

# MEDICAL RECORDS MANAGEMENT

## Module1

Medical Record: Definition, History of Medical Record, Medical record administration in country and other countries, Role of medical records in healthcare delivery

# Medical Record: Definition

**Medical record** is a record of a patient's medical information (as medical history, care or treatments received, test results, diagnoses, and medications taken)

A chronological written account of a **patient's** examination and treatment that includes the **patient's medical** history and complaints, the physician's physical findings, the results of diagnostic tests and procedures, and medications and therapeutic procedures.

# History of Medical Record

- History of medical record parallels with the history of medicine
- Primitive medical records carved in wood and chipped in stone dated back to approximately 2500 BC
- In subsequent centuries, hieroglyphics found on parchments recorded scientific progress. These chronicles preserved medical achievements for later generations.

- Ample evidence is available to substantiate the flourishing of medical records in India many centuries before the birth of Christ. Art forms, caves and temples of Ajanta and Ellora, Buddhist stupas at Amaravathi and Nagarjuna Konda portray medical concepts.
- Innumerable references to science of medicine and surgery in Indian epics like Ramayana and Mahabharata.
- Earliest documentation on medical practice in India is found in Atharvaveda
- The first Indian textbook of medicine Atreya Samhita was written by sage Atreya during vedic ages.
- Agnivesa Samhita, Charaka Samhita, Susruta Samhita contain valuable information about the science of medicine.



Figure 1.1: Primitive medical records in various formats date back to 5000 BC

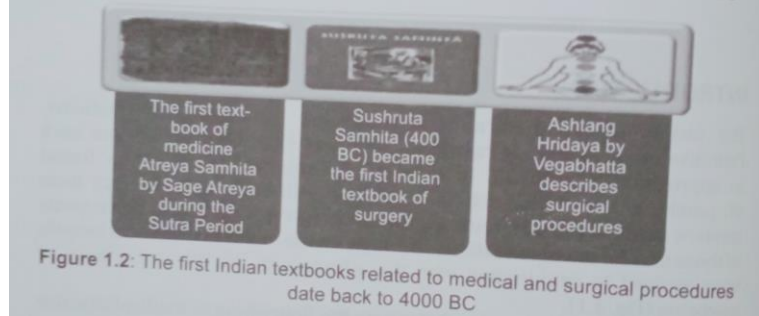


Figure 1.2: The first Indian textbooks related to medical and surgical procedures date back to 4000 BC

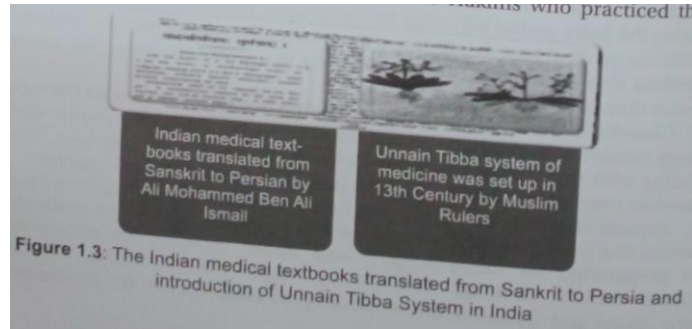


Figure 1.3: The Indian medical textbooks translated from Sanskrit to Persian and introduction of Unnain Tibba System in India



Figure 1.4: Introduction of modern medicine in India by Portuguese, British and French during 16-18th century



Figure 1.5: British military surgeons established medical schools/colleges in Madras, Kolkata and Bombay in 18th century

Table 1.1: The number of participants and countries represented at each congress and hosting country

Congress	Year	Participants	Countries	Country
I	1952	309	9	UK
II	1956	723	12	USA
III	1960	346	17	UK
IV	1963	1000	18	USA
V	1968	750	19	Sweden
VI	1972	409	24	Australia
VII	1976	2000	23	Canada
VIII	1980	550	24	The Netherlands
IX	1984	291	17	New Zealand
X	1988	2600	26	USA
XI	1992	NA	18	Canada
XII	1996	300	36	Germany
XIII	2000	375	26	Australia
XIV	2004	4000	39	USA
XV	2007	NA	NA	South Korea
XVI	2010	NA	NA	Italy
XVII	2013	NA	NA	Canada
XVIII	2016			To be held in Japan

Health Information Management (HIM) Professional Association Role in effective implementation of Electronic Health Records (EHR) and eHealth Management by the global nations.

- Sushruta Samhita is the first Indian textbook of surgery, describing 21 sharp and 101 blunt surgical instruments, methods of preparation for major surgery and native methods of anesthesia administration.
- Ashtanga Hridaya by Vegabhatta described surgical procedures and discussed innovative drugs for medical care.
- The successive invasions of India and eventual British Colonial rule evoked a decline in the indigenous system of medicine.
- Modern medicine was introduced to India by Portuguese in the 16<sup>th</sup> century

- In 1510, the first Indian hospital, the royal hospital in Goa was found. The Ecole de Pondicherry was a school of medicine established in India by the French government in 1823.
- Medical department of East India Company was created in 1740, comprising of British Military surgeons and their local assistants.
- Among the earliest existing medical documents is a papyrus presenting 48 cases attributed to the Egyptian physician Imhotep. A 13 inch wide replica of this original document generated about 1600 BC is in the possession of the New York Academy of Medicine

- The first hospital in U.S. to incorporate medical records was Pennsylvania hospital, established by Benjamin Franklin in 1752.
- This institution preserved continuous, detailed medical records from that time, followed by New York Hospital in New York city, and Massachusetts General hospital in Boston.
- Massachusetts General hospital in Boston appointed Mrs. Grace Whiting Myers (1859-1957) as its initial medical record librarian. She later became the first president of the Association of Medical Record Librarians on North America ( now known as the “ American Health Information Management Association”)



# Administration of medical records

- The terms **medical record**, **health record**, and **medical chart** are used somewhat interchangeably to describe the systematic documentation of a single patient's medical history and care across time within one particular health care provider's jurisdiction.
- The medical record includes a variety of types of "notes" entered over time by health care professionals, recording observations and administration of drugs and therapies, orders for the administration of drugs and therapies, test results, x-rays, reports, etc.
- The maintenance of complete and accurate medical records is a requirement of health care providers and is generally enforced as a licensing or certification prerequisite.

- Medical records are legal documents that can be used as evidence and are thus subject to the laws of the country/state in which they are produced.
- As such, there is great variability in rules governing production, ownership, accessibility, and destruction.

## **Demographics**

Demographics include patient information that is not medical in nature. It is often information to locate the patient, including identifying numbers, addresses, and contact numbers. It may contain information about race and religion as well as workplace and type of occupation. It also contains information regarding the patient's health insurance. It is common to also find emergency contact information located in this section of the medical chart.

## **Production**

In the United States, written records must be marked with the date and time and scribed with indelible pens without use of corrective paper. Errors in the record should be struck out with a single line (so that the initial entry remains legible) and initiated by the author. Orders and notes must be signed by the author. Electronic versions require an electronic signature.

# Medical record administration has become information management

- The medical record is essentially a document which act as:
  - A basis for continuity of patient care
  - A fundamental means of communication among health care personnel
  - A source for comparative studies and research
  - A medium of education for medical and paramedical personnel,
  - Legal protection for institutions, practitioners and patients

The most significant milestones and landmarks in the recent history of medical record science are:

- American and British endeavors to standardize medical records through formal accreditation processes
- Organization of national medical record associations the USA (1928), Canada (1942), Great Britain (1948), Australia (1952), India (1972)
- Founding of the International Federation of Medical Records in Stockholm, Sweden in 1968. Current member countries of this organization are:
  - Australia
  - Canada
  - France, Germany
  - Great Britain
  - Israel
  - Jamaica
  - Japan
  - Kenya
  - Netherlands
  - New Zealand
  - Nigeria
  - Phillippines
  - South Korea
  - USA
  - Venezuela

# Ownership of patient's record

## ■ **US law and customs**

- In the United States, the data contained within the medical record belongs to the patient, whereas the physical form the data takes belongs to the entity responsible for maintaining the record per the Health Insurance Portability and Accountability Act.
- Patients have the right to ensure that the information contained in their record is accurate, and can petition their health care provider to amend factually incorrect information in their records.
- Factors complicating questions of ownership include the form and source of the information, custody of the information, contract rights, and variation in state law. There is no federal law regarding ownership of medical records. HIPAA gives patients the right to access and amend their own records, but it has no language regarding ownership of the records. Twenty-eight states and Washington, D.C. have no laws that define ownership of medical records. Twenty-one states have laws stating that the providers are the owners of the records. Only one state, New Hampshire, has a law ascribing ownership of medical records to the patient

## ■ **Canadian law and customs**

- Under Canadian federal law, the patient owns the information contained in a medical record, but the healthcare provider owns the records themselves. The same is true for both nursing home and dental records. In cases where the provider is an employee of a clinic or hospital, it is the employer that has ownership of the records. By law, all providers must keep medical records for a period of 15 years beyond the last entry.

- **UK law and customs**

- In the United Kingdom, ownership of the NHS's medical records has in the past generally been described as belonging to the Secretary of State for Health and this is taken by some to mean copyright also belongs to the authorities.



## ■ German law and customs

- In Germany, a relatively new law, which has been established in 2013, strengthens the rights of patients. It states, amongst other things, the statutory duty of medical personnel to document the treatment of the patient in either hard copy or within the electronic patient record (EPR). This documentation must happen in a timely manner and encompass each and every form of treatment the patient receives, as well as other necessary information, such as the patient's case history, diagnoses, findings, treatment results, therapies and their effects, surgical interventions and their effects, as well as informed consents. The information must include virtually everything that is of functional importance for the actual, but also for future treatment. This documentation must also include the medical report and must be archived by the attending physician for at least 10 years. The law clearly states that these records are not only memory aids for the physicians, but also should be kept for the patient and must be presented on request.
- In addition, an electronic health insurance card was issued in January 2014 which is applicable in Germany, but also in the other member states of the European Union (European Health Insurance Card). It contains data such as: the name of the health insurance company, the validity period of the card, and personal information about the patient (name, date of birth, sex, address, health insurance number) as well information about the patient's insurance status and additional charges. Furthermore, it can contain medical data if agreed to by the patient. This data can include information concerning emergency care, prescriptions, an electronic medical record, and electronic physician's letters. However, due to the limited storage space (32kB), some information is deposited on servers.

# **Accessibility:**

## **United States**

In the United States, the most basic rules governing access to a medical record dictate that only the patient and the health-care providers directly involved in delivering care have the right to view the record. The patient, however, may grant consent for any person or entity to evaluate the record. The full rules regarding access and security for medical records are set forth under the guidelines of the Health Insurance Portability and Accountability Act (HIPAA).

## **Capacity**

When a patient does not have capacity (is not legally able) to make decisions regarding his or her own care, a legal guardian is designated (either through next of kin or by action of a court of law if no kin exists). Legal guardians have the ability to access the medical record in order to make medical decisions on the patient's behalf. Those without capacity include the comatose, minors (unless emancipated), and patients with incapacitating psychiatric illness or intoxication.

## **Medical emergency**

In the event of a medical emergency involving a non-communicative patient, consent to access medical records is assumed unless written documentation has been previously drafted (such as an advance directive)

## **Research, auditing, and evaluation**

Individuals involved in medical research, financial or management audits, or program evaluation have access to the medical record. They are not allowed access to any identifying information, however.

## ■ **Canada**

- In the 1992 Canadian Supreme Court ruling in *McInerney v. MacDonald* gave patients the right to copy and examine all information in their medical records, while the records themselves remained the property of the healthcare provider. The 2004 Personal Health Information Protection Act (PHIPA) contains regulatory guidelines to protect the confidentiality of patient information for healthcare organizations acting as stewards of their medical records. Despite legal precedent for access nationwide, there is still some variance in laws depending on the province. There is also some confusion among providers as to the scope of the patient information they have to give access to, but the language in the supreme court ruling gives patient access rights to their entire record.

## ■ **United Kingdom**

- In the United Kingdom, the Data Protection Acts and later the Freedom of Information Act 2000 gave patients or their representatives the right to a copy of their record, except where information breaches confidentiality (e.g., information from another family member or where a patient has asked for information not to be disclosed to third parties) or would be harmful to the patient's wellbeing (e.g., some psychiatric assessments). Also, the legislation gives patients the right to check for any errors in their record and insist that amendments be made if required.

# Destruction:

- In general, entities in possession of medical records are required to maintain those records for a given period. In the United Kingdom, medical records are required for the lifetime of a patient and legally for as long as that complaint action can be brought.
- Generally in the UK, any recorded information should be kept legally for 7 years, but for medical records additional time must be allowed for any child to reach the age of responsibility (20 years).
- Medical records are required many years after a patient's death to investigate illnesses within a community (e.g., industrial or environmental disease or even deaths at the hands of doctors committing murders)

# Medical Council of India (MCI) Guidelines on Medical Records

The issue of medical record keeping has been addressed in the Medical Council of India Regulations 2002 guidelines answering many questions regarding medical records. The important issues that have been addressed are as follows:

1. Maintain indoor records in a standard proforma for 3 years from commencement of treatment (Section 1.3.1 and Appendix 3).
2. Request for medical records by patient or authorized attendant should be acknowledged and documents issued within 72 hours (Section 1.3.2).
3. Maintain a register of certificates with the full details of medical certificates issued with at least one identification mark of the patient and his signature (Section 1.3.3).
4. Efforts should be made to computerize medical records for quick retrieval (Section 1.3.4).

[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2779965/#:~:text=MEDICAL%20COUNCIL%20OF%20INDIA%20GUIDELINES%20ON%20MEDICAL%20RECORDS,-The%20issue%20of&text=Maintain%20indoor%20records%20in%20a,2\).](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2779965/#:~:text=MEDICAL%20COUNCIL%20OF%20INDIA%20GUIDELINES%20ON%20MEDICAL%20RECORDS,-The%20issue%20of&text=Maintain%20indoor%20records%20in%20a,2).)

## HOW LONG SHOULD MEDICAL RECORDS BE PRESERVED?

There are no definite guidelines in India regarding how long to retain medical records. The hospitals follow their own pattern retaining the records for varied periods of time. Under the provisions of the Limitation Act 1963 and Section 24A of the Consumer Protection Act 1986, which dictates the time within which a complaint has to be filed, it is advisable to maintain records for **2 years for outpatient records and 3 years for inpatient and surgical cases**. However the provisions of the Consumer Protection Act allows for condoning the delay in appropriate cases. This means that the records may be needed even after 3 years. It is important to note that in pediatric cases a medical negligence case can be filed by the child after acquiring the age of majority. The Medical Council of India guidelines also insist on preserving the inpatient records in a standard proforma for 3 years from the commencement of treatment. The records that are the subject of medico-legal cases should be maintained until the final disposal of the case even though only a complaint or notice is received. It is necessary that the Government frames guidelines for the duration for which medical records are preserved by the hospitals so that hospitals are protected from unnecessary litigation in issues of medical records.

## OWNERSHIP OF MEDICAL RECORDS

An important issue of dispute between the patient and the treating hospital is about the ownership of the medical records. By and large medical records are the property of the hospitals and it is the responsibility of the hospitals to maintain it properly.

The hospitals and the doctors have to be careful with medical records as these can be stolen, manipulated, and misused for malafide reasons by any interested parties. Hence, the records should be in safe custody. It is the primary responsibility of the hospital to maintain and produce patient records on demand by the patient or appropriate judicial bodies.

However, it is the primary duty of the treating doctor to see that all the documents with regard to management are written properly and signed. An unsigned medical record has no legal validity. The patient or their legal heirs can ask for copies of the treatment records that have to be provided within 72 hours.

The hospitals can charge a reasonable amount for the administrative purposes including photocopying the documents. Failure to provide medical records to patients on proper demand will amount to deficiency in service and negligence.



# SUMMONING MEDICAL RECORDS BY COURTS

- Medical records are usually summoned in a court of law in the following cases:
  1. Criminal cases for proving the nature, timing, and gravity of the injuries. It is considered important evidence to corroborate the nature of the weapon used and the cause of death
  2. Road traffic accident cases under the MACT Act for deciding on the amount of compensation
  3. Labor courts in relation to the Workmen's Compensation Act
  4. Insurance claims to prove the duration of illness and the cause of death
  5. Medical negligence cases- these can be in criminal courts when the charge against the doctor is for criminal negligence or under the Consumer Protection Act for deficiency in the doctor's or hospital's care

# Initiatives in India for Electronic Health Records



In India, there is an increase in the magnitude of digitization of healthcare services in various healthcare delivery institutions. It has been claimed by practitioners and clinicians that electronic health records (e.g. personal health records) have the ability to enhance quality and safety of care besides improved management of health information and clinical data. Electronic health records also increase portability of clinical information including the better interaction between patient and health service provider. This has helped public health experts to understand disease trends and better diagnose diseases. Also, from the patients' perspective, it enables improved services and has reduced the redundant clinical tests. However, these medical records are more institution centric as these are limited to specific/ defined healthcare delivery institutions only.

Further, the clinical data resides in silos and usually, access of this data is not extended to the patients, who often struggle with paper based record keeping. Today, with the growing trend of a citizen centric healthcare system from an institution centric healthcare system. To bring about this shift, Ministry of Health and Family Welfare jointly with Ministry of Electronics and IT, Govt. of India has developed a Personal Health Record Management System (titled MyHealthRecord) for citizens of India.

# International Federation of Health Information Management Association (IFHIMA)

- **The objectives of International Federations of Health Information Management Association (IFHIMA) is to:**
  - Promote the development and use of health records information management in all countries
  - Advance the development and use of international health records/ information management standards
  - Provide for the exchange of information on health record/ information management education requirements and training programs
  - Provide opportunities for education and communication between persons working in the field of health record/ information management in all countries
  - Promote the use of technology and the electronic health records
  - These aspirations are achieved through the collaboration, networking and sharing of experiences and resources of IFHIMA members.
  - IFHIMA is a non-profit organization affiliated with the World Health Organization (WHO) as a nongovernmental organization (NGO)

# Role of medical records in healthcare delivery

## ■ The purpose of the medical record are:

- To provide a means of communication among physicians , nurses and other allied health care professionals
- To serve as an easy reference for providing continuity in patient care
- To furnish documentary evidence of care provided in the health care facility
- To serve as an informational document to assist in the quality review of patient care
- To protect the patient, physician, as well as the health care institution and its employees in the event of litigation
- To render clinical and administrative data required for budgeting, management, service development, planning, review, medical education and medical research
- To supply pertinent patient care information to authorized organizations and third party payers

**Medical records are important – “ People forget and records remember”**

Medical record is valuable to patients, physicians, healthcare institutions, research teams, teachers and students, national health agencies and international health organizations

# Importance of medical records-Patient's

- Present and past state of health
- Analysis of present illness in terms of diagnosis and prognosis
- Consultation opinion
- Serves as reference
- Old record enables physician to review and analyze previous illness
- Quick treatment- reducing the length of stay
- Allergies and drug reactions are noted
- Previous surgical procedures are recorded
- Protects from over prescription, unnecessary surgical exploration and repetition of investigations
- Protects from legal actions
- Assist kith and kin to settle property litigations
- Obtaining blood group information
- Obtaining medical certificates, such as birth, death, insurance and so forth



# Importance of medical records-Physician

- Yields information about previous treatments, reactions, allergies, drugs, investigations, methods of treatments and results of care
- Suggests newer lines of investigations and treatment
- Evaluation of drugs for their clinical effect
- Information about availability of newer drugs for patients
- Comparative studies
- Medicolegal concerns
- Teaching and research



# Importance of medical records-Healthcare Institutions

- Evaluating the competency of the medical, nursing and ancillary staff ( Quality assurance)
- Justifying the results of treatment
- Medicolegal purposes
- Defense in malpractice suits
- Basis for preparing operating budgets
- Administrative control over functional activities
- Basis for distribution of expenses when computing costs of operations
- Statistical data to assist in controlling bed allocation, infection and mortality rates, and length of stay
- Planning of additional facilities, staff and equipment as well as improving medical education and patient care.



# Importance of medical records- Research Teams

- Medical science is dynamic: New techniques, new methods and new medications
- Conduct research to meet own country's needs
- Research results are shared by others
- Each country has its own health problem to solve
- Medical records of present and past help in concurrent, prospective and retrospective research
- Learn simple and better ways to deal with problems
- Control healthcare costs
- Find better drugs and techniques
- Improve quality of services
- Essential for medical education
- Practical training by medical students
- Clinical practice in art of patient history taking, proper physical examination and written treatment notes
- As better guiding tool to teacher
- Learn traits of teacher through well documented records
- Better record keeping practices among staff
- Records are full of documented facts of live cases, which are better than a written textbook
- Benefits undergraduate and post graduate students





# Importance of medical records- National Health Agencies

- Depend on information
- Allocate budget, staff and equipment
- Plan and construct hospitals and health centers in required locations
- Determine the type of health services required
- Monitor all hospitals and health institutions
- Exchange expertise from other nations
- Collaborate with international organizations
- Develop medical and allied health service education

# Importance of medical records- International Health Organizations



- Responsible for assisting and guiding nations
- Control infectious diseases and epidemics
- Provide assistance to needy nations and accepting assistance from countries which have surplus
- Exchange experts and specialists
- Send medical supplies and other items to needy countries
- Need reliable information from all countries to achieve global healthier living