

# Introduction to Health Information Management

Electronic Medical Records (EMR) Management is also known as Health Record Management. In India and some developing countries use the term Electronic Medical Records while most of Western countries especially USA and Canada use the term Electronic Health Records (EHR). There is slight difference; electronic medical records are mostly used for ambulatory and most hospital-based records for curative; mostly for secondary and tertiary care purpose, while electronic health records are comprehensive longitudinal records encompass primary, secondary and tertiary information from birth to death.

**Health Information Management (HIM) Professionals:** HIM professionals may not deal with patient directly, but help patients indirectly by maintaining their records or taking care of medical data and ensure reliability, timeliness, accuracy and completeness. They maintain patient records in the strictest of all confidences making sure these records remain securely protected and ensure the information is readily available to authorized healthcare providers whenever and wherever needed. HIM plans information systems, develops health policy, identifies current and future information needs and applies the science of informatics to the collection, analysis, storage, use and transmission of information to meet legal, professional, ethical and administrative records-keeping requirements of healthcare delivery. Their services are used in clinical, epidemiological, demographic, financial services. The HIM plays a crucial role in the healthcare delivery system of any health institution.

There are three distinct career-oriented areas concerning health information, all professionals seeking careers should inspect that include health information management, health information technology and health informatics.

**Health Information Management (HIM):** HIM activity focuses mainly on obtaining, analyzing in a systematic order the traditional and digital medical information for continuity of patient care and many other purposes such as medical education, research, legal and public health, etc. With the widespread computerization of health records, traditional (paper-based) records are being replaced with Electronic Health Records (EHRs). The tools of health informatics and health information technology are being increasingly utilized to introduce efficiency in information management practices in the healthcare sector.

Both hospital information systems and health human resources information systems (HRHS) are common implementations of HIM.

Health information management professionals are specialized in this field to maintain efficiently the patient medical records and health information according to the highest standards, and protecting data integrity, the confidentiality and secure data and making available only to authorized personnel.

### **HIM STANDARDS BEGAN WITH ESTABLISHMENT OF AHIMA**

History of HIM standard is dated back to the introduction of American Health Information Management Association, founded in 1928 “when the American College of Surgeons established the Association of Record Librarians of North America (ARLNA) to elevate the standards of clinical records in hospitals and other medical institutions”. In 1938, AHIMA was known as American Association of Medical Record Librarians (AAMRL) and its members were known as medical record librarians who studied medical record science. The goal was to raise the standards of record keeping in hospitals and other healthcare facilities. The individuals involved in this profession were promoters for the successful management of clinical records to guarantee accuracy and precision. Over time, the organization’s name changed to reflect the evolving field of health information management practices, eventually becoming the American Health Information Management Association (AHIMA). AHIMA members affect the quality of patient information and patient care at every touch point in the healthcare delivery cycle. They often serve in bridge roles, connecting clinical, operational, and administrative functions.

**Health Information Technology (HIT):** HIT is a vital aspect that deals with management of patient’s health data in digital format, safe storage and exchange system. The health information technologists specialized in IT hardware and software employed to manage and store patient health information and focus strictly on technical aspects concerning information management. The HIT professionals possess specific knowledge and skills related to management of computer-based health records and information as well as other systems designed to aid the healthcare providers including other allied health workers in efficient management of healthcare delivery system including patient care.

Health Informatics (HI) describes how patient information is technically received, stored, transmitted and used. The focus is mainly dealing with health information generated by the healthcare providers including medical, nursing and other allied healthcare workers in healthcare institutions, its technology and operating principles involved in daily application process. The HI is a science, engineering principles and is an integrated computer technology discipline. HI by its application and process offers varieties of different options for multifarious activities of health institutions technically in securing, storing, transforming comprehensive data in a secured manner.

### **OPPORTUNITIES FOR HEALTH INFORMATICS (HI)**

- *Biomedical informatics:* A physician-based research focus that attracts medical students to HI.
- *Nursing informatics:* Nursing-based clinical research focused on nursing issues related healthcare delivered in primary, secondary and tertiary care for the benefit of nursing professionals and especially nursing graduates.
- *Public health informatics:* The public health related issues, conducting research, reporting and managing with the support of technology dealing with epidemiological data including morbidity and mortality that attract student graduates in public health administration.

- *Application informatics*: This is the endeavor of professionals making use of technology; focus on flow of information in digital environment with policies, and procedures to arrive at information management solutions to the identified problems or other problems which need some sort of remedial actions.

Accredited HM educational program development: The Commission on Accreditation for Health Informatics and Information Management Education (CAHIM) defines standards with higher education health information management and technology programs must meet to qualify for accreditation. Students who graduate from an accredited associate's, bachelor's or certificate program are qualified to sit for their respective exams for certification as a Registered Health Information Technician (RHIT), via graduation from an accreditation associate or certification program or Registered Health Information Administrator (RHIA), which requires education through an accredited bachelor or certification program.

### **What Makes a Health Information Management Career a Good Choice?**

A health information management professional is highly trained person, acquaints with the latest technology applications, policies and procedures affecting healthcare provider workflow. Opportunities are available to work in small medical practices and the large hospital systems with many locations. Health information management professionals perform essential operations needed to be executed in the daily healthcare provider environment. An exciting and challenging career in health information management is possible only if the individual willing to gain the specific education leading to great personal and professional rewards provided the individual committed to the profession to do his/her best.

### **Methods to Ensure Data Quality**

The mother of information is the patient health record, and its well planned and organized maintenance can produce accurate and comprehensive data. The accuracy of data depends on the manual or computer information system design for collecting, recording, storing, processing, accessing and displaying data as well as the ability and follow through the people involved in each phase of these activities. Everyone involved with documenting or using health information is responsible for its quality. According to AHIMA's Data Quality Management Model, there are four key processes for data:

1. *Application*: The purpose for which the data are collected.
2. *Collection*: The processes by which data elements are accumulated.
3. *Warehousing*: The processes and systems used to store and maintain data and data journals.
4. *Analysis*: The process of translating data into information utilized for an application.

*Each aspect is analyzed with 10 different data characteristics:*

1. *Accuracy*: Data are the correct values and are valid.
2. *Accessibility*: Data items should be easily obtainable and legal to collect.
3. *Comprehensiveness*: All required data items are included. Ensure that the entire scope of the data is collected and document intentional limitations.
4. *Consistency*: The value of the data should be reliable and the same across applications.
5. *Currency*: The data should be up-to-date. A datum value is up-to-date if it is current for a specific point in time. It is outdate if it was current at some preceding time yet incorrect at a later time.

6. *Definition:* Clear definitions should be provided so that current and future data users will know what the data mean. Each data element should have clear meaning and acceptable values.
7. *Granularity:* The attributes and values of data should be defined at the correct level of detail.
8. *Precision:* Data values should be just large enough to support the application or process.
9. *Relevancy:* The data are meaningful to the performance of the process or application for which they are collected.
10. *Timeliness:* Timeliness is determined by how the data are being used and their context.

**Health information professionals:** Health information management field is a broad and successful as there are several career opportunities in health information management and many different customary and non-traditional settings for an HIM professional to work within.

- **Customary settings include:** Managing an HIM medical records department, cancer registry, coding, trauma registry, transcription, quality improvement, release of information. Patient admissions, compliance auditor, physician accreditation, utilization review, physician offices and risk management.
- **Non-traditional settings include:** Consulting firms, government agencies, law firms, insurance companies, correctional facilities, extended care facilities, pharmaceutical research, information technology and medical software companies.
- Health information managers

Professional health information managers design and construct health information programs to ensure that they accommodate medical, legal, and ethical standards. They play a crucial role in the maintenance, collection, and analyzing of data that is received by doctors, nurses, and other healthcare providers. In return these healthcare data contributors rely on the information to deliver quality healthcare. Managers must work with a group of HIM technicians to guarantee that the patient's medical records are complete, accurate and are easily retrievable whenever needed.

**Health information management:** Health information management (HIM) is a vital part of the healthcare delivery system that provides for the maintenance of health records in hospitals, clinics, health departments, insurance companies, governmental agencies, and many other health related settings. HIM professional's responsibilities are becoming increasingly significant as the healthcare industry continues to transition to Electronic Health Records (EHRs). As Health Information Management professional works with hospitals and allied health institutions, insurance, clinical, financial, and software companies are responsible for the management of health information in a scientific way that is not only useful for patient, physician, hospitals, medical education and research, but also for legal, insurance, public health or national health and international health agencies.

One of the roles of the HIM is maintaining complete and accurate record which is a central part of providing medical care to people in any medical settings. Such information is necessary to track health conditions, move records from place to place, get insurance coverage, and receive accurate treatment. With a degree in Bachelor of Science in Health Information Management, one get equipped with the required knowledge, competent skills, and with positive attitude, will be able to provide these services effectively by the institutions where the HIM serves.

**Reimbursement process:** The prominence of HM department is in addition to initiating and maintaining patient health records, have many important responsibilities to carry out,

and to do that effectively and efficiently, emphasis on timely completion of documentation accurate classification of diseases by coding efficiently, the HIM staff can expedite key audits for proper reimbursement and quality is more significant in the present day situation and this entails having right HIM education. HIM professional should conduct chart audits and quality assurance assessments; for content completion, timeliness of documentation that support the healthcare providers in rendering healthcare effectively. There are mainly two types of audits; quantitative and qualitative audits.

- Quantitative audit is focused mainly on the patient record which is properly organized and all the required documents are in chronological order, the information is accurate, complete and timely. The auditor's job is to ensure that all the records and documentation system are carried out systematically so that the records are useful for the purpose they are created and maintained.
- Qualitative audit's objective is to ensure that the quality of documentation by healthcare providers are in-line with the recommended guidelines, standards of practice. The auditor's job is to focus on reason for admission, investigations or tests carried out, diagnosis, treatment, length of stay and end results have been in-line with established criteria by medical staff group. Hence, to do this job efficiently the HIM professional must have right education and experience in the field.

There are different types of audits which are carried out by health institutions, the frequency and type of audit varies from institution to institution. The terminology used for audits are: New admission audit, that is conducted within 24–72 hours of a resident's admission to ensure that the accurate and complete information is documented from the beginning of the admission process. Re-admission audit: This is similar to new admission, as done for new admission, the re-admission episode, need to understand the cause for re-admission and required information to be documented. Discharge audits are carried out for all the discharged patients records, and special emphasis is made for long-term care cases. The main focus is to ensure that all the documents are in place and required information is complete at the earliest but not later than 30 days. Health information manager needs to report or takes measures those records which are delinquency for more than 30 days. In order to control or minimize the delinquency rate, hospital management applies different measures such as taking away the certain hospital privileges from the physicians, or not releasing the monthly salary payment bill till the records are completed, etc. An efficient HIM professional with good cooperation and coordination of physicians can alleviate this situation to a greater extent.