**Chapter 6**

**Data Management**

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**Real-World Case 6.1**

A large urban healthcare system was experiencing the rapid implementation and use of the EHR as well as many mergers and partnerships to support clinics and create better business opportunity. In one year, the healthcare systems purchased three new clinics and became affiliates with two others. The affiliate structure allows for the clinics to use their EHR and have a clear referral process if a patient needed additional attention. While integrating the new clinics into the system, data and documents were being entered into the EHR with no common naming structure and with no common places to enter the information; the data was hard to find and inconsistent throughout the entire health record.

With the need to fix the issue as soon as possible, the eHIM manager was tasked with creating a process for the enterprise record management system. The objectives of the project were to define the organization’s official health record, detail the record retention schedule for the organization, and create databases. A team consisting of members from across the organization strived to meet the goals of the project and help create information governance within the organization.

The project was a success and the organization now has processes, policies, procedures, and decisions documented to help manage and support health records throughout the entire organization. In addition, there will be efficient integration of records into the current enterprise record management process as new mergers occur. Better oversight of the records has not solved all the issues with the management of patient records, but it has created a foundation for success and a place to expand and build on information governance.

*Source:* Lundgren, K. 2015 (May 1). Minnesota Health Information Management Association Annual Meeting Presentation: Enterprise Record Management.

# Real-World Case Discussion Questions

1. As new clinics came onto the health system, they had issues with documentation identification as the same documents were often called different names. What principle of information governance can be applied when documenting the decisions to standardize the naming of documents across the healthcare system? Why? **Transparency** creates a clear and open documentation system. It includes the documentation and evidence that supports the organization’s operations, decisions and activities and performance that related to the creation, implementation and maintenance of the information governance program.

What users should be involved? HIM professionals, manager of HIM, providers and representatives from each department that uses the medical record.

Users should be *experts* in what areas? There should be experts in clinical, financial, regulatory and technology related to healthcare.

2. What skills would the eHIM manager need? Name four and why needed

Ability in planning, organizing and staffing of the health information department to get the most qualified staff for the work that needs to be done. Ability to coordinate administrative and operational activities in accordance with established standards, policies, procedures, regulatory and legal requirements to meet organizational needs. Ability to integrate the organizations mission into the HIM Department to meet organizational needs. Expert knowledge in EHR to be able to problem solve issues that arise.

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**Real-World Case 6.2**

A medium-sized hospital had been using an EHR for 12 months. They were having great success with getting the providers to document within a timely fashion; however, many of the notes did not provide enough information to code the record or key components to adequately code were missing. They had a process for physician query, as follows:

● Electronically flag the record for physician query

● Create a paper query form for the provider

● Send the electronic query to the HIM operations department to put in a physician completion folder

● HIM operations would add a deficiency to the patient chart to flag the provider that a coding query needed to be complete

● The provider would come in to the HIM department to complete the query

● The deficiency was removed, and the query was scanned into the chart

● HIM operations then notified the coder through an e-mail that the query was answered

● Chart is coded and sent to billing

While it was a strong process and the providers did answer the questions, it caused a spike in the time to get the charts coded and to billing, as providers usually came into the department once every 20 to 25 days. In some cases, providers would leave the coding queries unanswered for up to 60 days. The average turnaround time for a coding query was 28 days. The organization needed to change the process to help accelerate the query process and reduce the physicians’ frustrations of having to come into the HIM department.

New functionality exists within the EHR to send an electronic query, which would automatically assign the deficiency and send a note to the provider’s inbox within the EHR alerting him or her that a coding query exists. The new process had less steps and involved less people; however, the physicians were concerned about the new process. With careful training and education, the new process was implemented and reduced the steps, making the physician query process easier for coding, HIM operations, and the providers. The new processes steps were:

● Electronically flag the record for physician query

● Create the electronic physician query through predesigned templates and assign the correct physician (this would automatically assign the deficiency and send the coding query to the inbox)

● Physician electronically completes the coding query through the EHR

● The electronic deficiency is automatically removed and the coding query is electronically submitted to the physician and retained and the chart then automatically flagged to complete coding

● Chart is coded and sent to billing

With the change in the process, the HIM operations department has little involvement unless it is supporting the physician in completing the query. The turnaround time for completion of coding queries was reduced from 28 days to 15 days within the first 60 days of completion. The process was a success and the organization has significantly reduced the time it takes to code and bill all patient encounters.

# Real-World Case Discussion Questions

1. List 5 benefits of an electronic-based query and discuss the positive impacts made on the organization. The health care provider can provide more clarification regarding the patients treatment and diagnosis. The health care provider can provide more specification regarding the patients treatment and diagnosis. The time frame is reduced. All requests and information are sent and received electronically, reducing the number of people involve in the query process. The physician can respond electronically with, additional clarification note as needed directly into the health record. The information can be retrieved by other people sooner, with more accuracy.
2. What are the positive impacts made on the organization? A more current up-to-date health record. A timelier way to process information, so all departments have quicker access to perform their role.
3. Differentiate between the 10 characteristics of data quality found in the AHIMA data quality model.
* Accuracy-Ensure data are the **correct** values, valid, and attached to the correct **patient record**.
* Accessibility-Data items should be **easily obtainable** and **legal** to access with **strong protections** and **controls** built into the process.
* Comprehensiveness-**All required data items are included**. Ensure that the entire scope of the data is collected and document intentional limitations.
* Consistency-The value of the data should be **reliable** and the same across applications.
* Currency-The data should be **up to date**.
* 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.**
* Granularity-The attributes and values of data should be defined at the **correct level of detail.**
* Precision-Data values should be just **large enough to support the application or process.**
* Relevancy-The data are **meaningful** to the performance of the process or
application for which they are collected.
* Timeliness-Timeliness is determined by **how the data are being used and their context.**
1. Give similarities and differences of the 10 characteristics ie comprehensiveness, granularity, precision, differences, etc. I**t seems to me the differences are in question #3**
* Accuracy-Ensure data are the correct values, valid, and attached to the **correct patient record.**
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application for which they are collected.
* Timeliness-Timeliness is determined by how the data are being **used and their context.**
1. What else could the facility do to improve the query process? Invest in Computer assisted Coding (CAC) software that searches and evaluates clinical documentation that produces information regarding potential areas for documentation improvement. Ongoing education to improve understanding and importance of correct information; how it benefits the patient for having their insurance pay for the services, the organization and physician for being paid for services rendered and how the correct information will promote continuity of care without duplicate services being rendered.

# Application Exercises

*Instructions:* Answer the following questions.

1. Review the AHIMA career map at <http://hicareers.com/careermap/>. Find a job that focuses on some aspect of data management. Identify 3-4 job-specific duties that interact with data management and develop a job description for the specific job. Include the following:

|  |  |  |  |
| --- | --- | --- | --- |
| Job Title: | Technician | Job Category: | XXX |
| Job Description |
| The Health Information Technician prepares medical record documents of the Emergency Department, Ambulatory Surgery and discharged patients for scanning and scanning them using an electronic system to ensure accuracy and timeliness.SkillsPerform a variety of activities involving preparation of medical record documents of the Emergency Department, Ambulatory Surgery and discharged patients for scanning and scanning them using an electronic system to ensure accuracy and timeliness; Perform merges of duplicate medical record numbers; Retrieves records and releases information for patient care purposes.Qualifications and Education Requirements Associates Degree in Medical Records or 5 years’ experience in similar roleThorough knowledge of legal medical record requirements, Medical record forms and content; Accurate keyboard skills. Ability to use peripheral equipment such as bar code scanners, printers, fax machine, photocopier and scanner; Strong computer skills; Ability to deal professionally with co-workers and staff from other departments and vendors as needed; Applicant is held accountable to the timely and accurate preparation, scanning, and quality check of scanned medical record documents, which become permanent electronic medical record and completion of other tasks; Inherent responsibility to practice and promote good customer relations acting as a representative of the department; Ability to focus on details, and multi-task in fast-paced environment.Other skillsWorks well with multiple healthcare professionals and public. Able to multitask. |

2. Using the the ICD-10-CM codes below, use the data map located at the CMS website to determine the ICD-9-CM equivalent codes. The website is: <https://www.cms.gov/Medicare/Coding/ICD10/2016-ICD-10-CM-and-GEMs.html>.

The ICD-10-CM codes are:

A18.01 015.00

D57.811 51.73

E06.5 24.58

H35.341 362.54

H40.1332 365.13

 365.72

L13.0 694.0

O36.8122 655.71

 655.73

S62.014G V54.12

V5412 This is an ICD-9 code

T20.511A 941.11

**Review Quiz**

*Instructions:* For each item, complete the statement correctly or choose the most appropriate answer.

1. Which of the following is an example of an electronic data source in healthcare?

a. Radiology Information System

b. Patient consent for treatment

c. Dictation system

d. Patient’s driver’s license

2. Which of the following datasets was created to collect uniform data across the United States for inpatient patient stays?

a. Uniform Ambulatory Care Data Set (UACDS)

b. Outcomes and Assessment Information Set (OASIS)

c. Data Elements for Emergency Department Systems (DEEDS)

d. Uniform Hospital Discharge Data Set (UHDDS)

3. Which of the following is a collection of data that is organized in a manner to be accessed, managed, reported, and updated electronically?

a. Dataset

b. Database

c. Data map

d. Data index

4. Which of the following is the process of execution, implementation, and management of databases within healthcare?

a. Database management

b. Database elements

c. Database life cycle

d. Database operations cycle

5. A/n \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a list that provides guidance, indication, or other references of information contained in a database?

a. Map

b. Mining

c. Element

d. Index

6. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_ characteristic of quality data is the data being completely free from any errors?

a. Accuracy

b. Precision

c. Comprehensiveness

d. Consistency

7. This concept includes the process of data governance, patient identification, authorization validation, amendments and record corrections, and audit validation.

a. Data reliability

b. Data accuracy

c. Data integrity

d. Data completeness

8. Which of the following describes the capability for two or more electronic systems to communicate and exchange information electronically?

a. Sharing

b. Interchange

c. Mapping

d. Interoperability

9. The evaluation of data collected based on business needs and strategy is part of \_\_\_\_\_\_\_.

a. Data ownership

b. Data stewardship

c. Data quality

b. Data modeling

10. The process that focuses on the improving the quality and integrity of patient data while supporting timely coding and reimbursement is known as \_\_\_\_\_\_\_\_.

a. Data collection and accuracy process

b. Data quality management

c. Clinical documentation improvement

d. Clinical quality enhancement

11. What does a healthcare organization create when it has a unique numbering system to identify all forms used within the organization?

a. Forms standardization system

b. Forms distribution system

c. Forms quality management system

d. Form tracking system

12. What data quality characteristic is met when documenting the specific height of a patient within the health record?

a. Comprehensiveness

b. Precision

c. Definition

d. Relevancy

13. A/n \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a communication tool that during clinical documentation improvement is used to communicate between a clinical documentation improvement professional and the provider?

a. Query

b. Outcomes and Assessment Information Set (OASIS)

c. Data Elements for Emergency Department Systems (DEEDS)

d. Uniform Ambulatory Care Data Set (UACDS)

14. This document defines how records and documentation are assembled and authenticated within the hospital.

a. Ancillary staff bylaws

b. Provider contracts

c. Hospital bylaws

d. Medical staff bylaws

15. What concept refers to the process of creating management and oversight of data assets to support the organization’s mission, vision, and values?

a. Enterprise information management

b. Outcomes and Assessment Information Set (OASIS)

c. Information governance

d. Data governance

16. Which of the following is one of the principles of data stewardship as defined by the National Committee on Vital and Health Statistics (NCVHS)?

a. Individual’s rights

b. Accuracy of patient information

c. Individual’s responsibilities

d. Completeness of patient information

17. The process of completing an inventory of all electronic systems that create, transmit, and store health information is known as what?

a. System management

b. Data mapping

c. Data Mapping

d. System characterization

18. True or false. Information is single elements that define a specific characteristic about a patient.

a. True

b. False

19. True or false. The master patient index is maintained by the healthcare organization and contains patient demographic information such as name, date of birth, and health record number.

a. True

b. False

20. True or false. Data modeling is the process of creating documentation to document any business decisions made on data collection and storage systems for data.

a. True

b. False

21. True or false. Organization information management is the processes and functions created by an organization to help plan, organize, and coordinate people, processes, technology, and content to manage information systems.

a. True

b. False

22. True or false. The term that refers to an individual’s ability to analyze, assess, and reconstruct a situation to provide a solution is critical thinking.

a. True

b. False

23. True or false. Structured data is data that is entered into a specific format that is capable of being read and analyzed without human intervention.

a. True

b. False

24. True or false. The process of creating paper forms to serve a business need is referred to as form creation.

a. True

b. False

25. True or false. The oversight of the definition of structure of data elements as well as the creation, storage, and transmission of data elements is referred to as data management.

a. True

b. False