1. **After reading the chapter and reviewing the power point presentation, please answer the following questions.**

**What is a health record?**

* A health record is a collection of a patient’s health information and medical records for the purpose of documenting a patient’s care. It is the main communication tool between healthcare providers in order to deliver safe and effective care to a patient.

**Who are the different users of the health record and how do they use it?**

* The main user of health records are healthcare providers/primary care providers. However, there are many other organizations that use health records as well such as: managed care organizations; integrated healthcare delivery systems; regulatory and accreditation organizations; licensing bodies; educational organizations; third-party payers; and research facilities. Some users refer to health records of patients as a part of their everyday work. Individual users rely on the healthcare records’ information to execute their job. But there are some users that don’t necessarily directly interact with the health record. For example, a radiology technician doesn’t directly document within the health record but they do provide reports that become a part of that individual’s health record.

**Explain the health record processes.**

* The health record processes are very important to the delivery of patient care. One of the main functions is that it operates as a communication tool between health care providers. For example, it is basically a record of every doctor you see and what kind of treatment said doctor provided. Without this accurate record, patients could be misdiagnosed, prescribed the wrong medication or provided unnecessary treatment.

**Explain the health information management information systems.**

**What quality controls can be put into place to manage health information management functions?**

2. **Please define the following:**

Abstracting- to collect information from a medical record for research, billing or statistical purposes

Addendum-  document or information attached (like a note) or added to clarify, modify, or support the information in an original document

Aggregate data- is information from different health records combined to form de-identified information about groups of patients that can be compared and analyzed

Amendment- is when a patient has something in their medical record (i.e.; possibly a mistake) they would like removed; has to be authorized by physician first

Audit trail- a chronological set of computerized records that provide evidence of information system activity; like log-ins and outs, file accesses) that can be used to determine security violations

Computer assisted coding- utilizes natural language processing and algorithmic software to electronically analyze entire medical charts to pre-code with both CPT procedure and ICD-9 diagnostic nomenclatures

Concurrent review- a review of the health record while the patient is still hospitalized or under treatment

Correction- the act or instance of correcting (as amendment)

Data- the dates, numbers, images, symbols, letters, and words that represent basic facts and observations about people, processes, measurements and conditions

Data mining- the process of extracting information from a database then quantifying and filtering discrete, structured data

Deficiency slip- a device for tracking information (like reports) missing from a paper-based health record

Delinquent record- an incomplete record not finished or made complete within the time frame determined by the medical staff of the facility

Demographics- is the study of the statistical characteristics of human populations

Deterministic algorithm- is an algorithm which, given a particular input, will always produce the same output, with the underlying machine always passing through the same sequence of states

Encoder- specialty software used to facilitate the assignment of diagnostic and procedural codes according to the rules of the coding system

Grouper-

Meaningful Use- is using EHR technology to improve quality, safety, efficiency and reduce health disparities

Out guide-a device used in paper-based health record systems to track the location of records removed from the file storage area

Overlap- situation in which patient is issued more than one medical record number from an organization with multiple facilities

Overlay- situation in which a patient is issued a medical record number that has been previously issued to a different patient

Probabilistic algorithm- the comparison methodology that identifies multiple records that represent the same person

Qualitative analysis- the analysis and interpretation of data that cannot be analyzed by statistical methods

Quantitative analysis- a review of the health record to determine its completeness and accuracy

ROI- release of information

Serial numbering system- a type of health record identification and filing system in which patients are assigned a different but unique numerical identifier for every admission

Requisition- a request from an authorized health record user to gain access to a medical; record

Terminal digit filing system- a system of health record identification and filing in which the last digit or group of digits (terminal digits) in the health record number determines file placement

Unit number system- a health record identification system in which the patient receives a unique medical record number at the time of the first encounter that is used for all subsequent encounters

Voice recognition technology- a method of encoding speech signals that do not require speaker pauses (but uses pauses when they are present) and of interpreting at least some of the signals’ content as words or intent of the speaker

3**.   Check your Understanding answers.**

**3.1**

1. **B**
2. **D**
3. **C**
4. **B**
5. **B**
6. **A**
7. **B**

**3.2**

 **1. B**

 **2. A**

 **3. C**

 **4. A**

 **5. C**

 **6. B**

 **7. D**

 **8. A**

**3.3**

 **1. B**

 **2. A**

 **3. C**

 **4. B**

 **5. C**

 **6. B**

 **7. C**

 **8. D**

 **9. B**

 **10. C**

**3.4**

  **1. A**

 **2. C**

 **3. C**

 **4. A**

 **5. B**

 **6. A**

 **7. A**

 **8. B**

**4.  Answer the following:**

 What is the purpose of the Health Record?

Health records have many purposes, but their first and foremost purpose is to document the history examination, diagnosis and treatment of a patient. They also serve for administrative, as well as financial processes, as research, education and even as public health and homeland security. Health records assist these processes in many different ways.

* Who are the users of the health record and why?

The users of the health record are mainly healthcare providers, but there are many other users of these records. For example, coding and billing staff use health records as a guideline in order to receive payment for services rendered by the healthcare provider. Physicians, nurses, and nurse practitioners also use health records; in fact, daily.

* Name those functions of HIM that support patient care.

Some of the functions of HIM that support patient care are storage, retrieval and record processing/completion, release of patient information, clinical coding, abstracting, and clinical data analysis.

* Describe the Master patient index and it many core data elements.

The Master Patient Index is a permanent record of every patient ever seen in the healthcare system. The MPI functions as a guide when searching for particular significant data about a patient as well as his/her health record number. Some of the many core data elements for an MPI are: Medical Record Number; Name; DOB; Gender; Race; Address; Phone Number; etc.

* Describe duplicate, overlay and overlap health record numbers.

Just like any system, the MPI is prone to errors. Duplicate, overlay and overlap health record numbers are some of the issues that arise due to those errors that happen usually at point of registration. Duplicate health record numbers happen when a new medical record number is assigned to a patient that has already had a medical record number assigned to them previously. Overlay health record numbers happen when a patient is assigned **ANOTHER** person’s health record number. Overlap health record numbers occurs when more than one medical record number exists for the same individual within an enterprise at different facilities or in different databases. Those are just 3 of the common problems that occur when a patient is poorly identified within the MPI.

* Describe Identification systems for paper records (4); Electronic health records

**Paper Records have four different systems for identification which include:**

**Serial Numbering System**- when a patient receives a unique numerical identifier for each admission to a healthcare facility

**Unit Numbering System**- used mostly in larger healthcare facilities; patients receive a unique health record number at time of first encounter, to which the same number is used for each visit thereafter

**Serial-Unit Numbering System**- numbers are assigned in a serial manner, like in the serial numbering system but unlike that system during each new patient encounter, the previous records are brought forward and filed as the last assigned health record number; thus creating a unit record.

**Alphabetic Identification and Filing System**- mostly used by smaller facilities; the patients last name is used first as the source of identification followed by his/her first name and middle initial as the further identification

**Electronic health records mainly use the unit numbering system as their identifier**. **Some other identifiers other than the health record number that might be used is a patient account number as well as a patient’s name.**

* Describe numeric filing systems and Alphanumeric filing systems.

In **numeric filing systems records** are filed by using the health record number. Numeric filing is a type of indirect filing system, which to use an index or authority file needs to be consulted- this is where the MPI usually comes in. There are three different types of numeric filing systems which are: straight numeric filing systems; terminal-digit filing systems; middle digit filing systems. **Alphanumeric filing systems** are a combination of alpha letters and numbers used for identifying. It uses the first two letters of patients last name followed by a unique numerical identifier.

* How are records located and retrieved?

In paper-based storage systems, the health record is contained in a special file folder that is filed either alphabetically or numerically depending on the organizations size. For example, a physician’s office probably files alphabetically with open-shelf files. Other organizations like clinics, hospitals, mainly larger facilities mostly file numerically using the patient’s health record number as the main identifier. In some cases, health records can be stored off site, microfilmed, or scanned as digital images.

Electronic Environment:

* What are the advantages??

There are many advantages of going electrical in the medical and health record field. EHR advantages include: easier to share medical information about patients with other care providers, helping providers diagnose patients more effectively, provide safer care, reduce medical errors all while interacting on a more convenient, secure system.

* What is Indexing?

Sorts the records by the different report type, making the viewing of the record uniform.

* Describe the management of free text in the EHR.

In the book, they describe free-text data as the unstructured narrative data that is the result of a person typing data into a word-processing system. Most all healthcare facilities have certain polices in place to protect the integrity of copying and pasting of free text in the electronic health record. This process speeds up a lot of the work, hence why it is becoming so widely used. But copying and pasting certain things into documents have risks, that is why you must be sure to follow the management rules for utilizing this function.

* Name several quality control functions of the EHR.

Some of the quality control functions of the EHR include: monitoring errors that occur, clear labeling of buttons and data fields, limiting the use of abbreviations on buttons and data fields, built-in alerts to notify the user of possible errors; navigation design should be consistent in grammar and terminology, provided undo button to make mistakes easy to fix; input design should simplify data collection, provide a title for each screen, minimize keystrokes by using pop-up menus.

* Describe the HYBRID record.

The Hybrid record is when a facility, who might be in the process of switching from paper based system to electronic system, utilizes both components of paper and electronic systems to access patient information.

* Describe ROI and what is the responsibility of the HIM department and staff? Describe the function of the ROI software system.

The HIM department and staff are normally responsible for determining appropriate access to the appropriate users, as well as the release of information (ROI) from the patient’s health record to the appropriate person. Release of information takes many forms, including possibly a patient requesting mail copies of his or her records to a healthcare provider. The HIM department and staff are responsible for entering the request of the ROI in the database, determine the validity of the authorization, verify the patient’s identity, and processing the request.