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DISSERTATION & INTERNSHIP REPORT 01February-30April2018

Organisation Brief

1. Dr JL Bassi Hospital was established in the year 1999 at Ludhiana, Punjab. The location of the hospital is such that it caters for not only the population of Ludhiana but also the small towns and villages around close proximity. It is a 40- bedded hospital, where facilities exist for OPD, Orthopedics & Joint Replacement, Surgery, Dental, Gynecology & Obstetrics , Medicine, Pediatrics and support services. Hospital staff are well trained to cater for all the requirements of the OPD, OT as well as patients admitted in it.

2. Ludhiana is a centrally located city of Punjab, which is on the Grand Trunk Road from Delhi to Amritsar at latitude 30.55 North and longitude 75.54 East in Northern India. Ludhiana is the most centrally located district in the Malwa region of the state of Punjab It is very well connected by road, rail, air to other parts of Punjab.

3. As per the 2011 census, Ludhiana had a population of 3,498,739 of which male and female were 1,867,816 and 1,630,923 respectively. Ludhiana District population constituted 12.61 percent of total Maharashtra population. There was change of 15.36 percent in the population compared to population as per 2001. In the previous census of India 2001, Ludhiana District recorded increase of 24.89 percent to its population compared to 1991.

Population :3,498,7393

Male : 1,867,816

Female : 1,630,923

Population Growth : 15.36%

Area Sq. Km : 3,578

Density/km² : 978

Proportion to Punjab Population : 12.61%

Sex Ratio (Per 1000) : 873

Child Sex Ratio (0-6 Age) : 860

Average Literacy : 82.20

Male Literacy : 85.98

Female Literacy :77.88

Total Child Population (0-6 Age) : 384,114

Male Population (0-6 Age) : 206,502

Female Population (0-6 Age) : 177,612

Literates : 2,560,225

Male Literates : 1,428,348

Female Literates : 1,131,877

Child Proportion (0-6 Age) : 10.98%

Boys Proportion (0-6 Age) : 11.06%

Girls Proportion (0-6 Age) : 10.89%



Fig 1

4. The hospital is managed by permanent staff consisting of Director, 04 graded specialists, 06GDMO, dental surgeon and other specialist on call basis. The hospital has a full time dental clinic(providing basic dental care free of cost). The hospital provides *limited IPD services(Orthopedic surgeries and obstetrics and gynecology)* and facilities are available 24x7. The hospital has engaged Medical Specialists viz Gynecologists, Pediatrician, Anesthetists, Medicine, Surgeons, Orthopedican, Radiologist, & Pathologist. Support / Diagnostic Services like

Ultrasound, X ray, ECG, Lab, are being provisioned satisfactorily. The hospital is equipped with one minor OT & two Major OTs, one being a modular OT.



Fig 2 Reception

5. The hospital services are being utilized not only by local residents but patients from adjoining areas and villages.

6. **Vision.** We have built an institution with dream to provide health to all with setting the highest standards of healthcare delivery across the world, where care is provided to patients at an affordable cost 'Feel at Home' gestures. Restoration of health by personal care of the doctors. To have a long lasting relationship with the patients and their wards and through research must integrate different forms of modern and traditional forms of medicine to provide accessible and affordable healthcare.

7. **Mission**

- (a) Deliver best patient care services at affordable cost.
- (b) Be the leading hospital and choice of patients.
- (c) Excel in medical care supported by research and education.
- (d) Value patient relationship.
- (e) Apply and share new technology.

8. Core Values. The core value are :-

- (a) Customer Care with dedication and Integrity.
- (b) Faith on associates.
- (c) Teamwork.
- (d) Mutual trust.
- (e) Honest and ethical practices.

9. Quality Policy at Dr JL Bassi Hospital

- (a) Par excellence patient care through medical professionalism at affordable cost.
- (b) Utilize highly skilled employees.
- (c) Create a patient centric environment.
- (d) Safety of treatment with high standards during the patient's stay.
- (e) Implementation of Ethical, technical, clinical and non-clinical procedures and protocols.
- (f) Comply with statutory regulations.
- (g) No compromise on Quality.

10. Layout of the Hospital. The Hospital is housed in a building comprising of four floors and basement, as under :-

- (a) **Ground Floor** This floor houses, Reception cum Registration centre, Emergency, Ortho, Gynecology, Medical and Dental OPDs,
- (b) **First Floor.** It comprises of the OT complex, Labour and Delivery room, Recovery rooms , Autoclaving room and Photo therapy room
- (c) **Second Floor.** Private rooms , General ward and Conference room.
- (d) **Third Floor.** Private rooms
- (d) **Basement.** The basement houses the Radiology (X-Ray &USG), Lab, Physiotherapy room, Office and Medical Records.

11. Ambulances. The hospital has Basic Support Ambulance (BSA).

12. Staff. The hospital is headed by a Director (Incharge) under whom are the following staff:-

- (a) **Permanent Staff.** Doctors-10, Nurses -09, Technicians-08,

Pharmacists-03, Administrative Staff-20.

(b) **On call Staff.** Doctors, Nurses .

13. Out-Sourced Services. The following services are outsourced :-

(a) Bio-Medical Waste.

(b) Laundry.

14. Services not available in the Hospital The hospital has not catered for the following services:-

(a) Blood Bank

(b) Mortuary

15. Departments in the Hospital. The hospital provides intimate care to its patients through the following departments:-

(a) Orthopedics

(b) Obstetrics and Gynecology

(c) Medical

(d) Pediatrics

(e) Dental

(f) Clinical Nutrition

(g) Radiology and Imaging

(h) Physiotherapy

(i) Health Check

(j) Path Laboratory

(k) Medical Records and Registration

(l) Pharmacy



Fig 3 X-Ray



Fig 4 OPD

16. Observations and Recommendations.

The period of internship at Dr JL Bassi Hospital gave the opportunity to learn the nuances of Hospital Administration. The internship provided an excellent opportunity of interaction platform to learn on all the aspects of Hospital administration including the clinical aspects. All the departments of the hospital including the support services were visited, met and held discussions with the key personnel to garner ideas with the running and maintenance of the hospital. The wide spectrum of people in the hospital activity ranges from highly skilled professionals to the man who may have not visited a school. Therefore, management of this varied group of people calls for a balanced approach. Patients' satisfaction with an encounter with health care service is mainly dependent on the duration and efficiency of care, and how empathetic and communicable the health care providers are which is favored by a good doctor-patient relationship, good communication amongst the staff members, time management are

of utmost and perfect coordination. The following suggestions are made for the hospital :-

- (a) Counseling of family members of high-risk patients at a fixed time in a day.
- (b) Provide information about diseases due to non-hygienic environment.
- (c) Digitization of hospital functioning.
- (d) Provision of air-conditioning in general ward.
- (e) Better communication with patient and family concerning discharge

17. Key Learnings As Hospital Administrator

- (a) Patient care of utmost priority, Saving life/ appendages important
- (b) Accepting responsibility.
- (c) Feelings of patient & family be given due regard.
- (d) No deviation from rules and regulations acceptable.
- (e) Smooth and speedy discharge of patients once directed by the doctor.
- (f) Visit to be carried out by the hospital authorities to the disposal site and be documented.
- (g) Crash Cart needs to be placed on the ground floor too, in addition to the one in the OT complex.

HOSPITAL RECORD KEEPING STANDARDS

18. Introduction. Hospitals³ are an open system interactive with the environment to complete necessary trades for survival of the system, growth and fulfillment of system's goals. A hospital is a sub-system that exists within a hierarchy of other systems additionally: Hospitals are complex systems, since they contain large number of sub-systems such as the radiology department, nursing services, housekeeping, food services, laundry, laboratory department and so. Each of these subsystems can be looked at as a system of its own. Hospital systems consist of a pattern of organised relations where different components of the system are related to each other in a particular way. Hospital by laws, rules, policies and procedures regulate these relationships. Good medical care relies on Well-trained doctors and nurses and on high-quality facilities and equipment. Good medical care also relies on good record keeping. Meticulous medical recordkeeping helps health care providers manage their patients and share medical information with other medical specialists. This is crucial for ensuring that each patient is cared for correctly and with regard to that patient's personal history. Medical records is also a form of communication between unrelated health care providers. Medical Notes of a patient made by a healthcare provider in all aspects will have a impact on future procedures performed by graded specialists and vice versa. Accurate medical records can assist emergency room medicine prescription based on previous drugs and dosage, thus eliminating any potential drug

interactions. It comes into play in a bigger manner when a patient has a severe injury, is unresponsive or has an unclear illness, an examination of that patient's medical records can help a healthcare provider with additional information to respond with accurate diagnosis and treatment. Without an accurate, comprehensive up-to-date and accessible patient case history, medical personnel may not be able to offer the best treatment or may in fact misdiagnose a condition, which can have serious consequences. The primary purpose of the medical record is to enable physicians to provide quality health care to their patients. It is a living document that provides the near complete information on the health aspects of the patient and the course of treatment to be followed. It is also a legal, and acts as a record of your billing practices. Complete and accurate medical records will meet all legal, regulatory and auditing requirements. Medical Record Documentation Standards and Performance Measures can be as follows⁴:-

STANDARD	PERFORMANCE MEASURES
MEDICAL RECORD	
1. Elements in the medical record are organized in a consistent manner.	<ul style="list-style-type: none"> • Medical record is clearly organized. • Records are organized in chronological order. • Medical record does not contain information for other patients. Exception: Family members in one record must be clearly separated.
2. Medical Records are maintained and stored in a manner which protects the safety of the records and the confidentiality of the information.	<ul style="list-style-type: none"> • All medical records are stored out of reach and view of unauthorized persons. • Staff receive periodic training in member information and confidentiality. • All practitioners with electronic medical records will maintain or have access to compatible electronic hardware and software that will enable the generation of a legible copy of the record in order to comply with patient and governmental access needs, and prepare and maintain a current back-up copy of electronic medical record files. • Upon meeting minimum record retention periods as defined by regulations, medical records should be discarded as follows: <ol style="list-style-type: none"> (1) For paper records, by incineration, shredding, pulping, or other comparable process which renders the records permanently unreadable; (2) For electronic or magnetic media, such as computer disks or magnetic tapes, by completely sanitizing the media, and not just by erasure or deletion; (3) For other media, such as film, photos, or compact discs, by destroying the media with no possibility of recovery; and (4) By complying with the HIPAA security provisions at 45 CFR §164.310(d), as amended.
3. Patient's name or identification number is on each page of record.	<ul style="list-style-type: none"> • Patient name or an identification number is found on each page in the record.
4. Entries are legible.	<ul style="list-style-type: none"> • Handwritten entries are legible to a reader other than the author. • Content of records is presented in a standard format that allows a reader, other than the author, to review without the use of separate legend/key.
5. Entries are dated.	<ul style="list-style-type: none"> • Entries and updates to a record are dated. • Documentation of medical encounters must be in the record within 72 hours or three business days of occurrence.
6. Entries are initialed or signed by author.	<ul style="list-style-type: none"> • Entries are initialed or signed by the author. Author identification may be a handwritten signature, unique electronic identifier or initials. Applies to practitioners and members of their office staff who contribute to the record. • When initials are used, there is a designation of signature and status maintained in the office.

Fig 5 Performance Measures

19. Associated records, such as X-rays, specimens, drug records and patient registers, must also be documented and filled with proper UHID Nos.. Good record keeping also ensures that the hospital's administration runs smoothly. Records also provide evidence of the hospital's accountability for its actions and they form a key source of data for medical research, Managing Hospital Records addresses the specific issues involved in managing clinical and non-clinical hospital records, providing clear vision as to the approach, resources and effort needed for specific requirements. The MRD contributes towards a comprehensive and high quality care. This is achieved in the following ways:

- (a) **Quality of care.** Medical records contribute to consistency and quality in patient care by providing a detailed description of patients' health status and a rationale for treatment decisions.
- (b) **Continuity of care.** Medical records may be used by several health practitioners. The record is not just a personal memory aid for the individual physician who creates it. It allows other health care providers to access quickly and understand the patient's past and current health status.
- (c) **Assessment of care.** Medical records are fundamental components of :-
 - (i) **External reviews:** such as those conducted for quality improvement purposes (e.g. Independent Health Facilities Programs)
 - (ii) **Investigations** : such as inquiries made by the ministry Office/MCI, and administration to bill for services
 - (iii) **Physician self-assessments:** whereby physicians reflect on and assess the care they have provided to patients (through patterns of care recorded in the patient case sheet/EMR).
- (d) **Evidence of care.** Medical records are legal documents and may provide significant evidence in regulatory, civil, criminal, or administrative matters when the patient care provided by a physician is questioned. The legal policy requirements for medical records, explains how medical records must be kept, outlining general requirements and considerations about the collection, use, storage, and disclosure of patients' personal health information, with respect to both paper and electronic records.

WHY HOSPITALS MUST MAINTAIN GOOD MEDICAL RECORDS ?

20. There are **important reasons** to keep comprehensive/exhaustive medical records for every patient, which enhances and supports the patient-centered care that the patient receives. In the following manner :-

- (a) The account of the patient's medical history which is comprehensive, accurate, legible and complete helps in getting timely insurance claims.
- (b) As a reference for colleagues. A comprehensive record with a clear well-organized history assists, saves valuable time and healthcare resources thus avoiding redundant investigations and medication of previous hospitalisations.
- (c) As a reference for official reports. A comprehensive, well-organized medical record will also help you to prepare reports efficiently and effectively.
- (d) As a evidence in a medical record audit for compliance with and accountable to all of the rules, regulations and standards of government regulatory bodies.
- (e) Disciplinary reviews. As defence (actions) in a malpractice case or review of billing practices.
- (f) Quality Assurance activities Practice of scientific medicine based on recorded facts.
- (g) Statistical Data and means of communication for the medical team.
- (h) Continuity of medical care for follow up and treatment.
- (i) Planning of services and improving quality of care.

21. AIM

To establish a protocol for standard in Medical Record Keeping and Retention of medical records.

22. OBJECTIVES

- (a) To study the current protocol and methods for medical record keeping standards and retention of medical records.
- (b) To perform the standard analysis of the Medical Records Department of

Dr JL Bassi Hospital.

(c) To identify gaps in the current protocol of record keeping standards and of retention of files.

(d) Transition to EMR.

23. SCOPE

(a) The Medical Recordkeeping process

(b) Physical facilities, Storage, System of filing and Functioning

(c) Privacy in Practice for Patient MR Management

(d) Policy for Retention

(e) Transition to Electronic Medical Recordkeeping

24. Medical Recordkeeping Process. This involves :-

(a) **Maintenance Process**, this entails the following steps :-

(i) **Step 1: Deposition of files**

- Files are brought by the ward boys from all the departments in the MRD after death or discharge of patient. -Files are put in file receiving rack.

- All files are accompanied with the ward register indicating to which ward the patient belong.

- Deposition of files from respective wards are after 2pm.

(ii) **Step 2: Receiving of files**

-Files are picked up from the receiving racks and checked for any deficiency.

-In case the files are complete then the MRD receives it by putting receiving signatures in ward register with date and time.

-Incase the files are incomplete a slip is attached to the file cover with the incomplete part indicated on it and sent back with the register for completion.

-Discrepancy register is also maintained for the incomplete files sent back to the respective wards and are daily updated and reported and reviewed by higher authority periodically.

(iii) Step 3: Assembling of Files

All documents attached in the file are arranged in a prescribed manner after crosschecking with a checklist which arranges the documents and a chronological sequence is created for uniformity.

(iv) Step 4: Coding

-Every file is given an ICD-10(International Statistical Classification of diseases and health related problems-ICD, a medical classification list by the WHO containing codes for diseases, symptoms, abnormal findings and external cause of injury) which describes the type of disease the patient suffered.

(v) Step 5: Entries into the excel sheet software programme

-EMR software helps doctors and medical practioners to keep track of patient information through a centralised electronic system.

-The popular software are e-clinical works, epic, care 360, All scripts and GE Healthcare.

-All entries are entered in the software programme as per requirement.

(vi) Step 6: Indexing

-This step involves coding which is entered into the programme ad an index of a particular disease is created by ICD10.

(vii) Step 7: Filing

-Files are arranged in the racks after allotting serial nos. Each rack can hold 80-100 files.

-Slips are pasted on the racks to indicate IP nos for easily accessing the files.

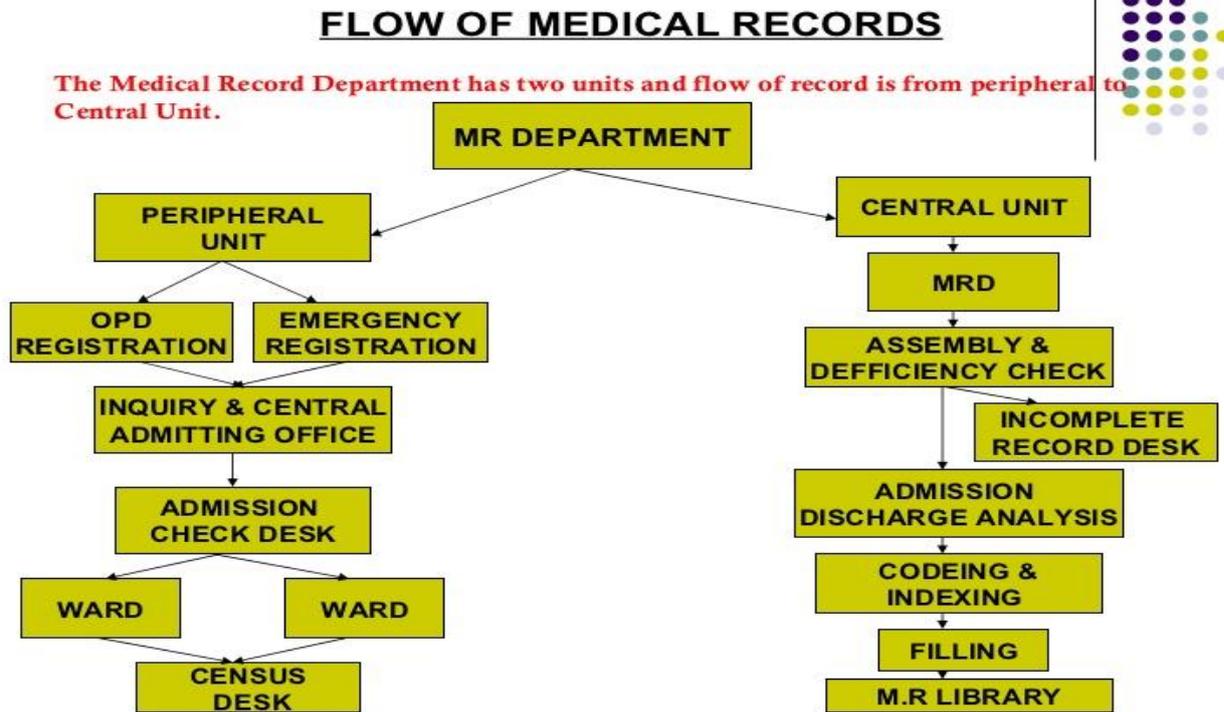


Fig 6 Medical Record Flow



Fig 7 Retrieval Process

(b) **Retrieval Process.** Whenever a patient or kin seek information about his treatment, the details are checked and verified for initiating the process :-

(i) On-site

-Paper scan – Scan paper onto secure laptop

-Print to scan –Print from the EMR and scan onto secure laptop

- Encrypted Flash Drive – ECS retrieves information from EMR with encrypted usb

(ii) Off-site

- Mail – Transfers data to a remote location as per patient requirement
- EMR Remote – Remotely gain access to EMR and get information

(c) Steps in Record Retrieval:

- (i) Record retrieval process is initiated by the patient
- (ii) File is retrieved from the rack at the medical facility.
- (iii) Follow up and reconfirmation with the facility to ensure that request has been received
- (iv) Status update of request and check for status update and readiness
- (v) Once the records are scanned from the secure database and ready for collection, appropriate payments are done.
- (vi) Check to ensure that all information requested are accurate and legible.
- (vii) Records are delivered through secured digital link/download or photocopies are handed over.

(d) . The medical record has four major sections:

- (i) **Administrative**: which includes demographic and socioeconomic data such as the name of the patient (identification), sex, date of birth, place of birth, patient's permanent address, and medical record number.
- (ii) **Legal data**: including a signed consent for treatment by appointed doctors and authorisation for the release of information.
- (iii) **Financial data**: relating to the payment of fees for medical services and hospital accommodation.
- (iv) **Clinical data**: Of the patient whether admitted to the hospital or treated as an outpatient or an emergency patient

(e) **Components and Content of a Medical Record**

- (i) The physical medical record will eventually consist of the following:
 - (aa) **Medical record forms**

- Personal Identification Information/Identification summary sheet
- Consent for treatment and consent to release information to authorized persons to be signed by the patient
- Medical History to include all diagnoses, medical care and treatments, allergies, and even the lack of need for medical care
- Correspondence and legal documents received about the patient
- Admission notes to include Family medical history for diseases that are genetic in each generation.
- Clinical progress notes to record patient's daily treatment and reaction to treatment
- Medication history to know about herbal, over the counter, home remedies, prescription medicines and even illegal drug use.
- Nurses' progress notes recording daily nursing care.
- Operation report if an operation or operations are performed.
- Pathology reports and X-ray.
- Treatment history whether they worked, and which have failed.
- Special nursing forms for observation of head injuries.
- Medical directives or Living Will

(ab) **Clip or fastener to hold the papers together**

(ac) **Dividers between each admission and outpatient notes**

(ad) **Medical record folder**

(f) **Medical Record Content** should be having :-

- (i) Current medication list
- (ii) Medication allergies and adverse reactions
- (iii) Past medical history

- (iv) Present Complaints if any
- (v) Working diagnosis
- (vi) Treatment Plans
- (vii) Clinical evaluation and findings
- (viii) Immunization records for children/Chronic patients requiring protection.

25. Functions of MRD. Major functions of a Medical Record Department are:-

- (i) Admission/ Admission procedure
- (ii) Coding diseases and operations
- (iii) Filing medical records
- (iv) Retrieval of medical records
- (i) Evaluation of the medical record service.
- (vi) Completion of monthly and annual statistics.
- (vii) Medico-legal issues ; patient information and other legal matters.
- (viii) Ownership, security and custody of medical records

26. Maintenance of Medical Records. Medical records pertaining to various departments and healthcare services should be managed in an efficient manner.

- (a). **Planned.** The planning process is important so as to provide the layout and focus of attention on the records of different departments, their arrangement to enable best quality medical care.
- (b). **Comprehensive.** Quality is related to comprehensiveness which entails Medical Record should be self explanatory. An accurate and complete medical document in keeping with the requirements of the policy is essential in facilitating and enhancing collaborative patient care.
- (c). **Accuracy.** One needs to ensure that all fact and figures, information made available is accurate, authentic and reliable as it influences policies and plans.

(d). **Time Management.** Time is of great significance in Medical Records management. All inpatient Medical Records must be completed within 14 days from the date of discharge. All Medical Record entries should be dated, the time entered, and signed. Personnel from various departments, agencies, organisations approach the records department for collecting and collating information which in itself is a time consuming process, hence, requisite for professional excellence.

(e) **Classification.** For making MR management ideal, effective and purposeful, it is pertinent that the records are classified as per their utility. Indexing, cataloguing and protection (Protected Health Information) are mandatory due to space constraints

(f) **Economy.** All activities of the hospitals and healthcare organisations are required to be cost-effective. Economies of scale should also be applicable for managing the hospital records. The basic criteria is protection location and retrieval. Hospital Administrator should have an in-depth knowledge of its relevance and usefulness.

(g) **Technology.** MR need to be technology driven. Records of patient information can exist in e-format/paper based format or a combination of both. Thus, HMIS minimizes functional responsibilities related to documentation, proper storing , less storage space usage and cost-effective.

27. Physical facilities, Storage, System of filing and Functioning

(a) **Physical Facilities.** While planning for physical facilities for the MR department we need to take the following into consideration:-

(i) **Location.** The Central admission desk/ registration desk should be located near the main entrance of the hospital and in close proximity to the OPD and A & E Services. Maximum admissions are initiated through these departments. It is always recommended that central MR office should form part of the hospital administrative wing.

(ii) **Space and General Facility Requirement.** The requirements are as under :-

(aa) *The Admission and Inquiry Office* requires a space of 125-175 sq. ft. The counters should be aesthetically made to facilitate easy communication between staff, patients and corporate clients. Basic office equipment will be required for the working staff. Independent counters for receptionist, billing clerk and patient admission desk be provided. Adequate waiting space with amenities for patients and their attendants.

(ab) The Central Record office space requirement is based on the size of the hospital. Roughly 2-3 sq.ft per bed may be sufficient.

- The Medical Record department should ensure in advance the growth of MRD and anticipate and make arrangements for the future requirements and make arrangements to procure the required space and storage equipment.
- Procedures can always be improved and periodic review can result in, increased operating efficiency, lower costs, and better use of employees and/or equipment.
- In addition to computers for functioning, general office equipment for smooth office work, filing equipment and stationery be available to the staff.

(ac) *Outpatient Record Office* requires the following:-

(i) Outpatient medical records include those for visits at polyclinics, GPs, specialists, nonresidential institutions.

(ii) A&E records be treated as outpatient medical records unless patient is admitted for inpatient treatment.

(iii). The retention period for outpatient medical records is for 6 years as a precautionary measure.

(b) **Storage**. Medical documents complete in all aspects are kept in the main medical records as per the filing system in vogue. factors governing an efficient and effective filing system are:-

- (i) Compactness for reduction of storage space, cost and effort.
- (ii) Accessibility for fast location and identification and retrieval.
- (iii) Simplicity for universal understanding.
- (iv) Economy of cost, installation and operation.
- (v) Scope for future expansion.
- (vi) Tracer Cards for documents in circulation

(c) **Filing**. For filing MR one of the following procedure can be implemented:-

(i) **Decentralised Filing System.** Under this system IPD and OPD have their individual records and are filed independently within the department. In case of patient transfer from one department to another the file is temporarily moved to the other department. This system is labour intensive and higher operating costs.

(ii) **Centralised Filing System.** In this system the MR are filed centrally in the medical records department. The system is more efficient, economical and provides better control.

(aa). **Methods of Filing** The various methods available for filing are:-

- (ai) Numerical Method
- (aai) Alphabetical Method
- (aiii) Chronological Order
- (aiv) Terminal Digit System
- (av) Mid Digit System

(ab) **Numerical method** of filing is the most common in use. Every patient is given a unique number at the time of admission/registration and filing is done in numerical order. This method is most suitable for retrieval of files.

(ac) **Filing Procedure.** File Indexing is a key to locating the files. Index is a reference list which is used for locating a particular document/record in the filing system. Colour coding of files, year vice provide easy retrieval and identification. Uniform standard sized files be used conforming to 8.5” x 11” preferable. The filing jacket should be min ½” bigger than the length and breadth of the file. The following type of filing procedure are in vogue:-

(ai) **Vertical card indexing** is used world over, the files are kept vertically on their spine with support of other files and card within the steel cabinets/racks. This system is economical, adaptable, easy to refer too and has scope for future extension.

(aaii) **Suspended card indexing requires** specially designed filing cabinets in this records are suspended from frames in drawers in the cabinet. The system is costly and adoptability is limited, but on the other hand protection and security is better.

(aⁱⁱⁱ) **Horizontal book indexing** refers to the method in which the medical records are inserted in folders kept on top of one another in chronological order. The retrieval of records are difficult and stacking at time is tardy.

(a^{iv}) **Loose leaf book indexing** is an improved version of book indexing.. The index pages are not stitched up and they remain loose. Pages are maintained as per alphabets and added thereon. It is flexible, as additional pages can be added as per requirement.

(d) **Functioning**. The functioning of a medical records department majorly include designing of patient information, assisting hospital medical staff and generating statistical reports. Maintenance of birth and death register for input of health ministry (MOH&FW) and keeping track of communicable diseases as per the government directives. Falls under the preview of MRD.

(i) The MRD is responsible for the security and maintenance of all digital and written medical records of a health care facility. It ensures that all information stored in the records is complete, accurate and is accessible to authorised personnel only.

(ii) Indexing of medical records is as per the hospital's prescribed standard order. MRD maintains and preserves patient medical records and diagnostic reports in a scientific manner.

(iii) Informational base as well as a mechanism for the provisioning of statistical data is developed and maintained by the MRD.

(i) Movement of patient files is controlled by the staff of MRD. The duty is to achieve a unit record system, protect any unauthorised access and ensure utmost confidentiality for the legal interests of the patients, physicians and the hospital. Admission procedures of patients requiring hospitalisation. are carried out under the guidance and control of MRD

(ii) MRD is the critical department for the hospital information system, It needs to be updated at regular intervals through scientific methods like *Lean management* which is a process improvement technique to identify waste actions processes and their elimination. This improves the quality of the outcome in terms of mistakes and error, and accounts for the amount of time taken for the process.

28. Privacy Practice for Patient MR Management.

(a) Physician Accountability.

- (i) The physician has ultimate responsibility for his or her patient records.
- (ii) Records must document a patient visit accurately.
- (iii) Clear rules must exist for the retention and disposal of records.

(b) Patient Rights.

- (i) Patients own the information in their record but the physician owns the actual records.
- (ii) Patients have the right to timely access to their record.
- (iii) In extremely limited circumstances, patients may be denied the right of access to their record if this poses a serious risk to themselves or others.
- (iv) Patients can get a copy of their record at a reasonable cost.
- (ii) Patients can request changes in their own record, and this request should be documented by an annotation in the record.
- (iii) A standardised process exists for dealing with patient complaints.

(c) Consent.

- (i) Patients has the right to know how their physician will use their health information.
- (ii) Only information needed for the care and treatment of the patient has to be collected.
- (iii) Consent is implied by the collection, use and disclosure of information needed for care and treatment.
- (iv) No consent is needed to disclose patient information when the disclosure is mandated by legislation.

(v) Consent is required to share information with third parties for reasons other than care and treatment.

(vi) Patient consent can be withdrawn at any time.

(vii) Consent is in writing, but implied consent is also applicable but in a restricted manner where in no invasive methods can be employed.

(viii) The consequences of denying or withdrawing consent should be made clear to the patient.

(d) Office Safeguards.

(i) Access to patient records is granted on a need-to-know basis.

(ii) Office layout should maximize protection of patient information.

(iii) Physical safeguards should be put in place.

(iv) Electronic safeguards should be in place.

(v) Written confidentiality agreements with Employees.

(vi) Policies to be in place to ensure confidentiality when physicians and staff share medical records.

(d) Business Implications.

(i) Contracts signed with third parties should explicitly address the protection of privacy.

(ii) When physicians close or transfer a practice, they must comply with government regulations (MOH&FW) for the storage or transfer of patient records.

29. Policy for Retention. All Medical Records are retained for at least as long as required by state and central government law and regulations. Medical Records are retained as per the medical retention schedule stated in NABH policies/procedures manual.

- (a) All Medical Records, regardless of form or format, must be maintained in their entirety, and no document or entry may be deleted from the record, except in accordance with the destruction policy.
- (b) Handwritten entries should be made with permanent black or blue ink, with medium point pens. This is to ensure the quality of electronic scanning, photocopying and faxing of the document. All entries in the medical record must be legible to individuals other than the author.
- (c) When an error is made in a medical record entry, the original entry must not be obliterated, and the inaccurate information should still be accessible. The correction must indicate the reason for the correction, and the correction entry must be dated and signed by the person making the revision.
- (d) The contents of Medical Records must not otherwise be edited, altered, or removed.
- (e) Patients may request a medical record amendment and/or a medical record addendum.
- (f) The retention policy of medical records are as follows:-
- (g) Hospitals and physicians are obligated to retain the original medical record and only transfer copies to others. A proportion of the records generated by the hospital will be scheduled for archival preservation.

DOCUMENTS	TIME
Inpatient Medical Records (case sheet)	10yrs
Outpatient Medical Records	05yrs
Medico-Legal Cases(or till finalization)	10yrs or more
X-Ray(outpatient/Inpatient)	5/10yrs
Statistical Reports	Permanent
All Registers	Permanent
Log Book	2yrs

30. Electronic Medical Records (EMRs)

(a) With the advent of new technology the medical procedures have become more complex. This additional information is overwhelming for the physician, patient and MR handlers, thus the requirement of EMR. This would expand the horizon of the physician to the latest technology plus would help in storing and retrieving huge medical records at the touch of a button or command.

(b) There is a great need for a digital record to allow capture of patient data that can then be *processed and mined* for insights into better treatment for the patients.

(c) When making the transition from paper to electronic records, physicians must ensure without interruption patient care and appropriate record keeping practices continue. Five key principles have been identified to guide the transition process:-

(i) Patient information must be secure.

(ii) Privacy of patient information must be maintained.

(iii) The integrity of the medical record content must be maintained.

(iv) The integrity of the clinical workflow supported by the medical record must be maintained.

(v) Continuity and quality of care must be maintained through the transition period.

(b) EMRs and EHRs have become an integral part of healthcare delivery system in India. They can improve the management of individual patient care and bolster the overall effectiveness of the healthcare system.

(c) EMR is the tool that provides an electronic version of the paper record generally maintained by doctors for their patients, and platform from which new functionality and new services can be provided.

(d) EHR is the system that attempts to meet health system needs. Thus an EHR is maintained by a hospital, regional health authority, or central government and typically includes a spectrum of repositories of patient data.

(e) Clearly, the EMR (used by physicians in their chambers) and the EHR (used by health systems to transmit and manage health care data), are complementary technologies.

(f) Physicians are expected to document encounters they have with patients to ensure crucial information for decision-making and actions taken are also recorded. When a physician converts paper records into an electronic format, the original

paper records may be destroyed in accordance with the principles set out in this policy, provided that

- (i) Written procedures for scanning are developed and consistently followed.
 - (ii) Appropriate safeguards are used to ensure reliability of digital copies.
 - (iii) A quality assurance process is established, followed, and documented by comparing scanned copies to originals to ensure that they have been accurately converted.
 - (iv) Scanned copies are saved in “read-only” format.
- (g) Physicians who are using Optical character Recognition (OCR) technology (OCR is a technology process that converts an image of handwritten or typewritten text into machine-editable text) convert records into searchable and editable files, provided they retain the original or scanned copy.
- (h) Electronic medical records are, definitely, the present and future of medical record systems. The efficiency and effectiveness that an EMR system can add to the daily practice of medicine is amazing, enhancing both the quality and comprehensiveness of care.
- (i) Introduction of EMR in a hospital, has many advantages which are :-
- (aa) Remove duplication of work using Barcode
 - (ab) Simplifies Work by using Templates
 - (ac) Internet Enabled EMR for sharing patient data across the globe securely
 - (ad) Quickly retrieval of all the information of a patient
 - (ae) Validation Checks and Security Procedures
 - (af) Digitisation of paper and films
 - (ag) Standardisation of Diagnosis
 - (ah) International Coding of Procedures
 - (ai) Better Storage facility
 - (aia) High degree of Security & Audit

(aiii) Faster search and updates and Online availability of records for Doctors (24 x7)

(aiv) Paperless medical history and in maintaining health information of patients

(av) Reduced healthcare costs

(avi) Empowering the stakeholders to deliver right treatment at the right time

(avii) Promote the practice of evidence-based- medicine

(aviii) Accelerate research and building effective medical practices

(j). Some e-Records are equipped with *decision support tools* embedded in the software that prompt the physician to consider certain factors or possible decisions in response to the inputted data. The software may also include alerts, flags, or instant messaging capabilities to assist physicians in diagnosing, treating, and monitoring their patients' clinical conditions or managing their prescriptions.

(k) The e-Record system is equipped with robust security features including access controls based on the user's role and responsibilities and ensuring encryption protection on all computer systems and portable data storage devices.

(l) Once the EMR is installed, it is prudent for practitioners to periodically conduct privacy audits and ensure that the e-Records has an audit trail that clearly indicates alterations but does not obscure the original record.

(m) Legislation and regulatory authority policies require that electronic files are routinely backed-up which allows files to be recovered, possibly daily or weekly and ensure encryption of backup files.

(n) A digital signature is a technology-specific electronic signature. An electronic signature, although not tangible in nature, can still be an evidence of the association of the signatory with the document and its contents.

31. Medical Record Keeping Standards: Types

- (a) A medical record, documents a patient's complete medical treatment, past and current health status and treatment plans for future health related care and thus remains an integral component of delivering quality health.
- (b) The principal purpose of medical records and medical notes is to record and communicate information about patients and their care. If notes are not organised and completed properly, it can lead to frustration, debate, clinical misadventure and litigation. Many of the causes of inaccurate clinical coding of this secondary data are rooted in the quality of medical notes.
- (c) It is therefore necessary to regularly assess compliance with the standards and monitor the processes and procedures of the services provided by the physician, which facilitates the delivery of continuous and coordinated healthcare.
- (d) The hospital should necessarily establish a performance goal and compliance with medical record standards. The aim of the Records Standards programme is to improve the quality of clinical information in the hospital setting by:-
 - (i) Developing standards for recording and communicating information about patients
 - (ii) Applying these standards to medical records to improve the validity and utility of patient data
 - (iii) Structuring the records so that the information can be incorporated into electronic records, shared with other healthcare providers and analysed for performance monitoring with confidence.
- (e) Record keeping standards can be sub-divided into two categories:
 - (i) Generic standards for good practice (Generic medical record keeping standards apply to all medical notes and addresses the broad requirements for clinical note keeping).
 - (ii) Specific standards to define the structure and content in a specific clinical context.(Standards are also needed so that records are structured appropriately and clinical information is recorded in the right place. Content standards apply to the format and definition of what is recorded in this structure).



Fig 8 Record Keeping

32. Rationale of the Study

(a) The healthcare industry is going through *basic demographic trends*, particularly increased education of people, higher income levels, more working hours and ageing of the working class. Thus consumers are more **knowledge**, discerning and demanding. The industry needs to adapt to the changes and be prepared with information that a patient requires.

(b) The healthcare organisations are service industries thus treatment details must be available and accessible and well maintained to enhance quality of care. The Records programme should develop to convert all entries into medical notes and standards for the content of admission, handover and discharge records, focus on hospital episode statistics and their use for monitoring clinician performance.

(c) This study analyses the basic Medical Records Department of Dr JL Bassi Hospital, Ludhiana and its working as per required regulations.

(d) This study will enable the hospital administration to identify the discrepancies and making available additional infrastructure and allocate equipment, take corrective actions to ensure smooth working of the department.

33. Problem Formulation

This study is focused to deliver tangible inputs to the growth of medical records department with a transition to EMRs and EHRs. This document would provide valuable inputs to all stakeholders like patient, hospital and management.

34. General Objective

To study and establish the standards for medical record department of Dr JL Bassi Hospital

35. Specific Objectives

- (a) To perform the standard analysis.
- (b) To study the storage system and retention of the medical record files.
- (c) To suggest suitable measures for improvement and transition to EMR at Dr JL Bassi Hospital

36. Review of Literature

(a) This dissertation reviews literature relevant to the study. It encompasses both theoretical and empirical works that bears on the study and the variables are measured. An extensive literature search reveals no previous research utilisation of the study variables.

(b) The idea of recording patient information electronically instead of on paper the Electronic Medical Record (EMR) has been around since the late 1960's, when Larry Weed introduced the concept of the Problem Oriented Medical Record into medical practice. Until then, doctor's usually recorded only their diagnoses and the treatment they provided.

(c) Weed's innovation was to generate a record that would allow a third party to independently verify the diagnosis. In 1972, the Regenstein Institute developed the first medical records system. Although the concept was widely hailed as a major advance in medical practice, physicians did not move towards this technology.

(d) In 1991, the Institute of Medicine, a highly respected think tank in the US recommended that by the year 2000, every physician should be using computers in their practice to improve patient care and made policy recommendations on how to achieve that goal. EMR is now moving into health care industry.

(e) Standards Analysis for EMRs: _There are many standards that have to be met in providing electronic medical records. These standards are set by the government.

(f) Privacy and Confidentiality- Patient consent is mandatory.

(g) Similarity Standards _ Vocabulary standards to record symptom and diagnostic information. Medication standards to allow decision-support tools to work by implementing ICD (10) code.

(h) Compatibility Standards - Platform specifications, are concerned with the *transmission* of data between systems so that various healthcare institutions involved in patient care and can share information.

37. Medical Records and Record-keeping standards

- (a) The structure and quality of medical records has been a matter of clinical, administrative and legal interest for many years. Medical records are now used not only for primary but also for secondary clinical purposes including reporting the activity of hospital services, monitoring the performance of hospitals, and research.
- (b) As the pressure to improve the quality of doctors' practice and hospital services grows, with ever increasing expectations and costs of medical care, so the focus on the structure and content of the clinical record is becoming ever more important.
- (c) The advent of electronic medical records is also bringing with it an added urgency for standardisation so that notes can be recorded, stored and reliably retrieved using computers.
- (d) The aim of Records keeping Standards is to improve the quality of clinical information in the hospital setting by:-
- (i) Developing standards for recording and communicating information about patients
 - (ii) Applying these standards to medical records to improve the validity and utility of patient data
 - (iii) Structuring the records so that the information can be incorporated into electronic records, shared with other healthcare providers and analysed for performance monitoring with confidence.
- (e) The features of quality of data include:
- (i) Accessibility – data items should be easily obtainable and legal to collect
 - (ii) Accuracy – data are of correct values and are valid
 - (iii) Comprehensiveness – all required data items are included
 - (iv) Consistency – data is recorded in a consistent manner
 - (v) Currency – the data should be up- to -date
 - (vi) Definition – each data element should have a clear meaning and acceptable values
 - (vii) Granularity – the attributes and values of data should be defined at the correct level of detail

(viii) Relevancy – data must be meaningful for the purpose for which they being collected

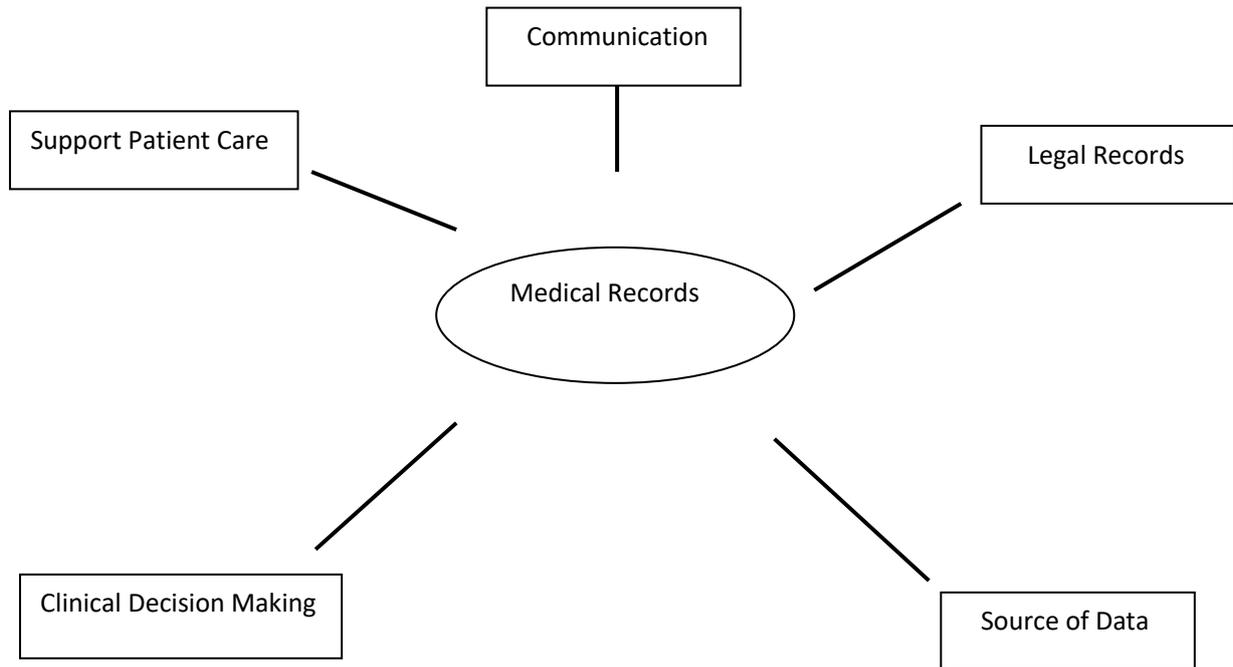


Fig 9 Process of Medical Record Keeping

38. Retention of Medical Records

All healthcare records are required to maintain medical records for a specific period. Its life cycle begins when information is created and ends when the information is destroyed. The diagram provides a simple reflection of the entire records retention process. The target of an organisation is to manage each step in the record keeping life cycle to ensure medical record of patients are available around the clock.

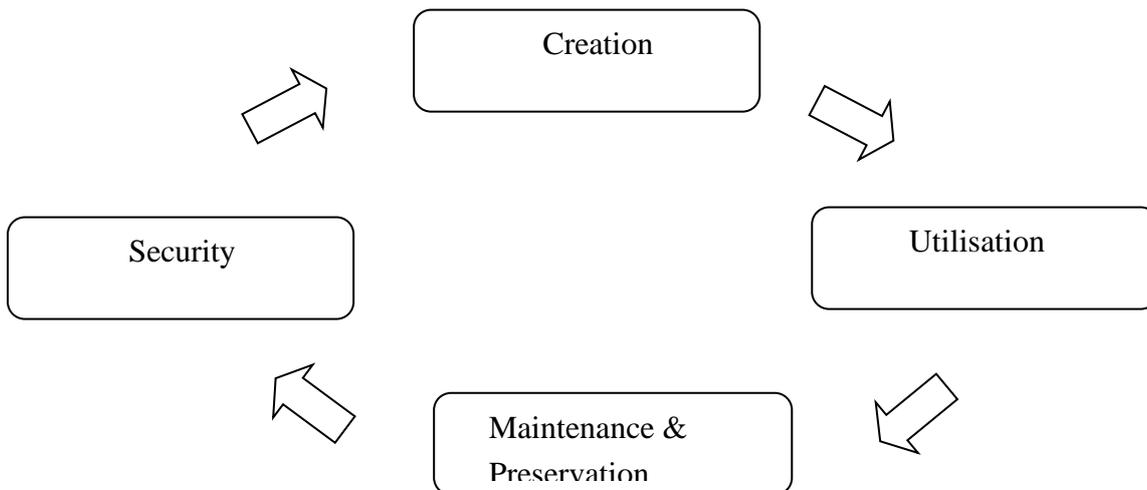


Fig 10 Retention Cycle

39. Transition of Medical Records to Digitisation

(a) It has become very difficult for a physician to track a patient's medical history (including past visit information, diagnostics, previous medications, and drug allergies) in the existing paper system of MR keeping. It is not uncommon for patients to have diagnostic repeated because of improper lab records.

(b) An EMR system helps physicians and hospitals function in a smoother, safer, and more secure manner, allowing hospital personnel to retrieve and update the information of any patient with a click of a button. Thus enhancing the patient care.

(c) EMR system promotes the evolution of healthcare transactions from an inefficient *paper-based system to a more reliable real-time paperless system*. Transcription cost, dictation time, manual note taking, and prescription writing are virtually eliminated.

(d) EMR systems efficiently and reliably store patient data electronically in a central data repository that can be accessed by various people at the same time,

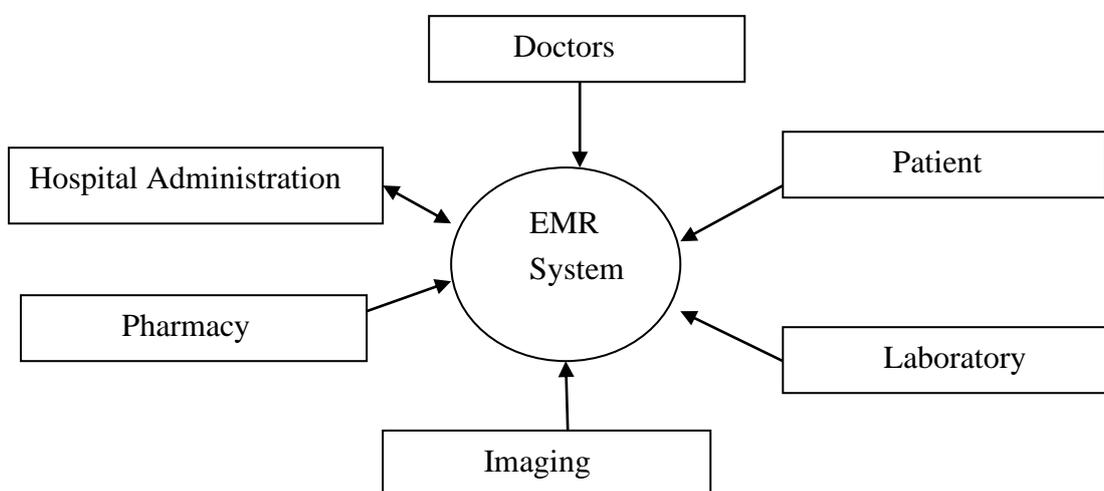


Fig 11 Electronic Medical Records

40. Preferred Filing System

(a) *Terminal Digit filing* is an arrangement of numeric files that groups together all file numbers that end in the same last two digits. Although file numbers are assigned in straight numeric sequence, location is determined by

reading them in reverse order (right to left) in groups of two digits. The main advantages include ease of locating misplaced files due to colors, and difficulty for unauthorized people to access the files.

(b) The terminal digit filing provides the following:-

- (i) Provides equal distribution in the storage area
- (ii) The filing is based on the last two digits of medical record number
- (iii) In Terminal digit filing six /seven digit is used and divided into three parts:

15 /015	20	94
Tertiary	Secondary	Primary

Part I - The Primary digits which are the last two digits on the right side (**94**)

PartII – The Secondary digits are the middle two digits (**20**)

Part III – The Tertiary digits are the first two/three digits on the left most side (**15/015**)

(iii) Thus the process of filing should be as follows:-

- (a) In the terminal digit file there are 100 primary sections ranging from 00-99.
- (b) When filing the primary digits are considered first i.e. The file will be filed in 94 primary section
- (c) Within each primary section there are 100 secondary sections also from 00-99. So after filing the primary digits the secondary digits are considered i.e. The file is placed in the 20th secondary part of the 94th section.
- (d) Within each secondary section there are 0-999 tertiary sets. Thus the file will be placed in 20/94 section, with the numerical order 15/015 of the tertiary number.
- (e) This method helps to generate about 01 crore numbers.

41. Colour Coding

- (a) Colour coding/bars can be used in various position along the edge of the files.
- (b) Colour coding creates distinct patterns of colour. Colour coding is convenient, facilitates easy sorting and prevents filing error.
- (c) In case of using two colours, the top colour represents the first digit of the primary number i.e. 6 and the second colour the second digit i.e. 7 .Any additional colour will represent secondary numbers.

42. Research Methodology

(a) **Sampling Method:** Simple random sampling technique was used to get desired sample size.

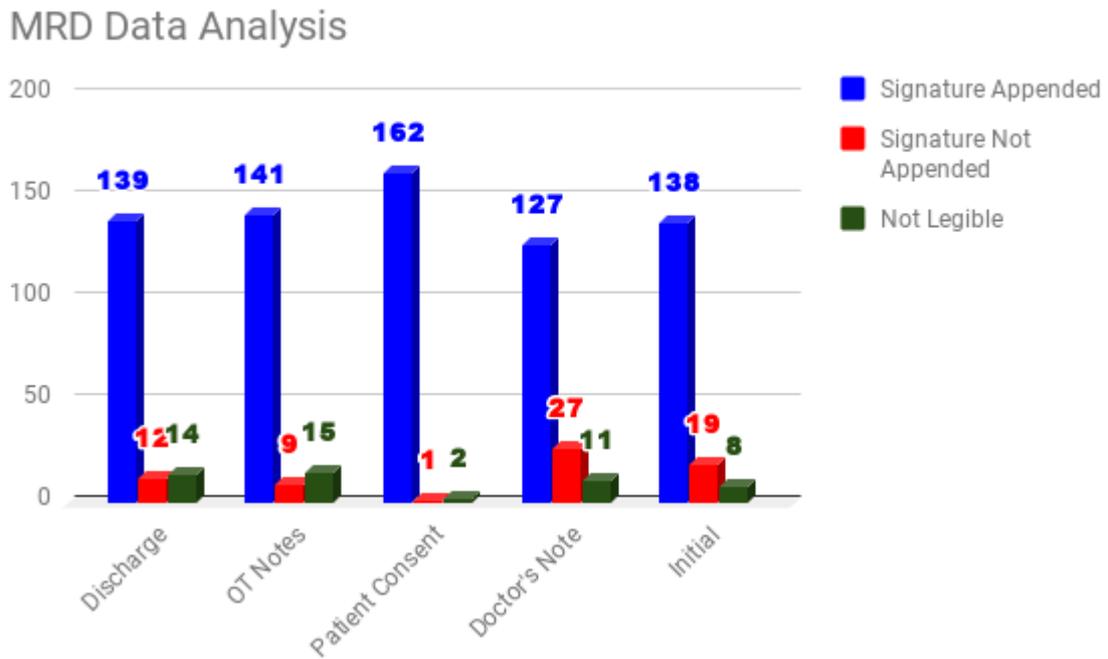


Fig 12 MRD Data Analysis

Incidents	Signature Appended	Signature Not Appended	Not Legible
Initial Assessment Form	138	19	08
Doctor's Note	127	27	11
Patient Consent Form	162	01	02
OT Notes	141	09	15
Discharge Summary	139	12	14

(b) **Sample Size:** 165 files were studied and assessed to check the MRD standard.

(c) **Tools and Techniques:** Explorative study of 05variables (, Initial Assessment Form, Doctor’s Note with Time and Signature, Patient Consent Form, OT Notes and Discharge Summary) were selected to be checked in the files.

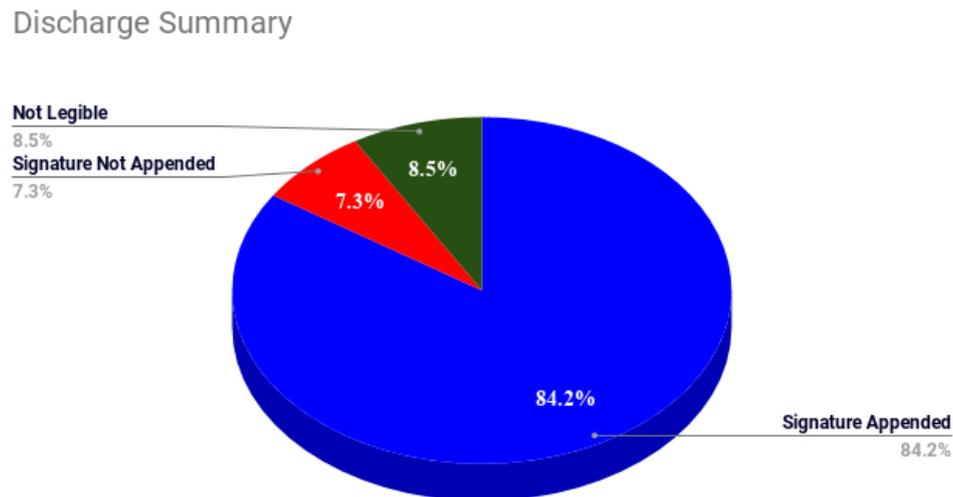


Fig 13 Pie Chart of Discharge Summary

(d) **Discharge Summary documentation must include the following:**

- (i) Problem list, including significant illnesses and medical conditions
- (ii) Medications
- (iii) Adverse drug reactions
- (iv) Distribution of copies to the referring physician and/or family physician
- (v) Any history of alcohol use or substance abuse
- (vi) Biographical or personal data
- (vii) Pertinent history
- (viii) Physical exams
- (ix) Documentation of clinical findings and evaluation for each visit
- (x) Laboratory and other studies that signify review by the ordering provider
- (xi) Working diagnoses consistent with findings and test results
- (xii) Brief summary of the management of each of the active medical problems
- (xiii) Date for return visits or a follow-up plan for each encounter
- (xiv) Previous problems addressed in follow-up visits
- (xv) Current immunization record
- (xvi) Follow-up instructions and specific plans after discharge

Initial Assessment

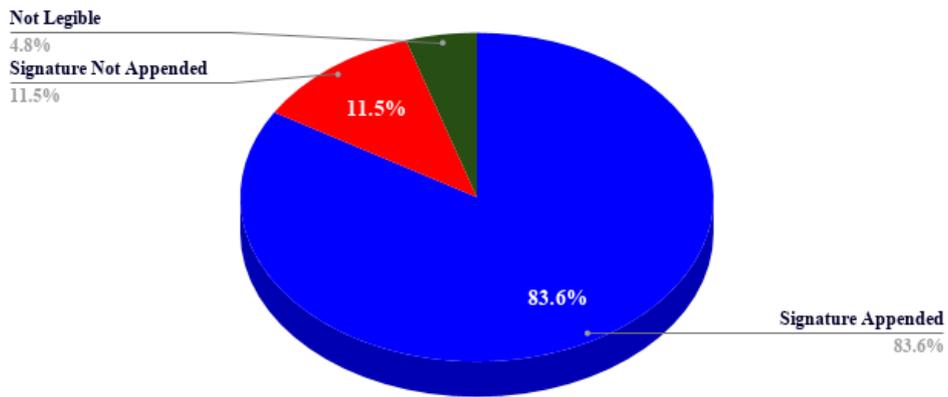


Fig 14 Pie Chart of Initial Assessment Form

(e) Initial assessment form must enter the following details:

- (i) Presenting complaint
- (ii) History of illness
- (iii) The user's name
- (iv) Vitals
- (v) Salient physical examination findings
- (vi) Drug Allergies
- (vii) Provisional Diagnosis
- (viii) Identify any Nursing needs and Special needs
- (ix) Nutritional needs
- (x) Care plan

Doctor's Note

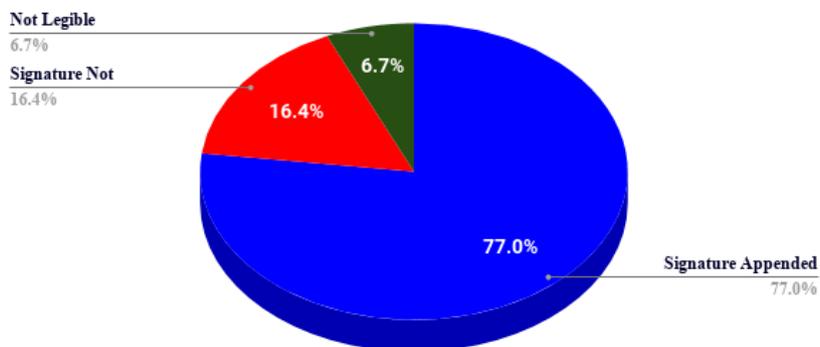


Fig 15 Pie Chart of Doctor's Note

(f) Doctor's note should have:

- (i) The contacts of the doctor that is his/her name, their address as well as the phone number
- (ii) The date and time of generating the document
- (iii) The user's name
- (iv) The reason as to why one chose to consult a medical doctor
- (v) A certificate of medical consultation
- (vi) Documentation of the Patient Encounter
- (vii) A detailed review of the problem originally consulted on and any response to therapy
- (viii) A detailed physical examination related to the system/problem
- (ix) A review of any laboratory reports, consultation reports, reports of investigations performed
- (x) A summary of conclusions, recommendations, and follow-up plans

Patient Consent Form vs. Incidents

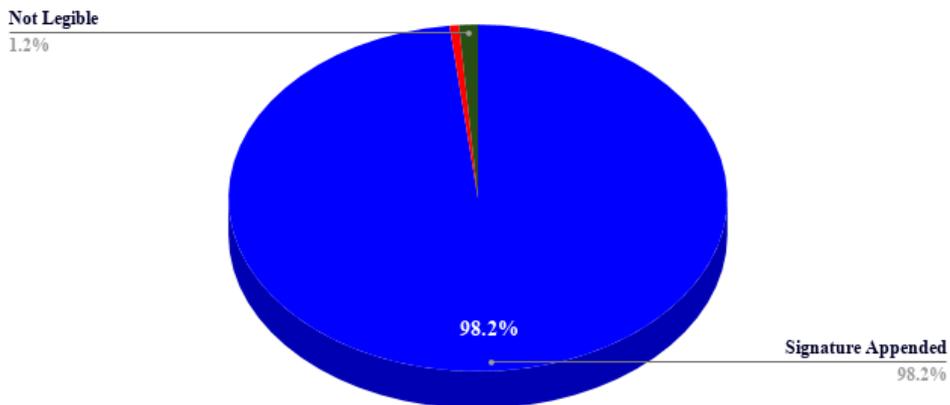


Fig 16 Pie Chart of Patient Consent Form

(g) Patient Consent Form :

- (i) Name and signature of the patient, or if appropriate, legal representative
- (ii) Name of the hospital
- (iii) Name of procedure(s)
- (iv) Name of all practitioners performing the procedure

- (v) Risks& Benefits
- (vi) Alternative procedures and treatments and their risks
- (vii) Date and time consent is obtained
- (viii) Statement that procedure was explained to patient or guardian
- (ix) Signature of person witnessing the consent
- (x) Name and signature of person who explained the procedure to the patient

OT Notes vs. Incidents

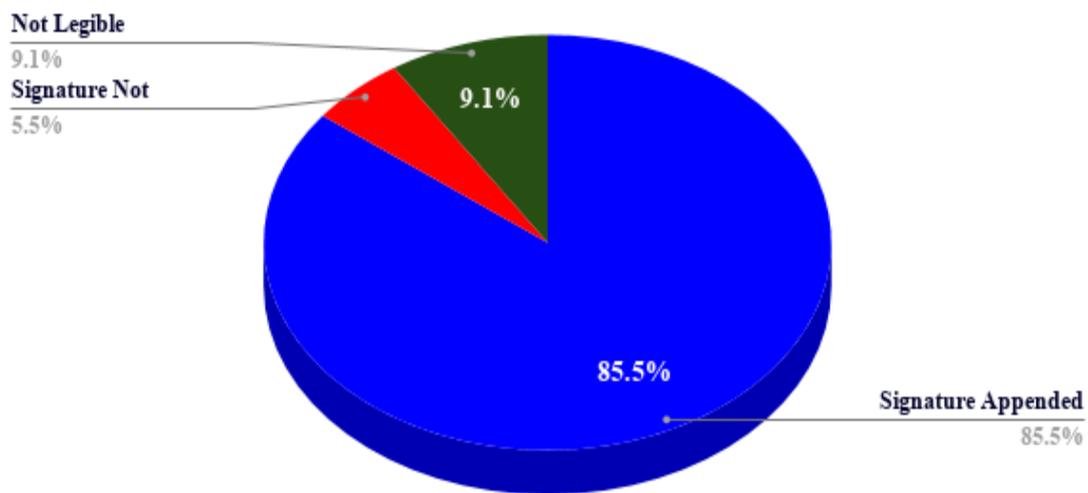


Fig 17 Pie Chart of OT Notes

(h) OT Notes : The Good Surgical Practice (GSP) explicitly state that medical notes should “allow another doctor to assess the care of the patient at any time”.. Operation notes are handwritten into the patient’s medical notes following the procedure by a member of the surgical team. Contents are :

- (i) Date and time
- (ii) Elective or emergency
- (iii) Name of surgeon and assistants
- (iv) Incision
- (v) Operative diagnosis

- (vi) Operative findings
- (vii) Any problems/complications
- (viii) Any extra procedure and reasons for it
- (ix) Details of tissue removed, added or altered
- (x) Identification of any prosthesis used
- (xi) Details of closure technique
- (xii) Post operative care instructions
- (xiii) Preoperative diagnosis: reason for surgery
- (xiv) Procedure performed
- (xv) Postoperative diagnosis: actual finding at surgery
- (xvi) Anesthesia: type; i.e, general, spinal, epidural, etc
- (xvii) Surgeon: attending physician
- (xviii) Assistant(s): resident/medical student
- (xix) Estimated Blood Loss
- (xx) IV Fluids
- (xxi) Urine output
- (xxii) Findings: in detail
- (xxiii) Pathology: what was sent to the pathologist for evaluation
- (xxiv) Disposition: where patient is going from operating room

43. A Second Set of variables (Delivery Note and APGAR Score) were selected to be checked in the files. 103 files were studied and assessed to check the MRD standard

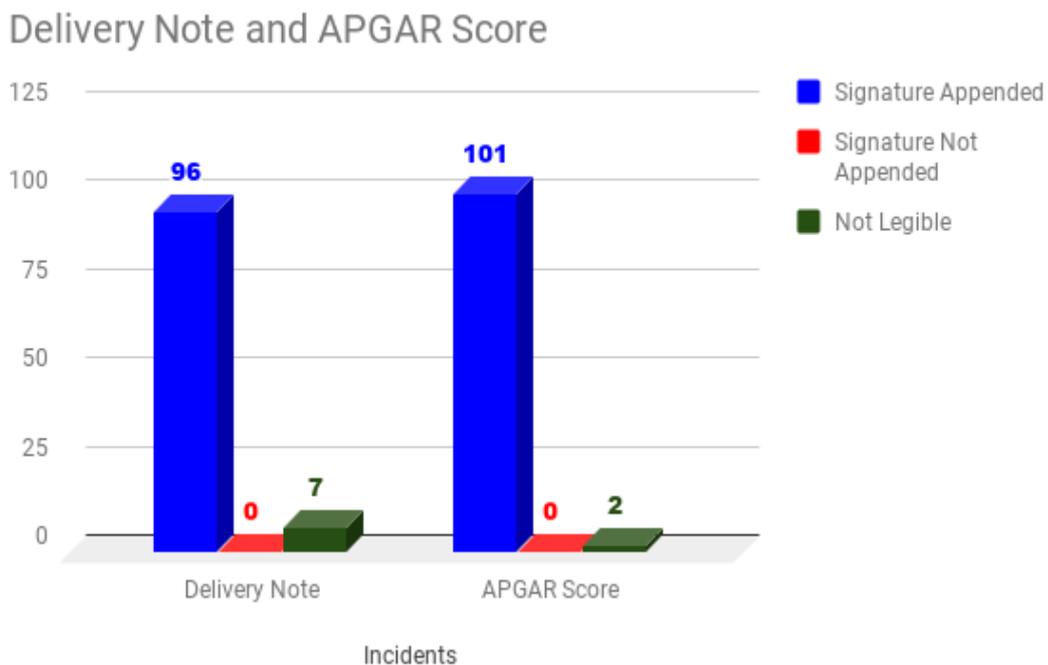


Fig 18 MRD Data Analysis (Delivery Note & APGAR Score)

Incidents	Signature Appended	Signature Not Appended	Not Legible
Delivery Note	96	0	7
APGAR Score	101	0	2

Delivery Note vs. Incidents

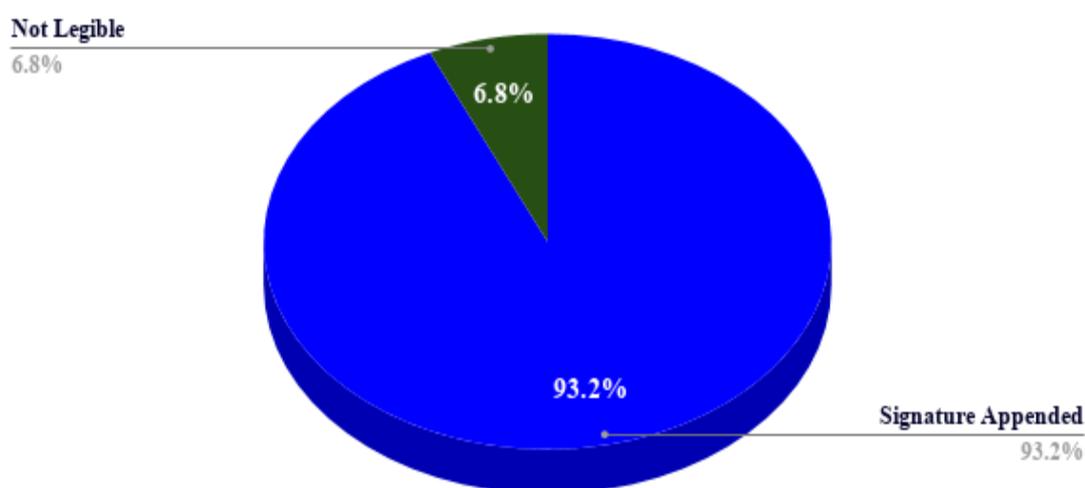


Fig 19 Pie Chart of Delivery Note

(j) Delivery Note : Delivery notes give the complete details of labor and delivery procedure, tool for assessment/ review. Contents are :-

Labor and Delivery Note (by Dr. Jen Pearson – to be used to complete the Delivery Summary)

Stage I: Duration

- (i) Description of labor
- (ii) Onset Progression
- (iii) Membrane status
- (iv) Fetal well being Type of monitoring
- (v) Analgesics used
- (vi) Position of infant presentation
- (vii) Any other pertinent information from this stage

Stage II: Duration

- (i) Description of this stage (to include same points as above) as well as the description of delivery (i.e.: spontaneous vs. forceps, etc.)
- (ii) Episiotomy – if applicable Analgesics used
- (iii) Infant status Sex, weight and any other pertinent infant data
- (iv) Any other pertinent information from this stage

Stage III: Duration

- (i) Description of placental delivery and cord status (i.e. expressed, spontaneous, etc.)
- (ii) Medications given
- (iii) Estimated Blood Loss Status of perineum and further maternal anatomy
- (iv) and description of any repair required
- (v) Complications Status of mother and baby
- (vi) Any other pertinent information from this stage.

APGAR Score vs. Incidents

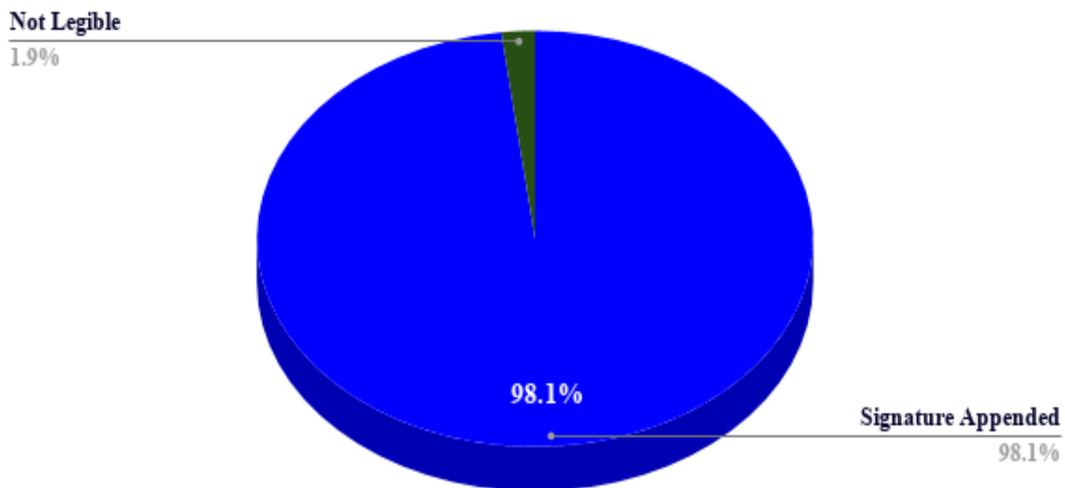


Fig 20 Pie Chart of APGAR Score

(k). **Apgar.** Apgar is a quick test performed on a baby at 1 and 5 minutes after birth. The 1-minute score determines how well the baby tolerated the birthing process. The 5-minute score tells the health care provider how well the baby is doing outside the mother's womb. The provider examines the baby's:

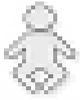
APGAR Test Scoring			
	Score 0	Score 1	Score 2
A ppearance	 Blue all over	 Blue only at extremities	 No blue coloration
P ulse	No pulse	< 100 beats/min.	> 100 beats/min.
G rimace	 No response to stimulus	 Grimace or feeble cry when stimulated	 Sneezing, coughing, or pulling away when stimulated
A ctivity	 No movement	 Some movement	 Active movement
R espiration	No breathing	Weak, slow or irregular breathing	Strong cry

Fig 21 APGAR Scoring Chart

- (i) Breathing effort
- (ii) Heart rate
- (iii) Muscle tone
- (iv) Reflexes
- (v) Skin color
- (vi) Each category is scored with 0, 1, or 2, depending on the observed condition.

44. Findings And Recommendations

- (a) Medical documents in Dr JL Bassi Hospital are being, maintained properly and Filed in cabinets.
- (b) The OPD files are kept according to the UHID nos. and the IPD files as per IP nos.
- (c) The MRD department be staffed adequately with staff to maintain the huge medical records of patients with colour coding
- (d) The location of the MRD is in the basement which provides ample storage area.
- (e) There is a requirement to feed the old medical records(paper) into the HMIS newly procured by the hospital. Thus, the requirement of additional staff(may be temp/contractual) till complete data has been fed into HMIS.
- (f) Proper documentation of patient files helps in providing correct, efficient and timely medical care to the patient be in terms of consultation or procedure.
- (g) On admission the file is prepared and moves to the respective wards once admission is confirmed.
- (h) Tracer Record Card plays a very vital role in the filing area. Case Files should not move out of the MRD without proper filling of Tracer Card, to be strictly implemented, as :
 - (i) It contains the record nos, Consultant's name and Date of retrieval.
 - (ii) The cardinal rule in the filing area is that no record can be removed from the rack without being replaced by a tracer card.
- (f) Authentication of Medical documents is important, hence all pertinent documents like OT Report, Initial Assessment Form, Patient consent, Delivery notes be signed by the authorized doctor and in a legible hand.
- (g) Movement of Files, at times the file movement can be delayed when it is required at two different places at the same time or is at one station and needs to move to the e other station. Priority be set in such cases.
- (h) IPD Files duly completed should reach the MRD within 72hours and duly authenticated by physician/HOD. MRD then should carry out checks for completion of Initial assessment, UHID/IPD No., Patient Details, Progress Notes, Consultations, Informed Consents, Pre & Post Anesthesia Evaluation, Delivery Note, OT Notes along with Discharge Summary etc.
- (i) Internal Audit be carried periodically. Essential for patient care, Efficient running of the hospital.
- (j) One should know the time frame for which different medical documents need to be retained and by which category of healthcare provider. IPD – 10yrs, OPD - 05yrs, MLC – till settlement, X-ray OPD/IPD – 05/10yrsMR of minors till

attaining adulthood plus 06 yrs, registers& statistical reports permanent, log book – 02yrs

(j) The patient files should be assembled and arranged in a prescribed standard format:-

- (a) Patient Admission Slip and Master Patient Index(MPI)
- (b) History Sheet
- (c) Plan of Care
- (d) Nursing Initial Assessment
- (e) Nutrition Assessment Form
- (f) Progress Card
- (g) Investigation Record
- (h) Observation Chart
- (i) Lab Reports and Imaging Tests
- (j) Consent Form
- (k) OT Notes
- (l) Labor and Delivery Notes
- (m) Patient briefing form
- (n) Blood Bank services
- (o) Discharge Summary

45. Retention of Medical Records MCI Guidelines on Medical Records. The Medical Council of India Regulations 2002 guidelines stipulate the time frame regarding medical records. The important issues that have been addressed are as follows:-

- (a) 1.3.1 Every physician shall maintain the medical records pertaining to his / her indoor patients for a period of **3 years** from the date of commencement of the treatment in a standard Performa laid down by the Medical Council of India and attached as Appendix 3.
- (b) 1.3.2. If any request is made for medical records either by the patients / authorised attendant or legal authorities involved, the same may be duly acknowledged and documents shall be issued within the period of 72 hours.
- (c) 1.3.3 A Registered medical practitioner shall maintain a Register of Medical Certificates giving full details of certificates issued. When issuing a medical certificate he / she shall always enter the identification marks of the patient and keep a copy of the certificate. He / She shall not omit to record the signature and/or thumb mark, address and at least one identification mark of the patient on the medical certificates or report.
- (d) 1.3.4 Efforts shall be made to computerize medical records for quick retrieval.

Conclusion.

46. Providing excellent health care to a patient is in the hands of the physician, but by only being highly qualified in his field alone a healthcare provider cannot do so. He needs the support of Diagnostics test be it Imaging or Lab results. These alone may not be adequate till he has the Patient's Medical record, his past medical history, Diagnosis if any, other ailments, medication, follow ups etc. All these input can only be provided by documented records, hence the requirement of Medical Record Keeping and to manage the same, Medical Records Department(MRD). Medical records not only provides old data held but also provide an inherent protection to the Patient and Healthcare provider(Doctor/Hospital), in case of any Event/Malpractice suit/Audit/Review/monitoring by Government Body etc. Authenticated medical documents can be produced in a court of Law as Evidence. Hence, one should know the time frame for which different medical documents need to be retained and by which category of healthcare provider. Thus, the requirement of professionals to man the MRD to evaluate, store and retrieve the requisite data as and when needed. The data and reports stored and generated by the MRD helps in evaluating the resources available to the need in the future, leading to upgradations in technology, knowledge and skill sets of the employees, thus helping the Management in running the organization in a smooth and efficient manner.