



Disclaimer

Please note that these presentations are designed to serve as a valuable supplement to your overall study plan to prepare for the RHIT certification examination.

Participation in these presentations does not guarantee a passing score on RHIT the examination. For more information on the testing dates and the RHIT credential go to www.ahima.org.

It is suggested that you follow the AHIMA Candidate Guide, Appendix H as a study guide for preparing for your certification exam.

Data Analysis and Management – 20%

Knowledge Clusters

- 1. Abstract information found in health records (i.e., coding, research, physician deficiencies, etc.)
- 2. Analyze data (i.e., productivity reports, quality measures, health record documentation, case mix index)
- 3. Maintain filing and retrieval systems for health records
- 4. Identify anomalies in data
- 5. Resolve risks and/or anomalies of data findings
- 6. Maintain the master patient index (i.e., enterprise systems, merge/unmerge medical record numbers, etc.)
- 7. Eliminate duplicate documentation
- 8. Organize data into a useable format
- 9. Review trends in data
- 10. Gather/compile data from multiple sources
- 11. Generate reports or spreadsheets (i.e., customize, create, etc.)
- 12. Present data findings (i.e., study results, delinquencies, conclusion/summaries, gap analysis, graphical)
- 13. Implement workload distribution
- 14. Design workload distribution
- 15. Participate in the data management plan (i.e., determine data elements, assemble components, set time-frame)
- 16. Input and/or submit data to registries
- 17. Summarize findings from data research/analysis
- 18. Follow data archive and backup policies
- 19. Develop data management plan
- 20. Calculate healthcare statistics (i.e., occupancy rates, length of stay, delinquency rates, etc)
- 21. Determine validation process for data mapping
- 22. Maintain data dictionaries

Abstract information found in health records (i.e., coding, research, physician deficiencies, etc.)

1.

Abstract information found in health records

- Define abstracting
- Why abstract?
 - Coding
 - Research
 - Physician Deficiencies

Abstracting

- ... is the process of pulling critical data from the patient record, the primary source, to be used in different functions found in healthcare. This function is used in clinical coding using ICD and CPT coding for reimbursement, research and indexes.
- Abstracting can also be used when we're reviewing patient records for completeness and conducting quality reviews using pre-determined quality criteria.
- This function can be conducted manually or electronically using a variety of software applications.
- An example would be 3M Grouper where you enter the clinical codes and extract a MS-DRG code for reimbursement. DRG and APC groupers are both software programs used to determine the appropriate payment classification for patient encounters.

Abstracting

Once hospital discharge abstract systems were developed and their ability to provide comparative data to hospitals was established, it became necessary to develop:

- a. Data sets
- b. Data elements
- c. Electronic data interchange
- d. Bills of mortality

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Why?

The first data standardization effort focused on hospitals and specifically on discharge data. The intent of the efforts was to standardize definitions of key data elements commonly collect in hospitals and used by Medicare. Discharge data became a standard abstracting function in all hospitals using databases to compile aggregate data on all patients discharge from a particular facility. It became valuable to compare uniform data between hospitals and that is what lead to data sets or lists of recommended data elements with uniform definitions such as UHDDS, MDS, and DEEDs.

- Reviewing the patient's record for missing signatures, missing medical reports, and ensuring that all documents belong in the patient record is an example of what type of review?
 - a. Quantitative
 - b. Qualitative
 - c. Statistical
 - d. Outcomes
 - e. legal

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Why?

Quantitative Analysis is the review of patient records for completeness, including identification of charge deficiencies, which include missing reports and other documentation and missing signatures. A deficiency slip issues to record chart deficiencies that are flagged in the record for provider completion.

Analyze data (i.e., productivity reports, quality measures, health record documentation, case mix index)

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- Healthcare collects a vast amount of data that needs to be analyzed to make it usable: administrative, clinical and financial. After abstracting data, it needs to be analyzed to make it usable measurable information to assist in decision support systems. Data analysis is the process of translating data into information utilized for an application.
- You'll also find Data Analysis as one of the 4 areas of quality management defined by AHIMA.
- Analyzing data comes in many forms for many uses; coding productivity, reviewing quality measure results, results of incomplete records review, looks at the type of patients treated in different healthcare settings such as a case mix index in the acute care environment. Some additional data analysis is done with length of stay, admission/readmission rates by area, by diagnosis and by provider.
- Today, more and more data analysis is being done using software applications that show trending results but it can also be done manually using a simple excel spreadsheet.

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HEALTH DATA ANALYSIS TOOLKIT

- http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_048618.pdf

Organize data into a useable
format

Data Sets

- Green, page 253 Table 8-3
 - DEEDS
 - EMDS
 - HEDIS
 - MDS
 - NCDB
 - OASIS
 - ORYX
 - UACDS
 - UHDDS
- Know the venue they are used
- Type of data elements collected
- Why are they collected
- Who requires the data

Data Sets

A health information technician is responsible for designing a data collection form to collect data on patients in an acute care hospital. The first resource that she should use is:

- a. UHDDS
- b. UACDS
- c. MDS
- d. ORYX

Data Sets

A health information technician is responsible for designing a data collection form to collect data on patients in an acute care hospital. The first resource that she should use is:

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- b. UACDS
- c. MDS
- d. ORYX

Why?

The purpose of the UHDDS is to list and define a set of common, uniform data elements. The data elements are collected from health records of every hospital inpatient and later abstracted from the health record and included in national databases.

Review trends in data

Data vs Information

- **Data** – raw facts that are not interpreted or processed such as numbers, letters, images, symbols and sounds that is organized in a hierarchy that begins with the smallest to largest
 - Characters
 - Field
 - Record
 - File
- **Health Data** – are the health facts collected on the patient
 - Example – blood pressure, a lab result

Data vs Information

- **Information** is factual data that have been collected, combined, analyzed, interpreted, and/or converted into a form that can be used for a specific purpose.
- **Health Information**
 - Example – clinical diagnosis based on clinical data collected

Data

- **Primary data source:**

- The health record because it contains information about a patient that has been documented by the professionals who provided the services.

- **Secondary data source:**

- Data taken from the primary health record and entered into registries and databases etc.

- **Aggregate data:**

- Data in groups of patients without identifying a specific patient.
Example statistics on LOS

Data

- Gather/compile data from multiple sources
- Generate report or spreadsheet
- Input and/or submit data to registries

Spreadsheets

- Spreadsheets:
 - Applications designed for use on personal computer systems and networks
 - Used for business analysis, planning and modeling.
 - Electronic worksheet of rows and columns
 - Format designed using by identifying variables and entering associated data
 - Associations between cells are defined through formulas
 - Applications include functions for statistical analyses and developing displays of spreadsheet data such as charts and graphs.
 - HIT use spreadsheets to collect and analyze data for processes.

Spreadsheet example

Statistics	MAY	JUNE	JULY
Total Inpatient Discharges	1499	1331	1297
Total Ambulatory Surgeries	168	243	289
Total Inpatient Operations	672	888	553
Total Discharges	1667	1574	1586
Total Operations	840	1131	842
Actual Delinquent Records	426	391	406
Actual Delinquent H&P	27	15	31
Actual Delinquent OR Reports	13	14	20
# Delinquent Records Permitted	834	787	793
# Delinquent H&P Permitted	33.3	31.5	31.7
# Delinquent OR Reports Permitted	16.8	22.62	16.84
Monthly Average	563.24	584.37	533.23

Question

- Patient data collection may vary according to health care settings. A data element you would expect to be collected in the MDS, but NOT in the UHDDS would be
 - A. personal identification
 - B. cognitive patterns
 - C. procedures and dates
 - D. principal diagnosis
- Represents data collected more typically in long-term care settings and required in the MDS.

Answer

- Patient data collection may vary according to health care settings. A data element you would expect to be collected in the MDS, but NOT in the UHDDS would be
 - A. personal identification
 - B. cognitive patterns
 - C. procedures and dates
 - D. principal diagnosis

Why? Represents data collected more typically in long-term care settings and required in the MDS.

Question

- You have been asked by a peer committee to print a list of the medical record number of all patients who had CABGs performed in the past year at your acute care hospital. Which secondary data source could be used to quickly gather this information?
 - A. Disease index
 - B. Physician index
 - C. Master patient index
 - D. Operation index

Answer

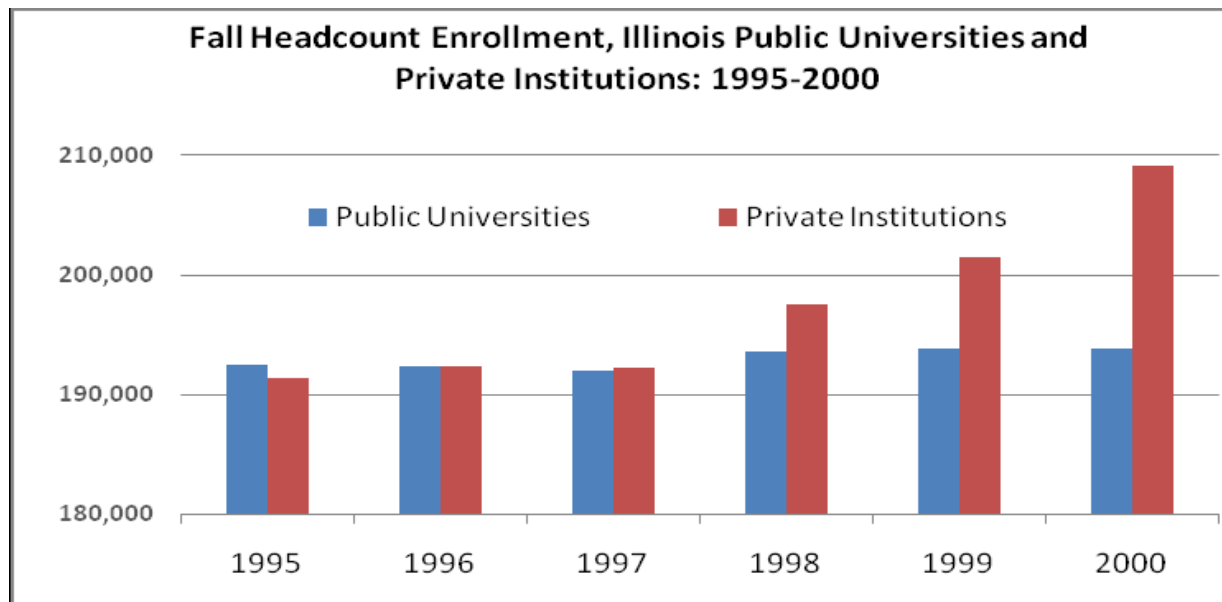
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 - A. Disease index
 - B. Physician index
 - C. Master patient index
 - D. **Operation index**

Why? The operation index diagnosis and operative codes (ICD-9) are used as guides or pointers to the health records of patients who have had a specific disease or operation. Disease and operation indexes are essential for locating health records to conduct quality improvement and research studies, as well as for monitoring quality of care. (Johns, 2011)

Present data findings (i.e. Study results, delinquencies, conclusion/summaries, gap analysis, graphical)

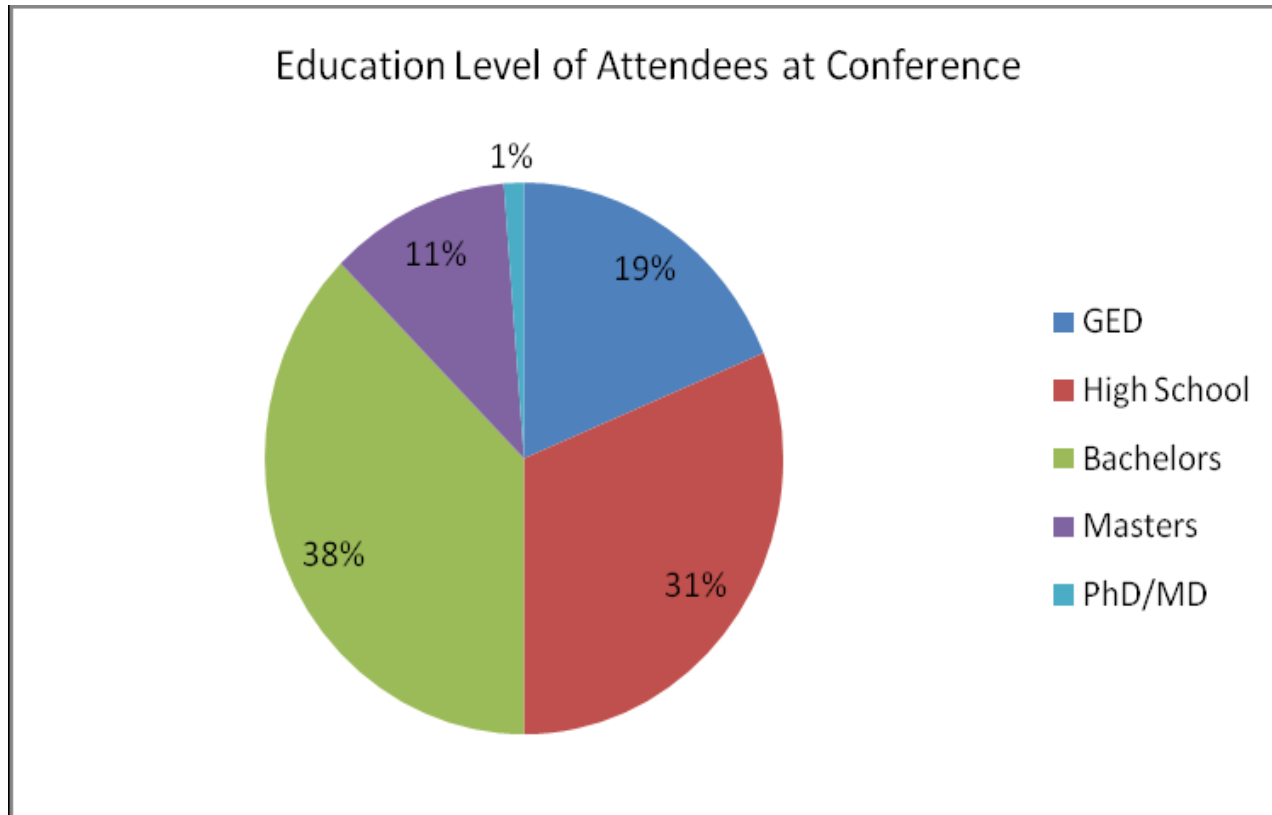
Bar graph

- Displays one or more variables
- Bars can be vertical or horizontal
- Length of bars are proportional to the frequency of the event



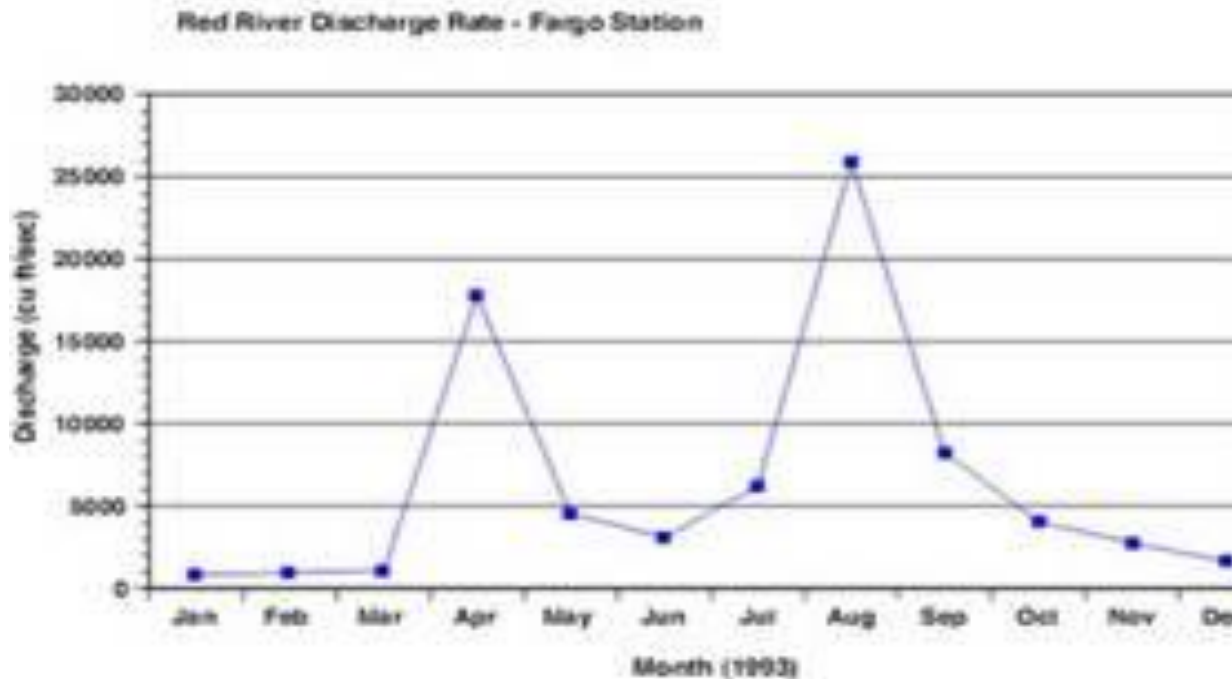
Pie chart

- Slices of the pie show the parts of a group or variable.



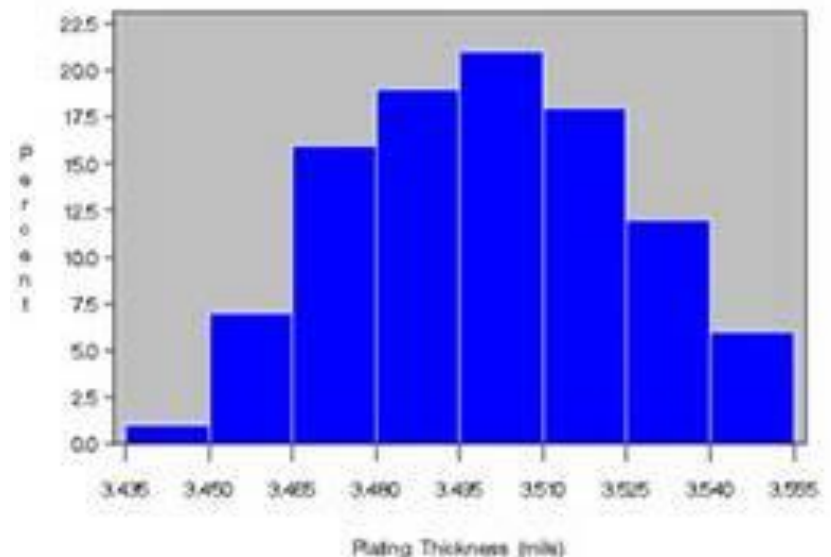
Line graph

- Displays relationship between continuous measurements ie) time trends



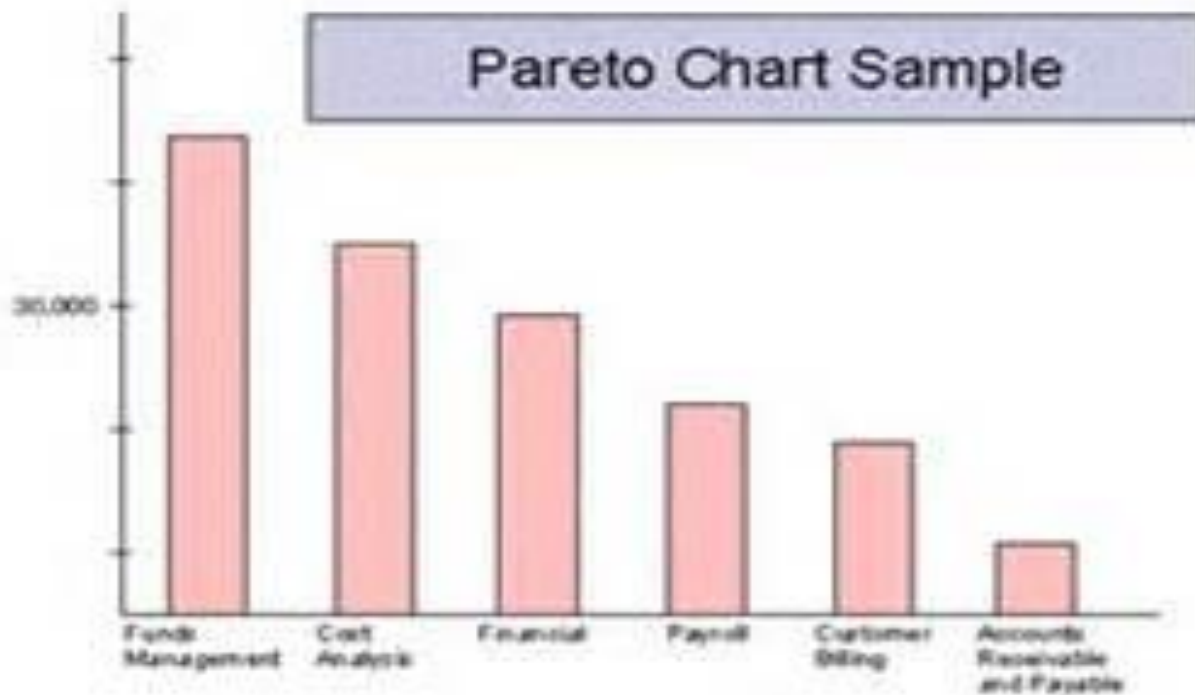
Histogram

- Displays data that fall into groups or categories
- Displays frequency distribution
- Keep in mind: Bar graphs categories are separated. Histograms have no space between bars.



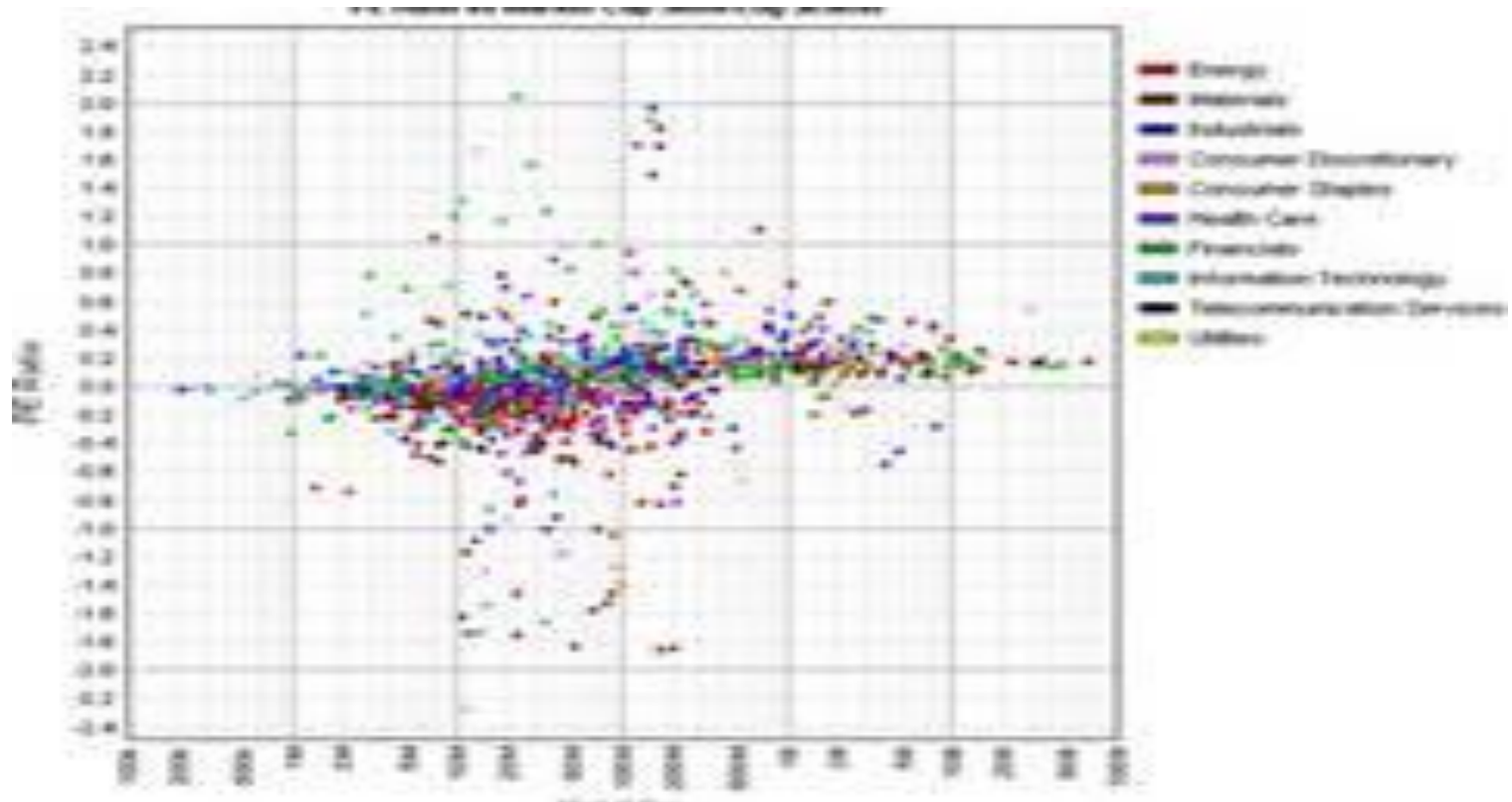
Pareto chart

- A bar graph with bars arranged in descending order



Scatter chart

- Shows relationship between two or more variables
- Shows a concentration trend



Data display

- If you want to display the parts of a whole in graphic form, what would you use:
- A. Table
- B. Histogram
- C. Line graph
- D. Pie chart

Answer

- If you want to display the parts of a whole in graphic form, what would you use:
- A. Table
- B. Histogram
- C. Line graph
- **D. Pie chart**

Question

- Which of the following is used to plot the points for two variables that may be related in some way?
- A. Force field analysis
- B. Pareto chart
- C. Root cause analysis
- D. Scatter diagram

Answer

- Which of the following is used to plot the points for two variables that may be related in some way?
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- B. Pareto chart
- C. Root cause analysis
- **D. Scatter diagram**

***Age of patient and blood pressure relationship

Implement workload distribution and Design workload distribution

Workflow

- Workload distribution analysis identifies:
 - Work functions
 - Amount of time for each function
 - Who is performing the function
 - How work is distributed among employees

Workflow - continued

- Tool for collecting basic work distribution data
 - Work distribution chart
 - Employees indicate the task and time spent on each task
- Results of workload distribution analysis:
- Redefine the job descriptions of some employees
- Redesign office layout
- Establish new or revised procedures to increase productivity or quality

Performance standards

The RHIT Supervisor for the filing and retrieval section of Rasmussen Medical Clinic is developing a staff schedule for the year. The clinic is open 260 days per year and has an average of 600 clinic visits per day. The standard for filing records is 60 records per hour. The standard for retrieval of records is 40 records per hour. Given these standards, how many filing hours will be required daily to retrieve and file records for each clinic day?

- a. 6 hrs per day
- b. 10 hrs per day
- c. 15 hrs per day
- d. 25 hrs per day

Performance standards

The RHIT Supervisor for the filing and retrieval section of Rasmussen Medical Clinic is developing a staff schedule for the year. The clinic is open 260 days per year and has an average of *600 clinic visits per day*. *The standard for filing records is 60 records per hour*. *The standard for retrieval of records is 40 records per hour*. Given these standards, how many filing hours will be required daily to retrieve and file records for each clinic day?

- a. 6 hrs per day
- b. 10 hrs per day
- c. 15 hrs per day
- d. *25 hrs per day*

Why?

- How many hours would it take to file the daily visits?

$$600/60=10$$

- How many hours will it take to pull the daily visits?

$$600/40=15$$

- Total number of hours per day to manage the pulling and filing of daily visits.

$$10+15=25 \text{ hours per day}$$

- $25/8 = 3$ full time plus a little overtime for staffing purposes

Question

- Which of the following contains a list maintained in diagnosis code number order for patients discharged from a facility during a particular time period?
 - A. Physician index
 - B. Master patient index
 - C. Disease index
 - D. Operation index

Answer

- Which of the following contains a list maintained in diagnosis code number order for patients discharged from a facility during a particular time period?

- A. Physician index
- B. Master patient index
- C. **Disease index**
- D. Operation index

Why?

- The disease index is a listing in diagnosis code number order for patients discharged from the facility during a particular time period. Each patient's diagnoses are converted from a verbal description to a numerical code, usually using ICD.
- The patient's diagnosis codes are entered into the facility's health information systems as a part of the discharge processing of the patient's health record.

Calculate healthcare statistics (i.e., occupancy rates, length of stay, delinquency rates, etc)

Definitions

Range

Measure of spread. The difference between the smallest and largest values in a frequency distribution

Mean

Average of frequency distribution. The sum of all the values divided by the frequency

Median

Midpoint. The point at which 50% of the observations fall above and 50% fall below

Concepts

- **Inpatient Census** - Those patient present at midnight or the census taking time.
 - To calculate this you take the census at midnight (in this case on August 1, 268) add the Admissions (16) and subtract Discharges (9) and arrive at the Inpatient Census for August 2, which would be 275.
- **Daily Inpatient Census** - Those patients present at midnight (275) plus any patients admitted and discharged that same day (2). You Daily Inpatient Census would then be 277 for August 2.

Concepts

- **Inpatient Service Days** - is a unit of measure that denotes the services received by on inpatient in a 24-hour period.
 - Again it is each patient treated on August 2 including those admitted and discharged that same day.
 - In this case it is equal to the daily inpatient census, 277. In this case it is equal the daily inpatient census, and to not confuse the issue but an exception would be if a patient is on a leave of absence (usually in a rehab. or outpatient situation). They are counted on the census but not treated.

Concepts

- **Bed Occupancy Ratios** - This is the number of **Inpatient Service Days** (surgical 988) **divided by the number of days** (in this case in August there are **31 days**), which equals 31.8, then **divide by the bed count** (34) which equals .937..., then **multiply by 100** which equals = 93.7%
- **Length of Stay:** For **Total LOS** you take the discharges and multiply by the LOS for each and then add for the total. (10 discharges at 2 days would equal 20, 7 discharges at 3 days would equal 21 and so on.
 - Once you have all add them up to equal your Total LOS). In this case on the exam the total LOS is 91.
 - For the **Average LOS** you then take this number (91) and divide it by the number of discharges (23) which give you an average LOS of 3.9 days.

Question

- **What is the mean for the following frequency distribution: 10, 15, 20, 25, 25?**
- A. 47.5
- B. 20
- C. 19
- D. 95

Answer

- What is the mean for the following frequency distribution: 10, 15, 20, 25, 25?
- A. 47.5
- B. 20
- **C. 19**
- D. 95

$10+15+20+25+25=95$ and then divide by $5=19$

Gross Hospital death rate

- All discharges that ended in death.
- $\text{Total number of deaths for the time period} / \text{Total number of discharges, including deaths}$

Question

- What is the official count of inpatients taken at midnight?
- A. Average daily census
- B. Census
- C. Daily inpatient census
- D. Inpatient service days

Answer

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 - B. Census
 - **C. Daily inpatient census**
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Determine validation process for data mapping

Data Mapping

- “Data mapping involves **matching** between a source and a target, such as between two databases that contain the same data elements but call them by different names. This matching enables software and systems to meaningfully exchange patient information, reimbursement claims, outcomes reporting, and other data.”
(McBride, 2006)

- AHIMA – Data Mapping
- **Article citation:**
McBride, Susan, et al.. "Data Mapping." *Journal of AHIMA* 77, no.2 (February 2006): 44-48.
- http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_030580.hcsp?dDocName=bok1_030580

Data Mapping - continued

- *Definition of Data Mapping:*
 - *Data mapping is a set of data that acts like a map or a crosswalk or an interface between two databases or sets of data that contain the same data elements but are different data designs.*
- *The purpose of data mapping is to allow an existing data set to be used and recorded for another purpose and to facilitate interoperability between data sets and software that are similar but not exactly the same.*
 - *For example: When October 1, 2014 comes along, data mapping will be needed to translate or crosswalk ICD-9 codes into ICD 10 CM/PCS codes.*

Data Mapping - continued

- *Data mapping will facilitate the translation of one set of codes into another set of codes. It will allow the matching of data between a “source”(which would be the ICD-9) and the “target”(which would be the ICD 10 CM/PCS). The purpose of the data map is called the “use case”and gives direction to the designing of the data map.*
 - *For example, the use case of a data map that crosswalks ICD-9 to ICD-10 would be matching an ICD-9 code in the sources software system of data to the proper ICD 10 CM/PCS code in the target system.*

Data Mapping - continued

- *A data map requires designing an additional set of data that facilitates the exchange of data between data bases in different software systems. Designing this data set that translates data into use for a different purpose can be “bidirectional” or “unidirectional” based on the type of data used and the purpose of the translation.*
- *To create a data map you would take the following steps:*
 - *First, you have to identify the data source you are going to map data from and then you find information you are going to map data to. And then you have to determine if you want it to go back again.*
 - *Secondly, you have to make sure the integrity of the data is maintained in the translation from source to target database.*
 - *Thirdly, you have to make sure the data map is maintained for integrity, updated as changes occur, and revised as needed if the purpose changes.*

Data Mapping - continued

- *Data mapping is a rapidly growing aspect of the HIM field and has often been more of the IT aspect. With the growth of electronic health records and increased data capturing, data mapping will become increasingly more important and used more frequently.*

Maintain data dictionaries

Data Dictionaries

- A data dictionary is a collection of descriptions of the data objects or items in a data model for the benefit of programmers and others who need to refer to them.

Data dictionaries include the following components:

- A list of data elements collected in individual health records
 - Definitions of data elements
 - Descriptions of the attributes of each data element
 - Specifications for the size of the data field in the information system
 - Descriptions of the data views to be accessed by various users
 - Location where the data are stored

EHRs

A critical early step in designing an EHRs is to develop a(n)___ in which the characteristics of each data element are defined.

- a. Accreditation manual
- b. Core content
- c. Continuity of care record
- d. Data dictionary

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Why?

The data dictionary is a descriptive list of data elements to be collected in an information system or database whose purpose is to ensure consistency of terminology

In many facilities, the HIM service leads the system's clinical data standards committee and is part of the implementation plan for any health information system deployment.

Data Management

- Participate in the data management plan
- Follow data archive and backup policies
 - Develop data management plan

Data Management

- Data Management is a board term used to describe the administration and supervision of tasks associated with the entry, transfer and/or preparation of source data and derived items for entry into a clinical database.
- Basic components include data retention, data storage, data quality, data analysis, data collection, determining data elements, assemble components and setting time frames
 - Data modeling, date dictionary maintenance, controlled vocabulary and coding system usage

Data Management

- Changing from paper to digital gives new ways to manage data such as audit trails to monitor access, retrieval of information in seconds, ability to access information from any access point by multiple individuals
- Managing database components
 - Field and relationships
 - One to one
 - 1 medical record number to 1 patient
 - One to many
 - 1 doctor to many patients
 - Many to many
 - Many dates of birth to many patients

Data Privacy and Security

- Data collection and analysis
 - Data integrity
 - Accuracy
 - Data discrepancies
- State and federal laws and regulations knowledge
 - HIPAA, ARRA & other compliance issues
 - Privacy training
 - Portable devices
 - Monitoring medical identify theft
 - Controlling EHRs access
- Risk management
 - Policies and procedures to minimize risk exposure
 - Disaster recovery
 - Incident report response planning

Data Management Plan

- It is an essential activity for those data collected to ensure quality and accuracy of data and compliance with best practice standards and HIPAA requirements
- Purpose behind the Data Management Plan is to assure that sites have procedures and controls in place to ensure protection of data for authenticity, integrity and confidentiality of collected data
- Addresses data management practices and processes

Question

- You are entering the valid choices for each of the data elements, defining each data element and more. You must be managing the:
 - A. Functional requirements
 - B. Data dictionary
 - C. System analysis
 - D. Data flow diagram

Answer

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Information Governance & Stewardship

- Pivotal to data maintenance, analysis, decision dissemination and leadership
- Ensures data management is compliant with jurisdictional law and regulations, standards, payer and policies within the organization
 - Archive, data retention, storage, destruction disaster planning
 - Working with compliance officer

More Example Questions

Data Sets

Which of the following is *not* a characteristic of the common healthcare data sets such as UHDDS and UACDS?

- a. They define minimum data elements to be collected
- b. They provide a complete and exhaustive list of data elements that must be collected
- c. They provide a framework for data collection to which an individual facility can add data items
- d. The federal government recommends, but does not mandate, implementation of most of the data sets

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- d. The federal government recommends, but does not mandate, implementation of most of the data sets

Why?

They provide a complete and exhaustive list of data elements that must be collected

A data set is a list of recommended data elements with uniform definitions that are relevant for a particular use. The contents of data sets vary by their purpose. However, data sets are not meant to limit the number of data elements that can be collected. Most healthcare organizations add additional data elements that have meaning for their specific administrative and clinical operations. Standardizing data elements and definitions make it possible to compare the data collected at different facilities. A number of data reporting requirements come from federal initiatives.

- What type of patient care record includes documentation of a family bereavement period?

- A. Hospice record
- B. Home health care record
- C. Long term care record
- D. Ambulatory care record

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- B. Home health care record
- C. Long term care record
- D. Ambulatory care record

Why?

Hospice records include both services provided to the patient but also to the family.

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- The HIM department is planning to scan non-electronic medical record documentation. The project includes the scanning of health record documentation such as histories and physicals, physician orders, operative reports and nursing notes. Which of the following methods would be best to help HIM professionals monitor the completeness of health records during a patient hospitalization?
 - a. Ad hoc scanning
 - b. Concurrent scanning
 - c. Retrospective scanning
 - d. Post discharge scanning

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Why?

During the patient's hospitalization, scanning documents on a concurrent basis would assist to maintain the patient record

- a. Ad hoc scanning
- b. **Concurrent scanning**
- c. Retrospective scanning
- d. Post discharge scanning

- Dr. Jones entered a progress note in a patient's health record 24 hours after he visited the patient. Which quality element is missing from the progress note?
 - a. Data completeness
 - b. Data relevancy
 - c. Data currency
 - d. Data precision

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Why?

This is part of the Data Quality Management Model developed by AHIMA

Often, the term date currency is used as the term data timeliness

Page 258 in Green

- The government agency most closely involved in the development of healthcare data sets and information standards is:
 - a. CMS
 - b. DHHS
 - c. Johns Hopkins University
 - d. National Center for Health Statistics

Data sets

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 - a. CMS
 - b. DHHS
 - c. Johns Hopkins University
 - d. National Center for Health Statistics (NCHS)

Why?

The idea of data standardization has been widely accepted in the United States since the early 1960s. The NCHS along with other organizations develop data sets for a variety of healthcare settings. Data healthcare says have two purposes:

- To identify the data elements that should be collected for each patient
- To provide uniform definitions for common terms

Standardizing data elements and definitions make it possible to compare the data collected at different facilities.

- Using the patient health records by clinicians to facilitate quality patient care is considered:
 - a. A primary purpose of the health record
 - b. Patient care support
 - c. A secondary purpose of the health record
 - d. Policymaking and support

Primary and secondary sources of information

- Using the patient health records by clinicians to facilitate quality patient care is considered:

- a. A primary purpose of the health record
- b. Patient care support
- c. A secondary purpose of the health record
- d. Policymaking and support

Why?

The primary purpose for the patient record is documenting and facilitating quality patient care. The patient record is the primary sources of information for all healthcare providers.

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Documentation format

A notation for a diabetic patient was entered by the physician in an ambulatory care record reads:

“Continue with Metformin 850 mg three times daily. Return visit in three months fasting to run A1C”.

Where in a POMR progress note with this information the written?

- a. Subjective
- b. Objective
- c. Assessment
- d. Plan

- A notation for a diabetic patient enough physicians amatory care note reads: “continue with Metformin 850 mg three times daily. Return visit in three months with the intent to run A1C”. Where in a POMR progress note with this information the written?

- A. Subjective
- B. Objective
- C. Assessment
- D. Plan

- Subjective – includes the patient’s statement about how she feels, including symptomatic information
- Objective – observations about the patient, such as physical findings or lab results documented by the healthcare provider
- Assessment – judgment, opinion or evaluation made by the healthcare provider
- **Plan – diagnostic, therapeutic, educational plans to resolve the problem documented by the healthcare provider**

Abstracting and data sets

- Skilled nursing facilities complete in MDS assessments:
 - A. On admission and once every 14 days
 - B. Once every 30 days up to 180 days
 - C. According to designated reassessment point
 - D. Depending on the diagnosis of the patient

Abstracting and data sets

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 - A. On admission and once every 14 days
 - B. Once every 30 days up to 180 days
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 - D. Depending on the diagnosis of the patient

- **Why?**

MDS 3.0 is federally mandated in long-term care facilities that participate with Medicare and Medicaid. It consists of a core set of screening and assessment elements based on common definitions. To meet federal requirements, long-term care facilities must complete an MDS assessment for every resident *at the time of admission and at designated reassessment points throughout the residence stay.*

Question

- Which of the following provides the most comprehensive controlled vocabulary for coding the content of the patient record?
- A. CPT
 - B. HCPCS
 - C. ICD-9-CM
 - D. SNOMED CT

Answer

- Which of the following provides the most comprehensive controlled vocabulary for coding the content of the patient record?

- A. CPT
- B. HCPCS
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- D. **SNOMED CT**

Why?

Systemized Nomenclature of Medicine Clinical Terminology is a controlled reference terminology. The American College of Pathologists defines SNOMED CT as a systematized, multi-axial and hierarchically organized nomenclature of medically terms.

Pages 304 – 306 Greens Textbook

Question?

- **In healthcare, data sets serve two purposes. The first is to identify data element to be collected about each patient. The second is to:**
 - A. Provide uniform data definitions
 - B. Guide efforts toward computerization
 - C. Determine statistical formulas
 - D. Provide a research database

Answer

- In healthcare, data sets serve two purposes. The first is to identify data element to be collected about each patient. The second is to:

A. Provide uniform data definitions

B. Guide efforts toward computerization

C. Determine statistical formulas

D. Provide a research database

Why?

- Healthcare data sets are to first identify the data elements that should be collected for each patient.
- The second is to provide uniform definitions for common terms. The use of uniform definitions ensures that data collected from a variety of healthcare settings will share a standard definition. Standardizing data elements and definitions makes it possible to compare the data collected at different facilities

Question

- What is the difference between data and information?
 - A. Data represents basic facts. Information represents meaning.
 - B. Data are expressed in numbers. Information is expressed in words.
 - C. Information must be kept confidential. Data are meant to be stored.
 - D. Information is about people. Data is about things.

Answer

- What is the difference between data and information?

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B. Data are expressed in numbers. Information is expressed in words.

C. Information must be kept confidential. Data are meant to be stored.

D. Information is about people. Data is about things.

Why?

- Data represent the basic facts about people, processes, measurements, conditions etc. They can be collected in the form of dates, numerical measurements and statistics, textual descriptions, checklists, images and symbols.
- After data have been collected and analyzed, they are converted into a form that can be used for a specific purpose. This useful form of is called information.
- Data represents facts and information represents meaning.

Question

- Information standards that provide clear descriptors of data elements to be included in computer-based patient record systems are called _____ standards:

A. Vocabulary

B. Structure and content

C. Transaction

D. Security

Answer

- Information standards that provide clear descriptors of data elements to be included in computer-based patient record systems are called _____ standards:

A. Vocabulary

B. Structure and content

C. Transaction

D. Security

Why?

- Structure and content standards establish and provide clear and uniform definitions of the data elements to be included in the EHR system.
- They specify the type of data to be collected in each data field and the attributes and values of each data field, all of which are captured in data dictionaries

Question

- Vital statistics include data on:
 - A. Research projects in which new treatments and tests are investigated to determine whether they are safe and effective.
 - B. Births, deaths, fetal deaths, marriages, divorces
 - C. Medicare claims
 - D. ICD diagnoses codes

Question

- The most prevalent trend in the collection of secondary databases is:
 - A. Increased use of encryption technology
 - B. Increased use of encoders
 - C. Increased use of automated data entry
 - D. Widespread implementation of electronic medical records

Answer

The most prevalent trend in the collection of secondary databases is:

- A. Increased use of encryption technology
- B. Increased use of encoders
- C. Increased use of automated data entry**
- D. Widespread implementation of electronic medical records

Why?

- Although registries and databases are almost *universally computerized*, data collection is commonly done manually, not all data collection is done manually. Data can be downloaded directly from other electronic systems. Birth defect registries, for example, often download information on births and birth defects from the vital records system.
- In some cases providers such as hospitals and physicians send information in electronic format to the registry or database. As the EHR develops, less and less data will need to be manually abstracted since it will be available electronically through the EHR

Question

- If the lowest value is 5 and the highest value is 20, what is the range?
- A. 5 to 20
- B. 15
- C. 7.5
- D. 20 to 5

Answer

- If the lowest value is 5 and the highest value is 20, what is the range?

A. 5 to 20

B. 15

C. 7.5

D. 20 to 5

*** difference between smallest and largest value

Question

- LOS for patients discharged on April 1: Patient A, 1 day; Patient B, 5 days; Patient C, 3 days; Patient D, 3 days; Patient E, 8 days; Patient F, 8 days; Patient G, 8 days; Patient H, 9 days; Patient I, 9 days. What is the median length of stay?

A. 5 days

B. 6 days

C. 8 days

D. 9 days

Answer

- LOS for patients discharged on April 1: Patient A, 1 day; Patient B, 5 days; Patient C, 3 days; Patient D, 3 days; Patient E, 8 days; Patient F, 8 days; Patient G, 8 days; Patient H, 9 days; Patient I, 9 days. What is the median length of stay?

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question

- Which rate describes the probability or risk of illness in a population over a period of time?

A. Mortality rate
B. incidence rate
C. Morbidity rate
D. Prevalence rate

Answer

- Which rate describes the probability or risk of illness in a population over a period of time?
 - A. Mortality rate
 - B. Incidence rate**
 - C. Morbidity rate
 - D. Prevalence rate

Question

- Which term describes the number of inpatients present at the census taking time each day plus the number of inpatients who were both admitted and discharged after the census taking time the previous day?
- A. Inpatient bed occupancy rate
- B. Bed count
- C. Average daily census
- D. Daily inpatient census

Answer

- Which term describes the number of inpatients present at the census taking time each day plus the number of inpatients who were both admitted and discharged after the census taking time the previous day?
 - A. Inpatient bed occupancy rate
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 - C. Average daily census
 - D. Daily inpatient census**

Question

- Which rate is used to compare the number of inpatient deaths to the total number of inpatient deaths and discharges?
 - A. Net hospital death rate
 - B. Fetal/newborn/maternal hospital death rate
 - C. Gross hospital death rate
 - D. Adjusted hospital death rate

Answer

- Which rate is used to compare the number of inpatient deaths to the total number of inpatient deaths and discharges?
 - A. Net hospital death rate
 - B. Fetal/newborn/maternal hospital death rate
 - C. Gross hospital death rate**
 - D. Adjusted hospital death rate

Question

- What term is used for the number of inpatients present at any one time in a facility?

A. Average daily census
B. Census
C. Inpatient service days
D. Length of stay

Answer

- What term is used for the number of inpatients present at any one time in a facility?

A. Average daily census
B. Census
C. Inpatient service days
D. Length of stay