

Medical oncology:

Specialized services-

- Acute lymphoblast leukemia
- Acute myeloid leukemia
- Hodgkin's and Non-Hodgkin's lymphoma
- Multiple myeloma
- Breast cancer
- Lung cancer
- Ovarian cancer
- Colorectal cancer
- Hepatobiliary and pancreatic cancer,
- Esophageal cancer

- Prostatic, urinary bladder, and kidney cancer

Care and facilities:

Surgical oncology:

The Department of Surgical Oncology is comprised of a devoted group of highly qualified surgeons with vast experience in cancer therapy.

Specialized services-

- Head and Neck Oncology
- Breast Oncology
- Thoracic Oncology
- Gastro-Intestinal Oncology
- Genito Urinary Oncology
- Gynae-Oncology
- Bone and Soft Tissue Oncology
- Plastic and Reconstructive Surgery
- Neurosurgery
- Services such as a colostomy clinic and physiotherapy are available for rehabilitation and aftercare.

Radiation oncology:

The Radiation Oncology department at BMCHRC is well equipped in delivering precision treatment with the use of the latest technology like 3DCRT, IMRT, IGRT and Rapid Arc. The treatment planning is carried out with customized immobilization device, followed by imaging on a wide-bore CT scanner. In house PET scan is available for PET based RT planning.

Anesthesiology department:

HOD –The Department of Anesthesiology at BMCHRC comprises of a team of experienced consultants and excellent support staff.

The department also handles a 15-bed SICU (Surgical Intensive Care Unit) in joint management with Surgeon & Critical Care Experts (Doctors & Nurses). The beds are fully equipped to handle several different treatments.

Also under the Anesthetic department is the 8-bed MICU (Medical Intensive Care Unit)

Specialized services-

- Preoperative assessment and perioperative care
- Optimization of patients undergoing complex surgery for cancer
- Provide anesthesia for major/minor surgeries
- Provision of ambulatory anesthesia and anesthesia in remote areas
- Preoperative care of high risk, elderly patients & patients with multiple comorbid conditions
- Central venous access and invasive hemodynamic monitoring
- Sono guided regional anesthesia and venous access

Nuclear medicine:

BMCHRC is the first comprehensive cancer institute to have PET-CT scan & Gallium in Rajasthan.

Neuro Onco surgery-

Department of Neuro onco Surgery is fully functional since May 2019 to offer the best and affordable treatment to patients of the region.

We have started all major and minor Neuro onco Surgical Procedures.

Facilities available:

- Surgery for all benign and malignant brain and spine tumors
- Awake craniotomy for lesions in crucial brain areas
- Endoscopic surgeries

- Pediatric neurosurgeries
- Surgery for difficult skull-base tumors/ vascular lesions
- Spine surgery.

- **OPD**: first floor. OPD consultation facility are provided to all patients from 9am -5pm where patients and attendants are counseled as per the requirements and are encouraged for regular follow-ups. Diet charts are given as per requirement to the patients.
- **IPD**: IPD billing on the ground floor

  All IPD patients are initially assessed at the time of admission and further reassessed on regular basis for any other health problem. Regular counseling to the patient and attendants is provided along with diet chart made for them.

- **ICU**:

The ICU is a department where critically ill patients are admitted for intensive care and specialized care.

There are 2 types of ICUs in the hospital – SICU, MICU. MICU is located on the first floor, and SICU is located on the second floor.

- **New OT Complex**:

It is located on the second floor.

The aim of the department of OT and Anesthesiology is to provide the highest quality of care for the patients undergoing various types of surgeries.

CLINICAL SUPPORT UNIT:

1. Radio Diagnosis Department:

The radiology department at BMCHRC offers patients diagnostic services as advanced as anywhere in the world.

Facilities offered in the department include:

- 16 SLICE CT scan
- Digital Mammography

- Color Doppler
- Digital X-Ray
- Orthopantomogram

2. **Pathology department**:

The goal of pathology examination of tissue is to provide accurate, specific and sufficiently comprehensive diagnosis to enable the treating physician to develop an optimal plan of treatment. The pathology department houses an integral part of the hospital; the Hospital Based Registry which comes directly under the National Cancer Registry. This is where the patients diagnosed with cancer and admitted to the hospital are all registered.

- Surgical pathology includes frozen section, histology, and immunohistochemistry (IHC).
- FNAC, fluid cytology, cytospin preparation, and cell block are all examples of cytology.
- Haematology, comprising complete blood count, platelet count, bone marrow aspiration and biopsy, and cytochemistry.
- Biochemistry including RFT, LFT enzymes, lipid profile and electrolytes
- Microbiology
- Serology and immunology, including tumour markers, HIV and HBsAg, chemiluminescence hormone and anaemia profile

- Flow cytometry
- Molecular Pathology (RT PCR)

3. **Nuclear medicine department**:

BMCHRC is the first comprehensive cancer institute to have PET-CT scan & Gallium in **Rajasthan**.

- PET CT (First in Rajasthan)
- Gamma Camera
- Radio Iodine Therapy (First & Only in Rajasthan For Thyroid Disorder Patients)
- Samarium Therapy for Bone Metastasis.

- Gallium – 68 generators for Neuroendocrine Tumors and Prostate Tumors

4. **Palliative care department**:

The Palliative Care Service is a research-based program. The Indian Association of Palliative Care has granted the hospital accreditation for the certificate program in Palliative Care Essentials. Ours is the only center in North India that offers six-week palliative care training to doctors and nurses.

The department aims to provide the best quality of life. The goal is to ease the suffering of cancer patients.

- Pain and Symptom Management
- Symptom control: fatigue, nausea, wound care, loss of appetite
- End of life or Hospice care
- Home based care
- Psychosocial support
- Care Giver Support

5. **Dietetics department**:

   Nutrition is as important as everything else when it comes to cancer treatment. The dietician and dietary experts at the BMCHRC provide special counselling to all cancer patients, so they eat the right kind of food during and after their treatment.

   The main areas of dietetic intervention include:

   - Clinical nutrition services
   - Nutritional education
   - Nutritional research services
   - Dietetic internship
   - Dietary supplements

6. **Physiotherapy department**:

At BMCHRC, the physiotherapy is personally tailored to our patients and can include:

- Massage
- Garments Under Pressure
- Exercises that are specifically developed to help people with lymphedema.
- Mobilization of Soft Tissues
- Packs of heat and cold
- Breathing exercises
- Exercises in spirometry range of motion
- Exercising for flexibility and strength
- Exercises that improve balance and coordination

7. **Pharmacy department**:

Medicine is available at the BMCHRC 24 hours a day, 7 days a week. At a fair cost. All necessary requisite licenses are always kept in order to comply with the norms and rules of the applicable government departments.

8. **Blood bank department**:

24-hour, 365 days availability (All fractions of blood)

BMCHRC has maintained its own blood bank that registers and provides services to the patients and donors as per the rules set up by the Drugs & Cosmetics Act of India.

• Components and Irradiated Blood

• Packed Cells (PRC)

• Frozen Plasma (Fresh) (FFP)

• Apheresis of a single donor platelet (SDP)

• Platelets from Unknown Donors (RDP)

• Cryoprecipitate is a term used to describe a substance that has been frozen (Factor 8 Conc.)

CLINICAL ADMIN UNIT

1. **Patient welfare department**:

   The main aim of the department is to make and position the hospital as a 'Centre of Excellence' by ensuring customer satisfaction through personalized customer care, following the guiding of empathy, care and compassion to make the patients feels and cared for. The scope and complexity provided by thus department is to enhance the customer satisfaction.

   The objective of PWD is to:

   - Handle in-house public relations with patients and relatives and other visitors.
   - Ensure that our processes are 'customer centric'.
   - Ensure these are followed
   - Create a pleasant experience for the patients and their attendants.

2. **Bio medical department**:

   The main objective of the department is to facilitate the usage of the latest technologies in the diagnosis, treatment and care of patient. It is responsible for proper usage and quality performances of these costly equipment and tools inside the hospital. The department performs the following functions:

   - Records of the hospital equipment.
   - Ensuring smooth functioning of the equipment.
   - Facilitation and identification of equipment requirements.
   - Conduct preventive maintenance servicing for all the installed equipment.

3. **Medical record department**:

   Following are the functions of MRD in BMCHRC

   - Medical records must be properly stored and maintained.
   - Maintaining the confidentiality and integrity of medical records.
   - Data collection and submission

4. **CSSD**

The objective of establishing this department is to make reliably sterilized articles available at the required time and place for any agreed purpose in the hospital as economically as possible.

Functions of this department are:

- It helps in reducing hospital's surgical infections and ensure patients safety.
- for preparing medical/ surgical supplies and equipment so that they are sterile and ready for use in patient care.
- To provide a reliable, consistent, and high-quality supply of sterilized materials to the hospital in a variety of departments, as well as infection-free patient care.
- To deliver sterile linen packs, basins, equipment, and other sterile things as needed.

  It has three zones:

  - Decontaminated area
  - Cleaning zone
  - Sterilized zone

  Protocol followed as follows:

  ✓ Prewashed: all the instruments are prewashed at their respective depts. Before they are sent to CSSD

  ✓ Decontaminated zone: instruments are received, checked, sorted according to checklist.

  - Automatic washer
  - Large ultrasonic washer with air gun
  - Small ultrasonic washer

  ✓ Cleaning zone: after washing, the instruments are carried to the clean zone.

  The packing of instrument is done in the zone in linen.

  - Autoclave (750lit)
  - Autoclave (250 lit)
  - Boiler

- ✓ Sterilized zone: all the sterilized instruments are kept in this zone and from here they are sent to OT and ICU through dumbwaiter.
- ✓ Quality indicators: chemical and biological tests, strip test, autoclave tape, Bowe Dick indicator. The infection control department team comes for monthly audits to collect swab and make culture reports.

5. **Infection control department**:

Infection Control department of BMCHRC organized "Infection Prevention and Control Week" from 19th to 23rd Oct 2020. Under these various activities were organized such as infection prevention and control awareness training: Break the chain of Infection, Trained the trainers and quiz compaction. DNB students, Residents doctors, nursing staff and other medical service providers participated in the activities.

ADMINISTRATION UNIT

Quality Assurance Department: -

- As per department posting schedule first 4 weeks has been spent in the Quality assurance department.
- I got posted just before 1 month prior to the NABH Inspection.
- I have given the responsibility of being the **internal auditor** for the numerous patient files which included the Active patient file Audit/ Open file Audit, Patient safety Audit, Discharge File Audit/ Closed file Audit and Prescription Audit.
- All the audits were done as per NABH 5th edition guidelines.
- Questionnaire were made during internal audit as per NABH guidelines.
- The Quality Assurance department was majorly involved in maintaining and in Enhancement of the efficient working of all the departments of the hospital.
- The Open file Audit and Patient safety audit was done by the evaluation of admitted patient's files and checking them for adherence.
- The Closed file audit and the prescription audit was done by inspecting the files of discharged patients in the MRD department and examining their compliance with the NABH criteria.
- The files were examined, adherence was calculated, adjustments were offered, and the files were re-audited after a period of time to assess their progress.

- I have observed and analyzed the internal factors by discussing them with the respective staff of departments of the organization on various parameters and done the Root-Cause analysis/ Fish bone analysis.
  a) Unplanned return to OT
  b) Turnaround time for OPD patients
  c) Waiting time (TAT) for various diagnostics [Ultrasound, MRI, CT, X-ray and mammography]
  d) Return to emergency within 72 hours
  e) Re-scheduling or operation theatre cancellation of surgeries
- The different occurrences are filed in the incident report file, which includes incidences for every accident on all floors and with all workers.
- For Hospital Associated Infections, data was gathered from the Infection Control Committee: -
  a) Surgical Site infection
  b) VAP - Ventilator associated Pneumonia
  c) CAUTI - Catheter associated Urinary tract Infection
  d) CLABSI – Central line associated blood stream infection
  e) Needle stick injury
- Conducted the mock interviews for all the departments of the hospital for the NABH inspection.
- Maintaining a corrective action, preventative action (CAPA) registry for the many departments, such as civil, electrical, and others, for the varied demands that arose.
- Checking the formula utilized by the floor specialists and their way of informing the nursing superintendent about the necessities to keep an eye on the patient nurse ratio. The following is the ratio: - [Patient: Nurse]
  - For ventilator patients – 1:1
  - For ICU patients – 2:1
  - For Wards patients – 4:1

- With March being an unusual month with five cases of unplanned return to OT, the analysis was done by comparing incident report files with surgeries performed in OT and concluding that 91 percent of the surgeries that resulted in an unplanned return to OT were free flap surgeries, with research to back it up.
- The hospital was audited by NABH, and it received a 95 percent compliance rating.

Medical Administration department.

- For the second deployment, I worked in medical administration for a week under the supervision of the hospital's medical superintendent.
- The first step was to create a Clinical Pathway for oral cancer and breast cancer, as the lack of one was a giveaway given input from the just completed NABH accreditation.
- Clinical Route is a standardized recorded strategy for treating certain diseases; thus, the clinical pathway for oral cancer and breast cancer was included in the first phase.

- The document was created in collaboration with the quality department, and it was distributed to several doctors in surgical oncology, medical oncology, and radiation oncology for discussion.
- After making the necessary revisions, a final report was developed and forwarded to the NABH, which included Clinical Approaches for Oral and Breast Cancer.
- The MS provided various doctors and technicians/ technologists with varied training programs for the prepared clinical route according to the NCCN criteria.
- The hospital process of registration to the doctor's workstation was comprehended, the patient followed, the time noted, and the various processes including registration for various types of patients such as Jan Arogya Yojana patients, ECHS patients, govt. employees' patients, and so on, to the process of initial assessment and panel selection by the doctors and AMS, respectively. The procedure was tallied, a root cause analysis was completed, and the MS was notified.

Operation Theatre

- The last deployment took place in the Operation Theatre.
- Protective zone, clean zone, sterile zone, and dirty zone were all understood in OT.
- The scheduling and recording of various surgery times, such as: Patient Wheel-in time, Anesthesia intubation time, Incision time (Time-out time) and Closure time (Sign-out time)
- The timings were recorded and compared to those noted by the team in the intra-operative record and other records.
- A form for an Anti-Biotic audit was created, with the mention of the antibiotic name and administration time based on NABH feedback from the recently completed NABH accreditation, and the patient files in the Surgical-ICU were audited.
- A questionnaire for a Surgical Safety Checklist Audit was also developed, as this was also a feedback that was about to be implemented for the fulfillment of the surgical safety checklist, which contained the newly added antibiotic adherence, and the SICU patient files were audited for it.

Human resources department

Objective: to do the wellness of the people and create a happy work force.

HOD'S Accountability:

- To assist in the selection of the staff
- Taking disciplinary action as per the organization of the management.
- Attending HOD's meeting as per schedule.

- Presenting monthly report to the department in review meeting.
- To control and coordinate the activities of the department and the staff.
- To allocate work to all the staff in the department.
- Policy preparation.
    - ✓ Regarding wages structure
    - ✓ Rules and regulations of the employees
    - ✓ Work force analysis department
    - ✓ Recruitment
    - ✓ To assist the deputy manager in conduction performance appraisal.

Marketing

The main functions are:

- Promotion and branding
- Marketing on the internet
- Corporate collaborations
- Carry out CMES
- Prepare pamphlets and brochures

Accounts and finance

Under the finance department comes billing and finance.

The financial department's functions are intertwined with the operations of nearly every other department. This department's principal and most important functions are as follows:

- ✓ To keep financial records up to date
- ✓ To make timely payments on bills and expenses
- ✓ To collect past-due accounts
- ✓ To keep track of cash flow and discoveries
- ✓ To receive and pay earnings and salaries.
- ✓ To offer information on the hospital's financial situation to the hospital's managers and decision-makers.

- ✓ Creating patient-related bills

IT: the functions of IT department are:

- ✓ Keeping all the hospital's software up to date
- ✓ Modifications to the programme in accordance with the department's needs.

Housekeeping: functions are:

- ✓ sanitary and hygienic conditions
- ✓ Controlling odors
- ✓ Getting rid of trash
- ✓ Pest control, rodent control, and animal control
- ✓ Decoration of the interior
- ✓ Infection prevention
- ✓ Laundry services are available.
- ✓ Uniforms

Store and purchase:

The hospital's stores receive all of the hospital's equipment, instruments, and raw materials, as well as consumables, printing and stationery, medicines, and other requirements.

Functions:

- ✓ Issue of the purchase order
- ✓ Negotiating contracts
- ✓ Checking of requisition and purchase indents
- ✓ Follow up with the purchase order

Engineering and Maintenance:

Functions:

- ✓ commissioning and installation

- ✓ Call management with a breakdown
- ✓ to keep the electricity and water flowing
- ✓ Refrigeration and air conditioning
- ✓ Transportation inside the hospital premises

V. LIMITATIONS AND SUGGESTIONS

- During the patient care department posting, OPD timings was observed and on average patient waits for 2 – 2.5 hours which is high.
- There are numerous processes involved in the patient registration procedure. The type of patient, on the other hand, is directly linked to their payment method, and the steps necessary before their file is created, including the first assessment and panel selection, are a lengthy and time-consuming process.
- The processes of initial evaluation and panel selection should all take place in the same room to simplify the process.
- At BMCHRC, the appointment system isn't up to par with the patient bottleneck; improved digitalization, as well as patient awareness, is required.
- Separate cafeterias for healthcare workers and patients are essential since there must be no infection transmission between healers and those seeking healing. Particularly in these difficult times.

RESEARCH PROJECT REPORT

PART 2 - Study on Medical records in BMCHRC

I. RESEARCH RATIONALE:

- When patients leave the hospital, a discharge report is crucial for their safety. According to a report published by Advances in Patient Safety, hospital discharge summaries are the key documents used to communicate a patient's treatment plan to the post-hospital care team.
- Medical record auditing is the process of reviewing medical records to ensure that the doctors, medical equipment, and services provided in a hospital or clinic adhere to the industry's standards and regulations.
- Medical auditors are responsible for finding problems in the documentation process, such as loss of accreditations, physician licenses, or Medicare status, because the prevalence of documentation errors has increased dramatically.
- Healthcare providers can spot their own flaws and weaknesses and make the required adjustments.

II. RESEARCH QUESTION:

What is the adherence of the closed patient files to the NABH guidelines and how their improvements were measured in the BMCHRC?

III. OBJECTIVE:

- To assess out the compliance from the given sample as per NABH.
- To estimate the time taken by doctors & nursing staff for patient's initial assessment within the study duration.
- To study the reason behind noncompliance of other important parameters.
- To provide the necessary recommendations in order to reduce the number of bounces.
- Analyze the data to determine the compliance rate and form a strategy for intervention at the institutional, team, and process levels, which will lead to improvements at the meso and micro levels.

IV. METHODOLOGY

The study was conducted at MRD of BMCHRC. It was a Cross sectional Descriptive study design. The study was carried out at the MRD unit of the hospital. Simple random sampling method was used. A sample of 232 in-patient discharge files were taken. The study was carried out in three phases. First phase was the observational phase, 10th may – 20th may, 2021 to understand the whole discharge process. In the second phase, 21st may – 28th June 2021 data was collected. In the last phase of the study evaluation was done according to the NABH guidelines, all the parameters were thoroughly checked, and analysis was done, and interpretation was given to the MRD authorized personnel.

Among the various parameters of discharge audit, 13 parameters were evaluated for this study which are:

1. Time taken for Nursing initial assessment (min.)
2. Time taken for IPD initial assessment by doctor (min.)
3. Time for discharge process (min.)
4. Nursing Plan of care documented
5. Patient's Stay in the Hospital (Day)
6. Discharge summary documented
7. Nutritional Screening documented
8. Doctor's plan of care
9. Surgery Consent
10. Anesthesia Consent
11. Blood transfusion consent
12. Chemotherapy consent
13. Patient and Family Education

Every parameter has its own findings. The data was collected manually by directly observing the whole process in the MRD department and transferred to the excel sheets and analysis was done with appropriate tools.

Following approaches were used during the study:

- Firstly, understood each step of the discharge audit process.
- Main parameters were identified.
- Analysis of the data was done through excel where an average time was taken out through the formula =AVERAGE(.. : ..) , and to get the number of counts, where 1 = Yes, 0 = No And 3 = N/A the countif formula was used to get the no. of Yes and not applicable.
- Even percentages were calculated of some of the parameters.

▪ RESEARCH DESIGN:

In the MRD of Bhagwan Mahaveer Cancer Hospital and Research Center Jaipur, Rajasthan, a descriptive study was undertaken.

▪ STUDY TOOL:

Quantitative technique with the use of Microsoft excel.

▪ SAMPLE SIZE:

A sample size of **232** closed patient files was used for the internal auditing.

- **STUDY SITE:**
  Bhagwan mahaveer cancer hospital & research Centre, Jaipur, Rajasthan.

- **STUDY DURATION: -**

  Data was collected from 10th May to 30TH JUNE 2021.

- **RESULTS:**

The step-by-step process of MRD was mapped by the observation of the whole process. Fig. 4 illustrating the entire process of flow of patient's file in MRD.

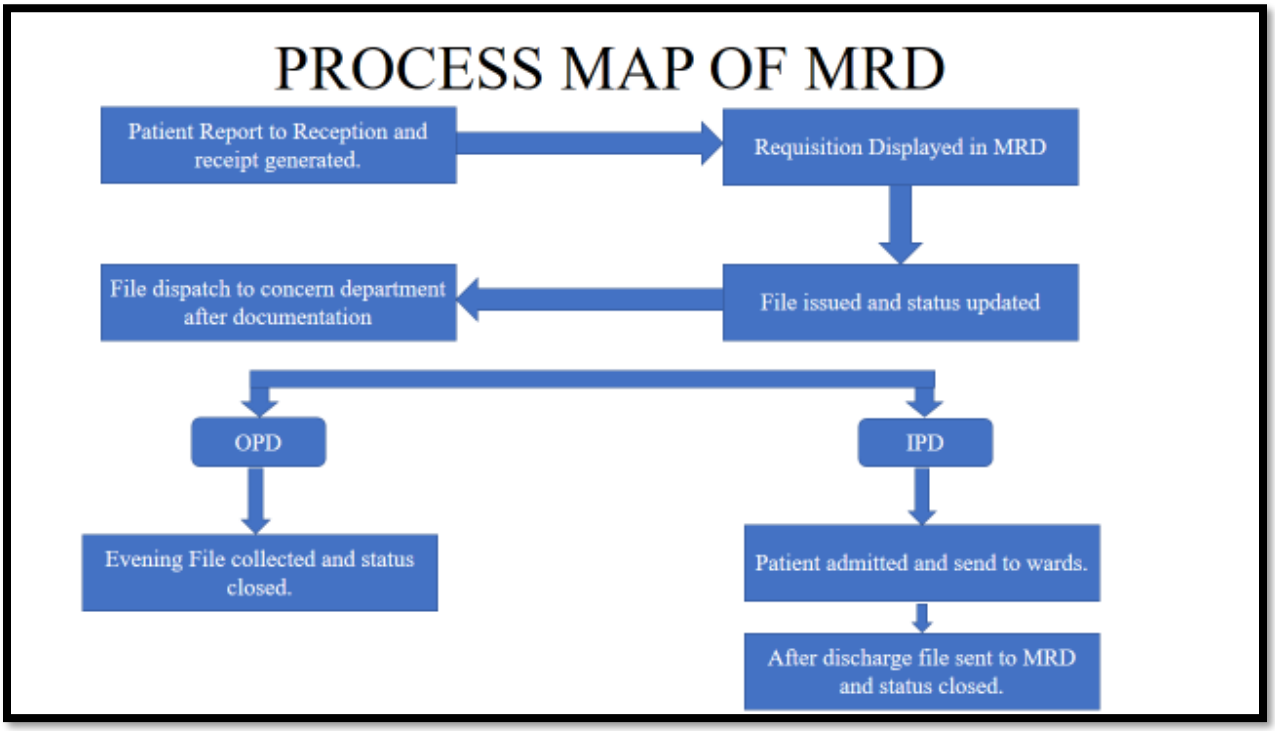

FIG. 4 – Process map of MRD

V. ANALYSIS AND INTERPRETATION OF THE DATA

Assessment of the time taken parameters as per NABH guidelines:

The fig. - 5 given below shows the average time taken for Nursing Initial Assessment is 29 minutes, which is in concordance within the 30 mins requirement. However, there were few discharges patient's files which were showing the delay in nursing initial assessment, and to make it under 30 mins. Steps will be taken to ensure the current rate is up kept.

The average time taken by doctors to assess IPD initial assessment is 56 min. which is in concordance of the needed within 60 min requirement. Some files have shown the delayed initial assessment by some doctors. In order to maintain the given timeline, the current work will be up kept, and steps will be taken w. r. t time management to bring within 60 min benchmark.

The discharge process is very complex in nature as it involves lot of departments and staff, however the average time taken for discharging the patient is 40 min. which is in concordance within 60 min. but, few patients were discharged with the exceeded timeline, however, further improvement will be brought by giving proper instructions to the staff involved in the discharge process.

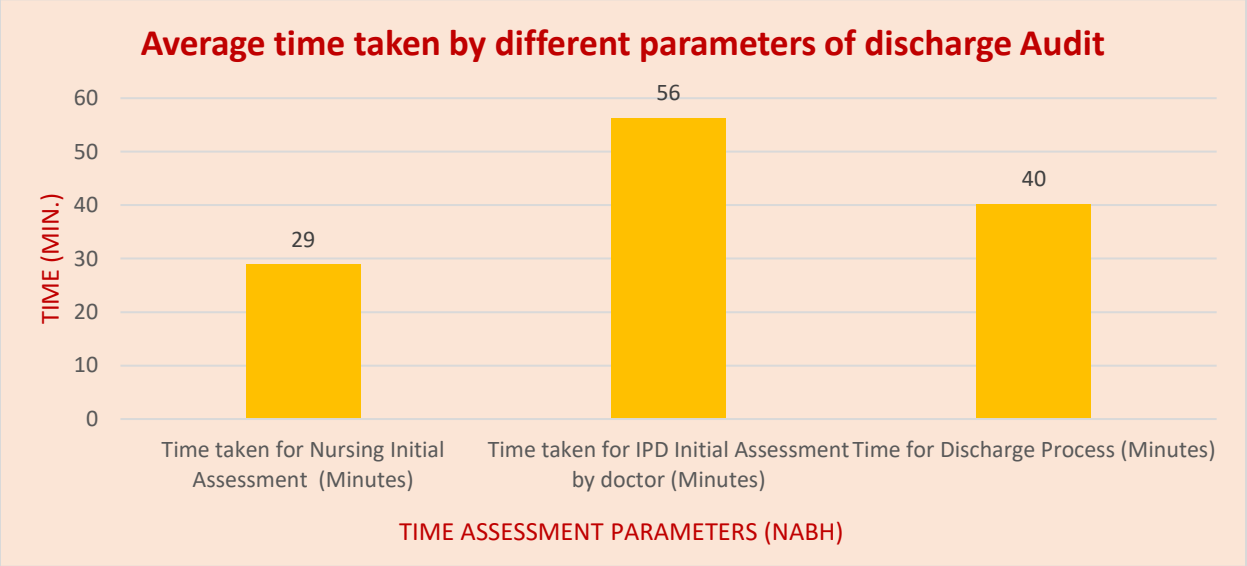

FIG. 5

The Fig. – 6 is showing the total number of the patients file w.r.t different parameters which are required in discharge file audit.
Out of 232 files which were evaluated during the internal closed file audit, 100% compliance

was seen in the nursing plan of care. To maintain this compliance steps will be taken to ensure the current rate is up kept.

The length of stay (LOS) is an essential metric of hospital management efficiency. Reducing the number of inpatient days reduces the risk of infection and pharmaceutical adverse effects, improves treatment quality, and increases hospital profit through better bed management.

Accurate knowledge of the elements linked to LOS, as well as gradual improvements in administration and supervision, may allow for more efficient inpatient LOS management.

At the time of discharge, patient will be provided with a discharge summary signed by the doctor which contains the summary of investigations, procedures & medication given to the patient. And during this study all the patient files founded with discharge summary. To maintain this compliance steps will be taken to ensure the current rate is up kept.

Nutritional Screening was founded perfect as it has been seen in all the evaluated files. To maintain this compliance steps will be taken to ensure the current percentage of nutritional screening is up kept.

One of the important parameters is the Dr. Plan of Care and during study only 82% of the patient files had Dr, Plan of care. Communication will be provided to make sure Dr's Plan of care is documented in patient's file.

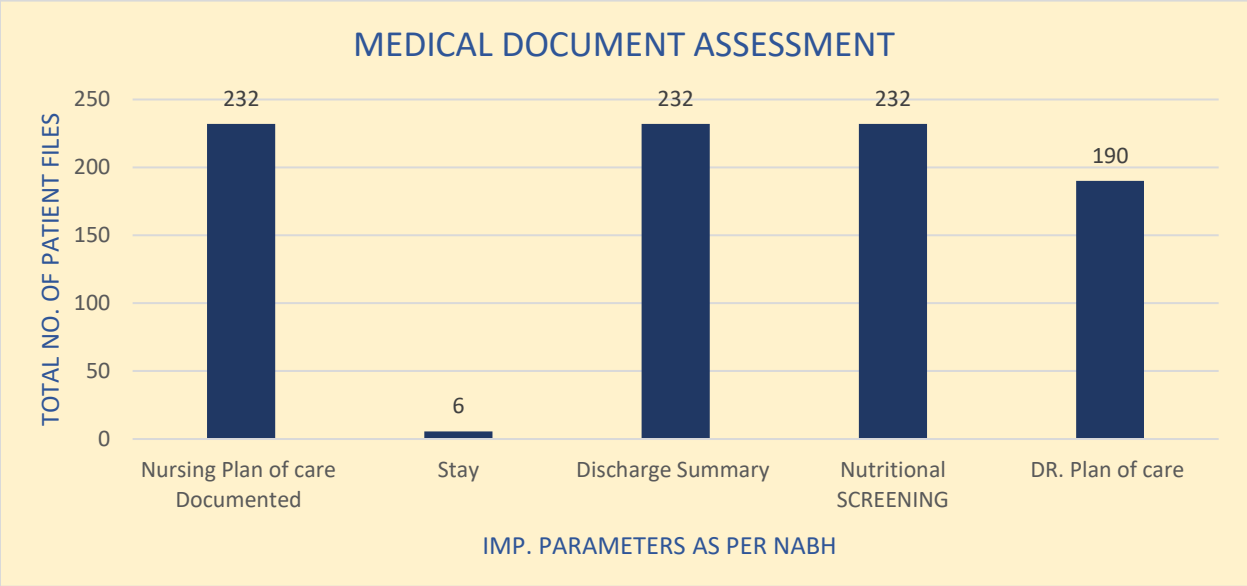

Fig. 6

The fig. – 7 depicting some of the important consent forms. Informed consent means that a person is aware of their medical condition and the treatment options available to them. It is a good idea to gather information regarding medical therapy and give yourself time to examine it before planning.

Surgery consent was present in 71% of the files whereas in 28% patient's surgery consent was not required. Only 1% of the file was found where Surgery consent was required, and it was absent. Communication will be provided to the doctors to give consent and to ensure that current rate is up kept.

Anesthesia consent was given to 67 patients where in 163 patients did not required the consent for anesthesia. 2 patient files found without the consent. To upkeep the current rate of consent given communication will be provided.

Blood transfusion consent forms were founded in all the evaluated files, where 22 patient files had the consent while other 210 patients did not require blood transfusion consent.

Chemotherapy consent forms was checked in all the 232 patient files and on evaluation only 1 file did not had consent, while 47 had consent and 184 did not required it. Steps will be taken to ensure the current rate is upkept and further improvement will be brought by giving proper instructions to the consultants.

Patient and family education gives patients the tools they need to enhance their health. Patients who are more involved in their care are more likely to participate in therapies that improve their odds of having a positive outcome. However, patient and family education were observed in 146 of the 232 patient files. Giving the consultant clear directions will result in much more progress.

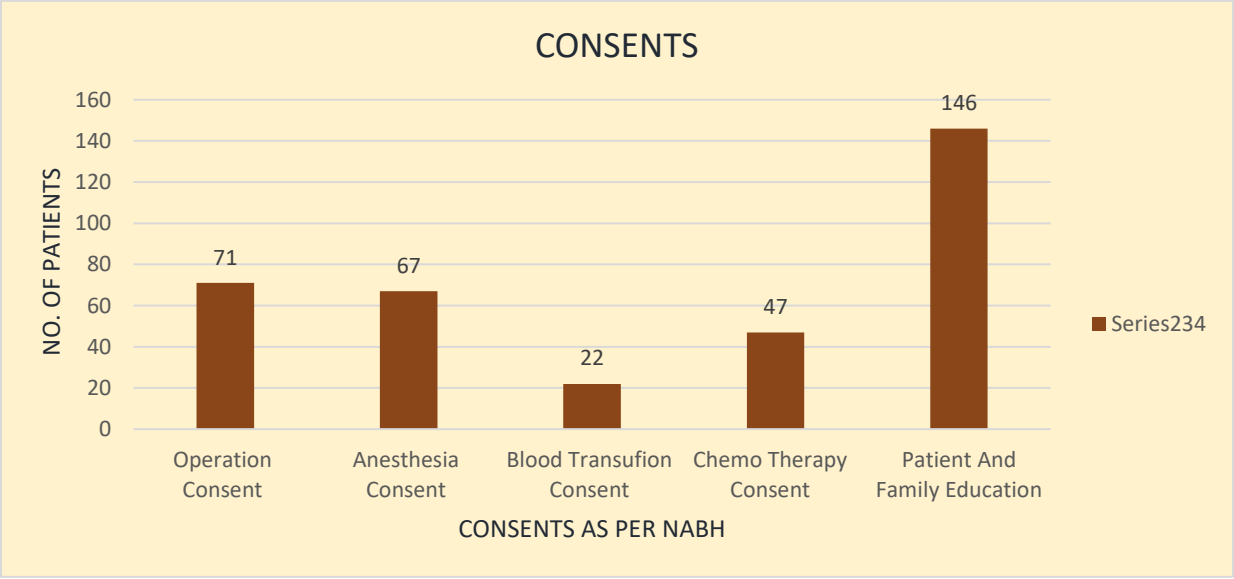

Fig. 7

The evaluation of the 232 patient files clearly depicts that in some parameters the compliance was founded to be satisfactory and for further improvement will be brought by giving proper instructions to the consultants or respective staff.

However, there were some indicators showing negligence of the respective staff and for that communication will be provided to them to take the steps that improve the compliance %age.

Some reasons for non-compliance are sometimes respective physician is not available for the work, or he/she is busy in some other important work.

Lack of knowledge about NABH protocol, which later turned out to be non-compliance.

System issues can be there due to which proper track of the parameters is not present.

Files required recurrent corrections.

Incomplete files may create confusion.

Improper segregation and division of work among staff.

SUGGESTION

Health officials and medical personnel should spell out their individual duties for patient care quality.

Proper monitoring of the discharge process should be done to minimize the error according to NABH.

Medical professionals should organize themselves such that they can fulfil auditing tasks and take action to enhance clinical outcomes.

Data dependability can also be increased by providing adequate data collecting and implementation training.

MRD personnel should reevaluate all the parameters as per NABH guidelines.

Proper monitoring of discharge process should be done to minimize the noncompliance

Weekly training should be given to the nursing staff to improve the compliance percentage.

In each Unit respective person should be allocated for evaluation of the patient file before discharging.

VI. CONCLUSION:

To conclude my study on discharge file audit I would say the parameters should be followed as per NABH guidelines. Doctors, consultants and nursing staff should thoroughly check all the indicators and fill the complete them in given timeline. Consents should be taken appropriately and should be illustrated to the patients. Discharge process should be followed by viewing all the documents of discharge patients.

VII. REFERENCES

1. SemiColonWeb. The importance of medical auditing [Internet]. Capminds.com. 2020 [cited 2021 Jul 11]. Available from: https://www.capminds.com/blog/the-importance-of-medical-auditing/

2. S. Michael Ross MD MHA. What should be included in a hospital discharge summary? [Internet]. Cureatr.com. Cureatr Inc.; 2018 [cited 2021 Jul 11]. Available from: https://blog.cureatr.com/what-should-be-included-in-a-hospital-discharge-summary

3. Kass NE, Natowicz MR, Hull SC, Faden RR, Plantinga L, Gostin LO, et al. The use of medical records in research: what do patients want? J Law Med Ethics. 2003 Autumn;31(3):429–33.

4. Pilania M. Medical Audit [Internet]. Slideshare.net. [cited 2021 Jul 11]. Available from: https://www.slideshare.net/ManjuPilania/final-medical-audit

5. Psu.edu. [cited 2021 Jul 11]. Available from: https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.997.7056&rep=rep1&type=pdf

VIII. ANNEXURE

Time Schedule

S.No.	Name of the Department	Date(s) of visit	% of time spent	Interacted with (Name and Designation)
1.	**Quality Assurance Dept.**	10th May	30 days	Dr. Sonal Rai (Senior Quality Executive) HOD
2.	**Operation Theatre**	20th June	7 days	Dr. Renu Joshi (HOD)
3.	**Medical Administration**	13th June	7 days	Dr. Subha Pathania (MS)
4.	**CSSD**	7th June	1 day	Mohammed Khalid (HOD)

5.	**Central Store**	8th June	1 day	Anil Kumawat (HOD)
6.	**Blood Bank**	9th June	1 day	Dr. KC Lokwani (HOD)
7.	**Engineering Dept.**	10th June	1 day	Shankar Jha (HOD)
8.	**MRD**	11th June	1 day	Radha Mohan Sharma (HOD)
9.	**Support Services**	26th June	1 day	Manish Goswami
10.	**IT**	27th June	1 day	Deepak Talukdar (HOD)
11.	**Marketing**	28th June	1 day	Siddhart Verma (HOD)
12.	**Pharmacy**	30th June	1 day	Praful Gulecha (HOD)
13.	**Bio-Medical Engineering**	1st July	1 day	Manendra Bele (HOD)