

**NURSING INFORMATICS AND THE FOUNDATION OF KNOWLEDGE 4TH EDITION
MCGONIGLE TEST BANK**

Chapter 1 Nursing Science and the Foundation of Knowledge

The nurse understands that nursing informatics is recognized as a specialty area of practice by which statement?

1. Research priorities for nursing informatics include the development of a standard nursing language and the development of databases for clinical information.
2. A formal educational program at the master's level must be completed before a nurse is eligible to sit for the credentialing examination.
3. As a differentiated practice, nursing informatics is focused upon the client, the environment, health, and the nurse.
4. There is a need for nursing informatics interests to gain representation by work groups and organizations within the United States.

Correct Answer: 1

Rationale 1: The development of research priorities is a key point in a specialty practice. Although degrees at the master's level are available, the degree required for credentialing is typically at the bachelor's level and includes experience in the field. Current demands for safer, cost-effective, quality care require evidence of the best practices supported by research.

Rationale 2: Such a formal educational program does not necessarily mean a specialty area of practice. Although degrees at the master's level are available, the degree required for credentialing is typically at the bachelor's level and includes experience in the field. The development of research priorities is a key point in a specialty practice.

Rationale 3: Your chosen response refers to the entire discipline of nursing. The specialty of nursing informatics integrates nursing science, computer science, and information science to manage and communicate data, information, knowledge, and wisdom into nursing practice. The development of research priorities is a key point in a specialty practice.

Rationale 4: There are many work groups in the United States related to informatics that focus on the specialty of informatics practice. One example is the Nursing Informatics Special Interest Group of the International Medical Informatics Association. The development of research priorities is a key point in a specialty practice.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 2

Type: MCSA

Which statement by the nurse verifies that the nurse is "information literate"?

1. "I understand how to search for a website and evaluate its usefulness for health care needs."
2. "I utilize databases in the health care setting to input client information such as skin condition."
3. "I use email over the Internet to correspond with clients and provide information."
4. "I can use software applications such as word processing, spreadsheets, and presentations."

Correct Answer: 1

Rationale 1: Information literacy necessitates that nurses have the ability to find, evaluate, and effectively use information. The other answers are examples of computer literacy but do not have the higher functions of information literacy.

Rationale 2: Your chosen response is an example of computer literacy, but it does not have the higher functions of information literacy. Information literacy necessitates that nurses have the ability to find, evaluate, and effectively use information.

Rationale 3: Your chosen response is an example of computer literacy but, it does not have the higher functions of information literacy. Information literacy necessitates that nurses have the ability to find, evaluate, and effectively use information.

Rationale 4: This answer is an example of computer literacy but, it does not have the higher functions of information literacy. Information literacy necessitates that nurses have the ability to find, evaluate, and effectively use information.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Planning

Learning Outcome:

Question 3

Type: MCSA

The nurse gathers much data when caring for clients. Which is an example of the higher-level "information" useful in caring for clients?

1. The vital signs are BP of 130/70, HR of 88, RR of 24, temperature of 98.8 degrees F., and oxygen saturation of 98%.
2. Lab work results include an electrolyte panel and complete blood count with differential.
3. The client is a widowed 64-year-old black male admitted with prostatitis.
4. After receiving Rocephin (ceftriaxone sodium) 1.0 gram IV yesterday, the client reported feeling better today.

Correct Answer: 4

Rationale 1: Your chosen response is an example of having pieces of data without interpretation. "Information" necessitates that the nurse interpret and structure the results of clinical data into information.

Rationale 2: Your chosen response is an example of having pieces of data without interpretation. "Information" necessitates that the nurse interpret and structure the results of clinical data into information.

Rationale 3: Your chosen response is an example of having pieces of data without interpretation. "Information" necessitates that the nurse interpret and structure the results of clinical data into information.

Rationale 4: "Information" necessitates that the nurse interpret and structure clinical data into information. It can then be used to aid clinical decision making and client monitoring. All other responses included pieces of data without interpretation.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 4

Type: MCSA

Which statement best distinguishes the difference between information literacy and computer literacy?

1. Information literacy is unnecessary in health care whereas computer literacy provides the basis for computer order entry.
2. Information literacy is the foundation of the EHR whereas computer literacy helps the nurse to access data.
3. A nurse can extrapolate data with computer literacy and not information skills.
4. Information literacy forms the basis for ongoing learning whereas computer literacy refers to a familiarity with the use of personal computers.

Correct Answer: 4

Rationale 1: Computer literacy is a popular term used to refer to a familiarity with the use of personal computers, including the use of software tools such as word processing, spreadsheets, databases, presentation graphics, and e-mail. The majority of students admitted to nursing schools now enter with some level of computer literacy.

Rationale 2: Computer literacy is a popular term used to refer to a familiarity with the use of personal computers, including the use of software tools such as word processing, spreadsheets, databases, presentation graphics, and e-mail. The majority of students admitted to nursing schools now enter with some level of computer literacy.

Rationale 3: Computer literacy is a popular term used to refer to a familiarity with the use of personal computers, including the use of software tools such as word processing, spreadsheets, databases, presentation graphics, and e-mail. The majority of students admitted to nursing schools now enter with some level of computer literacy.

Rationale 4: Computer literacy is a popular term used to refer to a familiarity with the use of personal computers, including the use of software tools such as word processing, spreadsheets, databases, presentation graphics, and e-mail. The majority of students admitted to nursing schools now enter with some level of computer literacy.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 5

Type: MCSA

Which statement indicates the appropriate level of informatics competencies to the correct nurse?

1. A nurse informatics specialist extrapolates data to develop best practice model for indwelling catheter care.
2. The novice nurse using a spreadsheet to document medication reactions.
3. An experienced staff nurse creates databases employing SNOMED.
4. A beginning nurse utilizes the Internet to integrate multidisciplinary languages.

Correct Answer: 1

Rationale 1: The nurse informatics specialist has the ability and education to access data and create a model of excellence based on the findings.

Rationale 2: According to research, nurses are graduating from programs without experience with databases, spreadsheets, and statistical packages. There is a learning curve from graduation to comfort with the information system and its capabilities.

Rationale 3: An experienced staff nurse does not have the skills to create a database using a standardized language.

Rationale 4: Beginning nurses are comfortable with basic skills and should be able to retrieve information from the system, as well as interpret data. Your chosen response is not an example of the competencies required for the informatics specialist; its level is too high.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 6

Type: MCSA

Which statement regarding pressures that drive the health care delivery system today is not accurate?

1. The current and projected nursing shortage may be eliminated by instituting technology enhancements in the acute care setting.

2. Evidence-based practice is supported with technology that enables the health care provider to utilize up-to-date research findings.

3. Medication errors and adverse events may be reduced with the implementation of computerized physician order entry (CPOE).

4. Managed care may utilize disease management to identify clients with chronic conditions, and treat them effectively to minimize complications and cost.

Correct Answer: 1

Rationale 1: Although the nursing shortage may not be eliminated with information technology, the probability that errors may be reduced with the implementation of technology that enables the health care provider to double check medication administration may help with client safety.

Rationale 2: Although the nursing shortage may not be eliminated with information technology, the probability that errors may be reduced with the implementation of technology that enables the health care provider to double check medication administration may help with client safety.

Rationale 3: Your chosen response is an example of a statement that is indeed accurate. The one statement that is not accurate is the one about eliminating the current and projected nursing shortage by instituting technology enhancements. Although the nursing shortage may not be eliminated with information technology, the probability that errors may be reduced with the implementation of technology that enables the health care provider to double check medication administration may help with client safety.

Rationale 4: Your chosen response is an example of a statement that is indeed accurate. The one statement that is not accurate is the one about eliminating the current and projected nursing shortage by instituting technology enhancements. Although the nursing shortage may not be eliminated with information technology, the probability that errors may be reduced with the implementation of technology that enables the health care provider to double check medication administration may help with client safety.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 7

Type: MCSA

Describe at least three factors in the current healthcare delivery system that drive the implementation of information technology in the acute care setting.

1. Patient safety
2. Nursing shortage
3. Evidence-based practice
4. Increased numbers of digital natives in nursing practice

Correct Answer: 4

Rationale 1: Patient safety, nursing shortage, managed care, and evidenced based practice are all factors that impact the acceptance and implementation of information technology in the acute care setting.

Rationale 2: Patient safety, nursing shortage, managed care, and evidenced based practice are all factors that impact the acceptance and implementation of information technology in the acute care setting.

Rationale 3: Patient safety, nursing shortage, managed care, and evidenced based practice are all factors that impact the acceptance and implementation of information technology in the acute care setting.

Rationale 4: Patient safety, nursing shortage, managed care, and evidenced based practice are all factors that impact the acceptance and implementation of information technology in the acute care setting. Digital natives may be more comfortable with technology, but they are not the driving force toward change.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Implementation

Learning Outcome:

Question 8

Type: MCSA

Which action indicates the nurse is functioning as a knowledge worker?

1. The nurse auscultates hypoactive bowel sounds while doing a client assessment eight hours postoperatively after abdominal surgery and documents the assessment in the electronic medical record.
2. The nurse administers four units of regular insulin to the client whose blood glucose is 240 at 11:30 a.m. per physician's sliding scale orders and documents it on the electronic medical administration record.
3. The nurse auscultates diminished breath sounds in a postoperative client the morning after abdominal surgery and encourages the client to turn, cough, and deep breathe every hour instead of every two hours.
4. The nurse obtains the client's vital signs of BP-120/82, P-112, and R-32, totals up the intake of 1040 ml and the output of 1100 ml, and records these data in the electronic medical record.

Correct Answer: 3

Rationale 1: Your chosen response is an example of gathering assessment data and recording same in the EMR. The nurse as knowledge worker interprets and structures clinical data into information that can then be used to aid clinical decision making and patient monitoring over time. In the auscultation with diminished breath sounds choice, the nurse compared the data to the knowledge that the client may be developing atelectasis, and acted upon this by having the client turn, cough, and deep breathe more frequently than the standard practice of every two hours.

Rationale 2: Your chosen response is an example of following physician orders. The nurse as knowledge worker interprets and structures clinical data into information that can then be used to aid clinical decision making and patient monitoring over time. In the auscultation with diminished breath sounds choice, the nurse compared the data to the knowledge that the client may be developing atelectasis, and acted upon this by having the client turn, cough, and deep breathe more frequently than the standard practice of every two hours.

Rationale 3: The nurse as knowledge worker interprets and structures clinical data into information that can then be used to aid clinical decision making and patient monitoring over time. In this case, the nurse auscultated diminished breath sounds in a postoperative client the morning after abdominal surgery. The nurse compared the data to the knowledge that the client may be developing atelectasis, and acted upon this by having the client turn, cough, and deep breathe more frequently than the standard practice of every two hours.

Rationale 4: Your chosen response is an example of gathering assessment data and recording same in the EMR. The nurse as knowledge worker interprets and structures clinical data into information that can then be used to aid clinical decision making and patient monitoring over time. In the auscultation with diminished breath sounds choice, the nurse compared the data to the knowledge that the client may be developing atelectasis, and acted upon this by having the client turn, cough, and deep breathe more frequently than the standard practice of every two hours.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Diagnosis

Learning Outcome:

Question 9

Type: MCSA

A disadvantage to the utilization of the electronic medical record (EMR) includes which of the following?

1. Accessibility from several different locations simultaneously and by different levels of providers
2. The intensive training in the beginning needed to prepare staff members to use the EMR
3. Less time available for client care because more time is required for documentation activity
4. Inability to incorporate diagnostic images into the EMR because of space limitations

Correct Answer: 2

Rationale 1: It is actually an advantage that the EMR can be accessed from several different locations simultaneously, as well as by different levels of providers. The disadvantage is the amount of time needed in the beginning for training on the computer records. However, once staff members are trained, more time is available for client care because less time is needed for documentation activity.

Rationale 2: There is a considerable amount of time needed in the beginning for the training on usage of computerized records. However, once staff members are trained, more time is available for client care because less time is needed for documentation activity. The EMR improves things such as: access to information, number of errors, communication, and redundancy of data entry.

Rationale 3: Actually, once staff members are trained, more time is available for client care because less time is required for documentation activity, though. The amount of time needed in the beginning for the training on usage of computerized records is a disadvantage.

Rationale 4: Diagnostic images are actually a part of the record and can be viewed from various locations. A disadvantage is the amount of time needed in the beginning for training on the computer records. However, once staff members are trained, more time is available for client care because less time is needed for documentation activity.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 10

Type: MCSA

A nurse manager wishes to hire a new nurse who has just graduated from nursing school. At the beginning level of informatics competencies, the nurse should be able to do which of the following?

1. Attain informatics nurse certification within six months of beginning practice.
2. Input vital signs and intake and output data in the electronic medical record.
3. Utilize the Internet to review trends in health care information technology.
4. Use an electronic spreadsheet to create staffing rotations.

Correct Answer: 2

Rationale 1: Your chosen response is not a beginning level competency for nurses entering the profession. Inputting data into the electronic medical record is a beginning level competency for nurses entering the profession; the other choices are at higher levels.

Rationale 2: Inputting data into the electronic medical record is a beginning level competency for nurses entering the profession; the other choices are at higher levels.

Rationale 3: Your chosen response is not a beginning level competency for nurses entering the profession. Inputting data into the electronic medical record is a beginning level competency for nurses entering the profession; the other choices are at higher levels.

Rationale 4: Novice nurses do not have the computer literacy skills to employ a spreadsheet to create schedules. This is a more advanced competency. The novice nurse is beginning to learn to use the system to input data.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:
Learning Outcome:

Question 11

Type: MCSA

In which way does medical informatics overlap with nursing informatics?

1. Medical and nursing informatics focus on the areas of information retrieval.
2. Medical and nursing informatics focus on patients' families.
3. Medical and nursing informatics focus on hospital complications.
4. Medical and nursing informatics focus on hospital complications.

Correct Answer: 1

Rationale 1: Informatics has subsequently emerged as an area of specialization within the various health care disciplines and is one of the fastest growing career fields in health care. Overlap occurs among medical, dental, and nursing informatics primarily in the areas of information retrieval, ethics, patient care, decision support, human to computer interactions, information systems, imaging, computer security, and computerized health records (Guenther & Caruth, 2006).

Rationale 2: Informatics has subsequently emerged as an area of specialization within the various health care disciplines and is one of the fastest growing career fields in health care. Overlap occurs among medical, dental, and nursing informatics primarily in the areas of information retrieval, ethics, patient care, decision support, human to computer interactions, information systems, imaging, computer security, and computerized health records (Guenther & Caruth, 2006).

Rationale 3: Informatics has subsequently emerged as an area of specialization within the various health care disciplines and is one of the fastest growing career fields in health care. Overlap occurs among medical, dental, and nursing informatics primarily in the areas of information retrieval, ethics, patient care, decision support, human-to computer interactions, information systems, imaging, computer security, and computerized health records (Guenther & Caruth, 2006).

Rationale 4: Informatics has subsequently emerged as an area of specialization within the various health care disciplines and is one of the fastest growing career fields in health care. Overlap occurs among medical, dental, and nursing informatics primarily in the areas of information retrieval, ethics, patient care, decision support, human-to computer interactions, information systems, imaging, computer security, and computerized health records (Guenther & Caruth, 2006).

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 12

Type: MCSA

Health care consumers have all the information and tools to make health care choices because they can easily compare quality and cost of care. Which of the following is correct?

1. This statement is true because the tool has been invented.
2. The statement is false because the tool has not been developed.
3. The statement is true because most consumers have Internet access.
4. The statement is true because of the steep learning curve associated with searching the Internet.

Correct Answer: 2

Rationale 1: There is an identified need for health care consumers to have the information and tools they needed to make the health care choices right for them by making it easier to compare quality and cost of care. This need has not yet been met.

Rationale 2: There is an identified need for health care consumers to have the information and tools they needed to make the health care choices right for them by making it easier to compare quality and cost of care. This need has not yet been met.

Rationale 3: There is an identified need for health care consumers to have the information and tools they needed to make the health care choices right for them by making it easier to compare quality and cost of care. This need has not yet been met.

Rationale 4: There is an identified need for health care consumers to have the information and tools they needed to make the health care choices right for them by making it easier to compare quality and cost of care. This need has not yet been met.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care
Nursing/Integrated Concepts:
Learning Outcome:

Question 13

Type: MCSA

The role of the informatics nurse does not include assessing the usability of devices for health care consumers. This statement is false because of which of the following reasons?

1. The informatics nurse approves the usability of devices.
2. The development of policy regarding usability is an important part of the informatics nurse's role.
3. The informatics nurse is concerned more with the actual device than the usability.
4. The informatics nurse's role is to work only with the nursing staff and not patients.

Correct Answer: 2

Rationale 1: Informatics nurses do have a role in assessing the usability of devices for health care consumers, including the development of health policy.

Rationale 2: Informatics nurses do have a role in assessing the usability of devices for health care consumers, including the development of health policy.

Rationale 3: Informatics nurses do have a role in assessing the usability of devices for health care consumers, including the development of health policy.

Rationale 4: Informatics nurses do have a role in assessing the usability of devices for health care consumers, including the development of health policy.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 14

Type: MCSA

Over the next few years, nursing informatics and other health informatics disciplines will crisscross, resulting in more interdisciplinary projects. This statement is true because of which of the following reasons?

1. Nurse informatics specialists will work collaboratively with other disciplines to develop user-friendly systems.
2. Nurse informatics specialists will work with other disciplines in an attempt to gain control over the use of the health care technology.
3. Nurse informatics specialists understand all of the disciplines and are able to effect changes in technology.
4. Nurse informatics specialists are knowledgeable about the needs of the typical consumer of technology.

Correct Answer: 1

Rationale 1: Nursing informatics will change rapidly over the next few years. There will be a continued blur between nursing informatics and other health informatics specialties, including more interdisciplinary projects.

Rationale 2: Nursing informatics will change rapidly over the next few years. There will be a continued blur between nursing informatics and other health informatics specialties, including more interdisciplinary projects.

Rationale 3: Nursing informatics will change rapidly over the next few years. There will be a continued blur between nursing informatics and other health informatics specialties, including more interdisciplinary projects.

Rationale 4: Nurse informatics will change rapidly over the next few years. There will be a continued blur between nursing informatics and other health informatics, including more interdisciplinary projects.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 15

Type: MCSA

The best estimate of the number of informatics nurses needed over the next few years is which of the following?

1. 500 to 1500
2. 6000 to 12,000
3. 2000 to 5000
4. 15,000 to 25,000

Correct Answer: 2

Rationale 1: Your chosen response is too low. Projections for the number of informatics nurses needed over the next few years range from 6000 to 12,000. Nursing, health care, clinical informatics graduate programs, and biomedical informatics programs collectively lag behind projected needs.

Rationale 2: Projections for the number of informatics nurses needed over the next few years range from 6000 to 12,000. Nursing, health care, clinical informatics graduate programs, and biomedical informatics programs collectively lag behind projected needs.

Rationale 3: Your chosen response is too low. Projections for the number of informatics nurses needed over the next few years range from 6000 to 12,000. Nursing, health care, clinical informatics graduate programs, and biomedical informatics programs collectively lag behind projected needs.

Rationale 4: Your chosen response is too high. Projections for the number of informatics nurses needed over the next few years range from 6000 to 12,000. Nursing, health care, clinical informatics graduate programs, and biomedical informatics programs collectively lag behind projected needs.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 16

Type: MCSA

There are no available nursing informatics programs including doctoral degrees; therefore, nurses prepare for advanced practice through medical informatics curriculum. This answer is false because of which of the following reasons?

1. There are a number of accredited advanced nursing education programs in informatics in the United States.
2. Advanced degrees in nursing informatics are available only online in the United States.
3. There is limited interest in advanced education in nursing informatics.
4. There are advanced degrees available in nursing informatics, however, with technology experience there is no need for advanced theoretical education.

Correct Answer: 1

Rationale 1: Doctoral degree programs are now available in nursing informatics. Also available are master's degree and certificate programs.

Rationale 2: Doctoral degree programs are available on ground and online in nursing informatics. Also available are master's degree and certificate programs.

Rationale 3: Doctoral degree programs are available in nursing informatics. Also available are master's degree and certificate programs. There is more interest in advanced education in nursing as health care and technology become more sophisticated.

Rationale 4: Doctoral degree programs are indeed now available in nursing informatics. Also available are master's degree and certificate programs. There is more interest in advanced education in nursing as health care and technology become more sophisticated.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 17

Type: MCMA

Knowledge management is a structured process for the generation, storage, distribution, and application of what kind of knowledge in the organization?

Standard Text: Select all that apply.

1. Chronological knowledge
2. Redundant knowledge
3. Tacit knowledge (personal experience)
4. Generational knowledge
5. Explicit knowledge (evidence)

Correct Answer: 3,5

Rationale 1: Knowledge management refers to the creation of systems that enable organizations to tap into the knowledge, experiences, and creativity of their staff to improve their performance. It is a structured process for the generation, storage, distribution, and application of both tacit knowledge (personal experience) and explicit knowledge (evidence) in organizations. Chronological, redundant, and generational are not types of knowledge used in any organization.

Rationale 2: Knowledge management refers to the creation of systems that enable organizations to tap into the knowledge, experiences, and creativity of their staff to improve their performance. It is a structured process for the generation, storage, distribution, and application of both tacit knowledge (personal experience) and explicit knowledge (evidence) in organizations. Chronological, redundant, and generational are not types of knowledge used in any organization.

Rationale 3: Knowledge management refers to the creation of systems that enable organizations to tap into the knowledge, experiences, and creativity of their staff to improve their performance. It is a structured process for the generation, storage, distribution, and application of both tacit knowledge (personal experience) and explicit knowledge (evidence) in organizations. Chronological, redundant, and generational are not types of knowledge used in any organization.

Rationale 4: Knowledge management refers to the creation of systems that enable organizations to tap into the knowledge, experiences, and creativity of their staff to improve their performance. It is a structured process for the generation, storage, distribution, and application of both tacit knowledge (personal experience) and explicit knowledge (evidence) in organizations. Chronological, redundant, and generational are not types of knowledge used in any organization.

Rationale 5: Knowledge management refers to the creation of systems that enable organizations to tap into the knowledge, experiences, and creativity of their staff to improve their performance. It is a structured process for the generation, storage, distribution, and application of both tacit knowledge (personal experience) and explicit knowledge (evidence) in organizations. Chronological, redundant, and generational are not types of knowledge used in any organization.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care
Nursing/Integrated Concepts:
Learning Outcome:

Question 18

Type: MCMA

The American Nurses Credentialing Center (ANCC) incorporated the foundation provided by the American Nurses Association (ANA) in its definition of nursing informatics and scope and standards of practice. Applicants for the Informatics Nurse credentialing examination are required to meet which of the following minimum criteria?

Standard Text: Select all that apply.

1. Advanced graduate education in nursing informatics (or related field)
2. Equivalent of two years of full-time professional practice
3. Professional clinical practice for at least 500 hours
4. Baccalaureate or higher degree in nursing (or relevant field baccalaureate)
5. Current, active license as a professional nurse

Correct Answer: 2,4,5

Rationale 1: The certified informatics nurse (IN) has experience or interest in the area but no formal informatics preparation. This person has earned the credential RN-BC (Registered Nurse, Board Certified). Therefore, advanced graduate education in nursing informatics (or related field) is not required. The informatics nurse specialist (INS) has this education and may also hold ANCC certification. Both the IN and INS may work under a variety of different titles and in various settings.

Rationale 2: The certified informatics nurse (IN) is an RN who works in the area of informatics. This person had the equivalent of two years of full-time professional practice in order to be eligible for certification. (There are also required practice hour requirements.)

Rationale 3: Having 500 hours of professional clinical practice is insufficient. Practice requirements are met by having practiced one of these: either a minimum of 2000 hours in informatics nursing within the last three years; or a minimum of 1000 hours in informatics nursing in the last three years and completed a minimum of 12 semester hours of academic credit in informatics courses that are a part of a graduate level informatics nursing program; or completing a graduate program in nursing informatics containing a minimum of 200 hours of faculty supervised practicum in informatics.

Rationale 4: The certified informatics nurse (IN) is an RN who works in the area of informatics. This person has experience or interest in the area but no formal informatics preparation and has the credential RN-BC (Registered Nurse, Board Certified). Therefore, advanced graduate education in nursing informatics (or related field) is not required. The informatics nurse specialist (INS) has this education and may also hold ANCC certification. Both the IN and INS may work under a variety of different titles and in various settings.

Rationale 5: The certified informatics nurse (IN) holds a current, active license as a professional nurse and works in the area of informatics. This person has experience or interest in the area but no formal informatics preparation and has the credential RN-BC (Registered Nurse, Board Certified).

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 19

Type: MCSA

Nursing informatics employs information and computer technology to support all aspects of nursing practice, including research. Which is an example of supporting research?

1. Development of a standardized nursing language
2. Identifying evidence of best clinical nursing practices
3. Familiarity with spreadsheets and statistics software and analysis
4. Housing collected client data within automated record systems

Correct Answer: 1

Rationale 1: Development of a standard language for use within nursing would allow nurses, from different regions of a country or the world, to establish that they were describing the same phenomenon as well as conduct studies that could be replicated.

Rationale 2: Your chosen response is an example of identifying clinical evidence; however, that does not mean supporting research. Current demands for safer, cost-effective, quality care do require evidence, supported by research, of the best practices. Development of a standard language for use within nursing would allow nurses, from different regions of a country or the

world, to establish that they were describing the same phenomenon as well as conduct studies that could be replicated.

Rationale 3: Your chosen response is an example of utilizing informatics tools that may or may not support research. Nurses do need familiarity with spreadsheets and statistics software and analysis for use in quality improvement activities, the creation and monitoring of budgets, and to better understand research findings. Development of a standard language for use within nursing would allow nurses, from different regions of a country or the world, to establish that they were describing the same phenomenon as well as conduct studies that could be replicated.

Rationale 4: Your chosen response is an example of data collection that may or may not support research. However, data collected and housed within automated record systems would make available information that could be used by health care professionals at the bedside. Development of a standard language for use within nursing would allow nurses, from different regions of a country or the world, to establish that they were describing the same phenomenon as well as conduct studies that could be replicated.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 20

Type: MCSA

Which of the following is not associated with information literacy?

1. Recognizing when information is needed
2. Ability to find, evaluate, and effectively use information
3. Familiarity with the use of personal computers and software
4. Understanding ethical issues surrounding the use of information

Correct Answer: 3

Rationale 1: Your chosen response is an example of information literacy. Information literacy is defined as the ability to recognize when information is needed as well as the skills to find, evaluate, and use needed information effectively. It includes a fundamental understanding of ethical issues surrounding the access and use of information. The information literate nurse can weigh the quality and significance of research findings for clinical practice.

Rationale 2: Your chosen response is an example of information literacy. Information literacy is defined as the ability to recognize when information is needed as well as the skills to find, evaluate, and use needed information effectively. It includes a fundamental understanding of ethical issues surrounding the access and use of information. The information literate nurse can weigh the quality and significance of research findings for clinical practice.

Rationale 3: Familiarity with the use of personal computers and software is an example of computer literacy. Information literacy is defined as the ability to recognize when information is needed as well as the skills to find, evaluate, and use needed information effectively. It includes a fundamental understanding of ethical issues surrounding the access and use of information. All other responses are associated with information literacy. The information literate nurse can weigh the quality and significance of research findings for clinical practice.

Rationale 4: Your chosen response is an example of information literacy. Information literacy is defined as the ability to recognize when information is needed as well as the skills to find, evaluate, and use needed information effectively. It includes a fundamental understanding of ethical issues surrounding the access and use of information. The information literate nurse can weigh the quality and significance of research findings for clinical practice.

Chapter 2 Introduction to Information, Information Science, and Information Systems

Question 1

Type: MCSA

Which statement concerning "thin client technology" is correct?

1. System processing occurs on both the server and on the local PC.
2. A thin client consists of a display with keyboard and requires its own storage device.
3. Software exists on the server, therefore upgrades are done in one step for all clients.
4. When implemented, older PCs formerly used in networking must be replaced.

Correct Answer: 3

Rationale 1: All system processing occurs on the server, rather than on the thin client or local PC, as seen in traditional client/server technology. When using thin client technology, software resides on the server requiring only one upgrade on the server rather than a physical visit to each PC or client. Security is also enhanced because users cannot locally run foreign disks/memory sticks that may contain a virus.

Rationale 2: A thin client is primarily a display, keyboard, and mouse or other pointing device and does not require local drives or storage devices. When using thin client technology, software

resides on the server requiring only one upgrade on the server rather than a physical visit to each PC or client. Security is also enhanced because users cannot locally run foreign disks/memory sticks that may contain a virus.

Rationale 3: When using thin client technology, software resides on the server requiring only one upgrade on the server rather than a physical visit to each PC or client. Security is also enhanced because users cannot locally run foreign disks/memory sticks that may contain a virus.

Rationale 4: Any PC can serve as a thin client. System processing occurs on the server; therefore, older equipment may be utilized as a client with the addition of a pointing device. When using thin client technology, software resides on the server requiring only one upgrade on the server rather than a physical visit to each PC or client. Security is also enhanced because users cannot locally run foreign disks/memory sticks that may contain a virus.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 2

Type: MCSA

Which health risk related to computer use has been best documented?

1. Miscarriage or sterility
2. Ulnar nerve syndrome
3. Carpal tunnel syndrome
4. Cataracts

Correct Answer: 3

Rationale 1: Research has not established any clear links between computer use and miscarriage or sterility. Carpal tunnel syndrome, a repetitive-stress injury, has been researched and documented as occurring with computer use.

Rationale 2: Research has not established any clear links between computer use and ulnar nerve syndrome. Carpal tunnel syndrome, a repetitive-stress injury, has been researched and documented as occurring with computer use.

Rationale 3: Correct. Carpal tunnel syndrome, a repetitive-stress injury, has been researched and documented as occurring with computer use.

Rationale 4: Research has not established any clear links between computer use and cataracts. Carpal tunnel syndrome, a repetitive-stress injury, has been researched and documented as occurring with computer use.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: MCSA

Health care information plans include adding super users to the hospital staff. Which person is most appropriate for this role?

1. An experienced staff nurse who has been employed at the institution for three years
2. An informatics nurse specialist with a master's degree and informatics certification
3. A newly hired charge nurse who has practiced for ten years in an intensive care unit
4. A clinical nurse specialist for three departments, employed at the institution for six years

Correct Answer: 1

Rationale 1: Correct. An experienced staff nurse who has clinical experience in the institution would be very useful as a resource person.

Rationale 2: An informatics nurse specialist with a master's degree and certification in informatics would not know the clinical area well enough or be able to answer questions from users about the hospital. An experienced staff nurse who has clinical experience in the institution would be very useful as a resource person.

Rationale 3: A newly hired charge nurse who has practiced for ten years in an intensive care unit would not know the clinical area well enough or be able to answer questions from users about the hospital computer system. An experienced staff nurse who has clinical experience in the institution would be very useful as a resource person.

Rationale 4: The clinical nurse specialist for three departments who has been employed at the institution for six years would not know the clinical area well enough or be able to answer questions from users about the hospital.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 4

Type: MCSA

Which example best fits the description of a local area network (LAN)?

1. One server communicates with multiple PCs and printers
2. Office computers are connected through the use of the Internet
3. Client computers are interconnected with multiple servers
4. Internet technology is used to communicate with hospital suppliers

Correct Answer: 1

Rationale 1: A local area network connects multiple PCs and printers to create a shared system.

Rationale 2: The Internet actually consists of thousands of interconnected networks. A LAN is confined to a single building or campus and has only one server.

Rationale 3: Networks with multiple servers are known as wide area networks (WANs). A LAN has only one server.

Rationale 4: The Internet actually consists of thousands of interconnected networks. A LAN is confined to a single building or campus and has only one server.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCSA

In which instance is using a wireless device an advantage for health care provider staff?

1. More memory is needed to input data for glucose monitoring and insulin coverage.
2. Error reduction is needed to input data, such as vital signs from a client's isolation room.
3. A larger screen is needed to track data, such as medication administration times with vital signs.
4. An increase in security is needed to prevent physician orders from being intercepted on the Intranet.

Correct Answer: 2

Rationale 1: A wireless device is an advantage for a client's isolation room. Wireless technology may be used at the bedside to facilitate data entry at the point-of-care. However, disadvantages of wireless devices include the potential for data interception, less available memory, and smaller screens.

Rationale 2: Correct. A wireless device is an advantage for a client's isolation room. Wireless technology may be used at the bedside to facilitate data entry at the point-of-care. However, disadvantages of wireless devices include the potential for data interception, less available memory, and smaller screens.

Rationale 3: A wireless device is an advantage for a client's isolation room. Wireless technology may be used at the bedside to facilitate data entry at the point-of-care. However, disadvantages of wireless devices include the potential for data interception, less available memory, and smaller screens.

Rationale 4: A wireless device is an advantage for a client's isolation room. Wireless technology may be used at the bedside to facilitate data entry at the point-of-care. However, disadvantages of wireless devices include the potential for data interception, less available memory, and smaller screens.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCSA

Which of these is the most flexible and reliable secondary storage device?

1. DVD drive
2. Magnetic tape drive
3. CD-ROM drive
4. Zip drive

Correct Answer: 1

Rationale 1: Correct. The most flexible and reliable secondary storage device is DVD drives; they can read CD disks as well. Zip drives are used to store and transfer data but storage is limited. Magnetic tape drives store data and can be used to back up or transfer data.

Rationale 2: The most flexible and reliable secondary storage device is DVD drives; they can read CD disks as well. Zip drives are used to store and transfer data but storage is limited. Magnetic tape drives store data and can be used to back up or transfer data.

Rationale 3: The most flexible and reliable secondary storage device is DVD drives; they can read CD disks as well. Zip drives are used to store and transfer data but storage is limited. Magnetic tape drives store data and can be used to back up or transfer data.

Rationale 4: The most flexible and reliable secondary storage device is DVD drives; they can read CD disks as well. Zip drives are used to store and transfer data but storage is limited. Magnetic tape drives store data and can be used to back up or transfer data.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 7

Type: MCSA

Which of these is an advantage in the use of personal digital assistants (PDAs) in the health care setting?

1. PDAs may be synchronized with any network without the use of special equipment or software.
2. PDAs minimize the chance of interception of data transmission.
3. Current medication information may be easily stored and compared to actual client data.
4. Data loss is minimized due to long battery life and ease of backups.

Correct Answer: 3

Rationale 1: An advantage in the use of PDAs is that current medication information may be easily stored and compared to actual client data. Synchrony with other computers may require special equipment. Information may still be intercepted, and battery life varies greatly.

Rationale 2: An advantage in the use of PDAs is that current medication information may be easily stored and compared to actual client data. Even though a PDA only transmits data over short distances, synchrony with other computers may require special equipment. Information may still be intercepted, and battery life varies greatly.

Rationale 3: Correct. An advantage in the use of PDAs is that current medication information may be easily stored and compared to actual client data. Synchrony with other computers may require special equipment. Information may still be intercepted, and battery life varies greatly.

Rationale 4: An advantage in the use of PDAs is that current medication information may be easily stored and compared to actual client data. Synchrony with other computers may require special equipment. Information may still be intercepted, and battery life varies greatly.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCSA

Research best supports the use of which ergonomic device?

1. Ergonomic mouse to reduce wrist and hand pain
2. Support brace used while typing to prevent carpal tunnel syndrome

3. Lumbar back support to maintain natural curves of the back
4. Wrist rests to support the wrists while inputting data and typing

Correct Answer: 3

Rationale 1: Only the lumbar back support has been documented to reduce strain and minimize back pain. The others have not consistently tested as helpful.

Rationale 2: Only the lumbar back support has been documented to reduce strain and minimize back pain. The others have not consistently tested as helpful.

Rationale 3: Correct. Only the lumbar back support has been documented to reduce strain and minimize back pain. The others have not consistently tested as helpful.

Rationale 4: Only the lumbar back support has been documented to reduce strain and minimize back pain. The others have not consistently tested as helpful.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 9

Type: MCSA

Many workstations house clinical information systems and provide Internet access in the acute care setting. Which type of software program is most likely to be used by the health care staff providing direct patient care?

1. A programming language such as Java to access the Internet
2. A virus checker to increase security for Internet connections
3. A programming language such as COBOL to create databases
4. A programming language such as Visual Basic to enter data

Correct Answer: 2

Rationale 1: A virus checker to increase security for Internet connections is the most likely to be used by health care staff providing direct patient care. Utility programs may be used to increase

security and prevent data from falling into the wrong hands. Programming languages such as Visual Basic, COBOL, or Java are used in specialty applications.
(Reference: textbook Table 2-2 Examples of Ergonomic Devices.)

Rationale 2: Correct. A virus checker to increase security for Internet connections is the most likely to be used by health care staff providing direct patient care. Utility programs may be used to increase security and prevent data from falling into the wrong hands. Programming languages such as Visual Basic, COBOL, or Java are used in specialty applications.
(Reference: textbook Table 2-2 Examples of Ergonomic Devices.)

Rationale 3: A virus checker to increase security for Internet connections is the most likely to be used by health care staff providing direct patient care. Utility programs may be used to increase security and prevent data from falling into the wrong hands. Programming languages such as Visual Basic, COBOL, or Java are used in specialty applications.
(Reference: textbook Table 2-2 Examples of Ergonomic Devices.)

Rationale 4: A virus checker to increase security for Internet connections is the most likely to be used by health care staff providing direct patient care. Utility programs may be used to increase security and prevent data from falling into the wrong hands. Programming languages such as Visual Basic, COBOL, or Java are used in specialty applications.
(Reference: textbook Table 2-2 Examples of Ergonomic Devices.)

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: FIB

_____ is the science and technology of engineering devices at the molecular level.

Standard Text:

Correct Answer: Nanotechnology

Rationale : Nanotechnology is the science and technology of engineering devices at the molecular level.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: MCSA

Which statement best describes the role of the chief privacy officer (CPO)?

1. Duties include protection of the personal health information of patients, both electronic and paper
2. Duties include strategic planning, information security, and overall management of the information system
3. Duties include assigning and monitoring system access identification codes and passwords
4. Duties include design, maintenance, and security of materials placed on the Internet, intranet, and extranet

Correct Answer: 1

Rationale 1: Correct. A CPO is mandated by federal legislation to protect personal health information of patients; this includes both paper and electronic information. CPO duties include strategic planning, information security, and overall management of the information system. A webmaster is responsible for the design, maintenance, and security of materials placed on the Internet. The security officer's duties include assigning and monitoring system access identification codes and passwords.

Rationale 2: A CPO is mandated by federal legislation to protect personal health information of patients; this includes both paper and electronic information. CPO duties include strategic planning, information security, and overall management of the information system. A webmaster is responsible for the design, maintenance, and security of materials placed on the Internet. The security officer's duties include assigning and monitoring system access identification codes and passwords.

Rationale 3: A CPO is mandated by federal legislation to protect personal health information of patients; this includes both paper and electronic information. CPO duties include strategic planning, information security, and overall management of the information system. A webmaster is responsible for the design, maintenance, and security of materials placed on the Internet. The security officer's duties include assigning and monitoring system access identification codes and passwords.

Rationale 4: A CPO is mandated by federal legislation to protect personal health information of patients; this includes both paper and electronic information. CPO duties include strategic planning, information security, and overall management of the information system. A webmaster is responsible for the design, maintenance, and security of materials placed on the Internet. The security officer's duties include assigning and monitoring system access identification codes and passwords.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 12

Type: MCSA

What is the one byte binary code representation for the Arabic number 8?

1. 1000
2. 00001000
3. 2222
4. 11111111

Correct Answer: 2

Rationale 1: Binary code is a series of 1s and 0s called bits, and one byte contains 8 bits. The binary system is positional with each position's value increasing by the power of 2.

The right most position value is 2^0 or 1 and continuing to the left the values would be $2^1 = 2$, $2^2 = 4$, $2^3 = 8$ and so on. The Arabic number represented is the sum of the powers of 2 represented by the 0s and 1s. The sum of the powers of binary 00001000 is $0 + 0 + 0 + 0 + 8 + 0 + 0 + 0 = 8$, so the correct choice for representing the Arabic number 8 is the binary code 00001000. The binary code 1000 represents the Arabic number 8 but is not a byte.

(Reference: textbook Figure 2-3 [Internal view of a PC] will show some items that may be inside a computer cabinet.)

Rationale 2: Binary code is a series of 1s and 0s called bits, and one byte contains 8 bits. The binary system is positional with each position's value increasing by the power of 2. The right most position value is 2^0 or 1 and continuing to the left the values would be $2^1 = 2$, $2^2 = 4$, $2^3 = 8$ and so on. The Arabic number represented is the sum of the powers of 2 represented by the 0s and 1s. The sum of the powers of binary 00001000 is $0 + 0 + 0 + 0 + 8 + 0 + 0 + 0 = 8$, so the

correct choice for representing the Arabic number 8 is the binary code 00001000.

(Reference: textbook Figure 2-3 [Internal view of a PC] will show some items that may be inside a computer cabinet.)

Rationale 3: Binary code is a series of 1s and 0s called bits, and one byte contains 8 bits. The binary system is positional with each position's value increasing by the power of 2.

The right most position value is 2^0 or 1 and continuing to the left the values would be $2^1 = 2$, $2^2 = 4$, $2^3 = 8$ and so on. The Arabic number represented is the sum of the powers of 2 represented by the 0s and 1s. The sum of the powers of binary 00001000 is $0 + 0 + 0 + 0 + 8 + 0 + 0 + 0 = 8$, so the correct choice for representing the Arabic number 8 is the binary code 00001000. The numeral 2 is not used in writing binary code.

(Reference: textbook Figure 2-3 [Internal view of a PC] will show some items that may be inside a computer cabinet.)

Rationale 4: Binary code is a series of 1s and 0s called bits, and one byte contains 8 bits. The binary system is positional with each position's value increasing by the power of 2.

The right most position value is 2^0 or 1 and continuing to the left the values would be $2^1 = 2$, $2^2 = 4$, $2^3 = 8$ and so on. The Arabic number is the sum of the powers of 2 represented by the 0s and 1s. The sum of the powers of binary 11111111 is $128 + 64 + 32 + 16 + 8 + 4 + 2 + 1 = 255$. The sum of the powers of binary 00001000 is $0 + 0 + 0 + 0 + 8 + 0 + 0 + 0 = 8$, so the correct choice for representing the Arabic number 8 is the binary code 00001000.

(Reference: textbook Figure 2-3 [Internal view of a PC] will show some items that may be inside a computer cabinet.)

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 13

Type: FIB

_____ is defined as an electronic circuitry that executes computer instructions.

Standard Text:

Correct Answer: Central Processing Unit (CPU)

Rationale :

Central Processing Unit (CPU) is defined as electronic circuitry that executes computer instructions.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 14

Type: MCSA

Which of the following is not a common input device?

1. Network
2. Keyboard
3. Webcam
4. Joystick

Correct Answer: 1

Rationale 1: Input devices allow the user to feed data into the computer. Common input devices include the keyboard, mouse and trackball, touch sensitive screen, stylus, microphone, bar code reader, fax modem card, joystick, image scanner, fingerprint scanner, digital camera, and webcam. A network is not an input device.

Rationale 2: Input devices allow the user to feed data into the computer. Common input devices include the keyboard, mouse and trackball, touch sensitive screen, stylus, microphone, bar code reader, fax modem card, joystick, image scanner, fingerprint scanner, digital camera, and webcam.

Rationale 3: Input devices allow the user to feed data into the computer. Common input devices include the keyboard, mouse and trackball, touch sensitive screen, stylus, microphone, bar code reader, fax modem card, joystick, image scanner, fingerprint scanner, digital camera, and webcam.

Rationale 4: Input devices allow the user to feed data into the computer. Common input devices include the keyboard, mouse and trackball, touch sensitive screen, stylus, microphone, bar code reader, Fax modem card, joystick, image scanner, fingerprint scanner, digital camera, and webcam.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 15

Type: MCSA

Which of the following best describes RAID technology?

1. The computer shuts down when a single disk fails.
2. Community clinics use a primary data storage drive.
3. RAID costs more than using one large disk drive.
4. Duplicate disks mirror copies of data.

Correct Answer: 4

Rationale 1: RAID is a secondary storage technology that uses duplicate disks to mirror copies of data. Using RAID may be less costly than using one large disk drive. In the event that an individual disk fails, the remaining RAID would permit the computer to continue working uninterrupted.

Rationale 2: RAID is secondary storage technology that uses duplicate disks to mirror copies of data. Using RAID may be less costly than using one large disk drive. In the event that an individual disk fails, the remaining RAID would permit the computer to continue working uninterrupted.

Rationale 3: RAID is a secondary storage technology that uses duplicate disks to mirror copies of data. Using RAID may be less costly than using one large disk drive. In the event that an individual disk fails, the remaining RAID would permit the computer to continue working uninterrupted.

Rationale 4: RAID is secondary storage technology that uses duplicate disks to mirror copies of data. Using RAID may be less costly than using one large disk drive. In the event that an individual disk fails, the remaining RAID would permit the computer to continue working uninterrupted.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 16

Type: MCSA

Which of the following best describes an intranet?

1. The largest and best known electronic network in the world
2. Limited to systems affiliated with education and government agencies
3. A network outside of the hospital system for use by customers or suppliers
4. A private hospital system that is protected from outside access

Correct Answer: 4

Rationale 1: Intranets are private company networks that are protected from outside access. A network outside of the company system for use by customers or suppliers would be an extranet. The largest and best known network in the world is the Internet. The Internet was once limited to individuals affiliated with educational institutions and government agencies, but access is now available to the public.

Rationale 2: Intranets are private company networks that are protected from outside access. A network outside of the company system for use by customers or suppliers would be an extranet. The largest and best known network in the world is the Internet. The Internet was once limited to individuals affiliated with educational institutions and government agencies, but access is now available to the public.

Rationale 3: Intranets are private company networks that are protected from outside access. A network outside of the company system for use by customers or suppliers would be an extranet. The largest and best known network in the world is the Internet. The Internet was once limited to individuals affiliated with educational institutions and government agencies, but access is now available to the public.

Rationale 4: Intranets are private company networks that are protected from outside access. A network outside of the company system for use by customers or suppliers would be an extranet. The largest and best known network in the world is the Internet. The Internet was once limited to individuals affiliated with educational institutions and government agencies, but access is now available to the public.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 17

Type: MCSA

What are the two types of memory categories?

1. Control and central processing units
2. Read-only memory (ROM) and Random access memory (RAM)
3. Flash drives and user ports
4. CDROMs and DVDs

Correct Answer: 2

Rationale 1: Random access memory (RAM) is a temporary storage area that is active only while the computer is turned on. It provides storage for the program that is running, as well as for the data that are being processed. Read-only memory (ROM) is permanent; it remains when the power is off. It typically cannot be changed by the user unless additional memory is installed. ROM contains start-up instructions that are executed each time the computer is turned on.

Rationale 2: RAM is a temporary storage area that is active only while the computer is turned on. It provides storage for the program that is running, as well as for the data that are being processed. ROM is permanent; it remains when the power is off. It typically cannot be changed by the user unless additional memory is installed. ROM contains start-up instructions that are executed each time the computer is turned on.

Rationale 3: Random access memory (RAM) is a temporary storage area that is active only while the computer is turned on. It provides storage for the program that is running, as well as for the data that are being processed. Read-only memory (ROM) is permanent; it remains when the power is off. It typically cannot be changed by the user unless additional memory is installed. ROM contains start-up instructions that are executed each time the computer is turned on.

Rationale 4: Random access memory (RAM) is a temporary storage area that is active only while the computer is turned on. It provides storage for the program that is running, as well as for the data that are being processed. Read-only memory (ROM) is permanent; it remains when the power is off. It typically cannot be changed by the user unless additional memory is installed. ROM contains start-up instructions that are executed each time the computer is turned on.

Global Rationale:

Cognitive Level: Understanding
Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Teaching and Learning
Learning Outcome:

Question 18

Type: MCSA

Which of the following statements is correct about Blu-ray?

1. Blu-ray is a system that has replaced the optical scanner.
2. Blu-ray is a high density optical disc format; rival to HD-DVD.
3. Blu-ray functions are yet to be incorporated in health care systems.
4. Blu-ray has been designed to store data collected at the bedside.

Correct Answer: 2

Rationale 1: Blu-ray is a high-density optical disc format; rival to HD-DVD.

Rationale 2: Blu-ray is a high-density optical disc format; rival to HD-DVD.

Rationale 3: Blu-ray is a high-density optical disc format; rival to HD-DVD.

Rationale 4: Blu-ray is a high-density optical disc format; rival to HD-DVD.

Global Rationale:

Cognitive Level: Understanding
Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Teaching and Learning
Learning Outcome:

Question 19

Type: MCSA

Which of the following statements is true about portable or laptop computers?

1. Portable or laptop computers are unnecessary at the bedside.

2. Portable or laptop computers can be connected to networks or peripheral devices through the use of a Personal Computer Memory Card International Association (PCMCIA) card.
3. Portable or laptop computers have been replaced by smaller handheld devices.
4. Portable or laptop computers do not have enough memory to effectively store clinical data.

Correct Answer: 2

Rationale 1: Portable or laptop computers can be connected to networks or peripheral devices through the use of a Personal Computer Memory Card International Association (PCMCIA) card. These cards can be inserted into a slot in the case of the laptop computer.

Rationale 2: Portable or laptop computers can be connected to networks or peripheral devices through the use of a Personal Computer Memory Card International Association (PCMCIA) card. These cards can be inserted into a slot in the case of the laptop computer.

Rationale 3: Portable or laptop computers can be connected to networks or peripheral devices through the use of a Personal Computer Memory Card International Association (PCMCIA) card. These cards can be inserted into a slot in the case of the laptop computer.

Rationale 4: Portable or laptop computers can be connected to networks or peripheral devices through the use of a Personal Computer Memory Card International Association (PCMCIA) card. These cards can be inserted into a slot in the case of the laptop computer.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 20

Type: MCSA

Which of the following responses is most accurate in describing "thin client" or "fat client"?

1. The "thin client" is primarily a display, keyboard, and mouse or other pointing device.
2. "Fat" client technology is also known as server-based computing.
3. "Fat" client technology represents networking model that relies on highly efficient servers.

4. "Thin" client technology used in traditional client/server networks has local drives or storage devices.

Correct Answer: 1

Rationale 1: The thin client is primarily a display, keyboard, and mouse or other pointing device. The minimal hardware requirements for this model give rise to the name "thin client" as opposed to "fat client," as seen in traditional client/server technology. PCs used in traditional client/server networks had local drives or storage devices so they are referred to as fat clients.

Rationale 2: The thin client is primarily a display, keyboard, and mouse or other pointing device. The minimal hardware requirements for this model give rise to the name "thin client" as opposed to "fat client," as seen in traditional client/server technology. PCs used in traditional client/server networks had local drives or storage devices so they are referred to as fat clients.

Rationale 3: The thin client is primarily a display, keyboard, and mouse or other pointing device. The minimal hardware requirements for this model give rise to the name "thin client" as opposed to "fat client," as seen in traditional client/server technology. PCs used in traditional client/server networks had local drives or storage devices so they are referred to as fat clients.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 21

Type: MCSA

Handheld or personal digital assistants (PDAs) are more visible in the health care system. Which of the following answers best describes an advantage of using a PDA?

1. A PDA is easily transported to the point of care.
2. The probability of theft is high; therefore, nurses can keep the device in their pockets.
3. The PDA has a small screen size.

4. PDAs can hold up to rough use.

Correct Answer: 1

Rationale 1: A PDA is lightweight and portable and can be transported with ease to the bedside.

Rationale 2: Being concerned about theft is not an advantage of the PDA.

Rationale 3: A PDA with a small screen size is not an advantage and could limit the nurse's ability to read the screen.

Rationale 4: PDAs are to be treated with care and cannot tolerate rough use.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 22

Type: FIB

A _____ is a combination of hardware and software that allows communication and electronic transfer of information between computers.

Standard Text:

Correct Answer: network

Rationale : A network is a combination of hardware and software that allows communication and electronic transfer of information between computers.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 23

Type: MCSA

Selecting a computer system depends primarily on the needs and expectations of the organization. Which of the following choices are not relevant in the decision making process?

1. Applications needed to accomplish goals
2. Back up options
3. Cost
4. The computer literacy of the nursing staff

Correct Answer: 4

Rationale 1: Decision makers are called to identify the needs of the organization before selecting a computer system. The system is then tailored to the organizational goals.

Rationale 2: When selecting a computer system, the back up of files and documents are placed on the agenda and examined for relevance. In health care settings, it is essential to have a mechanism to back up all generated files.

Rationale 3: The cost of computer systems can rise to millions of dollars depending on the needs and size of the institution. Therefore, cost and its impact on the budget are important considerations when choosing a system.

Rationale 4: The computer literacy of the nursing staff is not an essential component when selecting a network or computer system for a health care setting. Nurses can be trained to use the hardware and software through a series of continuing education or staff development programs.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 24

Type: MCSA

A set of instructions that communicates with the computer and tells it what to do is called which of the following?

1. Software
2. Manual

3. Hardware

4. Input devices

Correct Answer: 1

Rationale 1: Software is a set of instructions that tells the computer what to do. Software is available in the forms of programs and applications.

Rationale 2: A paper manual can be used as a teaching tool for the user. A manual does not directly communicate with the computer.

Rationale 3: Computer hardware is the physical part of the computer and its associated equipment. Computer hardware consists of many different parts, but the main elements are input devices, the central processing unit, primary and secondary storage devices, and output devices. These devices may be contained within one shell or may be separate but connected via cables or infrared technology.

Rationale 4: Input devices allow the user to feed data into the computer. Common input devices include the keyboard, mouse and trackball, touch sensitive screen, stylus, microphone, bar code reader, fax modem card, joystick, image scanner, fingerprint scanner, digital camera, and webcam.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 25

Type: MCSA

The primary disadvantage to client/server technology is which of the following?

1. Cost
2. Vulnerability
3. Computer education
4. Staff resistance to change

Correct Answer: 2

Rationale 1: Cost is a factor when selecting a system and, therefore, is not a disadvantage.

Rationale 2: Vulnerability arises with an increase in the number of users on any network system. More users increase in the opportunities to compromise data.

Rationale 3: Educating the staff to use the computer with confidence is not considered a disadvantage to client/server technology.

Rationale 4: Staff resistance can be overcome by incorporating their input in the design and needs of the system. Resistance itself can be a useful tool when defining the needs of the organization as naysayers may pose ideas not considered by the selection team.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 26

Type: MCSA

Which of the following terms serves as a set of programs designed to accomplish a particular task such as word processing, financial management, or drawing?

1. Application software
2. Vista
3. XP
4. Windows

Correct Answer: 1

Rationale 1: Application software that includes word processing, presentation graphics, spreadsheets, databases, and desktop publishing is considered software.

Rationale 2: Application software that includes word processing, presentation graphics, spreadsheets, databases, and desktop publishing is considered software.

Rationale 3: Application software that includes word processing, presentation graphics, spreadsheets, databases, and desktop publishing is considered software.

Rationale 4: Application software that includes word processing, presentation graphics, spreadsheets, databases, and desktop publishing is considered software.

Chapter 3 Computer Science and the Foundation of Knowledge Model

Question 1

Type: MCSA

Which of the following is considered a threat to information quality?

1. An unauthorized user hacks into the system to review the clients' records
2. Not verifying information as correct prior to entry
3. An earthquake interrupts the power supply and causes data loss
4. A wireless transmission is intercepted to review a new client's records.

Correct Answer: 2

Rationale 1: Hackers are a threat to confidentiality. The correct response is a failure to enter data correctly which is a very serious threat to the quality of information.

Rationale 2: Failing to enter data correctly is a very serious threat to the quality of information and "garbage in" equals "garbage out". Interruption of a power supply is a threat to information availability; and hackers and wireless interceptions are threats to confidentiality.

Rationale 3: Interruption of a power supply is a threat to information availability. The correct response is a failure to enter data correctly which is a very serious threat to the quality of information.

Rationale 4: Wireless interception is a threat to confidentiality. The correct response is a failure to enter data correctly which is a very serious threat to the quality of information.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: MCSA

In which instance is using the technique of data mining most appropriate?

1. To document quality improvement when problems are identified and targeted on a medical-surgical unit
2. To find the appropriate treatment for a client with advanced lung cancer
3. To identify an appropriate diagnosis for a client with undetermined signs and symptoms
4. To assist in the determination of the correct dose of medication to give a client in congestive heart failure

Correct Answer: 1

Rationale 1: Data mining is a technique that is used to look for hidden patterns and relationships in large groups of data, not specific cases.

Rationale 2: Data mining is a technique that is used to look for hidden patterns and relationships in large groups of data, not specific cases.

Rationale 3: Data mining is a technique that is used to look for hidden patterns and relationships in large groups of data, not specific cases.

Rationale 4: Data mining is a technique that is used to look for hidden patterns and relationships in large groups of data, not specific cases.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: MCSA

Which of the following is an example of data cleansing or scrubbing?

1. Abbreviations are compared using software to ensure standard language is used.
2. When the name of the admitting physician is blank, the primary physician is used by default.

3. Users may sort and compare data to determine relationships.
4. Data are used to identify standardized treatments for specific diseases.

Correct Answer: 1

Rationale 1: Data cleansing or scrubbing is a procedure that uses software to improve the quality of data to ensure that it is accurate enough for use in data mining and warehousing. It uses technology to reconcile data inconsistencies that arise from different systems as well as duplicate entries in one system. These inconsistencies may include typographical errors, misspellings, and various abbreviations as well as address changes.

Rationale 2: Data cleansing or scrubbing is a procedure that uses software to improve the quality of data to ensure that it is accurate enough for use in data mining and warehousing. It uses technology to reconcile data inconsistencies that arise from different systems as well as duplicate entries in one system. These inconsistencies may include typographical errors, misspellings, and various abbreviations as well as address changes.

Rationale 3: Data cleansing or scrubbing is a procedure that uses software to improve the quality of data to ensure that it is accurate enough for use in data mining and warehousing. It uses technology to reconcile data inconsistencies that arise from different systems as well as duplicate entries in one system. These inconsistencies may include typographical errors, misspellings, and various abbreviations as well as address changes.

Rationale 4: Data cleansing or scrubbing is a procedure that uses software to improve the quality of data to ensure that it is accurate enough for use in data mining and warehousing. It uses technology to reconcile data inconsistencies that arise from different systems as well as duplicate entries in one system. These inconsistencies may include typographical errors, misspellings, and various abbreviations as well as address changes.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: MCSA

Which of the following is a key motivation to outsource data storage?

1. To allow company personnel to maintain their positions in the company

2. To contract with company employees to maintain their loyalty
3. To reduce costs required for data storage and maintenance
4. To maintain data storage on site with the least amount of effort

Correct Answer: 3

Rationale 1: Outsourcing is a method by which outside companies specializing in data management techniques may take on responsibilities such as data storage for lower costs, since the companies are highly efficient in one or two areas of data management.

Rationale 2: Outsourcing is a method by which outside companies specializing in data management techniques may take on responsibilities such as data storage for lower costs, since the companies are highly efficient in one or two areas of data management.

Rationale 3: Outsourcing is a method by which outside companies specializing in data management techniques may take on responsibilities such as data storage for lower costs, since the companies are highly efficient in one or two areas of data management.

Rationale 4: Outsourcing is a method by which outside companies specializing in data management techniques may take on responsibilities such as data storage for lower costs, since the companies are highly efficient in one or two areas of data management.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCSA

When is it more appropriate to use online storage as compared to offline storage?

1. Safety of backup materials is a must
2. Long-term data storage is required for old records
3. Old client records should be kept more safely
4. Immediate access to data may be needed

Correct Answer: 4

Rationale 1: Online storage provides immediate access to current data. Offline storage is useful to archive data for long-term storage, maintain old records, and keep backups safely.

Rationale 2: Online storage provides immediate access to current data. Offline storage is useful to archive data for long-term storage, maintain old records, and keep backups safely.

Rationale 3: Online storage provides immediate access to current data. Offline storage is useful to archive data for long-term storage, maintain old records, and keep backups safely.

Rationale 4: Online storage provides immediate access to current data. Offline storage is useful to archive data for long-term storage, maintain old records, and keep backups safely.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCSA

Data integrity may be affected by how data is stored. Which of the following storage methods is the most reliable?

1. Portable hard drive with removable disk
2. Optical media and disks
3. Magnetic tape or cartridges
4. Redundant Array of Disks (RAID)

Correct Answer: 4

Rationale 1: RAID technology uses two or more hard drives that are interconnected to duplicate data. Magnetic tapes, optical media, and portable hard drives do not automatically store duplicate copies of data.

Rationale 2: RAID technology uses two or more hard drives that are interconnected to duplicate data. Magnetic tapes, optical media, and portable hard drives do not automatically store duplicate copies of data.

Rationale 3: RAID technology uses two or more hard drives that are interconnected to duplicate data. Magnetic tapes, optical media, and portable hard drives do not automatically store duplicate copies of data.

Rationale 4: RAID technology uses two or more hard drives that are interconnected to duplicate data. Magnetic tapes, optical media, and portable hard drives do not automatically store duplicate copies of data.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 7

Type: MCSA

Which of the following is an example of a system check?

1. When a duplicate entry is entered into the system, that entry is immediately deleted.
2. The nurse asks clients to verify their names when prompted by the computer system.
3. After turning on the bedside computer, the system performs a self-check before data will input.
4. Software in the system automatically corrects misspelled words and abbreviations.

Correct Answer: 2

Rationale 1: System checks are programmed into the computer to assist in data collection and verification at the point of entry. The health care worker will be prompted to verify or confirm information that seems inappropriate.

Rationale 2: System checks are programmed into the computer to assist in data collection and verification at the point of entry. The health care worker will be prompted to verify or confirm information that seems inappropriate.

Rationale 3: System checks are programmed into the computer to assist in data collection and verification at the point of entry. The health care worker will be prompted to verify or confirm information that seems inappropriate.

Rationale 4: System checks are programmed into the computer to assist in data collection and verification at the point of entry. The health care worker will be prompted to verify or confirm information that seems inappropriate.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCSA

Data verification techniques are important to ensure data accuracy. For which of the following clients is data verification most difficult?

1. A client who is visually impaired can verbalize which data are correct and incorrect.
2. A client who is hard of hearing can read and confirm printouts of entered data.
3. A client who does not speak English can point to the screen to verify correct data.
4. A client who is unable to read can affirm verbally that the information is correct.

Correct Answer: 3

Rationale 1: For non-English speaking persons, all data verification techniques are at highest risk for improper verification. Proof of identification or a translator may be needed to ensure accuracy.

Rationale 2: For non-English speaking persons, all data verification techniques are at highest risk for improper verification. Proof of identification or a translator may be needed to ensure accuracy.

Rationale 3: For non-English speaking persons, all data verification techniques are at highest risk for improper verification. Proof of identification or a translator may be needed to ensure accuracy.

Rationale 4: For non-English speaking persons, all data verification techniques are at highest risk for improper verification. Proof of identification or a translator may be needed to ensure accuracy.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 9

Type: MCSA

Which type of storage document is most accurate and improves access to records?

1. Immediate entry of data into automated systems
2. Films of old records converted from old client paper records
3. Document imaging and scanning of old client paper records
4. Original paper records from old client charts

Correct Answer: 1

Rationale 1: Although more costly in the long run, automation of records is efficient and allows for better access. Other types of records require more storage space and it can be difficult to find the exact record desired.

Rationale 2: Although more costly in the long run, automation of records is efficient and allows for better access. Other types of records require more storage space and it can be difficult to find the exact record desired.

Rationale 3: Although more costly in the long run, automation of records is efficient and allows for better access. Other types of records require more storage space and it can be difficult to find the exact record desired.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: MCSA

Which of the following is a result of the shift toward evidence-based practice in health care?

1. Quality of clinical data collected is not as important as the quantity of the data because AI can extract needed information.
2. Data mining has reduced the need for special analysis and statistics.
3. Dependence on information derived from examining patterns and relationships in data has increased.
4. The need for primary data storage has increased while the need for secondary data storage has decreased.

Correct Answer: 3

Rationale 1: The shift toward evidence-based practice and outcomes research requires a massive amount of clinical data and the amount of data collected and stored is growing exponentially. This process requires the collection of the right information in its entirety. Special analysis using statistics, artificial intelligence, and machine learning technologies are needed to provide useful information about patterns and relationships.

Rationale 2: The shift toward evidence-based practice and outcomes research requires a massive amount of clinical data and the amount of data collected and stored is growing exponentially. This process requires the collection of the right information in its entirety. Special analysis using statistics, artificial intelligence, and machine learning technologies are needed to provide useful information about patterns and relationships.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 11

Type: MCSA

A relational database is a type of database that is specifically designed for which of the following?

1. Accessing data stored in multiple databases
2. Exclusive use of a database administrator (DBA)
3. Answering complex analytical questions
4. Using data that are represented as tables

Correct Answer: 4

Rationale 1: A relational database is designed for using data that are represented as tables. A data warehouse is a repository for storing data from several different databases so that it can be combined and manipulated to provide answers to complex analytic questions. Several levels of personnel are involved in data management and the database administrator (DBA) is specifically responsible for overseeing all activities related to maintaining the database.

Rationale 2: A relational database is designed for using data that are represented as tables. A data warehouse is a repository for storing data from several different databases so that it can be combined and manipulated to provide answers to complex analytic questions. Several levels of personnel are involved in data management and the DBA is specifically responsible for overseeing all activities related to maintaining the database.

Rationale 3: A relational database is designed for using data that are represented as tables. A data warehouse is a repository for storing data from several different databases so that it can be combined and manipulated to provide answers to complex analytic questions. Several levels of personnel are involved in data management and the database administrator (DBA) is specifically responsible for overseeing all activities related to maintaining the database.

Rationale 4: A relational database is designed for using data that are represented as tables. A data warehouse is a repository for storing data from several different databases so that it can be combined and manipulated to provide answers to complex analytic questions. Several levels of personnel are involved in data management and the database administrator (DBA) is specifically responsible for overseeing all activities related to maintaining the database.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: MCSA

The rate of suspected adverse drug reaction (ADR) among clients in the maternity unit is climbing. The nurse manager is aware that a World Health Organization (WHO) ADR database analyzes millions of suspected ADR reports in order to uncover new adverse effects. This WHO tracking is an example of which of the following?

1. Data scrubbing
2. Data mining
3. Knowledge discovery
4. Electronic data interchange

Correct Answer: 3

Rationale 1: Knowledge discovery is defined as "the non-trivial extraction of implicit, unknown, and potentially useful information from data." Data mining is a technique that uses software to look for hidden patterns and relationships in large groups of data. Data cleansing or scrubbing is a procedure that uses software to improve the quality of data to ensure that it is accurate enough for use in data mining and warehousing. Electronic data interchange streamlines the flow of clinical and financial data from one location to another.

Rationale 2: Knowledge discovery is defined as "the non-trivial extraction of implicit, unknown, and potentially useful information from data." Data mining is a technique that uses software to look for hidden patterns and relationships in large groups of data. Data cleansing or scrubbing is a procedure that uses software to improve the quality of data to ensure that it is accurate enough for use in data mining and warehousing. Electronic data interchange streamlines the flow of clinical and financial data from one location to another.

Rationale 3: Knowledge discovery is defined as "the non-trivial extraction of implicit, unknown, and potentially useful information from data." Data mining is a technique that uses software to look for hidden patterns and relationships in large groups of data. Data cleansing or scrubbing is a procedure that uses software to improve the quality of data to ensure that it is accurate enough for use in data mining and warehousing. Electronic data interchange streamlines the flow of clinical and financial data from one location to another.

Rationale 4: Knowledge discovery is defined as "the non-trivial extraction of implicit, unknown, and potentially useful information from data." Data mining is a technique that uses software to look for hidden patterns and relationships in large groups of data. Data cleansing or scrubbing is a procedure that uses software to improve the quality of data to ensure that it is accurate enough for use in data mining and warehousing. Electronic data interchange streamlines the flow of clinical and financial data from one location to another.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 13

Type: MCSA

Which of the following will have the greatest impact on data integrity?

1. The computer system goes down but is completely restored within one minute.
2. A nurse collects data related to allergies but fails to document all reported allergies.
3. A clinic manager uses secondary storage for storing clinical records offline.
4. A number of printed media clinical records are discarded in the regular trash dumpster.

Correct Answer: 2

Rationale 1: Data integrity refers to the ability to collect, store, and retrieve correct, complete, and current data so that it will be available to authorized users when needed. If the data are faulty or incomplete, the quality of derived information may be poor, resulting in decisions that may be inappropriate and possibly harmful to clients. A one minute computer outage would disrupt operations but would not necessarily impact data integrity.

Rationale 2: Data integrity refers to the ability to collect, store, and retrieve correct, complete, and current data so that it will be available to authorized users when needed. If the data are faulty or incomplete, the quality of derived information may be poor, resulting in decisions that may be inappropriate and possibly harmful to clients.

Rationale 3: Data integrity refers to the ability to collect, store, and retrieve correct, complete, and current data so that it will be available to authorized users when needed. If the data are faulty or incomplete, the quality of derived information may be poor, resulting in decisions that may be inappropriate and possibly harmful to clients. Offline storage is used for data that are needed less

frequently, or for long-term data storage, as may occur with old client records. Immediacy of need for particular data is a key factor in determining whether it is stored online or offline.

Rationale 4: Data integrity refers to the ability to collect, store, and retrieve correct, complete, and current data so that it will be available to authorized users when needed. If the data are faulty or incomplete, the quality of derived information may be poor, resulting in decisions that may be inappropriate and possibly harmful to clients. Dumping documents in the trash could breach patient confidentiality but would not necessarily impact data integrity.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: MCSA

Which of the following statements is not part of the data storage process?

1. Environmental control and conditions maximize the shelf life for media
2. Data storage on magnetic tape is a long-term solution to data storage
3. A contingency plan is developed to prevent the loss of data
4. The state dictates the length of time client records are stored

Correct Answer: 2

Rationale 1: Data stored on magnetic tape may degrade after 1 to 50 years, depending on storage conditions. If the organization intends to retain records indefinitely, the data must be transferred to other media.

Rationale 2: Data stored on magnetic tape may degrade after 1 to 50 years, depending on storage conditions. If the organization intends to retain records indefinitely, the data must be transferred to other media.

Rationale 3: Magnetic tape can degrade after years of use and is not a long term solution to data storage.

Rationale 4: The state's mandate does not impact the storage process.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 15

Type: MCSA

All members of the nurse manager's staff have attended classes that emphasized appropriate system access, input device use, potential harmful effects associated with incorrect data, data verification techniques, and error correction. They received a certificate indicating proficiency in the use of the input device and computer systems. These staff members will not require additional training unless the technology changes significantly. Which of the following suggests that this statement is false?

1. Continuing education is only necessary with significant changes.
2. Continuing education should be consistent.
3. Continuing education should be performed when time permits.
4. Continuing education is essential for point-of-care staff only.

Correct Answer: 2

Rationale 1: Even after staff members display competence, continuing education should occur on a routine basis and as indicated by problems such as increases in data errors.

Rationale 2: Even after staff members display competence, continuing education should occur on a routine basis and as indicated by problems such as increases in data errors.

Rationale 3: Even after staff members display competence, continuing education should occur on a routine basis and as indicated by problems such as increases in data errors.

Rationale 4: Even after staff members display competence, continuing education should occur on a routine basis and as indicated by problems such as increases in data errors.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation
Learning Outcome:

Question 16

Type: MCSA

The night shift charge nurse is being promoted to the position of mental health unit nurse manager. The supervisor would contact the database administrator (DBA) to allow the nurse manager access to needed data required for this new position. Which of the following suggests this is a correct statement?

1. The DBA is responsible for overseeing all activities related to maintaining the database.
2. The database administrator has no authority over the management of data input.
3. The mental health manager should not have access to the database.
4. The mental health manager does not have to communicate with the database manager and ask for permission for access.

Correct Answer: 1

Rationale 1: The DBA is responsible for overseeing all activities related to maintaining the database and optimizing its use.

Rationale 2: The DBA is responsible for overseeing all activities related to maintaining the database and optimizing its use.

Rationale 3: The DBA is responsible for overseeing all activities related to maintaining the database and optimizing its use.

Rationale 4: The DBA is responsible for overseeing all activities related to maintaining the database and optimizing its use.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 17

Type: MCSA

No agreement exists among health care groups in the United States regarding a common electronic data interchange (EDI) standard. This statement is true because of which of the following?

1. Experts have not yet finished the discussion phase leading to an agreement.
2. There is an agreement among health care groups because there is no need for a common EDI.
3. Agreements are part of the national health care reform initiative.
4. Health groups have isolated databases while working toward unification.

Correct Answer: 1

Rationale 1: EDI streamlines the flow of clinical and financial data from one location to another. EDI is the communication of data in binary code from one computer to another. As the number of automated client record systems increases, so does the need to establish standard record structure and identifiers for individual data items to facilitate data exchange. Presently, no agreement exists among health care groups in the United States regarding a common EDI standard.

Rationale 2: EDI streamlines the flow of clinical and financial data from one location to another. EDI is the communication of data in binary code from one computer to another. As the number of automated client record systems increases, so does the need to establish standard record structure and identifiers for individual data items to facilitate data exchange. Presently, no agreement exists among health care groups in the United States regarding a common EDI standard.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 18

Type: MCSA

Data integrity is crucial to the success of professional nursing practice. Which of the following phrases identifies its relevance to quality care?

1. Data integrity provides a systematic approach to the care of the patient.
2. The use of authentic data ensures mistakes are avoided.
3. All data entered into the system are accurate.
4. Data integrity is a driving force in treatment decision making.

Correct Answer: 4

Rationale 1: Data, itself, does not provide an approach to patient care, but guides the nurse and health care team in decision making.

Rationale 2: Data can assist in the prevention of medical errors, but it is the role of the nurse to analyze the accuracy and integrity of the data.

Rationale 3: The person inputting the data can make a mistake. The health care team needs to analyze presented data and use critical thinking skills to ascertain its relevance and accuracy.

Rationale 4: Authentic data are essential in ensuring successful patient care outcomes.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 19

Type: MCSA

The best teaching method to assure nurses are competent with laptops and handheld devices is which of the following?

1. A class based on relevant learning objectives with student demonstration of competence.
2. Point-of-care orientation
3. Online orientation
4. Written directions found in a central location

Correct Answer: 1

Rationale 1: Staff development educators are aware of the importance of staff competency with computers to assure accurate input and data retrieval. By abiding by measurable objectives, educators can evaluate the success of the educational process. Staff development needs to be an ongoing process.

Rationale 2: A point-of-care orientation is useful after the nurse has undergone a prepared class on the subject. There should be a preceptor of staff member available at all times to demonstrate or answer questions as they arise from staff members.

Rationale 3: An online self-study module can supplement an actual class and demonstration but should not be used as the only form of education.

Rationale 4: It is important to have written directions on how to use the available technology, yet the most effective method of orientation is a classroom setting with faculty who understand and use the technology with ease.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 20

Type: FIB

_____ is the process of controlling the collection, storage, retrieval, and use of data to optimize accuracy and utility while safeguarding integrity.

Standard Text:

Correct Answer: Data management.

Rationale : Data management is defined as the process of controlling the collection, storage, retrieval, and use of data to optimize accuracy and utility while safeguarding integrity.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 21

Type: MCSA

Technology committee members debate the merits of online versus offline storage. Which response is the most accurate when describing data storage?

1. Online storage is a slower retrieval system.
2. Offline storage provides access to current data.
3. Offline storage is used for data that are needed less frequently.
4. Online storage provides limited access to current data.

Correct Answer: 3

Rationale 1: Online storage systems are faster using high-speed hard disk drives.

Rationale 2: Online storage provides access to current data.

Rationale 3: Offline storage is used for data that are needed less frequently, or for long-term data storage, as may occur with old client records. Offline storage can be done on any secondary storage device. Access to data stored offline is slower than with online storage. Immediacy of need for particular data is a key factor in determining whether it is stored online or offline.

Rationale 4: Online storage provides access to current data.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 22

Type: FIB

Data retrieval most commonly occurs as a function of a _____ in conjunction with secondary storage media

Standard Text:

Correct Answer: Software application.

Rationale : Data retrieval most commonly occurs as a function of a **software application** in conjunction with secondary storage media

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 23

Type: MCSA

Which of the following terms is a knowledge management tool that engages software to uncover inter-relationships within large data-sets?

1. Data mining
2. Knowledge discovery
3. Data destruction
4. Data cleansing

Correct Answer: 1

Rationale 1: Data mining is a knowledge management tool that engages software to uncover inter-relationships within large data-sets and naturally leads to the knowledge discovery in databases paradigm.

Rationale 2: Knowledge discovery can be defined as the development of skills, understandings, and integrative abilities derived from data. Data mining provides trended patterns that can then be transformed into useful data (Bonchi & Ferrari, 2010).

Rationale 3: Data destruction may be achieved through physical and software destruction.

Rationale 4: Data cleansing or scrubbing is a procedure that uses software to improve the quality of data to ensure that it is accurate enough for use in data mining and warehousing.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 24

Type: MCSA

Knowledge discovery in databases offers the health care team trended patterns that can be transformed into useful data. Which nursing role can best benefit from knowledge discovery as it pertains to evidence-based practice?

1. The nurse as administrator
2. The nurse as educator
3. The nurse as researcher
4. The nurse at point of care

Correct Answer: 3

Rationale 1: The nurse as administrator can utilize the data retrieved from data mining and knowledge discovery to define trends.

Rationale 2: The nurse as educator has a role in the staff development and providing guidance in the use of technology.

Rationale 3: The nurse as researcher can extrapolate data from the source and link relationships and patterns. Data can further be used to identify trends associated with evidence-based practice and best practice models.

Rationale 4: The nurse at point of care has the ability to incorporate evidence-based models to improve the quality of care.

Global Rationale:

Cognitive Level: Evaluating

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 25

Type: MCSA

Which of the following statements is true about knowledge discovery and the role of the nurse?

1. Point-of-care nurses do not have the education to translate knowledge into best practice models.
2. Nurses have the ability to translate knowledge into improved practice patterns.
3. Nurses cannot act upon data unless in collaboration with other health care professionals.
4. Attending physicians rather than nurses are in the best position to deliver high-quality and cost-effective care that is dependent upon their ability to translate knowledge (evidence) into practice.

Correct Answer: 2

Rationale 1: Clinical repositories are now available for research and utilization purposes. Point-of-care nurses are excellent candidates to analyze data in repositories and create best practice models to improve care.

Rationale 2: The potential to discern patterns and relationships within those databases that would contribute to new knowledge was recognized some time ago but efforts were hampered by the paucity of methods to discover useful information until recently. Currently there are new tools to assist with the discovery and analysis of data.

Rationale 3: Clinical databases hold huge amounts of information about patients and their medical conditions. The amount of data housed in contemporary hospital systems offer the health care team a plethora of information for decision making and the trending of patterns. Nurses have the ability to create models based on collected data. Collaboration with other disciplines can enhance the process but is not necessary when focusing on nursing care.

Rationale 4: Nurses are in the best position to deliver high-quality and cost-effective care that is dependent upon their ability to translate knowledge (evidence) into practice.

Question 1

Type: MCSA

It has been determined from previous experience that eight hours is the minimum time necessary for staff nurses to obtain initial training on the new system. Which of the following is the best way to schedule this training?

1. One eight-hour session is offered six weeks prior to go-live, where employees drop in when they are caught up with work assignments.
2. Eight one-hour sessions are scheduled one month prior to go-live, starting immediately after the employee's shift has ended.
3. Four two-hour sessions are scheduled three months prior to go-live during non-scheduled work time.
4. Two four-hour sessions are offered one month before go-live during non-scheduled work time.

Correct Answer: 4

Rationale 1: The correct answer is “two four-hour sessions are offered one month before go-live during non-scheduled work time.” Training is best when done within one month of go-live and offered at times when the employees are off work. Otherwise, they may be too tired or stressed to obtain the information. For eight hours of training, two four-hour sessions are preferred.

Rationale 2: The correct answer is “two four-hour sessions are offered one month before go-live, during non-scheduled work time.” Training is best when done within one month of go-live and offered at times when the employees are off work. Otherwise, they may be too tired or stressed to obtain the information. For eight hours of training, two four-hour sessions are preferred.

Rationale 3: The correct answer is “two four-hour sessions are offered one month before go-live, during non-scheduled work time.” Training is best when done within one month of go-live and offered at times when the employees are off work. Otherwise, they may be too tired or stressed to obtain the information. For eight hours of training, two four-hour sessions are preferred.

Rationale 4: Two four-hour sessions are offered one month before go-live, during non-scheduled work time. Training is best when done within one month of go-live and offered at times when the employees are off work. Otherwise, they may be too tired or stressed to obtain the information. For eight hours of training, two four-hour sessions are preferred.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Planning

Learning Outcome:

Question 2

Type: MCSA

Which of the following provides the most effective end-user learning experience?

1. Real client data are utilized for realistic practice.
2. The equipment used for training is the same used in the clinical setting.
3. Two employees share each workstation for mutual encouragement.
4. The live system is used with simulated client data.

Correct Answer: 2

Rationale 1: The correct answer is “the equipment used for training is the same used in the clinical setting.” Ideally, individual user training should be done on the same equipment that will be seen in the clinical setting. If the live system is used, data may be altered and confidentiality of client information may be compromised.

Rationale 2: Ideally, individual user training should be done on the same equipment that will be seen in the clinical setting. If the live system is used, data may be altered and confidentiality of client information may be compromised.

Rationale 3: The correct answer is “the equipment used for training is the same used in the clinical setting.” Ideally, individual user training should be done on the same equipment that will be seen in the clinical setting. If the live system is used, data may be altered and confidentiality of client information may be compromised.

Rationale 4: The correct answer is “the equipment used for training is the same used in the clinical setting”. Ideally, individual user training should be done on the same equipment that will be seen in the clinical setting. If the live system is used, data may be altered and confidentiality of client information may be compromised.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 3

Type: MCSA

A proficiency examination is planned to ensure that employees have the requisite knowledge to use a new wireless system. Which statement indicates the best use of testing?

1. Testing is criterion-referenced to evaluate predetermined system competencies.
2. Computer testing is done using a multiple-choice question format.
3. Predetermined competencies are determined by comparing class averages.
4. Norm-referenced testing is used to ensure the most successful employees keep their position.

Correct Answer: 1

Rationale 1: The most effective testing is criterion-referenced with predetermined competencies, not comparing results among employees.

Rationale 2: The correct answer is “testing is criterion-referenced to evaluate predetermined system competencies.” The most effective testing is criterion-referenced with predetermined competencies, not comparing results among employees.

Rationale 3: The correct answer is “testing is criterion-referenced to evaluate predetermined system competencies.” The most effective testing is criterion-referenced with predetermined competencies, not comparing results among employees.

Rationale 4: The correct answer is “testing is criterion-referenced to evaluate predetermined system competencies.” The most effective testing is criterion-referenced with predetermined competencies, not comparing results among employees. Norm-referenced testing is useful in competitive hiring situations where there are more applicants than positions available. However, this type of testing is not typically used for information system training.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Evaluation

Learning Outcome:

Question 4

Type: MCSA

How should health care student training most efficiently be handled by an institution?

1. Each nursing student receives the same amount of training as the staff nurse on the unit.
2. Practical or vocational nursing students are placed in the user class with LPNs or LVNs to access information and document client care.
3. Students must be trained to provide appropriate clinical information to an assigned staff nurse, who will document client care in the system.
4. Students assess and document client care and medication administration by giving their information to the clinical instructor to input into the system.

Correct Answer: 2

Rationale 1: The correct answer is “practical or vocational nursing students are placed in the user class with LPNs or LVNs to access information and document client care.” It is most cost-effective to use preexisting user classes for students at a similar end-user level.

Rationale 2: It is most cost-effective to use preexisting user classes for students at a similar end-user level.

Rationale 3: The correct answer is “practical or vocational nursing students are placed in the user class with LPNs or LVNs to access information and document client care.” It is most cost-effective to use preexisting user classes for students at a similar end-user level.

Rationale 4: The correct answer is “practical or vocational nursing students are placed in the user class with LPNs or LVNs to access information and document client care.” It is most cost-effective to use preexisting user classes for students at a similar end-user level.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 5

Type: MCMA

The training of students often takes the same amount of time and resources as employee training. Which of the following are the most appropriate uses of the computer system for a nursing student assigned to a cardiac unit?

Standard Text: Select all that apply.

1. Order lab tests
2. Document medication administration
3. Document client care
4. Document health assessment findings
5. View test results

Correct Answer: 3,4,5

Rationale 1: Students need to be able to review a client chart, view test results, complete assessments, and document findings in the information system.

Rationale 2: Students need to be able to review a client chart, view test results, complete assessments, and document findings in the information system.

Rationale 3: Students need to be able to review a client chart, view test results, complete assessments, and document findings in the information system.

Rationale 4: Students need to be able to review a client chart, view test results, complete assessments, and document findings in the information system.

Rationale 5: Students need to be able to review a client chart, view test results, complete assessments, and document findings in the information system.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 6

Type: MCMA

Which of the following statements regarding computer-based training (CBT) are true?

Standard Text: Select all that apply.

1. The accompanying materials require little trainer attention beforehand.

2. Retention is enhanced because technology is used to teach technology.
3. CBT facilitates mastery learning.
4. Vendor-supplied materials require no specific customization.
5. CBT is less costly to develop and revise.

Correct Answer: 2,3

Rationale 1: The correct answers are: retention of the material is enhanced because technology is used to teach technology, and mastery learning is facilitated. CBT is time and labor intensive to develop and revise; its materials require great trainer attention beforehand, and vendor-supplied materials are seldom useful unless they are customized.

Rationale 2: The correct answers are: retention of the material is enhanced because technology is used to teach technology, and mastery learning is facilitated. CBT is time and labor intensive to develop and revise; its materials require great trainer attention beforehand, and vendor-supplied materials are seldom useful unless they are customized.

Rationale 3: The correct answers are: retention of the material is enhanced because technology is used to teach technology, and mastery learning is facilitated. CBT is time and labor intensive to develop and revise; its materials require great trainer attention beforehand, and vendor-supplied materials are seldom useful unless they are customized.

Rationale 4: The correct answers are: retention of the material is enhanced because technology is used to teach technology, and mastery learning is facilitated. CBT is time and labor intensive to develop and revise; its materials require great trainer attention beforehand, and vendor-supplied materials are seldom useful unless they are customized.

Rationale 5: The correct answers are: retention of the material is enhanced because technology is used to teach technology, and mastery learning is facilitated. CBT is time and labor intensive to develop and revise; its materials require great trainer attention beforehand, and vendor-supplied materials are seldom useful unless they are customized.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 7

Type: MCSA

Which form of training would best fit the needs of a night shift worker (11 p.m. to 7 a.m.)?

1. An online tutorial that can be accessed when it fits worker's time off
2. A Listserv set up for e-mail comments and questions
3. A three-hour video that can be run during the worker's shift
4. A full-day workshop that starts shortly after the end of the shift

Correct Answer: 1

Rationale 1: Online tutorials are available 24/7 and allow immediate application of learning. The correct answer is an online tutorial that can be accessed when it fits the worker's schedule. Listservs via e-mail are too slow for training; videos are not interactive; and workshops should be scheduled for times when the employee is off duty and rested, ready to learn, not just as a shift ends.

Rationale 2: The correct answer is an online tutorial that can be accessed when it fits the worker's schedule. Online tutorials are available 24/7 and allow immediate application of learning. Listservs via e-mail are too slow for training; videos are not interactive; and workshops should be scheduled for times when the employee is off duty and rested, ready to learn, not just as a shift ends.

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Rationale 4: The correct answer is an online tutorial that can be accessed when it fits the worker's schedule. Online tutorials are available 24/7 and allow immediate application of learning. Listserv via e-mail are too slow for training; videos are not interactive; and workshops should be scheduled for times when the employee is off duty and rested, ready to learn, not just as a shift ends.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 8

Type: MCSA

Which statement regarding the training approach is true?

1. Users may choose online multimedia or online tutorials to enhance retention.
2. Computer-based training should be used whenever data entry is required.
3. Blended learning is popular because it is appropriate for almost any content need.
4. Instructor-led training is still the best approach even though it is now less prevalent.

Correct Answer: 1

Rationale 1: Users may choose online multimedia or online tutorials to enhance retention. Computers can be used to input data without the instruction being computer-based. Instructor-led training is actually the most popular but not necessarily the best. Blended learning is not appropriate for all types of content and the organization's network must be able to support electronic training delivery.

Rationale 2: The correct answer is “users may choose online multimedia or online tutorials to enhance retention.” Computers can be used to input data without the instruction being computer-based. Instructor-led training is actually the most popular but not necessarily the best. Blended learning is not appropriate for all types of content and the organization's network must be able to support electronic training delivery.

Rationale 3: The correct answer is “users may choose online multimedia or online tutorials to enhance retention.” Computers can be used to input data without the instruction being computer-based. Instructor-led training is actually the most popular but not necessarily the best. Blended learning is not appropriate for all types of content and the organization's network must be able to support electronic training delivery.

Rationale 4: The correct answer is “users may choose online multimedia or online tutorials to enhance retention.” Computers can be used to input data without the instruction being computer-based. Instructor-led training is actually the most popular but not necessarily the best. Blended learning is not appropriate for all types of content and the organization's network must be able to support electronic training delivery.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 9

Type: MCMA

The most essential knowledge for a staff nurse end-user are which of the following?

Standard Text: Select all that apply.

1. Basic equipment troubleshooting procedures
2. Backing up the computer system at the end of each shift
3. Error message content recognition
4. Protocol for dealing with system "freezes" and "crashes"
5. Data entry error log review

Correct Answer: 1,3,4

Rationale 1: The correct answers are: "basic equipment troubleshooting procedures"; "error message content recognition"; "and protocol for dealing with system 'freezes' and 'crashes.'" The system administrator, not the staff, should back up the system; data entry error logs are reviewed by the systems analyst.

Rationale 2: The correct answers are: "basic equipment troubleshooting procedures"; "error message content recognition"; and "protocol for dealing with system 'freezes' and 'crashes.'" The system administrator, not the staff, should back up the system; data entry error logs are reviewed by the systems analyst.

Rationale 3: The correct answers are: "basic equipment troubleshooting procedures"; "error message content recognition"; and "protocol for dealing with system 'freezes' and 'crashes.'" The system administrator, not the staff, should back up the system; data entry error logs are reviewed by the systems analyst.

Rationale 4: The correct answers are: "basic equipment troubleshooting procedures"; "error message content recognition"; and "protocol for dealing with system 'freezes' and 'crashes.'" The system administrator, not the staff, should back up the system; data entry error logs are reviewed by the systems analyst.

Rationale 5: The correct answers are: "basic equipment troubleshooting procedures"; "error message content recognition"; and "protocol for dealing with system 'freezes' and 'crashes.'" The system administrator, not the staff, should back up the system; data entry error logs are reviewed by the systems analyst.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning
Learning Outcome:

Question 10

Type: MCMA

Among the following computer-related policies, which of the following are appropriate?

Standard Text: Select all that apply.

1. A nursing student shared confidential lab results obtained from the system at the request of one of the student's relatives. The policy is to dismiss the student from the clinical site.
2. Both students and employees sign documents that explain the consequence of termination for misuse of the system.
3. Access codes are assigned to authenticate each individual user's identity and may not be shared with anyone.
4. A radiology student makes a copy of a client's MRI report to prepare for the next days clinical. The copy is accidentally left in the waiting room and found by a staff member. The policy is to dismiss the student from the clinical site.
5. Once trained and entered into the system, employees may sign other users in under their access code for documentation purposes when necessary.

Correct Answer: 1,2,3,4

Rationale 1: Appropriate policies are: Access codes are assigned to authenticate each individual user's identity and may not be shared with anyone (not even staff members or administrators); both students and employees sign documents that explain the consequence of termination for misuse of the system; two students are dismissed from the site for breaches of confidentiality and the inappropriate use of data within the information/paper system. It is also possible that legal action may follow. Each student's faculty should be notified and each school will review its own penalties. Students should never share confidential PHI with any unauthorized person and documents such as the MRI report should be properly disposed of. An inappropriate policy is: Allowing employees to sign other users in under their access code; this is never acceptable for any reason.

Rationale 2: Appropriate policies are: Access codes are assigned to authenticate each individual user's identity and may not be shared with anyone (not even staff members or administrators); both students and employees sign documents that explain the consequence of termination for misuse of the system; two students are dismissed from the site for breaches of confidentiality and the inappropriate use of data within the information/paper system. It is also possible that legal action may follow. Each student's faculty should be notified and each school will review its own penalties. Students should never share confidential PHI with any unauthorized person and

documents such as the MRI report should be properly disposed of. An inappropriate policy is: Allowing employees to sign other users in under their access code; this is never acceptable for any reason.

Rationale 3: Appropriate policies are: Access codes are assigned to authenticate each individual user's identity and may not be shared with anyone (not even staff members or administrators); both students and employees sign documents that explain the consequence of termination for misuse of the system; two students are dismissed from the site for breaches of confidentiality and the inappropriate use of data within the information/paper system. It is also possible that legal action may follow. Each student's faculty should be notified and each school will review its own penalties. Students should never share confidential PHI with any unauthorized person and documents such as the MRI report should be properly disposed of. An inappropriate policy is: Allowing employees to sign other users in under their access code; this is never acceptable for any reason.

Rationale 4: Appropriate policies are: Access codes are assigned to authenticate each individual user's identity and may not be shared with anyone (not even staff members or administrators); both students and employees sign documents that explain the consequence of termination for misuse of the system; two students are dismissed from the site for breaches of confidentiality and the inappropriate use of data within the information/paper system. It is also possible that legal action may follow. Each student's faculty should be notified and each school will review its own penalties. Students should never share confidential PHI with any unauthorized person and documents such as the MRI report should be properly disposed of. An inappropriate policy is: Allowing employees to sign other users in under their access code; this is never acceptable for any reason.

Rationale 5: Appropriate policies are: Access codes are assigned to authenticate each individual user's identity and may not be shared with anyone (not even staff members or administrators); both students and employees sign documents that explain the consequence of termination for misuse of the system; two students are dismissed from the site for breaches of confidentiality and the inappropriate use of data within the information/paper system. It is also possible that legal action may follow. Each student's faculty should be notified and each school will review its own penalties. Students should never share confidential PHI with any unauthorized person and documents such as the MRI report should be properly disposed of. An inappropriate policy is: Allowing employees to sign other users in under their access code; this is never acceptable for any reason.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 11

Type: MCMA

Among the following, which defines the process for determining health care worker information systems training needs?

Standard Text: Select all that apply.

1. User classes are used to refine the types of training courses needed for system implementation.
2. End-users are identified and grouped by job class responsibilities.
3. Training needs of each job class are determined according to what functions each end-user will perform.
4. Training is delivered based upon what administrators decide to automate first.
5. User class is defined and categorized as the personnel who perform similar functions.

Correct Answer: 1,2,3,4,5

Rationale 1: End-users are identified and grouped by job class responsibilities. The training needs of each job class are determined according to what functions each will perform. Professional skill level does not determine training needs. Administrators decide what applications or modules will be automated first and end-user training is delivered based upon these decisions. User classes are defined as the personnel who perform similar functions. User classes refine the types of training classes needed for implementation.

Rationale 2: End-users are identified and grouped by job class responsibilities. The training needs of each job class are determined according to what functions each will perform. Professional skill level does not determine training needs. Administrators decide what applications or modules will be automated first and end-user training is delivered based upon these decisions. User classes are defined as the personnel who perform similar functions. User classes refine the types of training classes needed for implementation.

Rationale 3: End-users are identified and grouped by job class responsibilities. The training needs of each job class are determined according to what functions each will perform. Professional skill level does not determine training needs. Administrators decide what applications or modules will be automated first and end-user training is delivered based upon these decisions. User classes are defined as the personnel who perform similar functions. User classes refine the types of training classes needed for implementation.

Rationale 4: End-users are identified and grouped by job class responsibilities. The training needs of each job class are determined according to what functions each will perform. Professional skill level does not determine training needs. Administrators decide what applications or modules will be automated first and end-user training is delivered based upon

these decisions. User classes are defined as the personnel who perform similar functions. User classes refine the types of training classes needed for implementation.

Rationale 5: End-users are identified and grouped by job class responsibilities. The training needs of each job class are determined according to what functions each will perform. Professional skill level does not determine training needs. Administrators decide what applications or modules will be automated first and end-user training is delivered based upon these decisions. User classes are defined as the personnel who perform similar functions. User classes refine the types of training classes needed for implementation.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 12

Type: MCMA

Which of the following are considered steps for identifying training needs?

Standard Text: Select all that apply.

1. Identify user needs
2. Determine content
3. Establishing learning objectives
4. Deciding teaching approach
5. Create evaluation strategy

Correct Answer: 1,2,3,4,5

Rationale 1: The training preparation process begins by identifying user needs, determining content, establishing learning objectives, and deciding upon the approach and evaluation strategy.

Rationale 2: The training preparation process begins by identifying user needs, determining content, establishing learning objectives, and deciding upon the approach and evaluation strategy.

Rationale 3: The training preparation process begins by identifying user needs, determining content, establishing learning objectives, and deciding upon the approach and evaluation strategy.

Rationale 4: The training preparation process begins by identifying user needs, determining content, establishing learning objectives, and deciding upon the approach and evaluation strategy.

Rationale 5: The training preparation process begins by identifying user needs, determining content, establishing learning objectives, and deciding upon the approach and evaluation strategy.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 13

Type: MCMA

Among the following, which indicate that an organization has identified and is managing human factors in the work environment?

Standard Text: Select all that apply.

1. Classroom question and answer periods are regularly kept to a strict limit of five minutes.
2. Tent cards with name and unit of trainees are placed in the classroom at each meeting.
3. Administrators meet with unit supervisors and not staff for fear of intimidating them during the critical implementation phase.
4. A series of noon meetings (lunch provided) called "LunchBytes" are offered for demonstrations and discussion sessions.
5. An article announcing the implementation of the new system and recognizing the staff appears in the local paper.

Correct Answer: 2,4,5

Rationale 1: Classroom question and answer periods are important and should be allotted sufficient time at each meeting. Administrators should provide a role model and interact with the staff to let them know they are interested in how the implementation is progressing.

Rationale 2: Tent cards promote interaction on a first-name basis. Positive media coverage helps employees explain to relatives and friends what is going on at their workplace. Lunch time meetings can provide a casual environment to discuss the new system and learn about what others are doing.

Rationale 3: Classroom question and answer periods are important and should be allotted sufficient time at each meeting. Administrators should provide a role model and interact with the staff to let them know they are interested in how the implementation is progressing.

Rationale 4: Tent cards promote interaction on a first-name basis. Positive media coverage helps employees explain to relatives and friends what is going on at their workplace. Lunch time meetings can provide a casual environment to discuss the new system and learn about what others are doing.

Rationale 5: Tent cards promote interaction on a first-name basis. Positive media coverage helps employees explain to relatives and friends what is going on at their workplace. Lunch time meetings can provide a casual environment to discuss the new system and learn about what others are doing.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 14

Type: FIB

_____ is a process approach that allows for a full range of evaluation tools, technology, and techniques.

Standard Text:

Correct Answer: Targeted Evaluation Process

Rationale : Many organizations have been interested in a process-based evaluation and have adopted the targeted evaluation process (TEP) as an evaluation methodology. TEP is a process approach that allows for a full range of evaluation tools, technology, and techniques (Combs & Falletta 2000).

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 15

Type: MCSA

A trainer uses the following learning plan: An e-mail push is used for the announcement, a Webinar (Web-based seminar) is used for an overview session, simulations are used for self-paced learning, instant messaging is used for query resolution, a Web meeting is used for demonstration, simulation is used for practice, e-mail is used for feedback, another Webinar is used for a closing session, and a Web-based test is used for evaluation. Identify which training strategy was used for the learning plan.

1. Mixed learning
2. Blended learning
3. Comprehensive learning
4. Flexible learning

Correct Answer: 2

Rationale 1: The correct answer is “blended learning.” Blended learning takes place when a trainer combines two or more methods of delivery of instruction. In this case, trainer-led, Web-based, and video conferencing methods were combined.

Rationale 2: Blended learning takes place when a trainer combines two or more methods of delivery of instruction. In this case, trainer-led, Web-based, and video conferencing methods were combined.

Rationale 3: The correct answer is “blended learning.” Blended learning takes place when a trainer combines two or more methods of delivery of instruction. In this case, trainer-led, Web-based, and video conferencing methods were combined.

Rationale 4: The correct answer is “blended learning.” Blended learning takes place when a trainer combines two or more methods of delivery of instruction. In this case, trainer-led, Web-based, and video conferencing methods were combined.

Global Rationale:

Cognitive Level: Understanding
Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Teaching and Learning
Learning Outcome:

Question 16

Type: MCMA

Which of the following are specific factors to consider when selecting a training method?

Standard Text: Select all that apply.

1. Time required to develop program
2. Cost of development and training
3. Application training strategies
4. Learning styles of trainees
5. Learning retention strategies

Correct Answer: 1,2,3,4,5

Rationale 1: -Time: The time required to develop and present using each instructional approach varies.

-Cost: Initial content development time and subsequent revisions can be lengthy for computer based training, running up the expense.

-Learning styles: Blended delivery includes a combination of approaches that target learning styles and allow learners to actively participate in training activities.

-Learning retention: Active participation through scenarios, case studies, practice exercises, and repetition provide opportunities for learning, applying job skills, and retaining knowledge.

Rationale 2: -Time: The time required to develop and present using each instructional approach varies.

-Cost: Initial content development time and subsequent revisions can be lengthy for computer based training, running up the expense.

-Learning styles: Blended delivery includes a combination of approaches that target learning styles and allow learners to actively participate in training activities.

-Learning retention: Active participation through scenarios, case studies, practice exercises, and repetition provide opportunities for learning, applying job skills, and retaining knowledge.

Rationale 3: -Time: The time required to develop and present using each instructional approach varies.

- Cost: Initial content development time and subsequent revisions can be lengthy for computer based training, running up the expense.
- Learning styles: Blended delivery includes a combination of approaches that target learning styles and allow learners to actively participate in training activities.
- Learning retention: Active participation through scenarios, case studies, practice exercises, and repetition provide opportunities for learning, applying job skills, and retaining knowledge.

Rationale 4: -Time: The time required to develop and present using each instructional approach varies.

- Cost: Initial content development time and subsequent revisions can be lengthy for computer based training, running up the expense.
- Learning styles: Blended delivery includes a combination of approaches that target learning styles and allow learners to actively participate in training activities.
- Learning retention: Active participation through scenarios, case studies, practice exercises, and repetition provide opportunities for learning, applying job skills, and retaining knowledge.

Rationale 5: -Time: The time required to develop and present using each instructional approach varies.

- Cost: Initial content development time and subsequent revisions can be lengthy for computer based training, running up the expense.
- Learning styles: Blended delivery includes a combination of approaches that target learning styles and allow learners to actively participate in training activities.
- Learning retention: Active participation through scenarios, case studies, practice exercises, and repetition provide opportunities for learning, applying job skills, and retaining knowledge.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 17

Type: MCMA

Which of the following topics should be included in training class content?

Standard Text: Select all that apply.

1. Computer-related policies
2. Access privileges
3. Computer literacy

4. Error correction

5. System idiosyncrasies

Correct Answer: 1,2,3,4,5

Rationale 1: -Computer-related policies

- Access privileges
- Human factors
- Computer literacy
- Workflow
- Scenario and step-by-step design of instruction
- Electronic help
- Error messages
- Error correction
- Screen and system "freezes"
- System idiosyncrasies
- Downtime procedures
- Ability to retrieve and view clinical information

Rationale 2: -Computer-related policies

- Access privileges
- Human factors
- Computer literacy
- Workflow
- Scenario and step-by-step design of instruction
- Electronic help
- Error messages
- Error correction
- Screen and system "freezes"
- System idiosyncrasies
- Downtime procedures
- Ability to retrieve and view clinical information

Rationale 3: -Computer-related policies

- Access privileges
- Human factors
- Computer literacy
- Workflow
- Scenario and step-by-step design of instruction
- Electronic help
- Error messages
- Error correction
- Screen and system "freezes"
- System idiosyncrasies

- Downtime procedures
- Ability to retrieve and view clinical information

Rationale 4: -Computer-related policies

- Access privileges
- Human factors
- Computer literacy
- Workflow
- Scenario and step-by-step design of instruction
- Electronic help
- Error messages
- Error correction
- Screen and system "freezes"
- System idiosyncrasies
- Downtime procedures
- Ability to retrieve and view clinical information

Rationale 5: -Computer-related policies

- Access privileges
- Human factors
- Computer literacy
- Workflow
- Scenario and step-by-step design of instruction
- Electronic help
- Error messages
- Error correction
- Screen and system "freezes"
- System idiosyncrasies
- Downtime procedures
- Ability to retrieve and view clinical information

Chapter 5 Ethical Applications of Informatics

1. When describing ethical decision making to a group of students, which of the following would the instructor most likely include?
 - A) Values are involved, but they are of minimal concern.
 - B) Scientific inquiry provides the answer.
 - C) Decisions are based on which value is most important.
 - D) Decisions have short-term consequences.

2. An informatics nurse is presenting a class on ethics and informatics. Which of the following would the nurse identify as being central to informatics?
 - A) Conflicting values
 - B) Autonomy
 - C) Influencing variables
 - D) Beneficence

3. After teaching a group of students about ethics and laws, the instructor determines that the teaching was successful when a student states which of the following?
 - A) Laws are subject to interpretation.
 - B) Penalties are used if laws are violated.
 - C) Laws involve value conflicts.
 - D) Laws address paternalism.

4. An informatics nurse specialist is conducting an in-service program about HIPAA. Which of the following would the nurse include when describing this rule?
 - A) HIPAA protects all private health information.
 - B) Fee-for-service providers have limited HIPAA coverage.
 - C) Information with health plan providers is excluded.
 - D) Information of agencies electronically billing CMS is covered.

5. When preparing a teaching plan for a group of students about the Nurse Licensure Compact, which of the following would the nursing instructor include? Select all that apply.
 - A) It limits the requirements for telehealth nursing by providing a restricted license.
 - B) Nurses licensed in one state could practice in another state.
 - C) The rules and regulations of the state of practice apply to the nurse.
 - D) Advanced practice nurses are exempt from the Compact.
 - E) Nurses are required to store personal licensure data online.

6. A group of students are debating the pros and cons of implantable identification devices. Which of the following would the proponents most likely address?
 - A) It allows quicker and safer emergency care.
 - B) It should be a requirement to enhance care.
 - C) It would ensure complete privacy.
 - D) It promotes an individual's civil liberties.

7. A nurse is blogging. Which of the following would demonstrate that the nurse violated ethical and legal guidelines?
- A) Including names of staff members in the blog
 - B) Demonstrating respect for others when writing
 - C) Using positive references about individuals
 - D) Avoiding dark humor
8. An instructor is assigning a research paper to a group of students. In preparation for writing the paper, the instructor reviews copyright law. Which of the following statements by a student indicates the need for additional teaching?
- A) "If the copyright symbol isn't there, then the information is not copyrighted."
 - B) "Copyrighted material is material that is considered to be original."
 - C) "If the information is not well defined, then it isn't subject to copyright."
 - D) "The time a copyright is in effect varies based on the law at the time."
9. While writing a research paper for a class, a student demonstrates plagiarism when doing which of the following?
- A) Including a citation at the end of a sentence about statistics from a research study
 - B) Inserting a paragraph from a reference article directly into one's paper
 - C) Using quotation marks around a statement with the name and page of the source
 - D) Crediting an author for a statement by saying, "According to ..."
10. A nurse advocates for a patient to ensure that what is being done is best for him. The nurse is demonstrating which ethical principle?
- A) Paternalism
 - B) Veracity
 - C) Justice
 - D) Beneficence
11. A nurse is working as part of a committee addressing the security of healthcare information and data breaches. The committee is working on ways to reduce the risk of data breaches. Which of the following would be helpful for the committee to include? Select all that apply.
- A) Program to teach employees about system logins
 - B) Training for employees about data encryption
 - C) Use of secure e-mail servers
 - D) Instillation of data loss prevention software
 - E) Tracking of external threats

12. After teaching a group of students about legal and ethical issues related to telehealth, the instructor determines that the teaching was successful when the students identify which of the following as an important milestone in allowing nurses licensed in one state to practice in another state?
- A) Coordinated Licensure Information System
 - B) Nurse Licensure Compact
 - C) HIPAA
 - D) HITECH
13. A group of students are reviewing information about copyright law. The students demonstrate understanding when they identify which of the following as an exception? Select all that apply.
- A) Height and weight chart
 - B) Recorded speech
 - C) Short phrases
 - D) List of ingredients
 - E) Quotation
14. A group of faculty are designing a Web-based course and are concerned about copyright law related to the use of information in the course. Which of the following would demonstrate that the faculty is adhering to fair use?
- A) Text provided was 1,000 words.
 - B) Images are accounted for 20% of the course.
 - C) Music included was about 45 seconds.
 - D) Video spanned about 5 minutes.
15. A nursing instructor reviews the development of copyright law as an introduction for a class project that will involve the students in writing a scholarly essay to support an ethical issue. After teaching the class, the instructor determines that the teaching was successful when the students identify copyright protection as extending for how many years after the life of the author?
- A) 14 years
 - B) 25 years
 - C) 50 years
 - D) 70 years

Answer Key

1. C
2. A
3. B
4. D
5. B, C
6. A
7. A
8. A
9. B
10. D
11. A, B, D, E
12. B
13. A, B, C, D
14. A
15. D

Chapter 6 History and Evolution of Nursing Informatics

1. After teaching a class about informatics, the instructor determines that the teaching was successful when the students define informatics as which of the following?
 - A) Use of computers
 - B) Use of information technology
 - C) Management of information
 - D) Access to the Internet
2. A strategic plan for the nationwide implementation of health information technology includes which of the following?
 - A) Discouraging the use of personal electronic health records
 - B) Developing a collaborative governance to support information use for population health
 - C) Advocating for statewide adoption of electronic health record
 - D) Limiting the use of telehealth systems
3. Which of the following would a nurse identify as the current focus of today's practice informatics?
 - A) Capturing data at the point of care
 - B) Performing secondary data analysis
 - C) Using aggregated data
 - D) Making decisions based on data

4. A nursing student is reviewing information about early computerized clinical information systems. Which of the following would the student identify as characteristic?
- A) Implementation to perform two or three functions
 - B) Ability to share information among several departments
 - C) Creation of different software systems for different areas
 - D) Entry of data occurring only once
5. When describing the benefits of informatics to a group of agency staff, which of the following would the presenter identify as one of the primary benefits?
- A) Increase usability of data
 - B) Promote cost-saving
 - C) Promote time-saving
 - D) Allow identification of patterns
6. After teaching a group of students about the benefits of informatics to the nursing profession, the instructor determines that the students need additional teaching when they identify which of the following as a benefit?
- A) Improvement in documentation
 - B) Use of data for quality control
 - C) Building of evidence-based knowledge
 - D) Increase in time needed for documentation
7. A nurse is presenting an in-service program on nursing informatics competencies. When describing the need for computer fluency for nursing informatics competencies, which of the following would the presenter include as characterizing this concept?
- A) Temporary state
 - B) Lifelong learning
 - C) Task oriented
 - D) Competency
8. After teaching a class for a group of nurses on nursing informatics, the instructor determines that the teaching was successful when the group identifies which of the following competencies as specific to the role of an informatics innovator?
- A) Using basic desktop software
 - B) Generating informatics theory
 - C) Making judgments about trends
 - D) Communicating via a computer

9. An informatics nurse specialist would describe information literacy as essential for which of the following?
- A) Critical thinking
 - B) Problem solving
 - C) Data evaluation
 - D) Evidence-based practice
10. When preparing for a class on healthcare informatics and information technology, the instructor would emphasize which of the following as the focus?
- A) Information
 - B) Computer
 - C) Access
 - D) Data storage
11. When describing the components needed to provide evidence-based care through informatics, which of the following would be needed? Select all that apply.
- A) Information presented in a digital format
 - B) Standards for exchange of information
 - C) Limited ability to capture relevant data
 - D) Multiple language structures for documentation
 - E) Competency of practitioners using the information
12. A nurse is reviewing an article about the strategic plan for health information technology as related to population health. Which of the following would the nurse expect to find as being supported by this goal? Select all that apply.
- A) Biomedical research
 - B) Cost-efficient patient care
 - C) Public health
 - D) Quality improvement
 - E) Emergency preparedness
13. A nurse is preparing an in-service program about forces driving toward the increased use of informatics in healthcare. Which of the following would the nurse include as a national force? Select all that apply.
- A) Creation of the President's Information Technology Advisory Committee (PITAC)
 - B) The Institute of Medicine (IOM) report on Health Professions Education
 - C) National Advisory Council on Nurse Education and Practice recommendations
 - D) National League for Nursing (NLN) position paper on nurse preparation
 - E) Technology Informatics Guiding Educational Reform (TIGER) initiative

14. A nurse working in informatics is analyzing information gathered about rates of infection of patients on a specific hospital unit. The nurse is using this information to determine appropriate interventions for overall infection control. The nurse is involved with which of the following?
- A) Point of care informatics
 - B) Secondary data analysis
 - C) Listserv
 - D) Computerized provider order entry
15. A nurse involved in informatics identifies the need for information and demonstrates ability to locate, evaluate, and effectively use it. The nurse is demonstrating which of the following?
- A) Information literacy
 - B) Computer literacy
 - C) Computer fluency
 - D) Information management

Answer Key

1. B
2. B
3. A
4. C
5. A
6. D
7. B
8. B
9. D
10. A
11. A, B, E
12. A, C, D, E
13. A, B
14. B
15. A

Chapter 7 Nursing Informatics as a Specialty

1. After teaching a group of students about the electronic medical record (EMR), the students demonstrate understanding by stating which of the following?
 - A) The EMR is transportable.
 - B) The data in the EMR are owned by the patient.
 - C) It describes the care rendered during an agency visit.
 - D) The EMR lacks standardized vocabulary.
2. An electronic documentation system will be implemented in an agency. As part of the process, the staff is receiving education about the system and the overall benefits. Which of the following would the audience expect to hear as the most important benefit?
 - A) Availability of an audit trail for information
 - B) Decreased decentralization of the healthcare delivery system
 - C) Enhanced ability to extract information
 - D) Improvement in patient care outcomes

3. Which of the following would be most important to do first when implementing a workflow redesign for an electronic documentation system?
- A) Focusing the design on the care provider
 - B) Determining what the system is expected to accomplish
 - C) Addressing the primary discipline's needs
 - D) Discussing how reports will be created
4. An instructor is describing the systems life cycle and compares it to the nursing process. Which of the following would the instructor include as a similarity about the life cycle? Select all that apply.
- A) Begins with assessment
 - B) Has a definite end point
 - C) Uses different terminology
 - D) Has a variable number of steps
 - E) Has little opportunities for iteration
5. A nurse is part of a committee that is working to develop and implement an electronic documentation system. Which of the following would the committee do first during the initiating phase?
- A) Identify the risks
 - B) Complete a needs assessment
 - C) Identify the project goal
 - D) Prepare for scope creep
6. An agency committee conducts a needs assessment for a health information system and identifies a list of potential vendors to be considered for the project. Which of the following would the committee do next?
- A) Send out a request for proposal
 - B) Identify the cost-benefit
 - C) Submit a request for information
 - D) Determine the return on investment
7. A nurse on a committee is conducting a workflow analysis. Which of the following would be most helpful when completing this task?
- A) Evaluating the pros and cons
 - B) Diagramming the activity
 - C) Identifying the steps of the workflow
 - D) Applying a structure

8. A committee is evaluating several vendors for a health information system, and the members notice that one of the vendors describes some new and amazing features that are in development, along with an upcoming release of a new product that is designed to increase the user-friendliness of the system. Unfortunately, the vendor fails to deliver on these features. The committee would interpret this as which of the following?
- A) Vaporware
 - B) Vanilla product
 - C) Bugs
 - D) Rollout
9. An agency involved in testing a new electronic system is evaluating the systems communication and network functioning. The agency is involved with which of the following?
- A) Test scripting
 - B) Regression testing
 - C) Integration testing
 - D) Debugging
10. Which of the following is occurring when an agency plans to implement a new system throughout the entire agency at the same time?
- A) Pilot conversion
 - B) Big-bang conversion
 - C) Parallel conversion
 - D) Phased conversion
11. A group of nurses are reviewing information related to the Health Information Technology for Economic and Clinical Health (HITECH) Act. The group demonstrates understanding of this act when they identify which of the following as an example of a basic core function for meaningful use? Select all that apply.
- A) Conducting drug formulary checks
 - B) Including clinical lab test results as structured data
 - C) Entering of clinical orders
 - D) Using decision support tools
 - E) Sending patient reminders for follow-up care

12. A nurse is preparing a presentation to a group of staff members comparing paper and electronic documentation. Which of the following would the nurse include as a weakness of paper records? Select all that apply.
- A) Legibility
 - B) Lack of a backup system
 - C) Difficult to transport
 - D) Slowness in charting
 - E) Easily damaged
13. A nurse is a part of a committee working on a project for implementing an electronic documentation system in the agency. The committee conducts a thorough needs assessment to ensure which of the following?
- A) The project scope is appropriate.
 - B) The system implementation is a success.
 - C) The risks are clearly identified.
 - D) The cost savings are realized.
14. A nursing instructor is teaching a class about implementing a system. The instructor determines the need for additional teaching when the students identify which of the following as an approach to implementing health information systems?
- A) Pilot conversion
 - B) Big-bang approach
 - C) Rollback
 - D) Phased conversion
15. After implementing a health information system, the agency takes steps to prevent loss of data from a power failure by having the system use the backup power supply. This is an example of which of the following?
- A) Superuser
 - B) Business continuity plan
 - C) Contingency plan
 - D) Debugging

Answer Key

1. C
2. D
3. B
4. A, C, D
5. C
6. A
7. B
8. A
9. C
10. B
11. C, D
12. A, B, E
13. B
14. C
15. B

Chapter 8 Legislative Aspects of Nursing Informatics: HITECH and HIPAA

Question 1

Type: MCSA

Medication errors have been on the rise over the past decade. A national initiative to minimize or eliminate the errors can be supported through which of the following responses?

1. Electronic medical administration records are generated weekly and compared to the clients' physician orders.
2. The client's medication administration record is compared to the client's identification bracelet before the medication is given.
3. The bar codes of the nurse, client's identification bracelet, and prescription medication are scanned and compared.
4. The client's medication administration record bar code is compared to the clients' prescription medications.

Correct Answer: 3

Rationale 1: Scanning bar codes at the point of care decreases the probability of the nurse making medication errors. These systems are designed to help the busy nurse to ensure that the right medication is given in the correct dosage and form at the correct time for the right client.

Bar coding systems often include warnings for high-risk drugs, for medications with sound-alike names, for maximum dosages, and dosage discrepancies. All the other examples are insufficient or are performed away from the clients themselves.

Rationale 2: Scanning bar codes at the point of care decreases the probability of the nurse making medication errors. These systems are designed to help the busy nurse to ensure that the right medication is given in the correct dosage and form at the correct time for the right client. Bar coding systems often include warnings for high-risk drugs, for medications with sound-alike names, for maximum dosages, and dosage discrepancies. All the other examples are insufficient or are performed away from the clients themselves.

Rationale 3: Scanning bar codes at the point of care decreases the probability of the nurse making medication errors. These systems are designed to help the busy nurse to ensure that the right medication is given in the correct dosage and form at the correct time for the right client. Bar coding systems often include warnings for high-risk drugs, for medications with sound-alike names, for maximum dosages, and dosage discrepancies. All the other examples are insufficient or are performed away from the clients themselves.

Rationale 4: Scanning bar codes at the point of care decreases the probability of the nurse making medication errors. These systems are designed to help the busy nurse to ensure that the right medication is given in the correct dosage and form at the correct time for the right client. Bar coding systems often include warnings for high-risk drugs, for medications with sound-alike names, for maximum dosages, and dosage discrepancies. All the other examples are insufficient or are performed away from the clients themselves.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: MCSA

Which of the following is the best example of a monitoring system?

1. Manual blood pressure of 132/82 is entered into the vital sign section of the graphic sheet.
2. The automatic blood pressure machine takes one reading of 164/104 and is turned off.
3. Blood glucose readings of 162 for 7:30 a.m. and 198 for 11:30 a.m. are obtained and entered into the computer system.

4. A temperature probe is connected to the pulmonary artery catheter to continuously monitor core temperature.

Correct Answer: 4

Rationale 1: Monitoring systems are devices that automatically monitor biometric measurements. The best monitoring systems, such as the temperature probe, obtain data electronically and transmit the data to be stored in the client's electronic medical record. Manual inputs are possible but are not the best way to record data.

Rationale 2: Monitoring systems are devices that automatically monitor biometric measurements. The best monitoring systems, such as the temperature probe, obtain data electronically and transmit the data to be stored in the client's electronic medical record. Manual inputs are possible but are not the best way to record data.

Rationale 3: Monitoring systems are devices that automatically monitor biometric measurements. The best monitoring systems, such as the temperature probe, obtain data electronically and transmit the data to be stored in the client's electronic medical record. Manual inputs are possible but are not the best way to record data.

Rationale 4: Monitoring systems are devices that automatically monitor biometric measurements. The best monitoring systems, such as the temperature probe, obtain data electronically and transmit the data to be stored in the client's electronic medical record. Manual inputs are possible but are not the best way to record data.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: MCMA

Which of the following supports the automation of nursing documentation?

Standard Text: Select all that apply.

1. The use of standardized nursing languages (SNLs) accepted by the American Nurses Association
2. The use of a SOAP note in narrative form to support assessment of client cardiopulmonary system

3. The use of interventions such as "turn, cough, and deep breathe" as determined by the Nursing Interventions Classifications (NIC)
4. The use of client-specific charting by exception, addressing only exceptions to normal
5. The use of nursing diagnoses such as "Alteration of Comfort" as defined by the North American Nursing Diagnosis Association (NANDA)

Correct Answer: 1,3,5

Rationale 1: Standardized nursing languages, including NANDA and NIC (also Nursing Outcomes Classification, (NOC)), support automation of nursing documentation so that comparisons among data may be made. These remove the ambiguity of meaning found in other documentation systems. The SOAP note and the charting by exception choices are not standardized and do not support the automation of nursing documentation.

Rationale 2: Standardized nursing languages, including NANDA and NIC (also Nursing Outcomes Classification, (NOC)), support automation of nursing documentation so that comparisons among data may be made. These remove the ambiguity of meaning found in other documentation systems. The SOAP note and the charting by exception choices are not standardized and do not support the automation of nursing documentation.

Rationale 3: Standardized nursing languages, including NANDA and NIC (also Nursing Outcomes Classification, (NOC)), support automation of nursing documentation so that comparisons among data may be made. These remove the ambiguity of meaning found in other documentation systems. The SOAP note and the charting by exception choices are not standardized and do not support the automation of nursing documentation.

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Rationale 5: Standardized nursing languages, including NANDA and NIC (also Nursing Outcomes Classification, (NOC)), support automation of nursing documentation so that comparisons among data may be made. These remove the ambiguity of meaning found in other documentation systems. The SOAP note and the charting by exception choices are not standardized and do not support the automation of nursing documentation.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: MCSA

Which of these is an example of a decision support system (DSS)?

1. A system used to schedule client visits for follow up care after extensive abdominal surgery
2. A system used to register clients who are admitted to an acute health care facility for surgery
3. A system used by emergency room administration to bill clients once their diagnoses are verified
4. A system used by physicians to provide suggestions for diagnostic tests according to selected admitting diagnoses

Correct Answer: 4

Rationale 1: The correct answer is a system used by physicians to provide suggestions for diagnostic tests according to selected admitting diagnoses. These suggestions may be followed or ignored, depending on the health care provider. A DSS assists with and strengthens the selection of viable options using the information of an organization or a field to facilitate decision making and overall efficiency. Your choice is an example of an administrative information system application.

Rationale 2: The correct answer is a system used by physicians to provide suggestions for diagnostic tests according to selected admitting diagnoses. These suggestions may be followed or ignored, depending on the health care provider. A DSS assists with and strengthens the selection of viable options using the information of an organization or a field to facilitate decision making and overall efficiency. Your choice is an example of an administrative information system application.

Rationale 3: The correct answer is a system used by physicians to provide suggestions for diagnostic tests according to selected admitting diagnoses. These suggestions may be followed or ignored, depending on the health care provider. A DSS assists with and strengthens the selection of viable options using the information of an organization or a field to facilitate decision making and overall efficiency. Your choice is an example of an administrative information system application.

Rationale 4: A system used by physicians to provide suggestions for diagnostic tests according to selected admitting diagnoses is indeed an example of a DSS. These suggestions may be followed or ignored, depending on the health care provider. A DSS assists with and strengthens the selection of viable options using the information of an organization or a field to facilitate decision making and overall efficiency.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCSA

Which statement indicates the nurse is correctly documenting according to a critical pathway?

1. Nursing documentation is entered separately from that of other health care team members
2. Nursing documentation is entered in nursing diagnoses and outcome statements framework
3. Variances are identified if client outcomes are not as anticipated
4. Only one critical pathway is selected at a given time for a given client

Correct Answer: 3

Rationale 1: When using the critical pathway or protocols approach to nursing documentation, the system should identify variances to the anticipated outcomes as they are charted and provide aggregate variance data for analysis by the providers. This information can be used to fine tune and improve the critical pathways, thereby contributing to improved client outcomes.

Rationale 2: When using the critical pathway or protocols approach to nursing documentation, the system should identify variances to the anticipated outcomes as they are charted and provide aggregate variance data for analysis by the providers. This information can be used to fine tune and improve the critical pathways, thereby contributing to improved client outcomes.

Rationale 3: When using the critical pathway or protocols approach to nursing documentation, the system should identify variances to the anticipated outcomes as they are charted and provide aggregate variance data for analysis by the providers. This information can be used to fine tune and improve the critical pathways, thereby contributing to improved client outcomes.

Rationale 4: When using the critical pathway or protocols approach to nursing documentation, the system should identify variances to the anticipated outcomes as they are charted and provide aggregate variance data for analysis by the providers. This information can be used to fine tune and improve the critical pathways, thereby contributing to improved client outcomes.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCSA

Which of these is an advantage of implementing a computerized order entry system?

1. Physicians argue for the option to continue traditional methods for ordering
2. Each department is notified simultaneously as orders are processed through the system
3. Increased system access or response time is available to the health care provider
4. Clinicians readily accept the new system, related to work process changes

Correct Answer: 2

Rationale 1: The correct answer is the simultaneous notification of orders is a benefit of computerized order entry. Departments receive notification of new orders more quickly than in a paper-based system. Other benefits include direct entry of orders by the provider (e.g., physician, nurse practitioner, physical therapist) that eliminates issues related to illegible handwriting and transcription errors, checking orders for accuracy and completeness, and speeding the implementation of ordered diagnostic tests and treatment modalities. Computerized order entry also enhances staff productivity, saves money, promotes safety, and improves outcomes when used in conjunction with evidence-based practices.

Rationale 2: The simultaneous notification of orders is an advantage of computerized order entry. Departments receive notification of new orders more quickly than in a paper-based system. Other benefits include direct entry of orders by the provider (e.g., physician, nurse practitioner, physical therapist) that eliminates issues related to illegible handwriting and transcription errors, checking orders for accuracy and completeness, and speeding the implementation of ordered diagnostic tests and treatment modalities. Computerized order entry also enhances staff productivity, saves money, promotes safety, and improves outcomes when used in conjunction with evidence-based practices.

Rationale 3: The correct answer is the simultaneous notification of orders is a benefit of computerized order entry. Departments receive notification of new orders more quickly than in a paper-based system. Other benefits include direct entry of orders by the provider (e.g., physician, nurse practitioner, physical therapist) that eliminates issues related to illegible handwriting and transcription errors, checking orders for accuracy and completeness, and speeding the implementation of ordered diagnostic tests and treatment modalities. Computerized order entry

also enhances staff productivity, saves money, promotes safety, and improves outcomes when used in conjunction with evidence-based practices.

Rationale 4: The correct answer is the simultaneous notification of orders is a benefit of computerized order entry. Departments receive notification of new orders more quickly than in a paper-based system. Other benefits include direct entry of orders by the provider (e.g., physician, nurse practitioner, physical therapist) that eliminates issues related to illegible handwriting and transcription errors, checking orders for accuracy and completeness, and speeding the implementation of ordered diagnostic tests and treatment modalities. Computerized order entry also enhances staff productivity, saves money, promotes safety, and improves outcomes when used in conjunction with evidence-based practices.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 7

Type: MCSA

Which of the following is characteristic of an automated radiology information system (RIS)?

1. Once a test is completed, the film is scanned to an optical imaging disc.
2. As each test is ordered, the user is prompted to answer questions such as the purpose of the test.
3. Images may be faxed to other institutions for timely consultations.
4. As soon as the test is performed, the system interprets the results and sends an electronic report.

Correct Answer: 2

Rationale 1: Automated radiology information systems create specific questionnaires to ensure reimbursement and individualize client care. Your answer is incorrect because physicians must still review the film and interpret the images; and images are digitally created and stored automatically.

Rationale 2: Automated RIS creates specific questionnaires to ensure reimbursement and individualized client care. Physicians must still review the film and interpret the images, and images are digitally created and stored automatically.

Rationale 3: Automated radiology information systems create specific questionnaires to ensure reimbursement and individualized client care. Your answer is incorrect because physicians must still review the film and interpret the images, and images are digitally created and stored automatically. Only the report can be faxed.

Rationale 4: Automated radiology information systems create specific questionnaires to ensure reimbursement and individualize client care. Your answer is incorrect because physicians must still review the film and interpret the images, and images are digitally created and stored automatically.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCMA

Which of the following are true about using automated pharmacy systems?

Standard Text: Select all that apply.

1. An automated system pulls in laboratory results and client information from the HIS more quickly to identify allergy and interaction problems.
2. Costs for operating automated pharmacy systems are not as important as the improved communication among departments.
3. Expenses used in starting up an automated pharmacy system are considerable, including personnel training.
4. The use of these systems is limited only to pharmacists.
5. Individual client data is integrated and provides the pharmacist with up-to-date information.

Correct Answer: 1,5

Rationale 1: Automated systems can pull in laboratory results and client information from the HIS more quickly and accurately identifying allergy and interaction problems.

Rationale 2: Automation of previously manual processes can result in significant cost savings; however, the organization must consider the initial cost when selecting the software. Pharmacy

systems offer many benefits that promote cost containment, improve the quality of care, and decrease medication errors.

Rationale 3: Pharmacy systems offer many benefits that promote cost containment, improve the quality of care, and decrease medication errors.

Rationale 4: These systems can be used by a variety of health care professionals who perform activities related to the ordering, dispensing, and administration of medications.

Rationale 5: All information obtained related to an individual client is integrated and provides the pharmacist with up-to-date information. This helps to provide accurate information and promote client safety.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 9

Type: FIB

_____ aid in and strengthen the selection of viable options using the information of an organization or a field to facilitate decision making and overall efficiency.

Standard Text:

Correct Answer: Decision support systems

Rationale : Decision support systems aid in and strengthen the selection of viable options using the information of an organization or a field to facilitate decision making and overall efficiency. Decision support software organizes information to fit new environments. It provides analysis and advice to support a choice. The final decision rests with the practitioner.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: FIB

_____ are large, computerized database management systems that support several types of activities that may include provider order entry, result retrieval, documentation, and decision support across distributed locations.

Standard Text:

Correct Answer: Clinical information systems

Rationale : Clinical information systems (CISs) are large, computerized database management systems that support several types of activities that may include provider order entry, result retrieval, documentation, and decision support across distributed locations.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: FIB

A nursing information system should identify variances to the anticipated outcomes as they are charted and provide aggregate variance data for analysis by the providers. This information can be used to fine tune and improve _____, thereby contributing to improved client outcomes.

Standard Text:

Correct Answer: critical pathways

Rationale : The system should identify variances to the anticipated outcomes as they are charted and provide aggregate variance data for analysis by the providers. This information can be used to fine tune and improve the critical pathways, thereby contributing to improved client outcomes. The critical pathway or protocol approach to nursing documentation is an approach used in automated nursing information systems and it is often use in a multidisciplinary manner, with many types of care providers accessing the system for information and to document care.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: MCSA

Which of the following describes home care information systems?

1. Supports the way that users function, and allows flexibility and improved access to information and tools
2. Uses monitoring technology which, when integrated into information systems, provides a way to care for the target population
3. Requires integration for the improvement of quality of care and business survival
4. Provides assistance to organizations to better manage their resources and improve efficiency

Correct Answer: 2

Rationale 1: Adoption of home care information systems makes use of monitoring technology which, when integrated into information systems, provides a way to care for the target population. Your choice describes nursing information systems.

Rationale 2: Adoption of home care information systems makes use of monitoring technology which, when integrated into information systems, provides a way to care for the target population.

Rationale 3: Adoption of home care information systems makes use of monitoring technology which, when integrated into information systems, provides a way to care for the target population. Your choice describes long-term health information systems.

Rationale 4: Adoption of home care information systems makes use of monitoring technology which, when integrated into information systems, provides a way to care for the target population. Your choice describes contract management systems.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 13

Type: MCSA

Which of the following systems supports the use and documentation of nursing processes and activities, and provides tools for managing the delivery of nursing care?

1. Administrative information system
2. Nursing information system
3. Computerized provider order entry (CPOE)
4. Clinical information system

Correct Answer: 2

Rationale 1: Administrative information systems support client care by managing financial and demographic information and providing reporting capabilities. This category includes client management, financial, payroll, and human resources, and quality assurance systems. Coding systems use clinical information to generate charges for care.

Rationale 2: Nursing information system supports the use and documentation of nursing processes and activities, and provides tools for managing the delivery of nursing care.

Rationale 3: CPOE is the electronic entry of patient orders directly into the system.

Rationale 4: Clinical information systems (CISs) are large, computerized database management systems that support several types of activities that may include provider order entry, result retrieval, documentation, and decision support across distributed locations.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: MCSA

The following answers are standardized languages used across the discipline of nursing that allow nurses to describe nursing problems, treatments, and outcomes in a manner that is understood by all nurses except which?

1. HIS
2. NANDA
3. NOC
4. NIC

Correct Answer: 1

Rationale 1: HIS is an acronym for health information systems. Standardized nursing languages (SNLs) accepted by the American Nurses Association include nursing diagnoses defined by the North American Nursing Diagnosis Association (NANDA), Nursing Interventions Classification (NIC), and Nursing Outcomes Classification (NOC) and several other languages.

Rationale 2: Standardized nursing languages (SNLs) accepted by the American Nurses Association include nursing diagnoses defined by the North American Nursing Diagnosis Association (NANDA), Nursing Interventions Classification (NIC), and Nursing Outcomes Classification (NOC) and several other languages.

Rationale 3: Standardized nursing languages (SNLs) accepted by the American Nurses Association include nursing diagnoses defined by the North American Nursing Diagnosis Association (NANDA), Nursing Interventions Classification (NIC), and Nursing Outcomes Classification (NOC) and several other languages.

Rationale 4: Standardized nursing languages (SNLs) accepted by the American Nurses Association include nursing diagnoses defined by the North American Nursing Diagnosis Association (NANDA), Nursing Interventions Classification (NIC), and Nursing Outcomes Classification (NOC) and several other languages.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 15

Type: FIB

_____ and wireless technology can be used with CISs to allow information entry and retrieval at the point of care or wherever it is needed by the health care professional.

Standard Text:

Correct Answer: Mobile

Rationale : Mobile technology can be used with CISs allow information entry and retrieval at the point of care or wherever it is needed by the healthcare professional. This is best seen by the healthcare professional who can view client lab results while walking or at the point of care which enhances worker productivity because it eliminates the need to walk back to a central location to view test results, and it improves client service because treatments can be ordered and initiated in a more timely fashion.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 16

Type: MCSA

The client registration system is also known as which of the following?

1. Admission system
2. Admission/discharge/transfer system
3. Transfer system
4. Discharge system

Correct Answer: 2

Rationale 1: The client registration system is critical to the effective operation of many other systems within the health care setting. This system is used to collect and store client identification and demographic data that are verified and updated at the time of each visit. For this reason, these may also be known as admission/discharge/transfer (ADT) systems.

Rationale 2: The client registration system is critical to the effective operation of many other systems within the health care setting. This system is used to collect and store client identification and demographic data that are verified and updated at the time of each visit. For this reason, these may also be known as admission/discharge/transfer (ADT) systems.

Rationale 3: The client registration system is critical to the effective operation of many other systems within the health care setting. This system is used to collect and store client

identification and demographic data that are verified and updated at the time of each visit. For this reason, these may also be known as admission/discharge/transfer (ADT) systems.

Rationale 4: The client registration system is critical to the effective operation of many other systems within the health care setting. This system is used to collect and store client identification and demographic data that are verified and updated at the time of each visit. For this reason, these may also be known as admission/discharge/transfer (ADT) systems.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 17

Type: FIB

_____ systems use clinical information to generate charges for care.

Standard Text:

Correct Answer: Coding

Rationale : Administrative information systems support client care by managing financial and demographic information and providing reporting capabilities. This category includes client management, financial, payroll, and human resources, and quality assurance systems. **Coding** systems use clinical information to generate charges for care.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 18

Type: MCSA

Which of the following can identify the client in all information systems across the organization?

1. Client identification code

2. Billing system
3. Nursing information system
4. Administrative information systems

Correct Answer: 1

Rationale 1: An important aspect of a registration system used in a multi-entity health system network is the development of a unique client identifier. This number or identification code is used to identify the client in all information systems across the organization and across all entities. This enables accurate client identification, supporting the development of a longitudinal client record that contains all clinical information available for the client.

Rationale 2: An important aspect of a registration system used in a multi-entity health system network is the development of a unique client identifier. This number or identification code is used to identify the client in all information systems across the organization and across all entities. This enables accurate client identification, supporting the development of a longitudinal client record that contains all clinical information available for the client. The billing system cannot be used unless there is a patient identification code.

Rationale 3: A nursing information system using the nursing process approach should support the use and documentation of nursing processes and provide tools for managing the delivery of nursing care.

Rationale 4: Administrative information systems support client care by managing financial and demographic information and providing reporting capabilities. This category includes client management, financial, payroll, and human resources, and quality assurance systems.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 19

Type: FIB

_____ can be used to fine tune and improve critical pathways thereby contributing to improved client outcomes.

Standard Text:

Correct Answer: Variances

Rationale : The nurse, or other care provider, can select one or more appropriate critical pathways for the client. If more than one path is selected, the system should merge the paths to create one “master” path or protocol. The system should identify variances to the anticipated outcomes as they are charted and provide aggregate variance data for analysis by the providers. This information can be used to fine tune and improve the critical pathways, thereby contributing to improved client outcomes.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 20

Type: MCSA

Which of the following statements suggests that the use of mobile devices in the health care setting can enhance patient care?

1. Personal access to patient's home address
2. Portable devices have a finite amount of space to receive instantaneous lab results.
3. The elimination of paper copies of lab reports
4. The elimination of a unit secretary position since all data is housed on the mobile device

Correct Answer: 3

Rationale 1: The nurse does not need access to a patient's address to improve nursing care.

Rationale 2: Space issues on handheld devices should be addressed before loading too many files and data on it.

Rationale 3: The ability to send results directly to secure mobile devices helps to ensure the privacy of health information because it eliminates the need for large numbers of printouts and the need to fax sensitive information.

Rationale 4: The unit secretary has additional duties besides delegated retrieval of lab results.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 21

Type: MCMA

Clinical information systems (CISs) can have a positive impact on which of the following?

Standard Text: Select all that apply.

1. Pharmacy
2. Radiology
3. Order entry
4. Laboratory department
5. Nursing department

Correct Answer: 1,2,4,5

Rationale 1: Clinicians use these systems to access client data that are used to plan, implement, and evaluate care. Some examples of CISs include nursing, laboratory, pharmacy, radiology, medical information systems, emergency department systems, physician practice management systems, and long term and home care information systems.

Rationale 2: Clinicians use these systems to access client data that are used to plan, implement, and evaluate care. Some examples of CISs include nursing, laboratory, pharmacy, radiology, medical information systems, emergency department systems, physician practice management systems, and long term and home care information systems.

Rationale 3: Clinicians use these systems to access client data that are used to plan, implement, and evaluate care. Some examples of CISs include nursing, laboratory, pharmacy, radiology, medical information systems, emergency department systems, physician practice management systems, and long term and home care information systems.

Rationale 4: Clinicians use these systems to access client data that are used to plan, implement, and evaluate care. Some examples of CISs include nursing, laboratory, pharmacy, radiology, medical information systems, emergency department systems, physician practice management systems, and long term and home care information systems.

Rationale 5: Clinicians use these systems to access client data that are used to plan, implement, and evaluate care. Some examples of CISs include nursing, laboratory, pharmacy, radiology, medical information systems, emergency department systems, physician practice management systems, and long term and home care information systems.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 22

Type: MCSA

Which of the following can be used with CISs to allow information entry and retrieval at the point of care or wherever it is needed by the health care professional?

1. Mobile and wireless technology
2. Computerized order entry
3. Bar coding systems
4. Monitoring systems

Correct Answer: 1

Rationale 1: Mobile and wireless technology used with CISs allow information entry and retrieval at the point of care or wherever it is needed by the health care professional. This is best seen by the health care professional who can view client lab results while walking or at the point of care which enhances worker productivity because it eliminates the need to walk back to a central location to view test results, and it improves client service because treatments can be ordered and initiated in a more timely fashion. Internet technology also changes the way that users interact with CISs.

Rationale 2: Mobile and wireless technology used with CISs allow information entry and retrieval at the point of care or wherever it is needed by the health care professional. This is best seen by the health care professional who can view client lab results while walking or at the point of care which enhances worker productivity because it eliminates the need to walk back to a central location to view test results, and it improves client service because treatments can be ordered and initiated in a more timely fashion. Internet technology also changes the way that users interact with CISs.

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Rationale 4: Mobile and wireless technology used with CISs allow information entry and retrieval at the point of care or wherever it is needed by the health care professional. This is best seen by the health care professional who can view client lab results while walking or at the point of care which enhances worker productivity because it eliminates the need to walk back to a central location to view test results, and it improves client service because treatments can be ordered and initiated in a more timely fashion. Internet technology also changes the way that users interact with CISs.

Chapter 9 Systems Development Life Cycle: Nursing Informatics and Organizational Decision Making

1. An instructor is describing the Physician Quality Report Initiative to a group of students. Which of the following would the instructor include?
 - A) Provision of financial incentives to fee-for-service providers for cost-effective, high-quality care
 - B) Payment for the quantity of patients served along with the number of resources that were consumed
 - C) A focus on decreasing patient care costs by decreasing the length of stay in an agency
 - D) A mandatory program for all agencies billing third parties to obtain incentives for improved outcomes
2. An agency is selecting a healthcare information system that includes a collection of systems already interfaced. Which of the following did the agency use?
 - A) Best-of-breed approach
 - B) Integrated approach
 - C) Integrated enterprise
 - D) Clinical information system

3. Which of the following would a nurse identify as a core information system in a clinical information system?
- A) Electronic medication administration record
 - B) Computerized provider order entry
 - C) Ancillary system
 - D) Positive patient identification
4. After teaching a group of students about clinical information systems, the instructor determines that the students need additional teaching when they identify which of the following as the foundation for other clinical systems?
- A) Lab system
 - B) Electronic medication administration record
 - C) Pharmacy system
 - D) Radiology system
5. A nurse is using an electronic clinical documentation system and enters the patient's pulse rate. Which of the following would the nurse expect to see if the value is considered abnormal?
- A) The value as a different color
 - B) An asterisk placed before the value
 - C) The block for the value shaded
 - D) A pop-up box next to the value
6. An instructor is preparing a teaching plan for a group of students about clinical documentation systems. The instructor plans to discuss aggregated data, which are used for which of the following?
- A) Identifying trends for an individual patient
 - B) Confirming decision making as correct
 - C) Determining best practices
 - D) Evaluating clinical workflow
7. A group of nurses are attending an in-service program on computerized documentation. Which of the following would the group expect to hear as the major impact of using a computerized provider order entry (CPOE) system?
- A) Time saving
 - B) Cost-effectiveness
 - C) Enhanced understanding
 - D) Improved patient safety

8. Which of the following would a clinical decision support system provide an alert for when a provider uses computerized provider order entry (CPOE) for a medication? Select all that apply.
- A) Dose within normal range
 - B) Drug incompatibilities
 - C) Allergies
 - D) Appropriate route
 - E) Drug–drug interaction
9. When describing the electronic medication record (eMar) to a group of students, the instructor would include which of the following as a required necessity for implementation?
- A) Computerized provider order entry
 - B) Positive patient identifier
 - C) Picture archiving and communication system
 - D) Ancillary systems
10. When using an admission, discharge, and transfer (ADT) system, which of the following would a nurse be least likely to find?
- A) Patient demographics
 - B) Insurance information
 - C) Supplies used
 - D) Next of kin
11. A nurse is working on a committee addressing problems associated with patient flow in the agency and looking at tracking system solutions. When reviewing the various products, which of the following would the committee most likely identify as a common feature? Select all that apply.
- A) Visual display of beds
 - B) Bed availability
 - C) Transport notification
 - D) Equipment locators
 - E) Passive RFID
12. A nurse is reading a journal article about the use of healthcare information systems. The article is discussing financial systems and mentions that these systems are mission critical. The nurse interprets this to mean which of the following?
- A) Most important to implement
 - B) Essential to the organization's existence
 - C) Necessary for use of other information systems
 - D) Required to prevent potential fraud

13. A group of nurses is putting together a proposal for the use of active RFID for medication administration. Which of the following would the nurses most likely cite as the key benefit?
- A) Decrease in medication errors
 - B) Improved patient safety
 - C) Decrease in disturbing patients
 - D) Better use of nurse time
14. After teaching a group of students about innovative reimbursement incentives being used to reward quality care, the instructor determines that the teaching was successful when the students identify which of the following as an example?
- A) Certification Commission for Healthcare Information Technology
 - B) Physician Quality Report Initiative
 - C) HIMSS Analytics
 - D) KLAS
15. Which of the following would an instructor use to describe best-of-breed system? Select all that apply.
- A) Need for an integrated interface
 - B) Integrated interface in place
 - C) Different vendors for different systems
 - D) Collection of varying levels of systems
 - E) Systems meeting the organization's needs at large

Answer Key

1. A
2. B
3. C
4. B
5. A
6. C
7. D
8. B, C, E
9. A
10. C
11. A, B, C, D
12. B
13. C
14. B
15. A, C

Chapter 10 Administrative Information Systems

1. When describing the role of the nurse administrator in relation to information management systems, which of the following would be expected as a basic skill?
 - A) Using spreadsheets
 - B) Recording quality assurance data
 - C) Interpreting benchmarking data
 - D) Using agency database systems
2. A nurse administrator is using a spreadsheet for forecasting. Which of the following would the administrator do first?
 - A) Review the data for observable patterns
 - B) Identify any data trends that are occurring
 - C) Obtain data spanning several years
 - D) Consider outside influences on the data
3. A nurse administrator is involved in process improvement and uses a chart to examine the relationships among complex processes. The chart resembles a fishbone. Which of the following has the administrator used?
 - A) Cause-and-effect chart
 - B) Flowchart
 - C) Gantt chart
 - D) Pie chart

4. A nurse administrator is evaluating several human resource management systems to determine if they meet the minimum requirements. Which of the following would lead the nurse to reject a system?
- A) Scheduling 24 hours/day, 7 days/week
 - B) Minimizing allowances for staff self-scheduling
 - C) Being able to connect to the payroll system
 - D) Tracking time and attendance
5. A nurse administrator is reviewing a report about the agency's nursing units and the care they provide. The results have been compared and benchmarked to similar units from other agencies. The administrator is reviewing a report from which of the following?
- A) Consumer Assessment of Health Providers and Systems, Hospital Survey (HCAHPS)
 - B) National Database of Nursing Quality Indicators (NDNQI)
 - C) Agency for Healthcare Research and Quality
 - D) The Joint Commission
6. A nurse manager is using real-time information on key performance indicators to guide decision making. Which of the following is the nurse using?
- A) Throughput
 - B) Core measures
 - C) Dashboards
 - D) Benchmarking
7. A nurse-manager is planning staff scheduling for a unit. To determine the needs accurately, which of the following would the nurse use?
- A) Business intelligence
 - B) Forecasting
 - C) Process improvement
 - D) Patient classification system
8. A nurse administrator who is using project management software wants to ensure that the project stays on time and on budget. The administrator would most likely use which of the following to track the project's status?
- A) Gantt chart
 - B) Spreadsheet
 - C) Cause-and-effect chart
 - D) Fishbone chart

9. Which of the following would be most important to include when conducting a survey of patients about their healthcare experiences?
- A) Using a variety of data collection methods
 - B) Addressing a core set of questions
 - C) Conducting the survey primarily with patients
 - D) Using the data internally for quality improvement
10. Which of the following would a nurse administrator least expect to use when collecting data for core measurements?
- A) Myocardial infarction
 - B) Pneumonia
 - C) Heart failure
 - D) Gastric upset
11. After teaching an in-service presentation about dashboards, the presenter determines that the teaching was successful when the class identifies which of the following as a characteristic of an effective dashboard? Select all that apply.
- A) Components working together
 - B) Evidence of valid and invalid data
 - C) Delayed-time display
 - D) Display of key performance indicators
 - E) Flagging of below-targeted indicators
12. For which purpose would a nurse-manager in an agency be least likely to use a spreadsheet?
- A) Create a variance report
 - B) Evaluate monthly budgets
 - C) Determine relationships between length of stay and staffing
 - D) Determine consumer satisfaction
13. A nurse-manager is looking at ways to improve the admission process from the emergency department to the inpatient unit. Which of the following would be most appropriate for the nurse-manager to use?
- A) Flowchart
 - B) Spreadsheet
 - C) Project management software
 - D) Gantt chart

14. After teaching a class of nurse-managers about human resource management systems (HRMS), the instructor determines a need for additional teaching when the class identifies which of the following as a category of HRMS?
- A) Personnel profiles
 - B) Daily schedules
 - C) Task ending dates
 - D) Payroll data
15. A group of nurses are reviewing information about the National Database of Nursing Quality Indicators® (NDNQI®). The nurses demonstrate a need for additional review when they identify information about which of the following as being included?
- A) Process
 - B) Outcomes
 - C) Structure
 - D) Patients' experiences

Answer Key

1. A
2. C
3. A
4. B
5. B
6. C
7. D
8. A
9. B
10. D
11. A, D, E
12. D
13. A
14. C
15. D

Chapter 11 The Human-Technology Interface Dee

1. When describing consumer informatics to a group of students, the instructor includes which of the following as a contributing factor?
 - A) The rising costs of healthcare
 - B) The complexity of navigating the Internet
 - C) Desire by consumers for increased responsibility
 - D) The continued pervasive culture of paternalism
2. Which of the following would a consumer use to compare the performance of health plans?
 - A) Healthcare Effectiveness Data and Information Set (HEDIS)
 - B) Hospital Quality Alliance (HQA)
 - C) Centers for Medicare and Medicaid Services (CMS)
 - D) National Committee for Quality Assurance (NCQA)

3. An instructor is teaching a group of students about the use of online pharmacies by patients. The instructor determines that the teaching was successful when the students identify which of the following as a problem?
- A) The site offers to prescribe a prescription drug for the first time without a physical exam.
 - B) The site offers convenient access to a licensed pharmacist able to answer patients' questions.
 - C) The site provides a U.S. address and phone number to contact if a patient has a problem.
 - D) The site requires a prescription for prescription drugs that are approved by the Food and Drug Administration
4. A patient comes to the clinic for a visit and brings information about his condition that he got off the Internet. Which of the following responses by the nurse would be most appropriate?
- A) "What, don't you believe that we're doing what's best for you?"
 - B) "Let's go over this information and see what it says."
 - C) "I really need to check out this site before we talk about it."
 - D) "You need to be really careful about what you get off the Internet."
5. A group of students is reviewing material in preparation for an examination on health literacy. Which of the following, if identified by the students as a characteristic, indicates the need for additional studying?
- A) Unrelated to years of education
 - B) Variable with the context and setting
 - C) Greater predictor of health than age
 - D) Primarily the ability to use basic reading skills
6. A patient receives his cholesterol test results and decides to make lifestyle changes to improve his numbers. The nurse would interpret this as which of the following?
- A) Health literacy
 - B) Health numeracy
 - C) Consumer informatics
 - D) Information literacy
7. When assisting a patient who will be participating in telemonitoring in his home, which of the following must the nurse do first?
- A) Evaluate the technical skills of the user
 - B) Determine if the user has the necessary physical skill
 - C) Ask the patient to select a location for the device in the home
 - D) Use everyday terms when teaching how to use the device

8. When discussing online support groups with patients, which of the following would the nurse include?
- A) Limited range of areas covered
 - B) Consistent quality of information
 - C) Variable sponsorship
 - D) Mostly nonmoderated
9. After teaching a group of students about the advantages of online support groups, the instructor determines that students need additional teaching when they state which of the following?
- A) Groups are highly diverse in their perspectives.
 - B) Anonymity aids in discussing sensitive issues.
 - C) Messages can be carefully thought out before posting.
 - D) Most interactions are synchronous.
10. A nurse is evaluating a Web page that was designed for use with patients. Which of the following would be most important to assess?
- A) Design
 - B) Accessibility
 - C) Usability
 - D) Artistic approach
11. A nurse is reviewing information about the quality of care for certain hospitals in the local area. The nurse finds information specifically about ratings related to high-risk treatments. Which Web page would the nurse be viewing?
- A) Healthcare Effectiveness Data and Information Set
 - B) National Committee for Quality Assurance
 - C) Hospital Quarterly Alliance
 - D) The Leapfrog Group
12. A nurse who is working in the physician's office is explaining the newly created patient portal that the practice has developed to a group of clients. When describing what the portal can be used for, which of the following would the nurse include? Select all that apply.
- A) Making routine appointments for follow-up
 - B) Getting renewals for current prescriptions
 - C) Alerting clients about abnormal lab results
 - D) Allowing clients to verbally communicate with staff
 - E) Helping clients in decision making

13. A client is searching the Web for health information. The search engine being used is a crawler search engine. Which of the following might the client be using? Select all that apply.
- A) Google
 - B) Yahoo!
 - C) Bing
 - D) Ask Jeeves
 - E) Open Directory
14. During a healthcare visit, a client shows the nurse information that he has obtained from the Internet about his current condition. When discussing this information with the client, which of the following would be most important for the nurse to keep in mind?
- A) The information may be correct.
 - B) The source needs to be verified.
 - C) References must always be listed.
 - D) The information is likely to be out-of-date.
15. After teaching a group of students about health literacy and the skills associated with it, the instructor determines that the teaching was successful when the students identify which ability as a necessary skill? Select all that apply.
- A) Understand visual information
 - B) Locate health information
 - C) Make decisions
 - D) Read at a college level
 - E) Apply relevant information

Answer Key

1. C
2. A
3. A
4. B
5. D
6. B
7. A
8. C
9. D
10. B
11. D
12. A, B, C, E
13. A, C, D
14. A
15. A, B, C, E

Chapter 12 Electronic Security

Question 1

Type: MCSA

The nurse wishes to compile information on congestive heart failure by tomorrow morning. When a comprehensive search is necessary and there is a limited time frame, which search tool is preferred?

1. A search index such as AltaVista
2. A search engine such as Lycos
3. A search engine such as Google
4. A search engine unifier such as OmniMedicalSearch

Correct Answer: 4

Rationale 1: A search engine unifier uses several search engines so it may compile results more quickly. Other searches take more time to reveal results.

Rationale 2: A search engine unifier uses several search engines so it may compile results more quickly. Other searches take more time to reveal results.

Rationale 3: A search engine unifier uses several search engines so it may compile results more quickly. Other searches take more time to reveal results.

Rationale 4: OmniMedicalSearch (www.omnimedicalsearch.com) was created to bring the best sources of medical information together in one easy-to-use platform for consumers and health care professionals. It selects sources deemed as reliable.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 2

Type: MCSA

The nurse refers the client to a website on smoking cessation after evaluating its contents. Which factor increases the probability that the website is appropriate for the client?

1. The site is written in technical language and has comprehensive chemical diagrams for credibility.
2. The site has a current revision date and a URAC accreditation seal that the site meets quality standards.
3. The site is sponsored by a pharmaceutical company that manufactures a smoking cessation medication.
4. The site has a list of broadly generalized indications for smoking cessation.

Correct Answer: 2

Rationale 1: Established websites should include revision dates of all pages and be written at the appropriate comprehension level of the intended audience. Additionally, a URAC accreditation seal that the site meets quality standards increases the site's credibility. The consumer should be wary of bias, poorly referenced materials, and broad generalizations of facts.

Rationale 2: Established websites should include revision dates of all pages and be written at the appropriate comprehension level of the intended audience. Additionally, a URAC accreditation seal that the site meets quality standards increases the site's credibility. The consumer should be wary of bias, poorly referenced materials, and broad generalizations of facts.

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Rationale 4: Established websites should include revision dates of all pages and be written at the appropriate comprehension level of the intended audience. Additionally, a URAC accreditation seal that the site meets quality standards increases the site's credibility. The consumer should be wary of bias, poorly referenced materials, and broad generalizations of facts.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: MCSA

The hospital health care library plans to switch some journals from paper format to online subscription. Physicians, nurses, and other health care professionals would be able to access online articles from anywhere by using a valid ID. Which of these is a disadvantage for totally online publications?

1. Current information may require more time to be approved for posting.
2. Libraries must pay higher fees to acquire and store the materials.
3. Those persons without online access may not be able to access the materials.
4. Drawings and photographs are difficult to reproduce in electronic format.

Correct Answer: 3

Rationale 1: Not everyone has online capabilities; this is a disadvantage for online publications. However, the numerous advantages include: multimedia capability, lower costs, and increased currency of information.

Rationale 2: Not everyone has online capabilities; this is a disadvantage for online publications. However, the numerous advantages include: multimedia capability, lower costs, and increased currency of information.

Rationale 3: Not everyone has online capabilities; this is a disadvantage for online publications. However, the numerous advantages include: multimedia capability, lower costs, and increased currency of information.

Rationale 4: Not everyone has online capabilities; this is a disadvantage for online publications. However, the numerous advantages include: multimedia capability, lower costs, and increased currency of information.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: MCSA

There are many Internet websites available for searching health care related questions. Web portals are specialized websites that personalize features for individual users. Which best describes how a Web portal can individualize user information?

1. A website that requests the user to register and then sign in each time upon entering
2. A website that provides a home page with general information about the organization
3. A website that uses the HyperText Markup Language (HTML) to display its pages
4. A website that offers specialized search engines for searching out information

Correct Answer: 1

Rationale 1: A Web portal requires users to register, thus obtaining information from the user that allows the site to personalize information for that user. It also assists the user in obtaining individualized, personalized information. Web portals use many markup languages, and provide the user with the ability to search and retrieve information (as do other websites).

Rationale 2: A Web portal requires users to register, thus obtaining information from the user that allows the site to personalize information for that user. It also assists the user in obtaining individualized, personalized information. Web portals use many markup languages, and provide the user with the ability to search and retrieve information (as do other websites).

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Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCSA

Which of the following is a true statement about protecting the confidentiality of client-related e-mail?

1. Encryption keys prevent viruses or Trojan horses from being attached to e-mail messages.
2. Digital credentials utilize biometric means, such as thumbprint, to verify the identity of the sender.
3. Public key infrastructure (PKI) uses unique codes to confirm the identity of those sending e-mails.
4. Viruses may be transmitted by e-mail messages, so each e-mail should be separately scanned prior to being read.

Correct Answer: 3

Rationale 1: PKI uses unique codes to verify the identity of the person who is e-mailing the sender. Viruses are transmitted using attachments (not e-mail messages) and may not be picked up with anti-virus programs once messages are encrypted. Encryption is used to prevent unauthorized people from reading e-mail.

Rationale 2: Digital credential does not require biometric measures to verify identity although there is increased interest in the use of biometric measures as a means to ensure that only authorized user's access private health information (p. 14).

Rationale 3: PKI uses unique codes to verify the identity of the person who is e-mailing the sender. Viruses are transmitted using attachments (not e-mail messages) and may not be picked up with anti-virus programs once messages are encrypted.

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Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCSA

Which is the most effective way to reduce SPAM (unsolicited e-messages) in the workplace?

1. Use "challenge response software" to request confirmation that the e-mail was sent by a person.
2. Allow the e-mail application program to filter all mail and send unwanted messages to the trash.
3. Send and receive all company e-mail from a single e-mail account.
4. Reply to each message and request to be taken off the mailing list.

Correct Answer: 1

Rationale 1: Challenge response software (such as CAPTCHAS) will not display the message unless a person can be contacted to verify that the message was sent by a person. Filtering takes too much time. A single e-mail account for all company e-mail might actually increase SPAM; and if one replies to SPAM, this verifies the person's address and even more SPAM might be sent.

Rationale 2: Challenge response software (such as CAPTCHAS) will not display the message unless a person can be contacted to verify that the message was sent by a person. Filtering takes too much time. A single e-mail account for all company e-mail might actually increase SPAM; and if one replies to SPAM, this verifies the person's address and even more SPAM might be sent.

Rationale 3: Challenge response software (such as CAPTCHAS) will not display the message unless a person can be contacted to verify that the message was sent by a person. Filtering takes too much time. A single e-mail account for all company e-mail might actually increase SPAM; and if one replies to SPAM, this verifies the person's address and even more SPAM might be sent.

Rationale 4: Challenge response software (such as CAPTCHAS) will not display the message unless a person can be contacted to verify that the message was sent by a person. Filtering takes too much time. A single e-mail account for all company e-mail might actually increase SPAM; and if one replies to SPAM, this verifies the person's address and even more SPAM might be sent.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 7

Type: MCSA

A physician wishes to send a very large file to a consulting physician, including a patient's chart and diagnostic images with reports. Which is the most appropriate method of sending the data?

1. Utilize a file transfer protocol (FTP) program to upload the information to the physician
2. Remove all graphics from the file, send the file via e-mail, and fax the diagnostic images
3. Attach the file to an e-mail and send it, ensuring encryption is utilized
4. Connect to the physician's computer via dialup and transfer the information

Correct Answer: 1

Rationale 1: FTP protocol allows the transmission of large files. Files may be too large to send as e-mail attachments, and faxing diagnostic images slows down transmission time (as well as increasing the probability that security may be breached during fax transmission).

Rationale 2: FTP protocol allows the transmission of large files. Files may be too large to send as e-mail attachments, and faxing diagnostic images slows down transmission time (as well as increasing the probability that security may be breached during fax transmission).

Rationale 3: FTP protocol allows the transmission of large files. Files may be too large to send as e-mail attachments, and faxing diagnostic images slows down transmission time (as well as increasing the probability that security may be breached during fax transmission).

Rationale 4: FTP protocol allows the transmission of large files. Files may be too large to send as e-mail attachments, and faxing diagnostic images slows down transmission time (as well as increasing the probability that security may be breached during fax transmission).

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCSA

Security is an important issue for all websites. Which measure best protects the overall security of a health-based website?

1. Connect the Web server directly to the agency computer.
2. Install an antivirus program and update annually.
3. Allow only registered users to access the website.
4. Construct separate firewalls for each Web server.

Correct Answer: 4

Rationale 1: Separate firewalls increase security of the system. Antivirus programs must be updated more frequently than once a year. Web servers should not be directly connected to agency computers. Registered users may not have given correct information when they registered.

Rationale 2: Separate firewalls increase security of the system. Antivirus programs must be updated more frequently than once a year. Web servers should not be directly connected to agency computers. Registered users may not have given correct information when they registered.

Rationale 3: Separate firewalls increase security of the system. Antivirus programs must be updated more frequently than once a year. Web servers should not be directly connected to

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Rationale 4: Separate firewalls increase security of the system. Antivirus programs must be updated more frequently than once a year. Web servers should not be directly connected to agency computers. Registered users may not have given correct information when they registered.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 9

Type: MCSA

Which of the following statements is true regarding intranets?

1. An intranet is immune to viruses and hacker attacks, because accessibility is restricted to employees.
2. An intranet is restricted to employees and allows them to review their personal information at any time.
3. An intranet is open to registered vendors and may be used to price and purchase health care products.
4. An intranet is used to facilitate collaborative data sharing among the employees within the institution.

Correct Answer: 4

Rationale 1: Intranets are private computer networks used to facilitate collaborative data sharing among the institution employees. Intranets remain vulnerable to viruses or hacker attacks, however. Employees may not be allowed to review their personal information; and vendors typically access information through extranets.

Rationale 2: Intranets are private computer networks used to facilitate collaborative data sharing among the institution employees. Intranets remain vulnerable to viruses or hacker attacks, however. Employees may not be allowed to review their personal information; and vendors typically access information through extranets.

Rationale 3: Intranets are private computer networks used to facilitate collaborative data sharing among the institution employees. Intranets remain vulnerable to viruses or hacker attacks, however. Employees may not be allowed to review their personal information; and vendors typically access information through extranets.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: MCSA

Which of the following is recommended when considering World Wide Web home page content and design?

1. To improve readability always use dark backgrounds with light colored text.
2. Do not include a counter; visitors do not need to know how many people visited a site.
3. Include as much information on the introductory page as possible so the user will not need to link to other pages.
4. Do not place a copyright notice on the introductory page; the U.S. Copyright Office does not register Web pages.

Correct Answer: 2

Rationale 1: The recommendation is not to include a counter; visitors do not need to know how many people visited a site. Your choice would decrease readability, since dark backgrounds can cause fatigue. To improve readability, use high-contrast backgrounds such as black text on white.

Rationale 2: The recommendation is not to include a counter; visitors do not need to know how many people visited a site.

Rationale 3: The recommendation is not to include a counter; visitors do not need to know how many people visited a site. Your choice would crowd pages with information and images; this is

not recommended. You should limit introductory page information so that essential data are visible without scrolling.

Rationale 4: The recommendation is not to include a counter; visitors do not need to know how many people visited a site. One should register original work with the U.S. Copyright Office and place a copyright notice with year next to protected material.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: MCSA

A nurse practitioner wishes to send e-mail to all clients on a distribution list without displaying the e-mail addresses of those on the list to the recipients. Which of the following will appropriately accomplish this task?

1. Include the nurse practitioner's e-mail address as primary recipient and the client addresses as carbon copies (CC).
2. The nurse practitioner must send a separate message to each individual client as primary recipient.
3. Include the nurse practitioner's e-mail address as primary recipient and the client addresses as blind copies (BCC).
4. Include the recipient e-mail addresses as primary recipients and the nurse practitioner's address as a blind copy (BCC).

Correct Answer: 3

Rationale 1: The correct response is to include the nurse practitioner's e-mail address as primary recipient and the client's addresses as blind carbon copies. The e-mail header lists who sent the message, when, to whom, and a subject line. Messages copied to clients through "CC" will make it possible for every client receiving the e-mail to see the e-mail addresses of all the other clients and, therefore, violate client e-mail address confidentiality. Messages copied to others through "BCC" (blind copy or blind carbon copy) will not display the addresses of other recipients.

Rationale 2: The correct response is to include the nurse practitioner's e-mail address as primary recipient and the client's addresses as blind carbon copies. The process of sending a separate

message to each client as primary recipient will accomplish the task but would be too time consuming. Messages copied to others through "BCC" (blind copy or blind carbon copy) will not display the addresses of other recipients.

Rationale 3: The correct response is to include the nurse practitioner's e-mail address as primary recipient and the client's addresses as "BCC." Messages copied to others through "BCC" will not display the addresses of other recipients and, therefore, protect client e-mail address confidentiality.

Rationale 4: The appropriate response is to include the nurse practitioner's e-mail address as primary recipient and the client's addresses as "BCC". The e-mail header lists who sent the message, when, to whom, and a subject line. Messages copied to others through "BCC" will not display the addresses of other recipients and, therefore, protect client e-mail address confidentiality. If one includes the recipient e-mail addresses as primary recipients, every client receiving the e-mail will be able to see the e-mail addresses of all the other clients.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: MCSA

While visiting the American Heart Association website, a client plays the animation of the heart at work. Which of the following was used to play the animation?

1. Browser
2. Search engine
3. Helper program
4. Plug-in

Correct Answer: 4

Rationale 1: A browser is a retrieval program that allows access to hypertext and hypermedia documents on the Web by using HTTP. There are some things that browsers do not do, such as play animations. In this application, a plug-in was required (Adobe Flash Player).

Rationale 2: Search engines use automated programs that search the Web, compiling a list of links to sites relevant to keywords supplied by the user. The correct answer is a plug-in; it is a program used to extend the capabilities of a browser. In this case a browser was running in order to view the Web page and the plug-in was needed to extend its capabilities (to play animation).

Rationale 3: There are some things that helper programs do not do, such as play animations. In this application, a plug-in was required (Adobe Flash Player). The main difference between helper and plug-in programs is that the first does not require the browser to be running to function, while the second does. The correct answer is a plug-in; it is a program used to extend the capabilities of a browser. In this case a browser was running in order to view the Web page and the plug-in was needed to extend its capabilities (to play animation).

Rationale 4: In this application, a plug-in was required (Adobe Flash Player). A browser was running in order to view the Web page and the plug-in was needed to extend its capabilities.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 13

Type: MCSA

SPIM is defined as which of the following?

1. Unsolicited messages
2. Personal instant messaging
3. Solicited messages
4. Wiki responses

Correct Answer: 1

Rationale 1: One of the disadvantages associated with the public versions of instant messaging (IM) software is SPIM. SPIM refers to unsolicited messages often containing a link to a website that the spimmer is attempting to market. SPIM is sometimes referred to as the IM version of SPAM found in e-mail.

Rationale 2: One of the disadvantages associated with the public versions of instant messaging (IM) software is SPIM. SPIM refers to unsolicited messages often containing a link to a website

that the spimmer is attempting to market. SPIM is sometimes referred to as the IM version of SPAM found in e-mail.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: MCSA

Which of the following statements is true about search indexes?

1. Search indexes are appropriate when specific information is requested.
2. Search indexes are appropriate when general information is requested.
3. Search indexes are necessary for access to certain databases.
4. Search indexes can only be found in libraries.

Correct Answer: 2

Rationale 1: Some sites, such as Yahoo, index links by broad subject categories. Search indexes are appropriate when general information is requested. Search engines use automated programs, such as robots or “bots” to search the Web, compiling a list of links to sites relevant to keywords supplied by the user. The search may also include Usenet discussions. Search engines are indicated when it is necessary to find a specific topic.

Rationale 2: Some sites, such as Yahoo, index links by broad subject categories. Search indexes are appropriate when general information is requested. Search engines use automated programs,

such as robots or “bots” to search the Web, compiling a list of links to sites relevant to keywords supplied by the user. The search may also include Usenet discussions.

Rationale 3: Some sites, such as Yahoo, index links by broad subject categories. Search indexes are appropriate when general information is requested. Search engines use automated programs, such as robots or “bots” to search the Web, compiling a list of links to sites relevant to keywords supplied by the user. The search may also include Usenet discussions.

Rationale 4: Some sites, such as Yahoo, index links by broad subject categories. Search indexes are appropriate when general information is requested. Search engines use automated programs, such as robots or “bots” to search the Web, compiling a list of links to sites relevant to keywords supplied by the user. The search may also include Usenet discussions.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 15

Type: MCMA

Java is a widely used programming language that enables the display of moving text, animation, and musical excerpts on Web pages. Which of the following are true about Java?

Standard Text: Select all that apply.

1. Helper programs and plug-in programs are often written in Java.
2. Considered an alternative to Microsoft's ActiveX
3. Resides on the server until it is needed by client computer
4. Runs on any Java-enabled browser
5. Reduces the need to purchase, install, and maintain on-site software

Correct Answer: 1,2,3,4,5

Rationale 1: Helper and plug-in programs are computer applications that have been designed to perform tasks such as view graphics, construct Web pages, play sounds, or even remotely control another PC over the Internet. Both these types of programs can be written in Java.

Rationale 2: An alternative to Java for the development of Internet-enabled tools and technologies is Microsoft's ActiveX.

Rationale 3: Actual code can reside on the server until it is downloaded to the client computer as it is needed.

Rationale 4: Applications will run on any Java-enabled browser.

Rationale 5: Java reduces the need to purchase, install, and maintain on-site software.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 16

Type: MCSA

A hospital plans to share data with all physician offices that utilize their facilities. Which of the following approaches would best meet the need?

1. Internet
2. Intranet
3. Web portal
4. Extranet

Correct Answer: 4

Rationale 1: Extranet is Extranets represent another variation of the Internet. Extranets are networks that sit outside the protected internal network of an organization and use Internet software and communication protocols for electronic commerce and for use by outside suppliers or customers. Extranets are more private than a website that is open to the public but are more open than an intranet, which can be accessed only by employees. Intranets sit behind firewalls or other barriers and may not normally be available to people outside of the organization.

Rationale 2: Extranet is Extranets represent another variation of the Internet. Extranets are networks that sit outside the protected internal network of an organization and use Internet software and communication protocols for electronic commerce and for use by outside suppliers

or customers. Intranets sit behind firewalls or other barriers and may not normally be available to people outside of the organization.

Rationale 3: Extranet is Extranets represent another variation of the Internet. Extranets are networks that sit outside the protected internal network of an organization and use Internet software and communication protocols for electronic commerce and for use by outside suppliers or customers. Extranets are more private than a website that is open to the public but are more open than an intranet, which can be accessed only by employees. Web portals help to create virtual communities for professionals and consumers.

Rationale 4: Extranets represent another variation of the Internet. Extranets are networks that sit outside the protected internal network of an organization and use Internet software and communication protocols for electronic commerce and for use by outside suppliers or customers. Extranets are more private than a website that is open to the public but are more open than an intranet, which can be accessed only by employees.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 17

Type: MCSA

Which of the following is not an e-mail organizational domain?

1. .edu
2. .ca
3. .govn
4. .org

Correct Answer: 3

Rationale 1: .edu represents an e-mail address to a university or college.

Rationale 2: .ca represents an organizational domain for Canada.

Rationale 3: .govn does not represent an e-mail organizational domain.

Rationale 4: .org represents a nonprofit organization.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub:

Nursing/Integrated Concepts:

Learning Outcome:

Question 18

Type: MCSA

Which nonprofit professional organization provides direction when issues arise on the Internet?

1. The Web Regulation Agency
2. The Internet Society
3. The Web Society
4. Java

Correct Answer: 2

Rationale 1: The Internet Society has the greatest overall influence on the Internet. This nonprofit professional organization provides direction when issues arise that can impact the Internet. The Internet Society also serves as a home for groups responsible for the promulgation of Internet infrastructure standards. These groups include the Internet Engineering Task Force (IETF) and the Internet Architecture Board (IAB). The IAB is chartered both as a committee of the IETF and as an advisory body of the Internet Society (ISOC). Its responsibilities include architectural oversight of IETF activities and Internet Standards Process oversight and appeal.

Rationale 2: The Internet Society has the greatest overall influence on the Internet. This nonprofit professional organization provides direction when issues arise that can impact the Internet. The Internet Society also serves as a home for groups responsible for the promulgation of Internet infrastructure standards. These groups include the Internet Engineering Task Force (IETF) and the Internet Architecture Board (IAB). The IAB is chartered both as a committee of the IETF and as an advisory body of the Internet Society (ISOC). Its responsibilities include architectural oversight of IETF activities and Internet Standards Process oversight and appeal.

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(IETF) and the Internet Architecture Board (IAB). The IAB is chartered both as a committee of the IETF and as an advisory body of the Internet Society (ISOC). Its responsibilities include architectural oversight of IETF activities and Internet Standards Process oversight and appeal.

Rationale 4: The Internet Society has the greatest overall influence on the Internet. This nonprofit professional organization provides direction when issues arise that can impact the Internet. The Internet Society also serves as a home for groups responsible for the promulgation of Internet infrastructure standards. These groups include the Internet Engineering Task Force (IETF) and the Internet Architecture Board (IAB). The IAB is chartered both as a committee of the IETF and as an advisory body of the Internet Society (ISOC). Its responsibilities include architectural oversight of IETF activities and Internet Standards Process oversight and appeal.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 19

Type: FIB

URL is an acronym for_____.

Standard Text:

Correct Answer: Uniform Resource Locator

Rationale : URL is an acronym for Uniform Resource Locator.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 20

Type: MCSA

One of the greatest concerns articulated by Internet users is security breaches. Which of the following is the best method to protect the integrity of the computer and its data?

1. Construct a separate firewall for the Web server.
2. Ignore security warnings.
3. Keep antivirus systems up-to-date and do not install intrusion detection systems to hail attacks.
4. Do not install security patches.

Correct Answer: 1

Rationale 1: Firewalls provide the same level of protection for Web servers as they do for private networks with Internet access. Some, if not all, hacker attacks can be prevented with a firewall for each Web server.

Rationale 2: Updates on hacker attacks and warnings on new breach techniques are posted by several sites on the Web, including the WWW Security FAQ and commercial sites such as Symantec.com. Webmasters should anticipate attack and take proactive measures.

Rationale 3: Keep antivirus systems up-to-date and install intrusion detection systems to hail attacks. Webmasters or network administrators need to maintain up-to-date virus detection to avoid having their site(s) being brought down by the latest virus or worm. Alarms and tracking mechanisms alert administrators or webmasters to attacks early so that action can be taken to minimize website damage.

Rationale 4: Download and install software security patches. Security patches for operating systems and applications are available from the vendor once problems have been identified.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 21

Type: MCSA

Which of the following is not considered a search engine?

1. Google
2. Altavista
3. Webinar

4. Bing

Correct Answer: 3

Rationale 1: Google is an example of a search engine.

Rationale 2: Altavista is an example of a search engine.

Rationale 3: A webinar is not a search engine but a method to deliver a class or educational online experience.

Rationale 4: Bing is an example of a search engine.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 22

Type: MCSA

Mrs. Jones is admitted to the medical-surgical unit with acute shortness of breath and substernal chest pain that she has experienced for several days. The nurse asks her why she did not contact her primary care provider sooner and she responded, "The website that I checked said that I had an allergy." What is the best response to Mrs. Jones?

1. "You are right. The information on the Internet is fairly accurate."
2. "Mrs. Jones, not all websites are accurate and you should check to make sure they were created by a reputable source."
3. "The Internet has a great deal of accurate information."
4. "Why would you check the Internet first?"

Correct Answer: 2

Rationale 1: Health information published on the Internet is not necessarily accurate. The nurse or health care professional must scrutinize content for accuracy and relevance before recommending the site to any patient. Patients can often rely too heavily on Internet content without first checking its validity.

Rationale 2: Health information published on the Internet is not necessarily accurate. The nurse or health care professional must scrutinize content for accuracy and relevance before recommending the site to any patient. Patients can often rely too heavily on Internet content without first checking its validity.

Rationale 3: Health information published on the Internet is not necessarily accurate. The nurse or health care professional must scrutinize content for accuracy and relevance before recommending the site to any patient. Patients can often rely too heavily on Internet content without first checking its validity.

Rationale 4: Health information published on the Internet is not necessarily accurate. The nurse or health care professional must scrutinize content for accuracy and relevance before recommending the site to any patient. Patients can often rely too heavily on Internet content without first checking its validity.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 23

Type: MCSA

Which is the most important legal statement about creating personal Web pages?

1. A Web page developer does not have to abide by copyright laws before posting information.
2. A Web page developer must review copyright laws before posting information.
3. Nonprofit organizations are the only entities that must abide by copyright laws.
4. For profit agencies are the only entities that must abide by copyright laws.

Correct Answer: 2

Rationale 1: When creating a Web page, register original work with the U.S. Copyright Office and place a copyright notice with year next to protected material. If outsourcing the creation and uploading of a Web page, develop a written agreement that identifies copyright ownership when working with a Web developer.

Rationale 2: If uploading work developed by others, first obtain information from the author. Register original work with the U.S. Copyright Office and place a copyright notice with year next to protected material.

Rationale 3: When creating a Web page, register original work with the U.S. Copyright Office and place a copyright notice with year next to protected material. If outsourcing the creation and uploading of a Web page, develop a written agreement that identifies copyright ownership when working with a Web developer.

Rationale 4: When creating a Web page, register original work with the U.S. Copyright Office and place a copyright notice with year next to protected material. If outsourcing the creation and uploading of a Web page, develop a written agreement that identifies copyright ownership when working with a Web developer.

Chapter 13 Worldlow and Beyond Meaningful Use

1. When describing consumer informatics to a group of students, the instructor includes which of the following as a contributing factor?
 - A) The rising costs of healthcare
 - B) The complexity of navigating the Internet
 - C) Desire by consumers for increased responsibility
 - D) The continued pervasive culture of paternalism
2. Which of the following would a consumer use to compare the performance of health plans?
 - A) Healthcare Effectiveness Data and Information Set (HEDIS)
 - B) Hospital Quality Alliance (HQA)
 - C) Centers for Medicare and Medicaid Services (CMS)
 - D) National Committee for Quality Assurance (NCQA)
3. An instructor is teaching a group of students about the use of online pharmacies by patients. The instructor determines that the teaching was successful when the students identify which of the following as a problem?
 - A) The site offers to prescribe a prescription drug for the first time without a physical exam.
 - B) The site offers convenient access to a licensed pharmacist able to answer patients' questions.
 - C) The site provides a U.S. address and phone number to contact if a patient has a problem.
 - D) The site requires a prescription for prescription drugs that are approved by the Food and Drug Administration

4. A patient comes to the clinic for a visit and brings information about his condition that he got off the Internet. Which of the following responses by the nurse would be most appropriate?
- A) "What, don't you believe that we're doing what's best for you?"
 - B) "Let's go over this information and see what it says."
 - C) "I really need to check out this site before we talk about it."
 - D) "You need to be really careful about what you get off the Internet."
5. A group of students is reviewing material in preparation for an examination on health literacy. Which of the following, if identified by the students as a characteristic, indicates the need for additional studying?
- A) Unrelated to years of education
 - B) Variable with the context and setting
 - C) Greater predictor of health than age
 - D) Primarily the ability to use basic reading skills
6. A patient receives his cholesterol test results and decides to make lifestyle changes to improve his numbers. The nurse would interpret this as which of the following?
- A) Health literacy
 - B) Health numeracy
 - C) Consumer informatics
 - D) Information literacy
7. When assisting a patient who will be participating in telemonitoring in his home, which of the following must the nurse do first?
- A) Evaluate the technical skills of the user
 - B) Determine if the user has the necessary physical skill
 - C) Ask the patient to select a location for the device in the home
 - D) Use everyday terms when teaching how to use the device
8. When discussing online support groups with patients, which of the following would the nurse include?
- A) Limited range of areas covered
 - B) Consistent quality of information
 - C) Variable sponsorship
 - D) Mostly nonmoderated

9. After teaching a group of students about the advantages of online support groups, the instructor determines that students need additional teaching when they state which of the following?
- A) Groups are highly diverse in their perspectives.
 - B) Anonymity aids in discussing sensitive issues.
 - C) Messages can be carefully thought out before posting.
 - D) Most interactions are synchronous.
10. A nurse is evaluating a Web page that was designed for use with patients. Which of the following would be most important to assess?
- A) Design
 - B) Accessibility
 - C) Usability
 - D) Artistic approach
11. A nurse is reviewing information about the quality of care for certain hospitals in the local area. The nurse finds information specifically about ratings related to high-risk treatments. Which Web page would the nurse be viewing?
- A) Healthcare Effectiveness Data and Information Set
 - B) National Committee for Quality Assurance
 - C) Hospital Quarterly Alliance
 - D) The Leapfrog Group
12. A nurse who is working in the physician's office is explaining the newly created patient portal that the practice has developed to a group of clients. When describing what the portal can be used for, which of the following would the nurse include? Select all that apply.
- A) Making routine appointments for follow-up
 - B) Getting renewals for current prescriptions
 - C) Alerting clients about abnormal lab results
 - D) Allowing clients to verbally communicate with staff
 - E) Helping clients in decision making
13. A client is searching the Web for health information. The search engine being used is a crawler search engine. Which of the following might the client be using? Select all that apply.
- A) Google
 - B) Yahoo!
 - C) Bing
 - D) Ask Jeeves
 - E) Open Directory

14. During a healthcare visit, a client shows the nurse information that he has obtained from the Internet about his current condition. When discussing this information with the client, which of the following would be most important for the nurse to keep in mind?
- A) The information may be correct.
 - B) The source needs to be verified.
 - C) References must always be listed.
 - D) The information is likely to be out-of-date.
15. After teaching a group of students about health literacy and the skills associated with it, the instructor determines that the teaching was successful when the students identify which ability as a necessary skill? Select all that apply.
- A) Understand visual information
 - B) Locate health information
 - C) Make decisions
 - D) Read at a college level
 - E) Apply relevant information

Answer Key

1. C
2. A
3. A
4. B
5. D
6. B
7. A
8. C
9. D
10. B
11. D
12. A, B, C, E
13. A, C, D
14. A
15. A, B, C, E

Chapter 14 The Electronic Health Record and Clinical Informatics

1. A nurse is working on a committee involved in adopting electronic healthcare systems for the agency. Currently, the agency has clinical documentation, a clinical decision support system (CDSS) with error checking, and a picture archive and communication system (PACS) in place. The committee determines that the agency is at which of the following stages of adoption?
 - A) Stage 0
 - B) Stage 1
 - C) Stage 2
 - D) Stage 3
2. When adopting the electronic healthcare record (EHR), which of the following would be considered the ultimate goal?
 - A) Sharing of information
 - B) Patient as the most important focus
 - C) Cost-effectiveness
 - D) Improved time management

3. A group involved in adopting healthcare information technology is developing a strategic plan. Which of the following would they include?
 - A) Plan that covers 2 to 3 years
 - B) Structured guide that does not change
 - C) Expenditures offset by patient outcomes benefits
 - D) Demonstration of a slight return on investment

4. A nurse using a clinical information system is required to document the same data in more than one area because the data do not “flow over” to the other areas and the data fields are not universally designed. Which of the following is lacking?
 - A) Interoperability
 - B) Intangibles
 - C) Return on investment
 - D) Biometrics

5. A nursing informatics specialist is conducting a seminar on the need for uniformity in user design for data entry screens based on the understanding of which of the following?
 - A) Most healthcare providers involved in the design process have background knowledge.
 - B) Database design skills are common in those serving on EHR committees.
 - C) Most providers approach user design using a paper chart thinking process.
 - D) Screen design issues are limited, rarely affecting the time for documentation.

6. When developing a plan for workflow redesign and the use of computerized documentation, which of the following would be the first thing to consider?
 - A) The number of computers needed
 - B) Location of the computers
 - C) Wheeled or bedside type of computer
 - D) Theft prevention

7. An instructor is describing the use of health information technology to meet national safety goals. The instructor determines that the students need additional teaching when they state which of the following?
 - A) Barcodes and chips in armbands promote accurate patient identification.
 - B) Agencies are providing electronic reports for transfer of patients to on-call staff.
 - C) Clinical decision support systems could alert providers to double-check their order.
 - D) Automated dispensing systems dramatically reduce the risk of stocking errors.

8. A nurse is creating a password for use in accessing the healthcare information system in the agency. Which of the following would be most appropriate for the nurse to do in creating this password?
- A) Select mostly lowercase letters
 - B) Select a combination of letters and numbers
 - C) Use numbers sparingly
 - D) Use a word familiar to the nurse
9. When describing the various biometric methods for authentication, which of the following would the nurse identify as most secure?
- A) Fingerprint
 - B) Voiceprint
 - C) Retinal scan
 - D) Iris scan
10. When describing the similarities and differences between the two types of radio frequency identification (RFID), which of the following would an instructor include as being associated with the passive type?
- A) Increased cost
 - B) Read–write capability
 - C) Readable from a distance of 1 to 10 feet
 - D) Implantable under the skin
11. After teaching a group of students about the benefits of a fully integrated electronic health record, the instructor determines the need for additional teaching when the students identify which of the following as a benefit to the patient?
- A) Individualized treatment
 - B) Ability to check the record's accuracy
 - C) Capability of decision support
 - D) Knowledge of persons with access to the data
12. A group of students are reviewing information about strategic planning and the adoption of healthcare information technology. The students demonstrate understanding of the material when they identify which of the following as reflective of the strategic plan? Select all that apply.
- A) Flexible in overall design
 - B) Focused on short-term time frames
 - C) Inclusion of resource acquisition
 - D) Support for the use of information technology
 - E) A brief overview of the agency's goals

13. A committee is reviewing the strategic plan for the agency's return on investment. The committee identifies tangibles. Which of the following would the committee be addressing? Select all that apply.
- A) Improved decision making
 - B) Decreased lengths of stay
 - C) Reduced charges per admission
 - D) Enhanced user satisfaction
 - E) Improved communication
14. A nursing instructor is preparing a class on syndromic surveillance. When describing this concept, the instructor defines as a means for which of the following?
- A) Meeting the Joint Commission's patient safety goals
 - B) Identifying unintended consequences of healthcare technology
 - C) A way to measure quality of care and patient outcomes
 - D) Providing early detection of potential disease or bioterrorist health problems
15. A nurse is working as part of a committee involved in creating passwords for the healthcare agency's network. Which of the following would be the strongest password?
- A) Nursing
 - B) NuRs1N9gY
 - C) 1234567
 - D) GniSrun

Answer Key

1. D
2. B
3. C
4. A
5. C
6. A
7. D
8. B
9. D
10. C
11. C
12. A, C, D
13. B, C
14. D
15. B

Chapter 15 Informatics Tools to Promote Patient Safety and Quality Outcomes

Question 1

Type: MCSA

Which agency has a comprehensive website dedicated to improving the quality, safety, efficiency, and effectiveness of health care for all Americans?

1. Joint Commission
2. Agency for Healthcare Research and Quality (AHRQ)
3. American Nurses Credentialing Center
4. Pathway to Excellence Program

Correct Answer: 2

Rationale 1: The Agency for Healthcare Research and Quality (AHRQ) is the part of the Department of Health and Human Services (DHHS) and is responsible for improving the quality, safety, efficiency, and effectiveness of health care for all Americans (www.ahrq.gov). AHRQ supports health-services research in these areas and provides information for practitioners on areas such as disaster preparedness, quality and patient safety, data-sets, and related research findings. Of particular interest for nurses is a listing of AHRQ resources for nurses (www.ahrq.gov/about/nursing/nrslinks.htm).

Rationale 2: The Agency for Healthcare Research and Quality (AHRQ) is the part of the Department of Health and Human Services (DHHS) and is responsible for improving the quality, safety, efficiency, and effectiveness of health care for all Americans (www.ahrq.gov). AHRQ supports health-services research in these areas and provides information for practitioners on areas such as disaster preparedness, quality and patient safety, data-sets, and related research findings. Of particular interest for nurses is a listing of AHRQ resources for nurses (www.ahrq.gov/about/nursing/nrslinks.htm).

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Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 2

Type: FIB

The _____ focuses on making available to individual registered nurses and organizations where nurses practice resources for pursuing excellence in practice.

Standard Text:

Correct Answer: American Nurses Credentialing Center

Rationale : American Nurses Credentialing Center (ANCC) focuses on making available to individual registered nurses and organizations where nurses practice resources for pursuing excellence in practice.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 3

Type: MCSA

Organizations and credentialing agencies often use the Internet to share educational information. Which of the following makes this possible?

1. Podcasts and webinars
2. DVDs
3. E-mail
4. List-servs

Correct Answer: 1

Rationale 1: Podcasts and webinars are educational resources used by many professional organizations. These online presentations are available initially as live broadcasts, then retained for later access. Members usually have free access, and others might have access after payment of a fee. Many organizations provide continuing education credits for viewing podcasts and webinars.

Rationale 2: Podcasts and webinars are educational resources used by many professional organizations. These online presentations are available initially as live broadcasts, then retained for later access. Members usually have free access, and others might have access after payment of a fee. Many organizations provide continuing education credits for viewing podcasts and webinars.

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Rationale 4: Podcasts and webinars are educational resources used by many professional organizations. These online presentations are available initially as live broadcasts, then retained for later access. Members usually have free access, and others might have access after payment

of a fee. Many organizations provide continuing education credits for viewing podcasts and webinars.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 4

Type: MCMA

Which of the following terms denote learning that uses the Internet?

Standard Text: Select all that apply.

1. E-learning
2. Web-based learning
3. Internet training
4. Online learning
5. Computer-assisted learning

Correct Answer: 1,2,3,4,5

Rationale 1: E-learning, Web-based learning, Internet-based training, advanced distributed learning, courseware and Web-based instruction, computer-based or computer-assisted learning, online learning, and open/ flexible learning are terms that denote Internet learning activities.

Rationale 2: E-learning, Web-based learning, Internet-based training, advanced distributed learning, courseware and Web-based instruction, computer-based or computer-assisted learning, online learning, and open/ flexible learning are terms that denote Internet learning activities.

Rationale 3: E-learning, Web-based learning, Internet-based training, advanced distributed learning, courseware and Web-based instruction, computer-based or computer-assisted learning, online learning, and open/ flexible learning are terms that denote Internet learning activities.

Rationale 4: E-learning, Web-based learning, Internet-based training, advanced distributed learning, courseware and Web-based instruction, computer-based or computer-assisted learning, online learning, and open/ flexible learning are terms that denote Internet learning activities.

Rationale 5: E-learning, Web-based learning, Internet-based training, advanced distributed learning, courseware and Web-based instruction, computer-based or computer-assisted learning, online learning, and open/ flexible learning are terms that denote Internet learning activities.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 5

Type: MCSA

A three credit baccalaureate course meets four hours a week in the classroom and three hours per week through Blackboard. This is considered what type of learning environment?

1. On site
2. Mixed methods
3. Multimodality
4. Hybrid

Correct Answer: 4

Rationale 1: Distributed learning or hybrid learning usually means a course that combines elements of an online classroom with an in-person classroom (sometimes called ‘bricks-and-mortar’).

Rationale 2: Distributed learning or hybrid learning usually means a course that combines elements of an online classroom with an in-person classroom (sometimes called ‘bricks-and-mortar’).

Rationale 3: Distributed learning or hybrid learning usually means a course that combines elements of an online classroom with an in-person classroom (sometimes called ‘bricks-and-mortar’).

Rationale 4: Distributed learning or hybrid learning usually means a course that combines elements of an online classroom with an in-person classroom (sometimes called ‘bricks-and-mortar’).

Global Rationale:

Cognitive Level: Remembering
Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Teaching and Learning
Learning Outcome:

Question 6

Type: MCSA

Which of the following describes a wiki?

1. A shared online resource
2. Social media site
3. A pop-up
4. SPAM

Correct Answer: 1

Rationale 1: A wiki is a website where users not only read the content but can add to or edit the content.

Rationale 2: A wiki is a website where users not only read the content but can add to or edit the content.

Rationale 3: A wiki is a website where users not only read the content but can add to or edit the content.

Rationale 4: A wiki is a website where users not only read the content but can add to or edit the content.

Global Rationale:

Cognitive Level: Remembering
Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Communication and Documentation
Learning Outcome:

Question 7

Type: FIB

A _____ is another name for a web log.

Standard Text:

Correct Answer: blog

Rationale : A web log or blog is an online document that grows sequentially, in chronological order. A single individual or a group of bloggers contribute to the main content.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCMA

Which of the following statements best defines a learning object?

Standard Text: Select all that apply.

1. A learning object is an entity or learning event.
2. A learning object teaches an online lesson.
3. A learning object describes the usefulness of the Internet.
4. A learning object is embedded in HTML mark ups.

Correct Answer: 1

Rationale 1: A learning object is an entity or learning event that can stand alone without losing meaning, usually addressing only one or two learning objectives (Jesse, Taleff, Payne, Cox, & Steele, 2006). A teacher can select from a collection of learning objects, organize them into unique learning tools or lessons, and reuse them in the same or different constructions. Thus, a learning object also is known as a reusable learning object (RLO). An RLO is believed to enhance learning by chunking down complex material into smaller packets.

Rationale 2: A learning object is an entity or learning event that can stand alone without losing meaning, usually addressing only one or two learning objectives (Jesse, Taleff, Payne, Cox, & Steele, 2006). A teacher can select from a collection of learning objects, organize them into unique learning tools or lessons, and reuse them in the same or different constructions. Thus, a

learning object also is known as a reusable learning object (RLO). An RLO is believed to enhance learning by chunking down complex material into smaller packets.

Rationale 3: A learning object is an entity or learning event that can stand alone without losing meaning, usually addressing only one or two learning objectives (Jesse, Taleff, Payne, Cox, & Steele, 2006). A teacher can select from a collection of learning objects, organize them into unique learning tools or lessons, and reuse them in the same or different constructions. Thus, a learning object also is known as a reusable learning object (RLO). An RLO is believed to enhance learning by chunking down complex material into smaller packets.

Rationale 4: A learning object is an entity or learning event that can stand alone without losing meaning, usually addressing only one or two learning objectives (Jesse, Taleff, Payne, Cox, & Steele, 2006). A teacher can select from a collection of learning objects, organize them into unique learning tools or lessons, and reuse them in the same or different constructions. Thus, a learning object also is known as a reusable learning object (RLO). An RLO is believed to enhance learning by chunking down complex material into smaller packets.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 9

Type: MCSA

How can educators employ the use of a reusable learning object (RLO)?

1. An RLO is believed to enhance learning by offering complex material.
2. An RLO is believed to enhance learning by creating a virtual experience for the learner.
3. An RLO is believed to enhance learning by providing a virtual workspace for the learner.
4. An RLO is believed to enhance learning by chunking down complex material into smaller packets.

Correct Answer: 4

Rationale 1: A teacher can select from a collection of learning objects, organize them into unique learning tools or lessons, and reuse them in the same or different constructions. Thus, a learning object is also known as an RLO. An RLO is believed to enhance learning by chunking down complex material into smaller packets.

Rationale 2: A teacher can select from a collection of learning objects, organize them into unique learning tools or lessons, and reuse them in the same or different constructions. Thus, a learning object is also known as an RLO. An RLO is believed to enhance learning by chunking down complex material into smaller packets.

Rationale 3: A teacher can select from a collection of learning objects, organize them into unique learning tools or lessons, and reuse them in the same or different constructions. Thus, a learning object is also known as an RLO. An RLO is believed to enhance learning by chunking down complex material into smaller packets.

Rationale 4: A teacher can select from a collection of learning objects, organize them into unique learning tools or lessons, and reuse them in the same or different constructions. Thus, a learning object is also known as an RLO. An RLO is believed to enhance learning by chunking down complex material into smaller packets.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 10

Type: MCMA

Which of the following statements are true about virtual worlds?

Standard Text: Select all that apply.

1. The simulated environment may reflect contemporary life, a setting found in works of fiction, or a setting unique to a world-developer's imagination.
2. Other terms for virtual world include: digital worlds, simulated worlds, multi-user virtual environments (MUVE), and massively multiplayer online games (MMOGs).
3. Gaming cannot be part of a virtual world.
4. Commercial virtual worlds focus on community building and socializing.
5. A virtual world is not an appropriate learning tool.

Correct Answer: 1,2,4

Rationale 1: Virtual worlds can simulate real world settings and situations. The virtual world is useful as a teaching tool, preparing students for hands on practical experiences.

Rationale 2: Virtual worlds can simulate real world settings and situations. The virtual world is useful as a teaching tool, preparing students for hands on practical experiences.

Rationale 3: Virtual worlds began as part of the gaming experience.

Rationale 4: Virtual worlds can simulate real world settings and situations. The virtual world is useful as a teaching tool, preparing students for hands on practical experiences.

Rationale 5: Virtual worlds can simulate real world settings and situations. The virtual world is useful as a teaching tool preparing students for hands on practical experiences.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 11

Type: MCSA

Which is the most accurate statement about Second Life?

1. Second Life has a single spot on the Internet and is easy to find.
2. Second Life is a gathering place where residents have housing built for them.
3. The focus of Second Life is not to build a community but to define an individual's place in the virtual world.
4. Second Life is an immersive world that fosters creativity.

Correct Answer: 4

Rationale 1: Second Life is useful in education and provides an immersive environment; is dependent on content generated by the users, fostering creativity and a sense of contribution to the world; and it fosters social interaction.

Rationale 2: Second Life is useful in education and provides an immersive environment; is dependent on content generated by the users, fostering creativity and a sense of contribution to the world; and it fosters social interaction.

Rationale 3: Second Life is useful in education and provides an immersive environment; is dependent on content generated by the users, fostering creativity and a sense of contribution to the world; and it fosters social interaction.

Rationale 4: Second Life is useful in education and provides an immersive environment; is dependent on content generated by the users, fostering creativity and a sense of contribution to the world; and it fosters social interaction.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: FIB

A _____ journal is one that is not printed on paper.

Standard Text:

Correct Answer: fully online

Rationale : A fully online journal is one that is not printed on paper.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 13

Type: MCSA

Registered nurses can use the Internet for a number of key functions pertaining to licensure. Which of the following answers reflects the usefulness of the Internet and licensure?

1. Nurses can renew their professional licenses online.
2. Nurses no longer have the option of renewing their licenses by mail.

3. Professional licensing agencies mandate license renewal online.

4. Professional licensing agencies do not have the technology to renew licenses online.

Correct Answer: 1

Rationale 1: State professional licensing agencies now allow many professionals to manage their licenses online. Professionals can submit an application for initial licensure, renew a current license, check on the status of the application or renewal, and explore additional services. Many licensing agencies now offer licensees, employers, and the general public the opportunity to conduct searches of licensed professionals via a secure website.

Rationale 2: State professional licensing agencies now allow many professionals to manage their licenses online. Professionals can submit an application for initial licensure, renew a current license, check on the status of the application or renewal, and explore additional services. Many licensing agencies now offer licensees, employers, and the general public the opportunity to conduct searches of licensed professionals via a secure website.

Rationale 3: State professional licensing agencies now allow many professionals to manage their licenses online. Professionals can submit an application for initial licensure, renew a current license, check on the status of the application or renewal, and explore additional services. Many licensing agencies now offer licensees, employers, and the general public the opportunity to conduct searches of licensed professionals via a secure website.

Rationale 4: State professional licensing agencies now allow many professionals to manage their licenses online. Professionals can submit an application for initial licensure, renew a current license, check on the status of the application or renewal, and explore additional services. Many licensing agencies now offer licensees, employers, and the general public the opportunity to conduct searches of licensed professionals via a secure website.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: FIB

Launched in June 1996, the _____ is the first totally electronic journal in nursing.

Standard Text:

Correct Answer: Online Journal of Issues in Nursing (OJIN)

Rationale : Launched in June 1996, the Online Journal of Issues in Nursing (OJIN) is the first totally electronic journal in nursing.

Global Rationale:

Cognitive Level: Remembering

Client Need: Health Promotion and Maintenance

Client Need Sub:

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 15

Type: MCSA

Which of the following describes Questia?

1. Online library that provides 24/7 access to the world's largest online collection of books and journal articles
2. Comprehensive online nursing database
3. Interactive resource that answers complex patient care questions
4. Web-based tool with a complete listing of nursing diagnoses

Correct Answer: 1

Rationale 1: Questia is an online library that provides 24/7 access to the world's largest online collection of books and journal articles in the humanities and social sciences, plus magazine and newspaper articles. Users can search by individual words, phrases, titles, authors, or subjects through the entire online collection of books and articles. Every title can be read online.

Rationale 2: Questia is an online library that provides 24/7 access to the world's largest online collection of books and journal articles in the humanities and social sciences, plus magazine and newspaper articles. Users can search by individual words, phrases, titles, authors, or subjects through the entire online collection of books and articles. Every title can be read online.

Rationale 3: Questia is an online library that provides 24/7 access to the world's largest online collection of books and journal articles in the humanities and social sciences, plus magazine and newspaper articles. Users can search by individual words, phrases, titles, authors, or subjects through the entire online collection of books and articles. Every title can be read online.

Rationale 4: Questia is an online library that provides 24/7 access to the world's largest online collection of books and journal articles in the humanities and social sciences, plus magazine and newspaper articles. Users can search by individual words, phrases, titles, authors, or subjects through the entire online collection of books and articles. Every title can be read online.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 16

Type: MCSA

Marketing services have become one of the important organizational uses of the Internet, therefore, multiple companies and organizations use websites as an opportunity to accomplish their goals. What are some of the reasons to use the Internet for marketing?

1. To offer virtual tours and job opportunity information
2. To share statistics regarding best practice models
3. To illustrate the usefulness of the intranet within the organization
4. To define the goals of the HIT

Correct Answer: 1

Rationale 1: The Internet is a good tool to share services with the user. Additional marketing considerations include: job postings, advertisements, and product information.

Rationale 2: The Internet is a good tool to share services with the user. Additional marketing considerations include: job postings, advertisements, and product information.

Rationale 3: The Internet is a good tool to share services with the user. Additional marketing considerations include: job postings, advertisements, and product information.

Rationale 4: The Internet is a good tool to share services with the user. Additional marketing considerations include: job postings, advertisements, and product information.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 17

Type: MCSA

Which of the following statements is most accurate about social media and hospitals?

1. Social media has relevance to health care.
2. Health care and social media are unrelated.
3. Hospital marketing departments refuse to incorporate social media into their practice.
4. Social media is not relevant to hospital marketing or nursing practice.

Correct Answer: 1

Rationale 1: Social media has become the norm in marketing services. Social media such as Facebook and Twitter are two examples of how organizations can key into technology to spread their message.

Rationale 2: Social media has become the norm in marketing services. Social media such as Facebook and Twitter are two examples of how organizations can key into technology to spread their message.

Rationale 3: Social media has become the norm in marketing services. Social media such as Facebook and Twitter are two examples of how organizations can key into technology to spread their message.

Rationale 4: Social media has become the norm in marketing services. Social media such as Facebook and Twitter are two examples of how organizations can key into technology to spread their message.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 18

Type: MCSA

Which of the following statements is the best response when a health care provider is asked by a patient to be their "friend" on Facebook?

1. "Great idea. I would love to keep in touch with you."
2. "I am flattered that you want to be my friend, but it is not appropriate for me to 'friend' you on Facebook."
3. "Absolutely, I 'friend' all of my former patients."
4. "Why would you want to be my friend? Are you lonely?"

Correct Answer: 2

Rationale 1: It is inappropriate for former patients and their health care providers to be "Facebook friends." This blurs the line of distinction between a professional and a client.

Rationale 2: It is inappropriate for former patients and their health care providers to be "Facebook friends." This blurs the line of distinction between a professional and a client.

Rationale 3: It is inappropriate for former patients and their health care providers to be "Facebook friends." This blurs the line of distinction between a professional and a client.

Rationale 4: It is inappropriate for former patients and their health care providers to be "Facebook friends." This blurs the line of distinction between a professional and a client.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 19

Type: FIB

_____ feeds allow the individual to subscribe to content eliminating the need to manually search for new information.

Standard Text:

Correct Answer: RSS (Really Simple Syndication)

Rationale : **RSS (Really Simple Syndication)** feeds allow you to subscribe to content eliminating the need to manually search for new information on sites that offer the RSS option.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 20

Type: MCMA

The Internet has become the source of locating current research and literature for practicing nurses and students. Which of the following websites provide beneficial information for health care professionals to access in an attempt to improve practice?

Standard Text: Select all that apply.

1. The Agency for Healthcare Research and Quality (AHRQ)
2. The American Nurses Credentialing Center (ANCC)
3. The Center for Disease Control (CDC)
4. National Institutes of Health (NIH)
5. Food and Drug Administration (FDA)

Correct Answer: 1,2,3,4,5

Rationale 1: -Food and Drug Administration (FDA)

Rationale 2: -Food and Drug Administration (FDA)

Rationale 3: -Food and Drug Administration (FDA)

Rationale 4: -Food and Drug Administration (FDA)

Rationale 5: -Food and Drug Administration (FDA)

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Teaching and Learning
Learning Outcome:

Question 21

Type: MCMA

Most professional organizations have a Web presence. What types of information should a professional organization's website offer to the reader?

Standard Text: Select all that apply.

1. Educational opportunities
2. Career opportunities
3. Certification opportunities
4. Policy work and initiatives
5. News feed

Correct Answer: 1,2,3,4,5

Rationale 1: Typically, a professional organization's website will have information about the organization; membership; educational opportunities; certification, past, present, and future conferences; resources; purchase of organizational memorabilia and attire; policy work; and a career center for assistance in finding employment. Often, a news feed or news center is available for updates on current organizational and/or health care issues. A website can also publish current research and evidence-based practice.

Rationale 2: Typically, a professional organization's website will have information about the organization; membership; educational opportunities; certification, past, present, and future conferences; resources; purchase of organizational memorabilia and attire; policy work; and a career center for assistance in finding employment. Often, a news feed or news center is available for updates on current organizational and/or health care issues. A website can also publish current research and evidence-based practice.

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Rationale 5: Typically, a professional organization's website will have information about the organization; membership; educational opportunities; certification, past, present, and future conferences; resources; purchase of organizational memorabilia and attire; policy work; and a career center for assistance in finding employment. Often, a news feed or news center is available for updates on current organizational and/or health care issues. A website can also publish current research and evidence-based practice.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 22

Type: MCMA

Social media is currently used to update subscribers on current events and updated content. Which of the following avenues can be used by health care professionals to share information?

Standard Text: Select all that apply.

1. Twitter
2. Textbook companion websites
3. Facebook
4. Linked In
5. YouTube

Correct Answer: 1,3,4,5

Rationale 1: Twitter, YouTube, Facebook, and Linked In are available online as communication conduits. Individuals join the sites to begin the process.

Rationale 2: A publishing company may offer an online supplement to a textbook. The site's intention is to offer additional information for the student and not a means of social interaction.

Rationale 3: Twitter, YouTube, Facebook, and Linked In are available online as communication conduits. Individuals join the sites to begin the process.

Rationale 4: Twitter, YouTube, Facebook, and Linked In are available online as communication conduits. Individuals join the sites to begin the process.

Rationale 5: Twitter, YouTube, Facebook, and Linked In are available online as communication conduits. Individuals join the sites to begin the process.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 23

Type: MCMA

Which of the following are advantages to asynchronous learning?

Standard Text: Select all that apply.

1. Teachers and learners can connect in the classroom at different times
2. Teachers and learners can connect in the classroom at the same time
3. Asynchronous learning is more flexible than on-ground learning
4. Asynchronous learners must commute to the classroom
5. Asynchronous learners can access online library databases

Correct Answer: 1,3,5

Rationale 1: Asynchronous teaching-learning enables learners and teachers to connect to virtual classrooms at different times; this flexibility supports a work environment where learners have different shifts and work days. Further, time is not spent commuting to and from a physical classroom. Online library resources are available when needed and when the seeker has time to search the literature. Learners acquire skills and confidence in using information technology.

Rationale 2: Asynchronous teaching-learning enables learners and teachers to connect to virtual classrooms at different times; this flexibility supports a work environment where learners have different shifts and work days. Further, time is not spent commuting to and from a physical classroom. Online library resources are available when needed and when the seeker has time to search the literature. Learners acquire skills and confidence in using information technology.

Rationale 3: Asynchronous teaching-learning enables learners and teachers to connect to virtual classrooms at different times; this flexibility supports a work environment where learners have different shifts and work days. Further, time is not spent commuting to and from a physical classroom. Online library resources are available when needed and when the seeker has time to search the literature. Learners acquire skills and confidence in using information technology.

Rationale 4: Asynchronous teaching-learning enables learners and teachers to connect to virtual classrooms at different times; this flexibility supports a work environment where learners have different shifts and work days. Further, time is not spent commuting to and from a physical classroom. Online library resources are available when needed and when the seeker has time to search the literature. Learners acquire skills and confidence in using information technology.

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Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 24

Type: MCMA

Wikis can be used as a tool in the classroom. Which of the following are advantages of using a wiki in education?

Standard Text: Select all that apply.

1. Wikis can foster collaboration.
2. Wikis can connect learners in different time zones.
3. Wikis can provide links to online resources.

4. Wikis can be used for asynchronous learning.
5. Wikis can serve as an online content-management system.

Correct Answer: 1,2,3,4,5

Rationale 1: Wikis used in education can foster and facilitate collaboration among learners. With geographically distributed learner populations working in different time zones and different shifts, an asynchronous method for collaborative learning is essential. Wikis can be used to disseminate learning resources and provide links to other resources, such as emerging clinical practices. Students can use wikis to share learning experiences. A class project may include compilation of one or more wiki books. (A wiki book, logically, is a collection of writings (documents) brought together by one or more writers for a specific purpose.) A wiki may serve as content-management system for one online course or an entire program, such as a MSN-degree program).

Rationale 2: Wikis used in education can foster and facilitate collaboration among learners. With geographically distributed learner populations working in different time zones and different shifts, an asynchronous method for collaborative learning is essential. Wikis can be used to disseminate learning resources and provide links to other resources, such as emerging clinical practices. Students can use wikis to share learning experiences. A class project may include compilation of one or more wiki books. (A wiki book, logically, is a collection of writings (documents) brought together by one or more writers for a specific purpose.) A wiki may serve as content-management system for one online course or an entire program, such as a MSN-degree program).

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Rationale 5: Wikis used in education can foster and facilitate collaboration among learners. With geographically distributed learner populations working in different time zones and different shifts, an asynchronous method for collaborative learning is essential. Wikis can be used to disseminate learning resources and provide links to other resources, such as emerging clinical practices. Students can use wikis to share learning experiences. A class project may include compilation of one or more wiki books. (A wiki book, logically, is a collection of writings (documents) brought together by one or more writers for a specific purpose.) A wiki may serve as content-management system for one online course or an entire program, such as a MSN-degree program).

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 25

Type: MCMA

Which of the following Web-based learning objects can educators use to support the learning experience?

Standard Text: Select all that apply.

1. Video
2. Cryptic usernames and passwords
3. Audio clips
4. Applications
5. Animations

Correct Answer: 1,3,4,5

Rationale 1: The World Wide Web enhances the development and use of RLOs by increasing the possible levels of interactivity and supporting the embedding of learning materials such as video and audio clips, text, applications, or animations.

Rationale 2: Cryptic usernames and passwords are essential for the protection of data and information, but are not considered learning objects.

Rationale 3: The World Wide Web enhances the development and use of RLOs by increasing the possible levels of interactivity and supporting the embedding of learning materials such as video and audio clips, text, applications, or animations.

Rationale 4: The World Wide Web enhances the development and use of RLOs by increasing the possible levels of interactivity and supporting the embedding of learning materials such as video and audio clips, text, applications, or animations.

Rationale 5: The World Wide Web enhances the development and use of RLOs by increasing the possible levels of interactivity and supporting the embedding of learning materials such as video and audio clips, text, applications, or animations.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 26

Type: MCSA

Which of the following depicts the best use of virtual worlds in the education of nurses?

1. The virtual world can simulate hospital life.
2. Virtual worlds offer students answers to NCLEX-RN® style questions.
3. Virtual worlds offer synchronous interaction with patients.
4. Virtual worlds are too expensive for classroom use.

Correct Answer: 1

Rationale 1: Virtual worlds are online simulated environments in which multiple users interact. The simulated environment may reflect contemporary life, a setting found in works of fiction, or a setting unique to a world-developer's imagination.

Rationale 2: Virtual worlds are online simulated environments in which multiple users interact. The simulated environment may reflect contemporary life, a setting found in works of fiction, or a setting unique to a world-developer's imagination.

Rationale 3: Virtual worlds are online simulated environments in which multiple users interact. The simulated environment may reflect contemporary life, a setting found in works of fiction, or a setting unique to a world-developer's imagination.

Rationale 4: Virtual worlds are online simulated environments in which multiple users interact. The simulated environment may reflect contemporary life, a setting found in works of fiction, or a setting unique to a world-developer's imagination.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 27

Type: MCMA

Online resources are available for health care professionals to complete a number of important tasks. Which of the following are services offered by professional organizations?

Standard Text: Select all that apply.

1. Cultural competence information is offered by Health Resources and Services Administration (HRSA)
2. HealthLink assists users to medical and health care information.
3. Healthcare Providers Service Organization (HPSO) offers licensure information.
4. State Boards of Nursing offer continuing education credits.
5. Second Life offers end-of-life content for bereavement counselors.

Correct Answer: 1,2

Rationale 1: Among the plethora of resources and services provided by the Health Resources and Services Administration (HRSA) is a section on cultural competence (www.hrsa.gov/culturalcompetence/). In this section, nurses and others may take advantage of assessment tools for cultural and linguistic competence. Educational content on general aspects of cultural competence as well as content on specific groups is available.

Rationale 2: HealthLink is a free website for health care professionals and consumers. The primary focus of this site is assisting users to medical and health care information, products, resources, services, and practitioners on the World Wide Web (WWW).

Rationale 3: HPSO is a division of Affinity Insurance Services, Inc. The core service from HPSO is insurance, especially professional liability insurance and risk-management information.

Rationale 4: State Boards of Nursing offer nurses an opportunity to renew licenses online.

Rationale 5: Second Life provides an immersive environment; is dependent on content generated by the users, fostering creativity and a sense of contribution to the world; and it fosters social interaction (Skiba, 2007).

Global Rationale:

Cognitive Level: Evaluating

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 28

Type: MCSA

There are a number of bibliographic online databases. Which of the following databases is dedicated to providing nurses with full-text articles?

1. Emerald Insight
2. Cumulative Index to Nursing and Allied Health Literature (CINAHL)
3. Google Books
4. ProQuest

Correct Answer: 2

Rationale 1: Emerald Insight is a collection of peer reviewed management journals and online support for librarians, students, faculty, researchers, and deans.

Rationale 2: Articles in most professional publications are now available in full-text when retrieved from a bibliographic database such as the CINAHL.

Rationale 3: Google Books is an excellent resource for old books and not considered a nursing periodical database.

Rationale 4: ProQuest contains dissertations and theses.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 29

Type: MCMA

The Internet offers a number of unique ways to market the organization. What are some of the ways companies use the Internet to create interest in their unique goods or services?

Standard Text: Select all that apply.

1. Securing domain names for a business
2. Arranging for e-mail addresses
3. Hosting one or more websites
4. Designing a company website.
5. Creating application for smart phones

Correct Answer: 1,2,3,4

Rationale 1: Internet-related services may include securing domain names for a business, arranging for e-mail addresses, establishing the ability to conduct electronic commerce, hosting one or more websites, designing and maintaining company websites, content management systems (CMS), and customer relationship management (CRM).

Rationale 2: Internet-related services may include securing domain names for a business, arranging for e-mail addresses, establishing the ability to conduct electronic commerce, hosting one or more websites, designing and maintaining company websites, content management systems (CMS), and customer relationship management (CRM).

Rationale 3: Internet-related services may include securing domain names for a business, arranging for e-mail addresses, establishing the ability to conduct electronic commerce, hosting one or more websites, designing and maintaining company websites, content management systems (CMS), and customer relationship management (CRM).

Rationale 4: Internet-related services may include securing domain names for a business, arranging for e-mail addresses, establishing the ability to conduct electronic commerce, hosting one or more websites, designing and maintaining company websites, content management systems (CMS), and customer relationship management (CRM).

Rationale 5: Applications for smart phones can be useful in a number of ways but are not considered marketing tools.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 30

Type: MCSA

With the onslaught of electronic mail in professional boxes, nurses must be cognizant of the impact on which of the following?

1. Patient knowledge
2. Patient diagnosis
3. Patient outcomes
4. Patient privacy

Correct Answer: 4

Rationale 1: The impact of electronic mail in the health care system can affect patient privacy. Strict measures and guidelines must be followed to assure confidentiality.

Rationale 2: The impact of electronic mail in the health care system can affect patient privacy. Strict measures and guidelines must be followed to assure confidentiality.

Rationale 3: The impact of electronic mail in the health care system can affect patient privacy. Strict measures and guidelines must be followed to assure confidentiality.

Rationale 4: The impact of electronic mail in the health care system can affect patient privacy. Strict measures and guidelines must be followed to assure confidentiality.

Question 1

Type: MCSA

Which of the following suggests that a vendor is reliable?

1. The vendor is willing to provide customized services for the institution at a reasonable negotiable fee.
2. The vendor is knowledgeable about the system and provides additional information without prompting.
3. The vendor provides a contact list of previous customers, but none are willing to be interviewed.
4. The vendor addresses all requirements for the system and quickly provides answers for questions.

Correct Answer: 4

Rationale 1: The correct answer is “Vendors should address institutional requirements and provide needed information quickly when asked.” The vendor should be knowledgeable about their system as well as the needs of the institution. Providing customized services does not guarantee that the vendor is reliable in other areas. Contact lists of previous customers willing to be interviewed or host site visits should be made available routinely.

Rationale 2: The correct answer is “Vendors should address institutional requirements and provide needed information quickly when asked.” The vendor should be knowledgeable about their system as well as the needs of the institution. Providing customized services does not guarantee that the vendor is reliable in other areas. Contact lists of previous customers willing to be interviewed or host site visits should be made available routinely.

Rationale 3: The correct answer is “Vendors should address institutional requirements and provide needed information quickly when asked.” The vendor should be knowledgeable about their system as well as the needs of the institution. Providing customized services does not guarantee that the vendor is reliable in other areas. Contact lists of previous customers willing to be interviewed or host site visits should be made available routinely.

Rationale 4: Vendors should address institutional requirements and provide needed information quickly when asked. The vendor should be knowledgeable about their system as well as the needs of the institution. Providing customized services does not guarantee that the vendor is reliable in other areas. Contact lists of previous customers willing to be interviewed or host site visits should be made available routinely.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: MCMA

The steering committee must consider much information in order to arrive at the best system. Which statements would be considered as favorable during the evaluation of systems for purchase consideration?

Standard Text: Select all that apply.

1. Minimal downtime is required nightly for complete system checks and backup.
2. Connectivity between the application and inputting clinical information, such as vital signs, can be achieved through customization.
3. Open system architecture is utilized for system protocols.
4. Response time for all online transactions is five seconds or more.
5. A separate training environment is used, where new users can utilize the live system for training whenever it is needed.

Correct Answer: 1,2,3

Rationale 1: Minimal downtime is required nightly for complete system checks and backup.

Rationale 2: Connectivity should be enhanced and downtime minimized.

Rationale 3: Architecture refers to the structure of the central processing unit and its interrelated elements. An open system uses protocols and technology that follow publicly accepted conventions and are used by multiple vendors, so that various system components can work together.

Rationale 4: Response time for all online transactions is too slow.

Rationale 5: The live system should never be used for training; training should occur in simulated environments specifically created for teaching where mistakes do not enter the system.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 3

Type: MCSA

A 512-bed acute-care community hospital is planning to install a wireless system. The steering committee is planning a site visit to observe the wireless system in action. Which site would be the most suitable for the committee to visit?

1. A 36-bed state-of-the-art open-heart intensive care unit at a hospital that uses the same vendor's equipment and services
2. A 496-bed acute-care hospital utilizing another vendor with similar equipment and services
3. A 485-bed acute-care community hospital utilizing the same vendor's equipment and services
4. A 712-bed acute-tertiary care hospital utilizing the same vendor's equipment and services

Correct Answer: 3

Rationale 1: Most suitable for the committee to visit is the 485-bed acute-care community hospital utilizing the same vendor's equipment and services. Site visits allow the vendor's system under consideration to be seen in action at a location that is comparable in size and providing similar services.

Rationale 2: Most suitable for the committee to visit is the 485-bed acute-care community hospital utilizing the same vendor's equipment and services. Site visits allow the vendor's system under consideration to be seen in action at a location that is comparable in size and providing similar services.

Rationale 3: Most suitable for the committee to visit is the 485-bed acute-care community hospital utilizing the same vendor's equipment and services. Site visits allow the vendor's system under consideration to be seen in action at a location that is comparable in size and providing similar services.

Rationale 4: Most suitable for the committee to visit is the 485-bed acute-care community hospital utilizing the same vendor's equipment and services. Site visits allow the vendor's system under consideration to be seen in action at a location that is comparable in size and providing similar services.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 4

Type: MCMA

When evaluating a request for proposal (RFP) for the installation of a wireless system, the health care facility would be most impressed with which of the following?

Standard Text: Select all that apply.

1. The proposal is a standard request sent to a number of institutions.
2. The proposal was received a week before the deadline date.
3. A proposal that includes precise answers to specific steering committee questions
4. A proposal that appears to meet most of the "must" requirements
5. A proposal that is written clearly, precisely, and professionally

Correct Answer: 2,3,5

Rationale 1: Proposals should be submitted by the deadline date; earlier can be a plus. Proposals should be professionally written, individualized to the health care facility's needs, and address questions asked. Vendors that are unable to meet all of the "musts" should be automatically eliminated.

Rationale 2: Proposals should be submitted by the deadline date; earlier can be a plus. Proposals should be professionally written, individualized to the health care facility's needs, and address questions asked. Vendors that are unable to meet all of the "musts" should be automatically eliminated.

Rationale 3: Proposals should be submitted by the deadline date; earlier can be a plus. Proposals should be professionally written, individualized to the health care facility's needs, and address questions asked. Vendors that are unable to meet all of the "musts" should be automatically eliminated.

Rationale 4: Proposals should be submitted by the deadline date; earlier can be a plus. Proposals should be professionally written, individualized to the health care facility's needs, and address

questions asked. Vendors that are unable to meet all of the "musts" should be automatically eliminated.

Rationale 5: Proposals should be submitted by the deadline date; earlier can be a plus. Proposals should be professionally written, individualized to the health care facility's needs, and address questions asked. Vendors that are unable to meet all of the "musts" should be automatically eliminated.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Planning

Learning Outcome:

Question 5

Type: MCSA

Which statement best fits a request for information (RFI) on a wireless cardiovascular (CV) monitoring system?

1. An Internet search is conducted to find likely wireless CV monitoring system vendors.
2. A brief document is sent to several CV monitoring vendors outlining plans for expansion to a wireless cardiovascular monitoring system.
3. A formal request is sent to one CV monitoring vendor following an initial contact at a trade show.
4. A representative of the wireless CV monitoring system search committee attends a trade show to appraise possible vendors.

Correct Answer: 2

Rationale 1: The correct answer is a brief document sent to several CV monitoring vendors outlining plans for expansion to a wireless cardiovascular monitoring system. The purpose of an RFI is to obtain essential information from each interested vendor about its system capabilities related to the expansion to a wireless CV monitoring system. The information received allows elimination of those vendors that cannot meet the organization's basic requirements. An Internet search would not meet RFI requirements.

Rationale 2: A brief document sent to several CV monitoring vendors outlining plans for expansion to a wireless system will secure information from those interested in supplying the desired monitors. The purpose of an RFI is to obtain essential information from each interested

vendor about its system capabilities related to the expansion to a wireless CV monitoring system. The information received allows elimination of those vendors that cannot meet the organization's basic requirements.

Rationale 3: The correct answer is a brief document sent to several CV monitoring vendors outlining plans for expansion to a wireless cardiovascular monitoring system. The purpose of an RFI is to obtain essential information from each interested vendor about its system capabilities related to the expansion to a wireless CV monitoring system. The information received allows elimination of those vendors that cannot meet the organization's basic requirements. A formal request sent to just one vendor would not meet RFI requirements.

Rationale 4: The correct answer is a brief document sent to several cardiovascular monitoring vendors outlining plans for expansion to wireless networks. The purpose of an RFI is to obtain information from vendors describing what the institution needs to eliminate those vendors who cannot comply. A representative of the search committee attending a trade show would not meet RFI requirements.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts:

Learning Outcome:

Question 6

Type: MCSA

Which statement best fits a request for proposal (RFP) for a wireless system?

1. The vendor sends literature about its wireless system to several institutions to increase their business.
2. The search committee sends email requests to several vendors stating the needs of the institution for a new wireless system.
3. The steering committee sends a formal document to several vendors to ask for specific information about their wireless system.
4. A formal document is sent by a vendor who heard an institution is upgrading its monitoring system.

Correct Answer: 3

Rationale 1: The correct answer is the steering committee sends a formal document to several vendors to request a proposal about their wireless system. An RFP is an invitation sent to vendors that describes the requirements of a potential information system and requests a proposal from those interested. An RFP often includes a bidding process for a specific information system commodity and/or service. A vendor sending literature would not meet RFP requirements.

Rationale 2: The correct answer is the steering committee sends a formal document to several vendors to request a proposal about their wireless system. An RFP is an invitation sent to vendors that describes the requirements of a potential information system and requests a proposal from those interested. An RFP often includes a bidding process for a specific information system commodity and/or service. A search committee sending email requests would not meet RFP requirements.

Rationale 3: The steering committee sends a formal document to several vendors to request a proposal about their wireless system. An RFP is an invitation sent to vendors that describes the requirements of a potential information system and requests a proposal from those interested. An RFP often includes a bidding process for a specific information system commodity and/or service.

Rationale 4: The correct answer is the steering committee sends a formal document to several vendors to request a proposal about their wireless system. An RFP is an invitation sent to vendors that describes the requirements of a potential information system and requests a proposal from those interested. An RFP often includes a bidding process for a specific information system commodity and/or service. An RFP is not sent by a vendor "out of the blue".

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Planning

Learning Outcome:

Question 7

Type: MCMA

Which of the following qualities should be considered desirable by the health care institution's steering committee when selecting an information systems consultant?

Standard Text: Select all that apply.

1. Strong personality that is up to the task of bucking the corporate culture
2. Tendency to focus on results rather than trying to manage expectations

3. Highly organized and follows a clearly defined work plan
4. Considerable experience with hospital mainframe legacy systems
5. Excellent written communication skills, but difficulty with spoken communications

Correct Answer: 3,4

Rationale 1: Having experience in the health care industry and following a well defined work plan are important consulting qualities. Consultants also need to be able to fit into the corporate culture and manage the expectations of the highly diverse and complex health care environment. Both written and spoken communication skills are needed.

Rationale 2: Having experience in the health care industry and following a well defined work plan are important consulting qualities. Consultants also need to be able to fit into the corporate culture and manage the expectations of the highly diverse and complex health care environment. Both written and spoken communication skills are needed.

Rationale 3: Having experience in the health care industry and following a well defined work plan are important consulting qualities. Consultants also need to be able to fit into the corporate culture and manage the expectations of the highly diverse and complex health care environment. Both written and spoken communication skills are needed.

Rationale 4: Having experience in the health care industry and following a well defined work plan are important consulting qualities. Consultants also need to be able to fit into the corporate culture and manage the expectations of the highly diverse and complex health care environment. Both written and spoken communication skills are needed.

Rationale 5: Having experience in the health care industry and following a well defined work plan are important consulting qualities. Consultants also need to be able to fit into the corporate culture and manage the expectations of the highly diverse and complex health care environment. Both written and spoken communication skills are needed.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Planning

Learning Outcome:

Question 8

Type: MCSA

When the steering committee of an acute care institution is appointed to select a new computer system, site visits are requested at a number of organizations to see the live systems. During these visits, which statement provided in staff interviews should alert the committee to potential bias?

1. "System backups occur daily at midnight but we rarely notice them. The downtime is minimal."
2. "What we would like to see added to the system is the ability to add wireless devices. The vendor is looking into the situation now."
3. "Vendor support is always wonderful. Here is one of the company representatives who can best explain that to you."
4. "System access is restricted per HIPAA guidelines. We use a thumbprint to verify entry into the system."

Correct Answer: 3

Rationale 1: The correct answer is "Vendor support is always wonderful. Here is one of the company representatives who can best explain that to you." Vendors should not be present during site visits, in order to avoid potential bias. Site visits should allow the committee to review security and confidentiality issues, backups and downtime, ask about how their vendor reacts to suggestions given them by the organization after the system has been implemented, etc.

Rationale 2: The correct answer is "Vendor support is always wonderful. Here is one of the company representatives who can best explain that to you." Vendors should not be present during site visits, in order to avoid potential bias. Site visits should allow the committee to review security and confidentiality issues, backups and downtime, ask about how their vendor reacts to suggestions given them by the organization after the system has been implemented, etc.

Rationale 3: Vendors should not be present during site visits to avoid potential bias. Site visits should allow the committee to review security and confidentiality issues, backups and downtime, ask about how their vendor reacts to suggestions given them by the organization after the system has been implemented, etc.

Rationale 4: The correct answer is "Vendor support is always wonderful. Here is one of the company representatives who can best explain that to you." Vendors should not be present during site visits, in order to avoid potential bias. Site visits should allow the committee to review security and confidentiality issues, backups and downtime, ask about how their vendor reacts to suggestions given them by the organization after the system has been implemented, etc.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Nursing Process: Planning
Learning Outcome:

Question 9

Type: MCSA

The members of a steering committee should be carefully selected. Which committee would be most effective?

1. A four-member committee consisting entirely of high-level executive board members
2. A five-member committee consisting of one upper-level management representative from each department
3. A 15-member committee consisting of multidisciplinary representatives from each unit/department
4. A 12-member committee consisting of staff nurse representatives from each unit

Correct Answer: 3

Rationale 1: The correct answer is a 15-member committee consisting of multidisciplinary representatives from each unit/department. To be effective, a steering committee should be large enough to make decisions, but small enough to be effective. All those affected should be represented with a multidisciplinary team membership.

Rationale 2: The correct answer is a 15-member committee consisting of multidisciplinary representatives from each unit/department. To be effective, a steering committee should be large enough to make decisions, but small enough to be effective. All those affected should be represented with a multidisciplinary team membership.

Rationale 3: To be effective, a steering committee should be large enough to make decisions, but small enough to be effective. All those affected should be represented with a multidisciplinary team membership.

Rationale 4: The correct answer is a 15-member committee consisting of multidisciplinary representatives from each department. To be effective, a steering committee should be large enough to make decisions, but small enough to be effective. All those affected should be represented with a multidisciplinary team membership.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Nursing Process: Planning
Learning Outcome:

Question 10
Type: MCSA

Which of these steering committee members should likely be replaced?

1. The coronary care nurse manager who attends half the regularly scheduled meetings
2. The chief nursing officer who attends more than half of the regularly scheduled meetings
3. The chief executive officer of the hospital who attends all meetings
4. The medical director of the organization who attends two-thirds of the regularly scheduled meetings

Correct Answer: 1

Rationale 1: The membership should consist of multidisciplinary members who are able to take time to attend most meetings and become involved in the project.

Rationale 2: The correct answer is the coronary care nurse manager who attends half the regularly scheduled meetings. The membership should consist of multidisciplinary members who are able to take the time to attend most meetings and become involved in the project.

Rationale 3: The correct answer is the coronary care nurse manager who attends half the regularly scheduled meetings. The membership should consist of multidisciplinary members who are able to take time to attend most meetings and become involved in the project.

Rationale 4: The correct answer is the coronary care nurse manager who attends half the regularly scheduled meetings. The membership should consist of multidisciplinary members who are able to take time to attend most meetings and become involved in the project.

Global Rationale:

Cognitive Level: Analyzing
Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Nursing Process: Assessment
Learning Outcome:

Question 11

Type: MCSA

A thorough understanding of how information is currently collected and processed is the starting point in performing a needs assessment. This is also known as which of the following?

1. Assessing internal environment
2. Assessing external environment
3. Planning for the change process
4. Implementing the new system

Correct Answer: 1

Rationale 1: A thorough understanding of how information is currently collected and processed is the starting point in performing a needs assessment. This is also known as assessing the internal environment. Methods for accomplishing this include questionnaires and observation of day-to-day activities (Saba & McCormick, 1996).

Rationale 2: A thorough understanding of how information is currently collected and processed is the starting point in performing a needs assessment. This is also known as assessing the internal environment. Methods for accomplishing this include questionnaires and observation of day-to-day activities (Saba & McCormick, 1996).

Rationale 3: A thorough understanding of how information is currently collected and processed is the starting point in performing a needs assessment. This is also known as assessing the internal environment. Methods for accomplishing this include questionnaires and observation of day-to-day activities (Saba & McCormick, 1996).

Rationale 4: A thorough understanding of how information is currently collected and processed is the starting point in performing a needs assessment. This is also known as assessing the internal environment. Methods for accomplishing this include questionnaires and observation of day-to-day activities (Saba & McCormick, 1996).

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 12

Type: MCSA

Which of the following methods can be used to collect information in order to determine information system requirements?

1. Schedule a focus group of maintenance personnel.
2. Send questionnaires to corporate partners.
3. Interview point-of-care staff only.
4. Interview staff members from each department.

Correct Answer: 4

Rationale 1: Collecting information in order to determine information system requirements is part of the assessment phase of any initiative. Data can be collected through interviewing staff from each department or work area to discover current and future needs.

Rationale 2: Collecting information in order to determine information system requirements is part of the assessment phase of any initiative. Data can be collected through interviewing staff from each department or work area to discover current and future needs.

Rationale 3: Collecting information in order to determine information system requirements is part of the assessment phase of any initiative. Data can be collected through interviewing staff from each department or work area to discover current and future needs.

Rationale 4: Collecting information in order to determine information system requirements is part of the assessment phase of any initiative. Data can be collected through interviewing staff from each department or work area to discover current and future needs.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 13

Type: MCMA

The information system life cycle in the text is divided into phases. Which of the following are considered part of the life cycle process?

Standard Text: Select all that apply.

1. Needs assessment
2. System selection
3. Problem solving
4. Implementation
5. Maintenance

Correct Answer: 1,2,4,5

Rationale 1: 4. Maintenance is the upkeep of the technology system.

Rationale 2: 4. Maintenance is the upkeep of the technology system.

Rationale 3: 4. Maintenance is the upkeep of the technology system.

Rationale 4: 4. Maintenance is the upkeep of the technology system.

Rationale 5: 4. Maintenance is the upkeep of the technology system.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Planning

Learning Outcome:

Question 14

Type: MCSA

The needs assessment committee starts the process by examining which organization document?

1. Critical pathways
2. Staffing schedules
3. Mission statement
4. Memos from chief financial officer

Correct Answer: 3

Rationale 1: The needs assessment committee starts the process by examining the vision and mission statements of the organization as well as the strategic plan. This will guide the committee in looking to the future and determining the organization's information needs while continuing to support the mission.

Rationale 2: The needs assessment committee starts the process by examining the vision and mission statements of the organization as well as the strategic plan. This will guide the committee in looking to the future and determining the organization's information needs while continuing to support the mission.

Rationale 3: The needs assessment committee starts the process by examining the vision and mission statements of the organization as well as the strategic plan. This will guide the committee in looking to the future and determining the organization's information needs while continuing to support the mission.

Rationale 4: The needs assessment committee starts the process by examining the vision and mission statements of the organization as well as the strategic plan. This will guide the committee in looking to the future and determining the organization's information needs while continuing to support the mission.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Planning

Learning Outcome:

Question 15

Type: MCSA

The selection and implementation of an information system occurs through a well-defined process known as which of the following?

1. Request for proposal
2. Decision making
3. Strategic planning
4. Life cycle

Correct Answer: 4

Rationale 1: The selection and implementation of an information system occurs through a well-defined process known as the life cycle. This term describes the ongoing process of developing and maintaining an information system. This cycle can be divided into four main phases that cover the life span of information systems. These four phases are: needs assessment, system selection, implementation, and maintenance. The relationship between these phases is circular, because needs assessment and evaluation are ongoing processes.

Rationale 2: The selection and implementation of an information system occurs through a well-defined process known as the life cycle. This term describes the ongoing process of developing and maintaining an information system. This cycle can be divided into four main phases that cover the life span of information systems. These four phases are: needs assessment, system selection, implementation, and maintenance. The relationship between these phases is circular, because needs assessment and evaluation are ongoing processes.

Rationale 3: The selection and implementation of an information system occurs through a well-defined process known as the life cycle. This term describes the ongoing process of developing and maintaining an information system. This cycle can be divided into four main phases that cover the life span of information systems. These four phases are: needs assessment, system selection, implementation, and maintenance. The relationship between these phases is circular, because needs assessment and evaluation are ongoing processes.

Rationale 4: The selection and implementation of an information system occurs through a well-defined process known as the life cycle. This term describes the ongoing process of developing and maintaining an information system. This cycle can be divided into four main phases that cover the life span of information systems. These four phases are: needs assessment, system selection, implementation, and maintenance. The relationship between these phases is circular, because needs assessment and evaluation are ongoing processes.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 16

Type: MCMA

Which of the following should the needs assessment committee do as a first step in the process of determining the organization's information needs?

Standard Text: Select all that apply.

1. Examining the vision of the organization

2. Using brainstorming to defining the expectations of the information system
3. Examining the strategic plan
4. Examining the mission statement
5. Establishing goals to guide the work of the committee

Correct Answer: 1,3,4

Rationale 1: The needs assessment committee should start the process by examining the vision and mission statements of the organization as well as the strategic plan. This will guide the committee in looking to the future and determining the organization's information needs while continuing to support the mission. From this, goals or a charge should be developed to guide the work of the committee. The committee should consider using brainstorming techniques later when defining the expectations of an information system.

Rationale 2: The needs assessment committee should start the process by examining the vision and mission statements of the organization as well as the strategic plan. The committee should consider using brainstorming techniques later when defining the expectations of an information system.

Rationale 3: The needs assessment committee should start the process by examining the vision and mission statements of the organization as well as the strategic plan. This will guide the committee in looking to the future and determining the organization's information needs while continuing to support the mission. From this, goals or a charge should be developed to guide the work of the committee. The committee should consider using brainstorming techniques later when defining the expectations of an information system.

Rationale 4: The needs assessment committee should start the process by examining the vision and mission statements of the organization as well as the strategic plan. This will guide the committee in looking to the future and determining the organization's information needs while continuing to support the mission. From this, goals or a charge should be developed to guide the work of the committee. The committee should consider using brainstorming techniques later when defining the expectations of an information system.

Rationale 5: The needs assessment committee should start the process by examining the vision and mission statements of the organization as well as the strategic plan. This will guide the committee in looking to the future and determining the organization's information needs while continuing to support the mission. From this, goals or a charge should be developed to guide the work of the committee.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 17

Type: MCMA

Which of the following accurately describes the process of determining system requirements?

Standard Text: Select all that apply.

1. The list of "musts" and "wants" are compiled from information gathered during numerous interviews.
2. Include only those criteria that are necessary at the present time and not in the future.
3. During the interview process the interviewers use a rating scale to weight the list of "musts" and "wants" from one to ten.
4. After the interviews are completed, the selection committee members use a rating scale to weight the list of "musts" and "wants" from one to ten.
5. The criteria are grouped into functional categories to present a full picture of the system requirements.

Correct Answer: 1,4,5

Rationale 1: The interviewer asks what information is necessary to conduct business and what information is desired but not essential. These are called the "musts" and the "wants." It is important to also consider those criteria that may not be necessary at the present time but might be important in the future. The information from numerous interviews is then compiled into a list of "musts" and "wants." The criteria should also be grouped into functional categories to present a comprehensive picture of the system requirements. The next step is to prioritize or weight the list of "musts" and "wants" from high to low. To accomplish this task, selection committee members should develop a rating scale such as a one-to-ten scale or rankings of low, medium, and high.

Rationale 2: The interviewer asks what information is necessary to conduct business and what information is desired but not essential. These are called the "musts" and the "wants." It is important to also consider those criteria that may not be necessary at the present time but might be important in the future. The information from numerous interviews is then compiled into a list of "musts" and "wants." The criteria should also be grouped into functional categories to present a comprehensive picture of the system requirements. The next step is to prioritize or weight the list of "musts" and "wants" from high to low. To accomplish this task, selection committee members should develop a rating scale such as a one-to-ten scale or rankings of low, medium, and high.

Rationale 3: The interviewer asks what information is necessary to conduct business and what information is desired but not essential. These are called the "musts" and the "wants." It is important to also consider those criteria that may not be necessary at the present time but might be important in the future. The information from numerous interviews is then compiled into a list of "musts" and "wants." The criteria should also be grouped into functional categories to present a comprehensive picture of the system requirements. The next step is to prioritize or weight the list of "musts" and "wants" from high to low. To accomplish this task, selection committee members should develop a rating scale such as a one-to-ten scale or rankings of low, medium, and high.

Rationale 4: The interviewer asks what information is necessary to conduct business and what information is desired but not essential. These are called the "musts" and the "wants." It is important to also consider those criteria that may not be necessary at the present time but might be important in the future. The information from numerous interviews is then compiled into a list of "musts" and "wants." The criteria should also be grouped into functional categories to present a comprehensive picture of the system requirements. The next step is to prioritize or weight the list of "musts" and "wants" from high to low. To accomplish this task, selection committee members should develop a rating scale such as a one-to-ten scale or rankings of low, medium, and high.

Rationale 5: The interviewer asks what information is necessary to conduct business and what information is desired but not essential. These are called the "musts" and the "wants." It is important to also consider those criteria that may not be necessary at the present time but might be important in the future. The information from numerous interviews is then compiled into a list of "musts" and "wants." The criteria should also be grouped into functional categories to present a comprehensive picture of the system requirements. The next step is to prioritize or weight the list of "musts" and "wants" from high to low. To accomplish this task, selection committee members should develop a rating scale such as a one-to-ten scale or rankings of low, medium, and high.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 18

Type: MCSA

Once the decision has been made as to which vendor's system to purchase, which department of the organization completes the final negotiations?

1. Information technology

2. Chief operating officer

3. Selection committee

4. Legal department

Correct Answer: 4

Rationale 1: The enterprise's legal and purchasing representatives may request the names of the three highest ranked vendors, as well as their RFP responses. In this way, the contract negotiations will be able to address issues not specifically included in the RFP responses, such as cost justification and expected implementation schedules. The end result will be the selection of one vendor and a system that will be implemented in the enterprise. Demands may include justifying their costs, guaranteeing the implementation schedules, or a specific quick response time for addressing problems.

Rationale 2: The enterprise's legal and purchasing representatives may request the names of the three highest ranked vendors, as well as their RFP responses. In this way, the contract negotiations will be able to address issues not specifically included in the RFP responses, such as cost justification and expected implementation schedules. The end result will be the selection of one vendor and a system that will be implemented in the enterprise. Demands may include justifying their costs, guaranteeing the implementation schedules, or a specific quick response time for addressing problems.

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Rationale 4: The enterprise's legal and purchasing representatives may request the names of the three highest ranked vendors, as well as their RFP responses. In this way, the contract negotiations will be able to address issues not specifically included in the RFP responses, such as cost justification and expected implementation schedules. The end result will be the selection of one vendor and a system that will be implemented in the enterprise. Demands may include justifying their costs, guaranteeing the implementation schedules, or a specific quick response time for addressing problems.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Planning

Learning Outcome:

Question 19

Type: MCSA

The methodology to assure the request for proposal (RFP) is structured to ensure successful system selection includes which of the following criteria?

1. Develop well constructed questions
2. Create a long list of elaborate questions
3. Request a quick review of the organization's needs
4. Selection of the final team to implement the system
5. Randomly ranked requirements

Correct Answer: 1

Rationale 1: All aspects of the RFP must be detailed and precise to facilitate an accurate response from the vendor. If questions are vague or poorly written, they could easily be misinterpreted by the vendor. For example, an ambiguous question might lead a vendor to indicate that the system meets a requirement when in fact it does not. It is advantageous to limit the number of requirements to those that are most important and to produce a simple and straightforward document. If an RFP is too lengthy, it will cost both the organization and the vendor a great deal of time and money to prepare and evaluate. It is difficult to evaluate a long document that is not focused on the important issues. Finally, a well-written RFP provides a framework that allows the steering committee to more accurately evaluate the vendor's proposal.

Rationale 2: All aspects of the RFP must be detailed and precise to facilitate an accurate response from the vendor. If questions are vague or poorly written, they could easily be misinterpreted by the vendor. For example, an ambiguous question might lead a vendor to indicate that the system meets a requirement when in fact it does not. It is advantageous to limit the number of requirements to those that are most important and to produce a simple and straightforward document. If an RFP is too lengthy, it will cost both the organization and the vendor a great deal of time and money to prepare and evaluate. It is difficult to evaluate a long document that is not focused on the important issues. Finally, a well-written RFP provides a framework that allows the steering committee to more accurately evaluate the vendor's proposal.

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vendor a great deal of time and money to prepare and evaluate. It is difficult to evaluate a long document that is not focused on the important issues. Finally, a well-written RFP provides a framework that allows the steering committee to more accurately evaluate the vendor's proposal.

Rationale 4: All aspects of the RFP must be detailed and precise to facilitate an accurate response from the vendor. If questions are vague or poorly written, they could easily be misinterpreted by the vendor. For example, an ambiguous question might lead a vendor to indicate that the system meets a requirement when in fact it does not. It is advantageous to limit the number of requirements to those that are most important and to produce a simple and straightforward document. If an RFP is too lengthy, it will cost both the organization and the vendor a great deal of time and money to prepare and evaluate. It is difficult to evaluate a long document that is not focused on the important issues. Finally, a well-written RFP provides a framework that allows the steering committee to more accurately evaluate the vendor's proposal.

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Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Planning

Learning Outcome:

Question 20

Type: MCSA

How long did Melanson, Lindeman, and Jarolim (2007) note that it would take from the time that a committee is formed until a health care information system selection is finalized?

1. 14 months
2. Two years
3. Six months
4. Three years

Correct Answer: 1

Rationale 1: Presently, it may take 14 months from the time that a committee is formed until a system selection is finalized. The selection of health care information systems will occur many times in the future as manual processes are replaced by automated ones and as individual systems require upgrades, outlive their utility, or can no longer be supported for various reasons. As the process is repeated, the body of knowledge required to support this practice will continue to grow helping to ensure the choice of the best system for a given organization.

Rationale 2: Presently, it may take 14 months from the time that a committee is formed until a system selection is finalized. The selection of health care information systems will occur many times in the future as manual processes are replaced by automated ones and as individual systems require upgrades, outlive their utility, or can no longer be supported for various reasons. As the process is repeated, the body of knowledge required to support this practice will continue to grow helping to ensure the choice of the best system for a given organization.

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Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 21

Type: MCSA

Which of the following answers best represents the use of a Gantt chart?

1. A Gantt chart is a horizontal bar chart used to illustrate the start and finish dates of the elements of a project.

2. A Gantt chart is useful in the creation of a RFP.
3. A Gantt chart controls the strategic planning process.
4. A Gantt chart is an essential document presented to all stakeholders.

Correct Answer: 1

Rationale 1: It is vital to organize responsibilities around a realistic timeframe. A Gantt chart is a horizontal bar chart used to illustrate the start and finish dates of the elements of a project.

Rationale 2: It is vital to organize responsibilities around a realistic timeframe. A Gantt chart is a horizontal bar chart used to illustrate the start and finish dates of the elements of a project.

Rationale 3: It is vital to organize responsibilities around a realistic timeframe. A Gantt chart is a horizontal bar chart used to illustrate the start and finish dates of the elements of a project.

Rationale 4: It is vital to organize responsibilities around a realistic timeframe. A Gantt chart is a horizontal bar chart used to illustrate the start and finish dates of the elements of a project.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 22

Type: MCSA

Which of the following statements best describes the term *milestone*?

1. A milestone is essential in developing a timeline.
2. A milestone delineates strategic planning goals.
3. A milestone is a major entity in the system's maintenance.
4. A milestone guides the selection of the system.

Correct Answer: 1

Rationale 1: It is essential to develop a timeline that delineates the major events or milestones when working through the various phases of the information system's life cycle.

Rationale 2: It is essential to develop a timeline that delineates the major events or milestones when working through the various phases of the information system's life cycle

Rationale 3: It is essential to develop a timeline that delineates the major events or milestones when working through the various phases of the information system's life cycle.

Rationale 4: It is essential to develop a timeline that delineates the major events or milestones when working through the various phases of the information system's life cycle.

Chapter 17 Using Informatics to Promote Community/Population Health

Question 1

Type: MCSA

What is the systematic application of information and computer science and technology to public health practice, research, and learning?

1. Public health nursing
2. Public health practice
3. Public health informatics
4. Public health research

Correct Answer: 3

Rationale 1: Public health informatics (PHI) is defined in several ways but one of the most widely accepted definitions of PHI is “the systematic application of information and computer science and technology to public health practice, research and learning” (Yasnoff, O’Carroll, Koo, Linkins, & Kilbourne, 2000, p. 67). Public health has always been about disease surveillance and management and it is apparent that identification of major disease outbreaks, particularly epidemics, influences recognition of disease causation, distribution of disease, and frequency of disease occurrence or transmission (Macha & McDonough, 2012).

Rationale 2: Public health informatics (PHI) is defined in several ways but one of the most widely accepted definitions of PHI is “the systematic application of information and computer science and technology to public health practice, research and learning” (Yasnoff, O’Carroll, Koo, Linkins, & Kilbourne, 2000, p. 67). Public health has always been about disease surveillance and management and it is apparent that identification of major disease outbreaks, particularly epidemics, influences recognition of disease causation, distribution of disease, and frequency of disease occurrence or transmission (Macha & McDonough, 2012).

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Rationale 4: Public health informatics (PHI) is defined in several ways but one of the most widely accepted definitions of PHI is “the systematic application of information and computer science and technology to public health practice, research and learning” (Yasnoff, O’Carroll, Koo, Linkins, & Kilbourne, 2000, p. 67). Public health has always been about disease surveillance and management and it is apparent that identification of major disease outbreaks, particularly epidemics, influences recognition of disease causation, distribution of disease, and frequency of disease occurrence or transmission (Macha & McDonough, 2012).

Global Rationale:

Cognitive Level: Understanding

Client Need: Health Promotion and Maintenance

Client Need Sub:

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: MCSA

Which of the following is considered a major challenge with public health informatics (PHI)?

1. Need to have additional terminals in neutral locations
2. Need to have stronger linkages and interface between and among providers and systems
3. Need to convince health care providers of PHI benefits
4. Need for additional research on PHI effectiveness

Correct Answer: 2

Rationale 1: One of the major challenges with PHI is the need to have stronger linkages and interface between and among providers and systems to enhance communications particularly related to man-made and natural disasters around the globe.

Rationale 2: One of the major challenges with PHI is the need to have stronger linkages and interface between and among providers and systems to enhance communications particularly related to man-made and natural disasters around the globe.

Rationale 3: One of the major challenges with PHI is the need to have stronger linkages and interface between and among providers and systems to enhance communications particularly related to man-made and natural disasters around the globe.

Rationale 4: One of the major challenges with PHI is the need to have stronger linkages and interface between and among providers and systems to enhance communications particularly related to man-made and natural disasters around the globe.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: FIB

Public Health Informatics (PHI) is distinguished from other information systems and technology by its emphasis on _____ in populations

Standard Text:

Correct Answer: prevention

Rationale : PHI is distinguished from other information systems and technology by its emphasis on prevention in populations (Yasnoff, O'Carroll, Koo, Linkins, & Kilbourne, 2000, p. 67). The focus on population health is linked to prevention as opposed to diagnosis and treatment. Public health has a governmental context as public health nearly always involves linkages to government agencies at the local, regional, national, or global levels.

Global Rationale:

Cognitive Level: Understanding

Client Need: Health Promotion and Maintenance

Client Need Sub:

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: MCSA

There are four major principles of public health informatics that are distinguishable from other types of informatics. Which of the following responses is not considered a principle?

1. Promote the health of populations as opposed to health of individuals.
2. Prevent disease and injury by altering the conditions or the environment putting populations at risk.
3. Should not reflect the governmental context in which public health is practiced.
4. Should explore the potential for prevention of all vulnerable points.

Correct Answer: 3

Rationale 1: 4. They should reflect the governmental context in which public health is practiced.

Rationale 2: 4. They should reflect the governmental context in which public health is practiced.

Rationale 3: 4. They should reflect the governmental context in which public health is practiced.

Rationale 4: 4. They should reflect the governmental context in which public health is practiced.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCSA

Which national organization has begun to link public health electronic health records (EHRs) with an immunization tracking system?

1. NIH
2. CDC
3. ANA
4. AACN

Correct Answer: 2

Rationale 1: The Center for Disease Control is a national organization that has begun national initiatives to link public health electronic health records (EHRs) with an immunization tracking system.

Rationale 2: The Center for Disease Control is a national organization that has begun national initiatives to link public health electronic health records (EHRs) with an immunization tracking system.

Rationale 3: The Center for Disease Control is a national organization that has begun national initiatives to link public health electronic health records (EHRs) with an immunization tracking system.

Rationale 4: Not correct. The Center for Disease Control is a national organization that has begun national initiatives to link public health electronic health records (EHRs) with an immunization tracking system.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: FIB

The _____ website has a wealth of information for nurses through fact sheets as well as a series of scenario-based workshops that are free of charge and can be completed online on topics related to nursing care and management during a crisis.

Standard Text:

Correct Answer: United States Homeland Security

Rationale : Nuclear attack: http://www.dhs.gov/xlibrary/assets/prep_nuclear_fact_sheet.pdf

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 7

Type: MCSA

The Centers for Disease Control (CDC) have begun national initiatives to link public health electronic health records (EHRs) with an immunization tracking system (CDC, 2011). This tracking system is focused on allowing EHRs of state and local health departments to share data with immunization information systems and integrate these records with the CDC's vaccine tracking system. The initiative focuses on communication and which of the following?

1. The ability to provide reminders, extend resources, and track records
2. The ability to combine data with global initiatives
3. The ability to work in tandem with governmental databases
4. The ability to design public health resources in case of an pandemic

Correct Answer: 1

Rationale 1: With respect to public health communication and tracking of immunizations, the Centers for Disease Control (CDC) have begun national initiatives to link public health electronic health records (EHRs) with an immunization tracking system (CDC, 2011). This tracking system is focused on allowing EHRs of state and local health departments to share data with immunization information systems and integrate these records with the CDC's vaccine tracking system (CDC, 2011). A major focus of this initiative is to foster communication that facilitates the ability to track, provide reminders, and extend the human and financial resources needed to track immunization records.

Rationale 2: With respect to public health communication and tracking of immunizations, the Centers for Disease Control (CDC) have begun national initiatives to link public health electronic health records (EHRs) with an immunization tracking system (CDC, 2011). This tracking system is focused on allowing EHRs of state and local health departments to share data with immunization information systems and integrate these records with the CDC's vaccine tracking system (CDC, 2011). A major focus of this initiative is to foster communication that facilitates the ability to track, provide reminders, and extend the human and financial resources needed to track immunization records.

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facilitates the ability to track, provide reminders, and extend the human and financial resources needed to track immunization records.

Rationale 4: With respect to public health communication and tracking of immunizations, the Centers for Disease Control (CDC) have begun national initiatives to link public health electronic health records (EHRs) with an immunization tracking system (CDC, 2011). This tracking system is focused on allowing EHRs of state and local health departments to share data with immunization information systems and integrate these records with the CDC's vaccine tracking system (CDC, 2011). A major focus of this initiative is to foster communication that facilitates the ability to track, provide reminders, and extend the human and financial resources needed to track immunization records.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCMA

The Homeland Security website has fact sheets and a series of scenario-based workshops that are free and can be completed online. Which of the following types of terrorist attacks have concomitant fact sheets on this website?

Standard Text: Select all that apply.

1. Chemical
2. Biological
3. Radiological
4. Nuclear
5. Improvised Explosive Attack

Correct Answer: 1,2,3,4,5

Rationale 1: The National Academies has prepared, in cooperation with the Department, fact sheets on five types of terrorist attacks including fact sheets on Chemical, Biological, Radiological, Nuclear, and IED attacks (Homeland Security, 2011). These fact sheets offer clear,

objective information on these specific types of attacks as well as their impact and dangers helping nurses focus on specific needs and communication in particular.

Rationale 2: The National Academies has prepared, in cooperation with the Department, fact sheets on five types of terrorist attacks including fact sheets on Chemical, Biological, Radiological, Nuclear, and IED attacks (Homeland Security, 2011). These fact sheets offer clear, objective information on these specific types of attacks as well as their impact and dangers helping nurses focus on specific needs and communication in particular.

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Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 9

Type: MCSA

Public health care is responsible for the protecting the health care needs of the public through a variety of ways. With the increase in technology, which of the following statements is true about information technology and public health protection?

1. Information technology provides the ability to access Center for Disease Control (CDC) updates on outbreaks of communicable disease.

2. Information technology diminishes the ability to make rapid decisions during crisis management.
3. Information technology controls communication during a crisis.
4. Information technology is unnecessary during a crisis.

Correct Answer: 1

Rationale 1: Information technology provides opportunities to solidify critical linkages between major stakeholders to enhance and facilitate timely and relevant communications between and among all levels of healthcare providers. Furthermore, the ability to access Center for Disease Control (CDC) updates on outbreaks of H1N1 or to track and trend the epidemiology of the outbreak is critical in management and treatment as well as containment and in some cases eradicating the disease before it rises to epidemic proportions.

Rationale 2: Information technology provides opportunities to solidify critical linkages between major stakeholders to enhance and facilitate timely and relevant communications between and among all levels of healthcare providers. Furthermore, the ability to access Center for Disease Control (CDC) updates on outbreaks of H1N1 or to track and trend the epidemiology of the outbreak is critical in management and treatment as well as containment and in some cases eradicating the disease before it rises to epidemic proportions.

Rationale 3: Information technology provides opportunities to solidify critical linkages between major stakeholders to enhance and facilitate timely and relevant communications between and among all levels of healthcare providers. Furthermore, the ability to access Center for Disease Control (CDC) updates on outbreaks of H1N1 or to track and trend the epidemiology of the outbreak is critical in management and treatment as well as containment and in some cases eradicating the disease before it rises to epidemic proportions.

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Global Rationale:

Cognitive Level: Analyzing

Client Need: Health Promotion and Maintenance

Client Need Sub:

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: MCSA

The use of the Internet for health information has grown exponentially in the past few years. There are a multitude of reasons for individuals to check online before contacting their health care provider. Which of the following statements is a major reason why people turn to the Internet and websites for health related information?

1. Fewer people have health care insurance.
2. The long lines and waiting time in healthcare providers' offices prevent individuals from making appointments.
3. People refuse to pay the co-pay when they can find out about their illness for free.
4. People are reluctant to bother their primary healthcare provider.

Correct Answer: 4

Rationale 1: One of the major reasons people turn to the Internet or websites when they feel sick is because they do not want to bother their healthcare providers with their question.

Rationale 2: One of the major reasons people turn to the Internet or websites when they feel sick is because they do not want to bother their healthcare providers with their question.

Rationale 3: One of the major reasons people turn to the Internet or websites when they feel sick is because they do not want to bother their healthcare providers with their question.

Rationale 4: One of the major reasons people turn to the Internet or websites when they feel sick is because they do not want to bother their healthcare providers with their question.

Global Rationale:

Cognitive Level: Understanding

Client Need: Health Promotion and Maintenance

Client Need Sub:

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: FIB

There is a global concern that not all populations or subpopulations have the resources and capabilities to utilize or benefit from communication using technology and Internet. This phenomenon is called _____.

Standard Text:

Correct Answer: digital divide

Rationale : The concern is that not all populations or subpopulations have the resources and capabilities to utilize or benefit from communication using technology and Internet. Goodall, Ward, and Newman, (2010) refer to this concern as the “digital divide” and express concern and their research examines the use of technology indicating that older people in Australia use information and communication technology (ICT) less than other age group. There is a compelling concern regarding governments or healthcare agencies to move exclusively to ICT communication may create a chasm of the worst kind excluding select populations from having access to this important health information.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: MCSA

The ability to improve health outcomes and make data-driven decisions within a new or existing health information infrastructure is critical. This can be accomplished through which of the following?

1. Reliable databases
2. A cogent plan of action
3. Systems implementation
4. Public health informatics

Correct Answer: 1

Rationale 1: The ability to improve health outcomes and make data-driven decisions within a new or existing health information infrastructure is critical. For example, there is a clear need for valid and reliable databases.

Rationale 2: The ability to improve health outcomes and make data-driven decisions within a new or existing health information infrastructure is critical. For example, there is a clear need for valid and reliable databases.

Rationale 3: The ability to improve health outcomes and make data-driven decisions within a new or existing health information infrastructure is critical. For example, there is a clear need for valid and reliable databases.

Rationale 4: The ability to improve health outcomes and make data-driven decisions within a new or existing health information infrastructure is critical. For example, there is a clear need for valid and reliable databases.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Health Promotion and Maintenance

Client Need Sub:

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 13

Type: MCSA

Research has suggested that there is a positive correlation between an individual's health literacy and which of the following?

1. Knowledge of illness
2. Managed care
3. Computer skills
4. Health outcomes

Correct Answer: 4

Rationale 1: Health literacy has been linked to positive health outcomes. Experts suggest this phenomenon be investigated further to determine the extent of the relationship.

Rationale 2: Health literacy has been linked to positive health outcomes. Experts suggest this phenomenon be investigated further to determine the extent of the relationship.

Rationale 3: Health literacy has been linked to positive health outcomes. Experts suggest this phenomenon be investigated further to determine the extent of the relationship.

Rationale 4: Health literacy has been linked to positive health outcomes. Experts suggest this phenomenon be investigated further to determine the extent of the relationship.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: MCMA

The relationship between information technology and the collection and analysis of data is part of the development of evidence-based practice and improved patient outcomes. Which of the following are essential elements that need to be considered to have a comprehensive, robust health information system to promote public health informatics?

Standard Text: Select all that apply.

1. Data definitions
2. Coding classification systems
3. Data transmission capability
4. Health information exchange (HIE)
5. Data storage

Correct Answer: 1,2,3,4

Chapter 18 Telenursing and Remote Access Telehealth: Original contribution

Question 1

Type: MCSA

Which of the following laws, signed by President Clinton in 2000, gives electronic signatures the same legal status as handwritten signatures?

1. The Health Insurance Portability and Accountability Act (HIPAA)
2. The American Recovery and Reinvestment Act of 2009 (ARRA)
3. Medicare Improvements for Patients and Providers Act (MIPPA)

4. The Electronic Signatures in Global and National Commerce Act

Correct Answer: 4

Rationale 1: The Electronic Signatures in Global and National Commerce Act ("E-Sign or ESIGN") was signed into law by President Clinton on June 30, 2000. E-Sign gives electronic signatures the same legal status as handwritten signatures. From a legal perspective, this means that any contract signed electronically cannot be declared invalid on the basis of an electronic signature (Freeman, 2004).

Rationale 2: The Electronic Signatures in Global and National Commerce Act ("E-Sign or ESIGN") was signed into law by President Clinton on June 30, 2000. E-Sign gives electronic signatures the same legal status as handwritten signatures. From a legal perspective, this means that any contract signed electronically cannot be declared invalid on the basis of an electronic signature (Freeman, 2004).

Rationale 3: The Electronic Signatures in Global and National Commerce Act ("E-Sign or ESIGN") was signed into law by President Clinton on June 30, 2000. E-Sign gives electronic signatures the same legal status as handwritten signatures. From a legal perspective, this means that any contract signed electronically cannot be declared invalid on the basis of an electronic signature (Freeman, 2004).

Rationale 4: From a legal perspective, this act means that any contract signed electronically cannot be declared invalid on the basis of an electronic signature. The Electronic Signatures in Global and National Commerce Act ("E-Sign or ESIGN") was signed into law by President Clinton on June 30, 2000. E-Sign gives electronic signatures the same legal status as handwritten signatures. From a legal perspective, this means that any contract signed electronically cannot be declared invalid on the basis of an electronic signature (Freeman, 2004).

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: FIB

MIPPA is an acronym for _____.

Standard Text:

Correct Answer: Medicare Improvements for Patients and Providers Act

Rationale : MIPPA: Medicare Improvements for Patients and Providers Act

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: MCSA

Which act makes several significant changes to the current HIPAA Security and Privacy Rules and provides funds and incentives to increase the use of electronic health records (EHRs) by physicians and hospitals who meet eligibility criteria?

1. Health Information Technology for Economic and Clinical Health Act (HITECH)
2. The American Recovery and Reinvestment Act of 2009
3. Medicare Improvements for Patients and Providers Act (MIPPA)
4. The Health Insurance Portability and Accountability Act

Correct Answer: 1

Rationale 1: The HITECH Act makes several significant changes to the current HIPAA Security and Privacy Rules and provides funds and incentives to increase the use of electronic health records (EHRs) by physicians and hospitals who meet eligibility criteria (Tomes, 2010).

Rationale 2: The HITECH Act makes several significant changes to the current HIPAA Security and Privacy Rules and provides funds and incentives to increase the use of electronic health records (EHRs) by physicians and hospitals who meet eligibility criteria (Tomes, 2010).

Rationale 3: The HITECH Act makes several significant changes to the current HIPAA Security and Privacy Rules and provides funds and incentives to increase the use of electronic health records (EHRs) by physicians and hospitals who meet eligibility criteria (Tomes, 2010).

Rationale 4: The HITECH Act makes several significant changes to the current HIPAA Security and Privacy Rules and provides funds and incentives to increase the use of electronic health records (EHRs) by physicians and hospitals who meet eligibility criteria (Tomes, 2010).

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: FIB

The _____ oversees information- technology standards, implementation strategies, and impact assessment.

Standard Text:

Correct Answer: Office of the National Coordinator for Health Information Technology (ONCHIT)

Rationale : The Office of the National Coordinator for Health Information Technology (ONCHIT) oversees information- technology standards, implementation strategies, and impact assessment. To receive the positive incentives and physicians and hospitals must use EHRs certified by ONCHIT (Tomes, 2010).

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCSA

To comply with the mandate to use EHRs by 2014, physicians and hospitals must have the EHR prepared and ready for implementation. Which of the following methods are available to entities that will assist in the funding of the EHR?

1. Medicare and Medicaid
2. HIPAA
3. Consumer Digest Guidelines
4. American Recovery and Reinvestment Act of 2009

Correct Answer: 1

Rationale 1: Beginning in 2011, Medicare and Medicaid will provide financial incentives of up to \$65,000 per eligible physician and up to \$11 million per hospital for meaningful use of health information technology. These positive incentives will be paid over several years.

Rationale 2: Beginning in 2011, Medicare and Medicaid will provide financial incentives of up to \$65,000 per eligible physician and up to \$11 million per hospital for meaningful use of health information technology. These positive incentives will be paid over several years.

Rationale 3: Beginning in 2011, Medicare and Medicaid will provide financial incentives of up to \$65,000 per eligible physician and up to \$11 million per hospital for meaningful use of health information technology. These positive incentives will be paid over several years.

Rationale 4: Beginning in 2011, Medicare and Medicaid will provide financial incentives of up to \$65,000 per eligible physician and up to \$11 million per hospital for meaningful use of health information technology. These positive incentives will be paid over several years.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCSA

To receive financial incentives, hospitals and physician offices must meet designated criteria established by which organization?

1. Centers for Medicare and Medicaid
2. The Joint Commission
3. American Nurses Association
4. TIGER Initiative

Correct Answer: 1

Rationale 1: To receive financial incentives, hospitals and physician offices must meet designated criteria established by The Centers for Medicare and Medicaid (CMS). For eligible

professionals, 20 of 25 meaningful-use objectives must be met to qualify for an incentive payment.

Rationale 2: To receive financial incentives, hospitals and physician offices must meet designated criteria established by The Centers for Medicare and Medicaid (CMS). For eligible professionals, 20 of 25 meaningful-use objectives must be met to qualify for an incentive payment.

Rationale 3: To receive financial incentives, hospitals and physician offices must meet designated criteria established by The Centers for Medicare and Medicaid (CMS). For eligible professionals, 20 of 25 meaningful-use objectives must be met to qualify for an incentive payment.

Rationale 4: To receive financial incentives, hospitals and physician offices must meet designated criteria established by The Centers for Medicare and Medicaid (CMS). For eligible professionals, 20 of 25 meaningful-use objectives must be met to qualify for an incentive payment.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 7

Type: MCSA

Healthcare entities, as well as their business associates, must notify individuals whose health information is breached within 60 days of that breach. In which of the following cases does the entity not have to notify the individual whose information has been breached?

1. If data are anonymous
2. If data are encrypted
3. If data are misplaced in setting
4. If data are lab results

Correct Answer: 2

Rationale 1: If data are encrypted, notification of a breach is not required. However, an entity has to validate that data encryption works and meets federal standards (Nelson, 2010).

Rationale 2: If data are encrypted, notification of a breach is not required. However, an entity has to validate that data encryption works and meets federal standards (Nelson, 2010).

Rationale 3: If data are encrypted, notification of a breach is not required. However, an entity has to validate that data encryption works and meets federal standards (Nelson, 2010).

Rationale 4: If data are encrypted, notification of a breach is not required. However, an entity has to validate that data encryption works and meets federal standards (Nelson, 2010).

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCSA

Which act eases the budgetary impact of EHR thereby facilitating implementation?

1. HIPAA
2. ARRA
3. ESIGN
4. HITECH

Correct Answer: 4

Rationale 1: The HITECH act is expected to alleviate much of this impediment, setting off a buying spree among chief information officers. HITECH provides financial incentives that assist in defraying some of the costs.

Rationale 2: The HITECH act is expected to alleviate much of this impediment, setting off a buying spree among chief information officers. HITECH provides financial incentives that assist in defraying some of the costs.

Rationale 3: The HITECH act is expected to alleviate much of this impediment, setting off a buying spree among chief information officers. HITECH provides financial incentives that assist in defraying some of the costs.

Rationale 4: The HITECH act is expected to alleviate much of this impediment, setting off a buying spree among chief information officers. HITECH provides financial incentives that assist in defraying some of the costs.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 9

Type: MCMA

HIPAA and HITECH have designated some technical standards as mandatory. Which of the following are associated with the implementation of standards?

Standard Text: Select all that apply.

1. The standards are insufficient to enable collection, management, and exchange of the mandated data.
2. Technical standards are needed to assure that structured and codified terminologies
3. Technical standards are needed to sufficiently capture all of health care
4. Standards must be widely available
5. Technical standards should be easily exchanged within and across organizations

Correct Answer: 1,2,3,4,5

Rationale 1: While HIPAA and HITECH have designated some technical standards as mandatory, those standards are insufficient to enable collection, management, and exchange of the mandated data. Technical standards are needed to assure that structured and codified terminologies, sufficiently comprehensive to capture all of health care, are widely available, that data can be securely and easily exchanged within and across organizations, and that a valid, safe, and reliable patient-centered community-care record can be created and maintained (Arlotto, 2010).

Rationale 2: While HIPAA and HITECH have designated some technical standards as mandatory, those standards are insufficient to enable collection, management, and exchange of the mandated data. Technical standards are needed to assure that structured and codified terminologies, sufficiently comprehensive to capture all of health care, are widely available, that

data can be securely and easily exchanged within and across organizations, and that a valid, safe, and reliable patient-centered community-care record can be created and maintained (Arlotto, 2010).

Rationale 3: While HIPAA and HITECH have designated some technical standards as mandatory, those standards are insufficient to enable collection, management, and exchange of the mandated data. Technical standards are needed to assure that structured and codified terminologies, sufficiently comprehensive to capture all of health care, are widely available, that data can be securely and easily exchanged within and across organizations, and that a valid, safe, and reliable patient-centered community-care record can be created and maintained (Arlotto, 2010).

Rationale 4: The availability of working technical standards is another challenge. While HIPAA and HITECH have designated some technical standards as mandatory, those standards are insufficient to enable collection, management, and exchange of the mandated data. Technical standards are needed to assure that structured and codified terminologies, sufficiently comprehensive to capture all of health care, are widely available, that data can be securely and easily exchanged within and across organizations, and that a valid, safe, and reliable patient-centered community-care record can be created and maintained (Arlotto, 2010).

Rationale 5: The availability of working technical standards is another challenge. While HIPAA and HITECH have designated some technical standards as mandatory, those standards are insufficient to enable collection, management, and exchange of the mandated data. Technical standards are needed to assure that structured and codified terminologies, sufficiently comprehensive to capture all of health care, are widely available, that data can be securely and easily exchanged within and across organizations, and that a valid, safe, and reliable patient-centered community-care record can be created and maintained (Arlotto, 2010).

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: MCMA

Which of the following skills are needed by nurse informaticists?

Standard Text: Select all that apply.

1. Communication
2. Mining data

3. Analyze data aggregates
4. Design in-case process
5. Design functional and clinically valid decision support

Correct Answer: 1,2,3,4,5

Rationale 1: The role of the nurse informaticists will broaden as the organizations comply with federal legislation. Informaticists are needed to mine data, analyze data aggregates, help in care-process redesign—especially information workflows, and design functional and clinically valid decision support.

Rationale 2: The role of the nurse informaticists will broaden as the organizations comply with federal legislation. Informaticists are needed to mine data, analyze data aggregates, help in care-process redesign—especially information workflows, and design functional and clinically valid decision support.

Rationale 3: The role of the nurse informaticists will broaden as the organizations comply with federal legislation. Informaticists are needed to mine data, analyze data aggregates, help in care-process redesign—especially information workflows, and design functional and clinically valid decision support.

Rationale 4: The role of the nurse informaticists will broaden as the organizations comply with federal legislation. Informaticists are needed to mine data, analyze data aggregates, help in care-process redesign—especially information workflows, and design functional and clinically valid decision support.

Rationale 5: The role of the nurse informaticists will broaden as the organizations comply with federal legislation. Informaticists are needed to mine data, analyze data aggregates, help in care-process redesign—especially information workflows, and design functional and clinically valid decision support.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: MCSA

The need for informaticians who understand health care has grown. Which of the following best represents the future of nursing informatics?

1. The role of the nurse informatician will decrease in the future with an emphasis on medical informatics.
2. The need for nurse informaticians will increase in the future.
3. The need for nurses to specialize in informatics is unnecessary.
4. Nurses need advanced education to participate in the design and implementation of the information system.

Correct Answer: 2

Rationale 1: A nurse can specialize in informatics in graduate school. Baccalaureate education prepares a nurse generalist. The growth of the specialty is expected to grow in the future.

Rationale 2: A nurse can specialize in informatics in graduate school. The need for nurse informaticians will increase as the EHR and the 2014 deadline looms for organizations.

Rationale 3: The need for nurse informaticians will grow with the resultant increase in technology.

Rationale 4: Advanced education prepares the nurse informatician for leadership and research. However, a graduate degree is not necessary for participation in the development of the information system initiative.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: FIB

_____ is a specialty in nursing that focuses on the technology aspect of patient care.

Standard Text:

Correct Answer: Nurse Informatics Specialist

Rationale : Nurse Informatics Specialist is a considered a specialty in nursing that focuses on the technology aspect of patient care. A nurse can become a specialist through completion of a graduate degree.

Chapter 19 Nursing Informatics and Nursing Education

Question 1

Type: FIB

_____ is defined as the electronic movement of health-related information among organizations according to nationally recognized standards.

Standard Text:

Correct Answer: Health information exchange

Rationale : Health information exchange is defined as the electronic movement of health-related information among organizations according to nationally recognized standards.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: MCSA

Which of the following answers best describes the relationship between the health information exchange (HIE) and regional health information organization (RHIO)?

1. The HIE provides oversight to authorize the location of health information and the secure transfer and reuse of that health information electronically.
2. RHIO provides oversight to authorize the location of health information and the unsecured transfer and reuse of that health information electronically.
3. RHIO provides oversight to authorize the location of health information and the secure transfer and reuse of that health information electronically.

4. RHIO provides analysis of health information and the secure transfer and reuse of that health information electronically.

Correct Answer: 3

Rationale 1: The organization provides oversight to authorize the location of health information and the secure transfer and reuse of that health information electronically. The RHIO is defined as a health information organization that brings together health care stakeholders within a defined geographic area and governs health information exchange among them for the purpose of improving health and care in that community.

Rationale 2: The organization provides oversight to authorize the location of health information and the secure transfer and reuse of that health information electronically.

Rationale 3: The organization provides oversight to authorize the location of health information and the secure transfer and reuse of that health information electronically. The RHIO is defined as a health information organization that brings together health care stakeholders within a defined geographic area and governs health information exchange among them for the purpose of improving health and care in that community.

Rationale 4: The organization provides oversight to authorize the location of health information and the secure transfer and reuse of that health information electronically. The RHIO is defined as a health information organization that brings together health care stakeholders within a defined geographic area and governs health information exchange among them for the purpose of improving health and care in that community.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: MCMA

Health information exchanges can be useful for more than patient care and the uses are described at levels. Which of the following are considered levels?

Standard Text: Select all that apply.

1. Public health

2. National

3. Individual

4. Agency/organization

5. Professional

Correct Answer: 1,2,3,4,5

Rationale 1: 4) A public health and national level for accreditation and regulatory bodies to evaluate population health and safety and recommend changes in policy

Rationale 2: 4) A public health and national level for accreditation and regulatory bodies to evaluate population health and safety and recommend changes in policy

Rationale 3: 4) A public health and national level for accreditation and regulatory bodies to evaluate population health and safety and recommend changes in policy

Rationale 4: 4) A public health and national level for accreditation and regulatory bodies to evaluate population health and safety and recommend changes in policy

Rationale 5: 4) A public health and national level for accreditation and regulatory bodies to evaluate population health and safety and recommend changes in policy

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: MCSA

To accomplish exchanges, an HIE infrastructure requires not only technology but an organizing structure for processes. The organizing structure establishes which of the following?

1. Nontechnical standardization

2. Secure application and rules of operation

3. Transoperational exchanges

4. Standardized workflow to obtain nonessential information

Correct Answer: 2

Rationale 1: To accomplish exchanges for four levels, an HIE infrastructure requires not only technology but an organizing structure for processes. The organizing structure establishes secure application and rules of operation, technical and content standardization for interoperable exchanges among entities, and outlines the use cases and workflow to obtain meaningful information use across the four levels (Iowa e-Health, 2010).

Rationale 2: To accomplish exchanges for four levels, an HIE infrastructure requires not only technology but an organizing structure for processes. The organizing structure establishes secure application and rules of operation, technical and content standardization for interoperable exchanges among entities, and outlines the use cases and workflow to obtain meaningful information use across the four levels (Iowa e-Health, 2010).

Rationale 3: To accomplish exchanges for four levels, an HIE infrastructure requires not only technology but an organizing structure for processes. The organizing structure establishes secure application and rules of operation, technical and content standardization for interoperable exchanges among entities, and outlines the use cases and workflow to obtain meaningful information use across the four levels (Iowa e-Health, 2010).

Rationale 4: To accomplish exchanges for four levels, an HIE infrastructure requires not only technology but an organizing structure for processes. The organizing structure establishes secure application and rules of operation, technical and content standardization for interoperable exchanges among entities, and outlines the use cases and workflow to obtain meaningful information use across the four levels (Iowa e-Health, 2010).

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCMA

According to Iowa e-Health, which of the following are key factors that are indispensable prerequisites to consider for the HIE organizing infrastructure?

Standard Text: Select all that apply.

1. Master person index

2. Record locator service used to access and find health information that matches the identified individual

3. Methods of authentication

4. Provide authorization for users

5. Scope of services provided

Correct Answer: 1,2,3,4,5

Rationale 1: -Portal for access to enable authorized users a way to sign-on to the HIE. Different portals may be necessary to support different types of information exchanges (or HIE services) required for continuous care delivery, public reporting, and quality monitoring.

Rationale 2: -Portal for access to enable authorized users a way to sign-on to the HIE. Different portals may be necessary to support different types of information exchanges (or HIE services) required for continuous care delivery, public reporting, and quality monitoring.

Rationale 3: -Portal for access to enable authorized users a way to sign-on to the HIE. Different portals may be necessary to support different types of information exchanges (or HIE services) required for continuous care delivery, public reporting, and quality monitoring.

Rationale 4: -Portal for access to enable authorized users a way to sign-on to the HIE. Different portals may be necessary to support different types of information exchanges (or HIE services) required for continuous care delivery, public reporting, and quality monitoring.

Rationale 5: -Portal for access to enable authorized users a way to sign-on to the HIE. Different portals may be necessary to support different types of information exchanges (or HIE services) required for continuous care delivery, public reporting, and quality monitoring.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCSA

The preparations for an HIE include organizing a governing body and establishing financial sustainability. Which of the following is considered a conceptual and sustainable public governance model?

1. Public utility HIE with government oversight
2. Public utility HIE with no government oversight
3. Private sector-led HIE with local collaboration
4. Private sector-led HIE with corporation collaboration

Correct Answer: 1

Rationale 1: Public utility HIE with government oversight where a public sector will serve an oversight role and regulates the private-provided services of the HIE is considered a sustainable conceptual model.

Rationale 2: Public utility HIE with government oversight where a public sector will serve an oversight role and regulates the private-provided services of the HIE is considered a sustainable conceptual model.

Rationale 3: Public utility HIE with government oversight where a public sector will serve an oversight role and regulates the private-provided services of the HIE is considered a sustainable conceptual model.

Rationale 4: Public utility HIE with government oversight where a public sector will serve an oversight role and regulates the private-provided services of the HIE is considered a sustainable conceptual model.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 7

Type: FIB

_____ and health systems with nursing homes, hospice, homecare, and clinics integrated with hospitals are able to exchange with standard content and identifiers adopted across settings.

Standard Text:

Correct Answer: Integrated delivery networks (IDN)

Rationale : Integrated delivery networks (IDN) and health systems with nursing homes, hospice, homecare, and clinics integrated with hospitals are able to exchange with standard content and identifiers adopted across settings. All IDNs experienced the challenges of adopting common information formats and learning new workflows for use cases. Current HIEs are becoming geographically defined and involve organizations that are led by multiple representatives from professional and healthcare entities to exchange information for the good of the individual and public services. Furthermore, sustainability can be achieved with adequate funding.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCMA

Which of the following are considered barriers to the implementation of the HIE?

Standard Text: Select all that apply.

1. Equipment
2. Financial
3. Local
4. Personnel
5. Legal procedures

Correct Answer: 1,2,5

Rationale 1: HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes.

Rationale 2: HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes.

Rationale 3: HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes.

Rationale 4: HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes.

Rationale 5: HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes (State Alliance for e-Health, 2009).

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 9

Type: MCSA

Which of the following is true about the sustainability of the HIE?

1. Sustainability discussions occur after the implementation phase.
2. Sustainability is no longer an issue in HIE.
3. A system that is not sustainable is not an effective one.
4. Sustainable technology is not cost effective.

Correct Answer: 3

Rationale 1: Funding is often associated with the perceived and measured sustainability of the HIE. Planners design methods to sustain or to keep the system working once it has been implemented. A system that is not sustainable is not an effective one. Sustainability discussions occur before the implementation phase.

Rationale 2: Funding is often associated with the perceived and measured sustainability of the HIE. Planners design methods to sustain or to keep the system working once it has been implemented. A system that is not sustainable is not an effective one.

Rationale 3: Funding is often associated with the perceived and measured sustainability of the HIE. Planners design methods to sustain or to keep the system working once it has been implemented. A system that is not sustainable is not an effective one.

Rationale 4: Funding is often associated with the perceived and measured sustainability of the HIE. Planners design methods to sustain or to keep the system working once it has been implemented. A system that is not sustainable is not an effective one.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: MCMA

Which of the following are considered obstacles to sustainability?

Standard Text: Select all that apply.

1. Underestimating the size and scope of the project
2. Identifying critical mass of data to exchange
3. Identifying critical mass of participants
4. The collaboration between common competitors in communities
5. The resistance to changes in workflow

Correct Answer: 1,2,3,4,5

Rationale 1: The obstacles to sustainability result from underestimating the size and scope of the project, identifying critical mass of data to exchange (e.g. standards for medication history, allergies, side effects, indications, weight/height), identifying critical mass of participants (e.g. pharmacies), the collaboration between common competitors in communities, the resistance to changes in workflow, and the numbers of unskilled workforce with HIT.

Rationale 2: The obstacles to sustainability result from underestimating the size and scope of the project, identifying critical mass of data to exchange (e.g. standards for medication history, allergies, side effects, indications, weight/height), identifying critical mass of participants (e.g.

pharmacies), the collaboration between common competitors in communities, the resistance to changes in workflow, and the numbers of unskilled workforce with HIT.

Rationale 3: The obstacles to sustainability result from underestimating the size and scope of the project, identifying critical mass of data to exchange (e.g. standards for medication history, allergies, side effects, indications, weight/height), identifying critical mass of participants (e.g. pharmacies), the collaboration between common competitors in communities, the resistance to changes in workflow, and the numbers of unskilled workforce with HIT.

Rationale 4: The obstacles to sustainability result from underestimating the size and scope of the project, identifying critical mass of data to exchange (e.g. standards for medication history, allergies, side effects, indications, weight/height), identifying critical mass of participants (e.g. pharmacies), the collaboration between common competitors in communities, the resistance to changes in workflow, and the numbers of unskilled workforce with HIT.

Rationale 5: The obstacles to sustainability result from underestimating the size and scope of the project, identifying critical mass of data to exchange (e.g. standards for medication history, allergies, side effects, indications, weight/height), identifying critical mass of participants (e.g. pharmacies), the collaboration between common competitors in communities, the resistance to changes in workflow, and the numbers of unskilled workforce with HIT.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: MCSA

Which of the following statements is most accurate about the relationship between the national health information network (NHIN) and the health information exchanges (HIE) in the United States?

1. The success of the NHIN is dependent on the state-wide HIEs.
2. The success of the NHIN is not dependent on the state-wide HIEs.
3. The success of the state-wide HIEs is dependent on the NHIN.
4. The success of the state-wide HIEs is not dependent on the NHIN.

Correct Answer: 1

Rationale 1: The NHIN is a structure that will bring together the state-level HIE and regional HIOs when all stakeholders are using the evolving information exchange standards. The state-level HIE programs have the responsibility to organize and facilitate the implementation of interoperability standards with stakeholders through state-wide operational planning. The role of the state-level HIE program can adapt to the state's needs and priorities based on characteristics of providers from evaluation of current HIT use. The agencies such as public health and Medicaid services within the state government are stakeholders and will be involved with HIE services. The success for the NHIN is dependent on the state-wide HIEs.

Rationale 2: The NHIN is a structure that will bring together the state-level HIE and regional HIOs when all stakeholders are using the evolving information exchange standards. The state-level HIE programs have the responsibility to organize and facilitate the implementation of interoperability standards with stakeholders through state-wide operational planning. The role of the state-level HIE program can adapt to the state's needs and priorities based on characteristics of providers from evaluation of current HIT use. The agencies such as public health and Medicaid services within the state government are stakeholders and will be involved with HIE services. The success for the NHIN is dependent on the state-wide HIEs.

Rationale 3: The NHIN is a structure that will bring together the state-level HIE and regional HIOs when all stakeholders are using the evolving information exchange standards. The state-level HIE programs have the responsibility to organize and facilitate the implementation of interoperability standards with stakeholders through state-wide operational planning. The role of the state-level HIE program can adapt to the state's needs and priorities based on characteristics of providers from evaluation of current HIT use. The agencies such as public health and Medicaid services within the state government are stakeholders and will be involved with HIE services. The success for the NHIN is dependent on the state-wide HIEs.

Rationale 4: The NHIN is a structure that will bring together the state-level HIE and regional HIOs when all stakeholders are using the evolving information exchange standards. The state-level HIE programs have the responsibility to organize and facilitate the implementation of interoperability standards with stakeholders through state-wide operational planning. The role of the state-level HIE program can adapt to the state's needs and priorities based on characteristics of providers from evaluation of current HIT use. The agencies such as public health and Medicaid services within the state government are stakeholders and will be involved with HIE services. The success for the NHIN is dependent on the state-wide HIEs.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: MCSA

The overall role of the state-level HIE initiatives can be loosely grouped into three broad categories. Which of the following is not considered a category?

1. HIE enabler/readiness
2. HIE sustainability
3. HIE outsourcing/technical partnership
4. HIE operator

Correct Answer: 2

Rationale 1: HIE enabler/readiness is considered one of the categories and focuses on coordinating and enabling ongoing regional HIE initiatives.

Rationale 2: •HIE operator. Focuses on implementation and management of the technical and business operations of HIE (CPHR, 2008).

Rationale 3: HIE outsourcing/technical partnership is considered a category and focuses on the business and policy aspects of HIE, but outsources the technology implementation and services.

Rationale 4: HIE operator is considered a category and focuses on implementation and management of the technical and business operations of HIE.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 13

Type: MCSA

The HIE initiatives are often started by which of the following?

1. Research teams, advisory councils, and executive committees
2. Informaticians
3. LeapFrog Group
4. TIGER

Correct Answer: 1

Rationale 1: The HIE initiatives are often started by research teams, advisory councils, and executive committees which can serve as the steering committee to coordinate the communication, education, foundational planning, and adoption activities to initiate and sustain standards for a state-level HIE program.

Rationale 2: The HIE initiatives are often started by research teams, advisory councils, and executive committees which can serve as the steering committee to coordinate the communication, education, foundational planning, and adoption activities to initiate and sustain standards for a state-level HIE program.

Rationale 3: The HIE initiatives are often started by research teams, advisory councils, and executive committees which can serve as the steering committee to coordinate the communication, education, foundational planning, and adoption activities to initiate and sustain standards for a state-level HIE program.

Rationale 4: The HIE initiatives are often started by research teams, advisory councils, and executive committees which can serve as the steering committee to coordinate the communication, education, foundational planning, and adoption activities to initiate and sustain standards for a state-level HIE program.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Safety and Infection Control

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: MCSA

As national standards for interoperability are developed, the future of HIEs seems to be in the hands of which of the following?

1. Nationwide health information network
2. The Department of Homeland Security
3. HIPAA
4. HIMMS

Correct Answer: 1

Rationale 1: Although great strides have been made concerning interoperable standards, the capabilities of the systems along with the standards need further investigation through nationwide health information network.

Rationale 2: Although great strides have been made concerning interoperable standards, the capabilities of the systems along with the standards need further investigation through nationwide health information network.

Rationale 3: Although great strides have been made concerning interoperable standards, the capabilities of the systems along with the standards need further investigation through nationwide health information network.

Rationale 4: Although great strides have been made concerning interoperable standards, the capabilities of the systems along with the standards need further investigation through nationwide health information network.

Global Rationale:

Cognitive Level: Evaluating

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 15

Type: FIB

A volunteer federal _____ develops interoperable standards.

Standard Text:

Correct Answer: Health Informatics Technology Standards Panel (HITSP)

Rationale : A volunteer federal Health Informatics Technology Standards Panel (HITSP) develops interoperable standards. The Secretary of Health and Human Services approves the interoperability standards. The standards are published for the Certification Commission for Healthcare Information Technology (CCHIT) certification process and for state HIE programs. The published interoperability standards have been and will require more research in trial sites for the Nationwide Health Information Network. This is an ongoing system.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation
Learning Outcome:

Question 16

Type: MCSA

As standards are developed for interoperability, there will be an increased number of vendors seeking which of the following?

1. Funding
2. Contracts
3. Certification
4. Revenue increases

Correct Answer: 3

Rationale 1: Abiding by national standards and norms leads to certification.

Rationale 2: Abiding by national standards and norms leads to certification.

Rationale 3: Abiding by national standards and norms leads to certification.

Rationale 4: Abiding by national standards and norms leads to certification.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 17

Type: MCMA

Which of the following are considered obstacles to the HIE?

Standard Text: Select all that apply.

1. Policy
2. Organizational

3. Structure

4. Financial sustainability

5. Technology design

Correct Answer: 1,2,3,4,5

Rationale 1: Even successful HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes.

Rationale 2: Even successful HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes.

Rationale 3: Even successful HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes.

Rationale 4: Even successful HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes.

Rationale 5: Even successful HIEs have endured a variety of obstacles with policy, organizational structure, financial sustainability, legal procedures, technical designs and equipment, and operational processes.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 18

Type: FIB

A _____ model enables the access and exchange of data stored in existing provider networks and also through a central data repository maintained for smaller providers who would not be able to maintain 24x7 services for HIE access.

Standard Text:

Correct Answer: hybrid infrastructure

Rationale : A hybrid infrastructure model enables the access and exchange of data stored in existing provider networks and also through a central data repository maintained for smaller providers who would not be able to maintain 24x7 services for HIE access. The infrastructure for data storage may be consolidated with a centralized co-operative central data repository to push and pull data. The infrastructure may be decentralized or federated with access to information through multiple health systems. The HIE may be a hybrid infrastructure which is a combination of the consolidated and federated models.

Chapter 20 Simulation, Game Mechanics, and Virtual Worlds in Nursing Education

1. A nurse is reviewing the different types of mobile computers. Which of the following would the nurse be least likely to identify as a small computer?
 - A) Cell phone
 - B) Smartphone
 - C) Laptop
 - D) Personal digital assistant

2. A nurse is reviewing the development of PDAs and smartphones. Which of the following would the nurse identify as being the most popular before being replaced by the iPhone and Android smartphones?
 - A) Psion
 - B) Palm Pilot
 - C) Pocket PC
 - D) Newton Message Pad

3. On a mobile device, which of the following would store all of the individual's contacts and notes?
 - A) ROM
 - B) RAM
 - C) Flash memory
 - D) Compact flash card

4. A student wants to share the address of the clinical facility with another student in the group during a clinical conference. Which of the following must be true for this to occur via beaming?
- A) Be within 10 feet of each other
 - B) Have infrared transmission on both devices
 - C) Be near a hotspot
 - D) Have different operating systems on the devices
5. A nurse-manager is preparing a presentation for the organization about the need for nurses to use handheld devices. Which of the following would a nurse-manager use to promote the use of portable handheld devices in the clinical area? Select all that apply.
- A) Improved time management
 - B) Fewer patient errors
 - C) Ability to be technologically up-to-date
 - D) Increased confidence in clinical skills
 - E) Change in patient perception of the nurse
6. As part of a class on informatics, a nursing instructor describes how handheld computers can be used in nursing education. Which of the following would the instructor most likely include?
- A) Writing care plans
 - B) Submitting assignments
 - C) Checking a drug dosage
 - D) Recording patient care
7. Which of the following would be a common example of using a handheld computer in the clinical setting?
- A) Barcode medication administration
 - B) Library search for citations
 - C) Patient progress evaluation
 - D) Reimbursement coding
8. Which of the following is essential for any PDA that contains clinical data?
- A) Compatibility with the agency's system
 - B) Password encryption
 - C) Wireless accessibility
 - D) Personal identification

9. A nurse is preparing to do research. Which of the following would be an appropriate use for the nurse's handheld device? Select all that apply.
- A) Participate in Web-based research surveys
 - B) Store data for aggregation and analysis
 - C) Record comments from a focus group
 - D) Take photos of changes in status with a treatment
 - E) Search for evidence-based resources
10. When looking at handheld computers and their operating systems, which of the following would a nurse identify as being fairly simple to use with a wide array of resources and applications?
- A) Windows CE
 - B) Palm OS
 - C) RIM Blackberry OS
 - D) iPhone OS
11. A nurse is considering purchasing a mobile device to be used to view video for physical assessment. When making the decision, a device with which screen resolution would be the best choice?
- A) 960×640
 - B) 480×360
 - C) 600×800
 - D) 240×500
12. After attending a class that compared and contrasted PCs with PDAs and smartphones, the instructor determines that the class needs additional review when they identify PDAs and smartphones as having which of the following?
- A) RAM
 - B) ROM
 - C) Hard drive
 - D) Removable memory
13. A nurse is using a mobile device that is Bluetooth enabled. Which of the following would be least appropriate for the nurse to keep in mind when using the Bluetooth?
- A) The distance from each device must be <32 feet.
 - B) The nurse needs to find a hotspot for a connection.
 - C) A personal area connection is made with Bluetooth.
 - D) The feature should be turned on continuously.

14. An instructor is discussing the uses of PDAs in nursing and describing the advantages and disadvantages of their use. Which of the following would the instructor identify as a shortcoming? Select all that apply.
- A) Time management
 - B) Cost
 - C) Technological changes
 - D) Battery life
 - E) Time necessary for device selection
15. A group of nurses are attending an in-service program about ensuring the security of handheld devices and the use of passwords. The group demonstrates understanding of the information when they identify which of the following as important when creating secure passwords? Select all that apply.
- A) Choose a family member's name
 - B) Select one with three to five characters
 - C) Use a misspelled name of a fruit
 - D) Replace a word letter with a number
 - E) Include various keyboard symbols

Answer Key

1. A
2. C
3. A
4. B
5. A, B, D
6. C
7. A
8. B
9. A, C, D, E
10. B
11. A
12. C
13. D
14. B, C, D, E
15. C, D, E

Chapter 21 Nursing Research: Data Collection, Processing, and Analysis

Question 1

Type: MCSA

Which is the most likely reason for a college of nursing to offer distance learning courses?

1. To decrease faculty workload by automating course content and lectures
2. To facilitate computer literacy in students who are unfamiliar with computers
3. To minimize student contact with faculty by using e-mail and the Internet
4. To extend geographic boundaries and reach increased numbers of students

Correct Answer: 4

Rationale 1: There is a strong push among nursing colleges to offer distance education in order to increase geographical boundaries. Distance education also allows nursing programs to improve student access, meet student demands, remain viable, and keep students on the cutting edge of technology. Workload, however, is not decreased; faculty must vigorously initiate contact with students to maintain interaction and students must have fundamental computer skills to take the courses.

Rationale 2: There is a strong push among nursing colleges to offer distance education in order to increase geographical boundaries. Distance education also allows nursing programs to improve student access, meet student demands, remain viable, and keep students on the cutting edge of technology. Workload, however, is not decreased; faculty must vigorously initiate contact with students to maintain interaction and students must have fundamental computer skills to take the courses.

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Rationale 4: There is a strong push among nursing colleges to offer distance education in order to increase geographical boundaries. Distance education also allows nursing programs to improve student access, meet student demands, remain viable, and keep students on the cutting edge of technology. Workload, however, is not decreased; faculty must vigorously initiate contact with students to maintain interaction and students must have fundamental computer skills to take the courses.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 2

Type: MCSA

Which student may be least suited for a distance learning class?

1. A 20-year-old professional nursing student in the last semester of the program
2. A 38-year-old RN to BSN student returning to school after a 14-year absence
3. A 24-year-old graduate nursing student in a nurse practitioner program
4. A 48-year-old RN who has just completed one year of master's level courses

Correct Answer: 2

Rationale 1: Students in current programs are exposed to computers and technology through their courses; older students who are returning to school may lack certain skills. However, each student must be individually considered.

Rationale 2: Students in current programs are exposed to computers and technology through their courses; older students who are returning to school may lack certain skills. However, each student must be individually considered.

Rationale 3: Students in current programs are exposed to computers and technology through their courses; older students who are returning to school may lack certain skills. However, each student must be individually considered.

Rationale 4: Students in current programs are exposed to computers and technology through their courses; older students who are returning to school may lack certain skills. However, each student must be individually considered.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 3

Type: MCSA

Web-based instruction (WBI) makes use of the hypertext capabilities of the Web. Which principle would best guide faculty who are teaching a Web-based course?

1. Assign group projects for students to encourage interaction and discussion among students
2. Use the latest version of software to encourage efficient and timely student response
3. Make detailed, lengthy documents for students to download and peruse at their leisure
4. On the class website, load multimedia presentations that utilize plug-ins to enhance instruction

Correct Answer: 1

Rationale 1: Group projects stimulate student interaction; this is important when students do not meet physically. Simple, short materials should be posted; because student equipment is variable, faculty should provide materials that can be accessed by older software programs without plug-ins.

Rationale 2: Group projects stimulate student interaction; this is important when students do not meet physically. Simple, short materials should be posted; because student equipment is variable, faculty should provide materials that can be accessed by older software programs without plug-ins.

Rationale 3: Group projects stimulate student interaction; this is important when students do not meet physically. Simple, short materials should be posted; because student equipment is variable, faculty should provide materials that can be accessed by older software programs without plug-ins.

Rationale 4: Group projects stimulate student interaction; this is important when students do not meet physically. Simple, short materials should be posted; because student equipment is variable, faculty should provide materials that can be accessed by older software programs without plug-ins.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 4

Type: MCSA

Which of the following is a potential disadvantage of Web-based instruction (WBI) for nursing students?

1. Learning time is prolonged due to the downloading of large learning modules.
2. The locus of control for learning lies with the student.
3. Online access is limited to those students who have a computer with Internet service.
4. Socializing students to their chosen profession is difficult.

Correct Answer: 4

Rationale 1: WBI poses difficulties about the ability to socialize students to their chosen profession. This is because there are usually no regular, face-to-face meetings between the faculty and the student and among the students themselves. Downloading large learning modules does not prolong learning time. Large files are usually compressed for easy download within a short period of time.

Rationale 2: WBI poses difficulties about the ability to socialize students to their chosen profession. This is because there are usually no regular, face-to-face meetings between the faculty and the student and among the students themselves. The locus of control for learning does lie with the student; however, that is not a potential disadvantage.

Rationale 3: WBI poses difficulties about the ability to socialize students to their chosen profession. This is because there are usually no regular, face-to-face meetings between the faculty and the student and among the students themselves. Some students may not have a computer with Internet service at home but there are libraries that provide them.

Rationale 4: WBI poses difficulties about the ability to socialize students to their chosen profession. This is because there are usually no regular, face-to-face meetings between the faculty and the student and among the students themselves.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 5

Type: MCSA

A virtual learning environment (VLE) is a system that uses the Internet to assist faculty in developing, managing, and administering educational materials for students. Which type of continuing nursing education content is least suited for a VLE alone?

1. A program reviewing assessment of heart and lung sounds
2. A refresher program on various types of injection administration skills
3. A program reviewing drug calculations and dosages for medication administration
4. A program reviewing documentation for an electronic medical record

Correct Answer: 2

Rationale 1: Continuing nursing education using VLE is useful for a variety of subjects. However, content with heavy skill components should be paired with some actual time in a nursing skills laboratory.

Rationale 2: Continuing nursing education using VLE is useful for a variety of subjects. However, content with heavy skill components should be paired with some actual time in a nursing skills laboratory.

Rationale 3: Continuing nursing education using VLE is useful for a variety of subjects. However, content with heavy skill components should be paired with some actual time in a nursing skills laboratory.

Rationale 4: Continuing nursing education using VLE is useful for a variety of subjects. However, content with heavy skill components should be paired with some actual time in a nursing skills laboratory.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 6

Type: MCSA

Three emergency room nurses are planning community education offerings that will use the American Heart Association's "Heartsaver CPR" training. Which of these would be a disadvantage to using manikin simulation technology for CPR skills practice and testing?

1. More instructors would be needed to oversee the training and testing.
2. Instruction time may be increased for training and testing purposes.
3. Participants may need to perform the skills several times to pass the test.
4. Initial costs for program implementation may be increased.

Correct Answer: 4

Rationale 1: Initial costs for implementation of a simulation program would be high. However, in the long run, costs are reduced, as participants may need fewer instructors and less instruction time. Participants may practice under a variety of conditions and contexts to test their skills, which may improve their confidence.

Rationale 2: Initial costs for implementation of a simulation program would be high. However, in the long run, costs are reduced, as participants may need fewer instructors and less instruction

time. Participants may practice under a variety of conditions and contexts to test their skills, which may improve their confidence.

Rationale 3: Initial costs for implementation of a simulation program would be high. However, in the long run, costs are reduced, as participants may need fewer instructors and less instruction time. Participants may practice under a variety of conditions and contexts to test their skills, which may improve their confidence.

Rationale 4: Initial costs for implementation of a simulation program would be high. However, in the long run, costs are reduced, as participants may need fewer instructors and less instruction time. Participants may practice under a variety of conditions and contexts to test their skills, which may improve their confidence.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 7

Type: MCMA

Schools of nursing are employing the use of virtual learning environments (VLEs) to teach students. Which of the following are considered advantages to VLEs?

Standard Text: Select all that apply.

1. Learners can proceed at a pace conducive to comprehension.
2. Learning offered at any site that has computer access
3. Learners can skim through familiar content and focus on weak areas.
4. 24-hour access
5. Consistent instruction in a safe environment

Correct Answer: 1,2,3,4,5

Rationale 1: -Flexibility of faculty schedules. Makes it easier to teach around clinical instruction.

Rationale 2: -Flexibility of faculty schedules. Makes it easier to teach around clinical instruction.

Rationale 3: -Flexibility of faculty schedules. Makes it easier to teach around clinical instruction.

Rationale 4: -Flexibility of faculty schedules. Makes it easier to teach around clinical instruction.

Rationale 5: -Flexibility of faculty schedules. Makes it easier to teach around clinical instruction.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 8

Type: MCSA

Virtual Learning Environments (VLEs) are used more in the classroom as a learning tool for nurses. Which of the following statements is accurate about the use of VLEs?

1. VLEs allow learners to practice new skills without fear of harm to themselves or others.
2. VLEs are difficult to navigate in a classroom setting.
3. Faculty members have difficulty creating measurable objectives for its use.
4. VLEs technology intimidates contemporary student nurses.

Correct Answer: 1

Rationale 1: VLEs provide consistent instruction in a safe environment, thereby, allowing learners to practice new skills without fear of harm to themselves or others.

Rationale 2: VLEs are becoming more user-friendly with the benefits outweighing the time spent learning how to incorporate the simulation in a classroom setting.

Rationale 3: Faculty can create measurable objectives for any learning activity.

Rationale 4: Today's student nurses have been working with computers and simulation since preschool. The students are comfortable with this technology.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 9

Type: MCSA

Which of these would best prepare a nursing student for the National Council Licensure Examination for Registered Nurses (NCLEX-RN®)?

1. Purchase a review text with a companion compact disc that has links to study sites on the Internet.
2. Purchase a review text with companion compact disc containing NCLEX-RN® types of questions.
3. Purchase a review text that has practice questions and drills on a compact disc, including test answers.
4. Form a study group to review subject content and surf the Internet for review sites and links.

Correct Answer: 2

Rationale 1: NCLEX-RN® uses computer-adaptive testing (CAT) that tailors the examination to the individual student. The student should practice under similar conditions to the actual NCLEX-RN®.

Rationale 2: NCLEX-RN® uses computer-adaptive testing (CAT) that tailors the examination to the individual student. The student should practice under similar conditions to the actual NCLEX-RN®.

Rationale 3: NCLEX-RN® uses computer-adaptive testing (CAT) that tailors the examination to the individual student. The student should practice under similar conditions to the actual NCLEX-RN®.

Rationale 4: NCLEX-RN® uses computer-adaptive testing (CAT) that tailors the examination to the individual student. The student should practice under similar conditions to the actual NCLEX-RN®.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 10

Type: MCSA

Which statement is true concerning health care professional continuing education taken over the Internet?

1. Feedback may be delayed while data are collected for the continuing education certificate.
2. Instruction is too generalized to meet the needs of specific targeted populations.
3. Personnel may attend continuing education programs at any time convenient for the participant.
4. Where continuing education is mandatory, utilizing the Internet causes documentation concerns.

Correct Answer: 3

Rationale 1: Continuing education programs on the Internet may be taken at any time convenient for the health care professional. Further advantages include highly individualized instruction, immediate feedback, and a decrease in expenses for travel between sites. It also means no associated interruptions to client services that would take place while the health care provider is traveling between sites.

Rationale 2: Continuing education programs on the Internet may be taken at any time convenient for the health care professional. Further advantages include highly individualized instruction, immediate feedback, and a decrease in expenses for travel between sites. It also means no associated interruptions to client services that would take place while the health care provider is traveling between sites.

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Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 11

Type: MCSA

Which of the following is an advantage to computer generated discharge instructions for postoperative clients?

1. The physician only provides clients with information necessary for each case.
2. Repetition of the information helps clients to remember pertinent details.
3. Consistent instructions may be generated very quickly for each client.
4. Nurses include what they feel is most important for each client.

Correct Answer: 3

Rationale 1: Computer-generated instructions are very quickly generated. They are standardized for each type of client so that the nurse does not have to repeat or copy down information, nor do physicians have to decide what the client needs each time a client is discharged. Further, the individualized, printed discharge teaching instruction provides the capability to incorporate evidence-based guidelines.

Rationale 2: Computer-generated instructions are very quickly generated. They are standardized for each type of client so that the nurse does not have to repeat or copy down information, nor do physicians have to decide what the client needs each time a client is discharged. Further, the individualized, printed discharge teaching instruction provides the capability to incorporate evidence-based guidelines.

Rationale 3: Computer-generated instructions are very quickly generated. They are standardized for each type of client so that the nurse does not have to repeat or copy down information, nor do physicians have to decide what the client needs each time a client is discharged. Further, the

individualized, printed discharge teaching instruction provides the capability to incorporate evidence-based guidelines.

Rationale 4: Computer-generated instructions are quickly generated. They are standardized for each type of client so that the nurse does not have to repeat or copy down information, nor do physicians have to decide what the client needs each time a client is discharged. Further, the individualized, printed discharge teaching instruction provides the capability to incorporate evidence-based guidelines.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 12

Type: MCMA

Web 2.0 is a second phase of the World Wide Web development. Which of the following technologies are included in Web 2.0?

Standard Text: Select all that apply.

1. Podcasts
2. Blogs
3. Wikis
4. YouTube
5. Vodcasts

Correct Answer: 1,2,3,4,5

Rationale 1: Web 2.0 technologies include each of these: blogs, podcasts wikis, and YouTube.

Rationale 2: Web 2.0 technologies include each of these: blogs, podcasts, wikis, and YouTube.

Rationale 3: Web 2.0 technologies include each of these: blogs, podcasts, wikis, and YouTube.

Rationale 4: Web 2.0 technologies include each of these: blogs, podcasts, wikis, and YouTube.

Rationale 5: Web 2.0 technologies include each of these: blogs, podcasts, wikis, and YouTube.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 13

Type: MCSA

Which of the following devices are increasingly being deployed to facilitate learning?

1. Personal Digital Assistants
2. Cell phones
3. Classroom response systems (CRS)
4. Laptop computers

Correct Answer: 3

Rationale 1: Personal Digital Assistants or PDAs are an increasingly popular choice for nurses and other health care professionals. You may find a PDA to be a big help in your work. PDAs are a convenient way to store and access health care information. They are small (fit in a pocket or small pouch), are inexpensive, and can be frequently updated (unlike traditional reference books).

However, classroom response systems (CRS) are increasingly being deployed to facilitate learning via the use of handheld transmitters.

Rationale 2: Smart phone technology has become increasingly more sophisticated; however, instructors are using the clickers to identify student knowledge base during classroom activities.

Rationale 3: Classroom response systems (CRS) are increasingly being deployed to facilitate learning via the use of handheld transmitters. This hardware and software makes use of a “clicker” that beams information showing the response to specific, real time questions projected overhead to a group of students to a receiver on the instructor’s computer which transforms the data into a chart detailing the responses. Some CRS systems work via other mobile devices such as student cell phones, PDAs, or laptops (Turning Technologies, 2010).

Rationale 4: Laptops are considered part of the learning process. However, clickers are more interactive in a classroom and help the instructor to identify successful learning.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 14

Type: MCMA

The community health nurse is designing a four week e-learning program for rural diabetic clients. One concern is that some of these clients may feel isolated. Which of the following could the nurse employ to prevent feelings of isolation?

Standard Text: Select all that apply.

1. Additional written assignments
2. Audio narrated lecture assignments
3. Message board assignments
4. Video enabled Skype assignments
5. Synchronous online chats

Correct Answer: 3,4,5

Rationale 1: Message boards and video enabled Skype create an interactive environment. Other technologies that would also help include whiteboards and instant messaging. Additional written assignments and lectures to watch and listen to may be good for some of the e-learning but would not help those who feel isolated.

Rationale 2: Message boards and video enabled Skype create an interactive environment. Other technologies that would also help include whiteboards and instant messaging. Additional written assignments and lectures to watch and listen to may be good for some of the e-learning but would not help those who feel isolated.

Rationale 3: Message boards and video enabled Skype create an interactive environment. Other technologies that would also help include whiteboards and instant messaging. Additional written assignments and lectures to watch and listen to may be good for some of the e-learning but would not help those who feel isolated.

Rationale 4: Message boards and video enabled Skype create an interactive environment. Other technologies that would also help include whiteboards and instant messaging. Additional written assignments and lectures to watch and listen to may be good for some of the e-learning but would not help those who feel isolated.

Rationale 5: Synchronous online chats enable the student and faculty to have real time interaction.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 15

Type: MCSA

When comparing various uses of computing, which of these works well for corporate training?

1. Chat room
2. Wiki
3. E-mail
4. E-learning

Correct Answer: 4

Rationale 1: E-learning works well for corporate training because it allows users to skip material that they already know. It is considered to be efficient for corporate purposes. A chat room would be too limiting for training purposes.

Rationale 2: E-learning works well for corporate training because it allows users to skip material that they already know. It is considered to be efficient for corporate purposes. Wikis would be too limiting for training purposes.

Rationale 3: E-learning works well for corporate training because it allows users to skip material that they already know. It is considered to be efficient for corporate purposes. E-mail would be too limiting for training purposes.

Rationale 4: E-learning works well for corporate training because it allows users to skip material that they already know. It is considered to be efficient for corporate purposes.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 16

Type: MCMA

Web-based instruction (WBI) uses the attributes and resources of the Internet to deliver and support education. Which of the following ways may effectively be used to teach health care content via WBI?

Standard Text: Select all that apply.

1. Teleconferencing mode
2. Stand-alone course
3. Supplement traditional, face-to-face courses
4. Wiki mode
5. Connectivity with hospital information systems

Correct Answer: 2,3

Rationale 1: WBI uses the attributes and resources of the Internet to deliver and support education. WBI may be used as a stand-alone course or to supplement traditional classes.

Rationale 2: WBI uses the attributes and resources of the Internet to deliver and support education. WBI may be used as a stand-alone course or to supplement traditional classes.

Rationale 3: WBI uses the attributes and resources of the Internet to deliver and support education. WBI may be used as a stand-alone course or to supplement traditional classes.

Rationale 4: WBI uses the attributes and resources of the Internet to deliver and support education. WBI may be used as a stand-alone course or to supplement traditional classes.

Rationale 5: WBI uses the attributes and resources of the Internet to deliver and support education. WBI may be used as a stand-alone course or to supplement traditional classes.

Global Rationale:

Cognitive Level: Understanding
Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Teaching and Learning
Learning Outcome:

Question 17

Type: MCMA

Which of the following computer related technology tools may be used in a variety of ways to support and enrich education?

Standard Text: Select all that apply.

1. Word-processing software allows the instructor to prepare student handouts.
2. Slide presentation software offers the ability to create presentations and audio-visual aids.
3. Spreadsheets or course management tools assist in the maintenance of attendance records and grades.
4. Course management system (CMS) tools offer tools to develop, administer, and score examinations and provide formative evaluation tools.
5. Communication tools such as Weblogs (blogs) answer student questions and provide feedback to students on their progress.

Correct Answer: 1,2,3,4

Rationale 1: -Word-processing software: Prepare student handouts

-Slide presentation software: Create presentations and audio-visual aids

-Spreadsheets or course management tools: Maintain attendance records and grades

-Course management system (CMS) tools: Develop, administer, and score examinations and provide formative evaluation tools

-Communication tools such as instant messaging, e-mail, Weblogs (blogs), podcasts, threaded discussions, chats, and wikis: Answer student questions and provide feedback to students on their progress

-Online literature searches: Research content prior to developing or revising a presentation.

Rationale 2: -Word-processing software: Prepare student handouts

-Slide presentation software: Create presentations and audio-visual aids

-Spreadsheets or course management tools: Maintain attendance records and grades

-Course management system (CMS) tools: Develop, administer, and score examinations and provide formative evaluation tools

- Communication tools such as instant messaging, e-mail, Weblogs (blogs), podcasts, threaded discussions, chats, and wikis: Answer student questions and provide feedback to students on their progress
- Online literature searches: Research content prior to developing or revising a presentation.

Rationale 3: -Word-processing software: Prepare student handouts

- Slide presentation software: Create presentations and audio-visual aids
- Spreadsheets or course management tools: Maintain attendance records and grades
- Course management system (CMS) tools: Develop, administer, and score examinations and provide formative evaluation tools
- Communication tools such as instant messaging, e-mail, Weblogs (blogs), podcasts, threaded discussions, chats, and wikis: Answer student questions and provide feedback to students on their progress
- Online literature searches: Research content prior to developing or revising a presentation.

Rationale 4: -Word-processing software: Prepare student handouts

- Slide presentation software: Create presentations and audio-visual aids
- Spreadsheets or course management tools: Maintain attendance records and grades
- Course management system (CMS) tools: Develop, administer, and score examinations and provide formative evaluation tools
- Communication tools such as instant messaging, e-mail, Weblogs (blogs), podcasts, threaded discussions, chats, and wikis: Answer student questions and provide feedback to students on their progress
- Online literature searches: Research content prior to developing or revising a presentation.

Rationale 5: -Word-processing software: Prepare student handouts

- Slide presentation software: Create presentations and audio-visual aids
- Spreadsheets or course management tools: Maintain attendance records and grades
- Course management system (CMS) tools: Develop, administer, and score examinations and provide formative evaluation tools
- Communication tools such as instant messaging, e-mail, Weblogs (blogs), podcasts, threaded discussions, chats, and wikis: Answer student questions and provide feedback to students on their progress
- Online literature searches: Research content prior to developing or revising a presentation.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 18

Type: MCSA

Formal applications for using computers to support nursing education include which one of the following?

1. Podcasts
2. Blogs
3. Continuing nursing education
4. Instant messaging

Correct Answer: 3

Rationale 1: Continuing education is a formal application that uses computers to support nursing education. The others (podcasts, blogs, & IM) are informal applications.

Rationale 2: Continuing education is a formal application that uses computers to support nursing education. The others (podcasts, blogs, & IM) are informal applications.

Rationale 3: Continuing education is a formal application that uses computers to support nursing education. The others (podcasts, blogs, & IM) are informal applications.

Rationale 4: Continuing education is a formal application that uses computers to support nursing education. The others (podcasts, blogs, & IM) are informal applications.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 19

Type: MCMA

Virtual Learning Environments (VLEs) benefit education by using the Internet to facilitate e-learning. Which of the following are other terms used for VLEs?

Standard Text: Select all that apply.

1. Learning management systems (LMS)
2. Competency-based training (CBT)

- 3. Course management system (CMS)
- 4. Managed learning environment (MLE)
- 5. Interactive multimedia systems (IMS)

Correct Answer: 1,3,4

Rationale 1: Other terms used for VLEs are course management system (CMS), managed learning environment (MLE), and learning management systems (LMS). VLEs facilitate electronic learning (e-learning) and may track students' progress in a course.

Rationale 2: Other terms used for VLEs are course management system (CMS), managed learning environment (MLE), and learning management systems (LMS). VLEs facilitate electronic learning (e-learning) and may track students' progress in a course.

Rationale 3: Other terms used for VLEs are course management system (CMS), managed learning environment (MLE), and learning management systems (LMS). VLEs facilitate electronic learning (e-learning) and may track students' progress in a course.

Rationale 4: Other terms used for VLEs are course management system (CMS), managed learning environment (MLE), and learning management systems (LMS). VLEs facilitate electronic learning (e-learning) and may track students' progress in a course.

Rationale 5: Other terms used for VLEs are course management system (CMS), managed learning environment (MLE), and learning management systems (LMS). VLEs facilitate electronic learning (e-learning) and may track students' progress in a course.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 20

Type: MCMA

The term *Web 2.0* has yet to be defined; however, it has been described as consisting of a set of "core characteristics." Which of the following are considered core characteristics?

Standard Text: Select all that apply.

- 1. User-centered design

2. Web as platform
3. Collaboration
4. Power decentralization
5. Dynamic content

Correct Answer: 1,2,3,4,5

Rationale 1: The term *Web 2.0* has yet to be defined; however, it has been described as consisting of a set of “core characteristics” including: user-centered design, crowd-sourcing, Web as platform, collaboration, power decentralization, dynamic content, SaaS (Software as a Service), and rich user experience (Sharma, 2008). No formal updates to the World Wide Web technical specifications have occurred. The term merely denotes the evolution in WWW use and versatility, which according to WWW inventor, Tim Berners-Lee, is precisely what he intended in the first place.

Rationale 2: The term *Web 2.0* has yet to be defined; however, it has been described as consisting of a set of “core characteristics” including: user-centered design, crowd-sourcing, Web as platform, collaboration, power decentralization, dynamic content, SaaS (Software as a Service), and rich user experience (Sharma, 2008). No formal updates to the World Wide Web technical specifications have occurred. The term merely denotes the evolution in WWW use and versatility, which according to WWW inventor, Tim Berners-Lee, is precisely what he intended in the first place.

Rationale 3: The term *Web 2.0* has yet to be defined; however, it has been described as consisting of a set of “core characteristics” including: user-centered design, crowd-sourcing, Web as platform, collaboration, power decentralization, dynamic content, SaaS (Software as a Service), and rich user experience (Sharma, 2008). No formal updates to the World Wide Web technical specifications have occurred. The term merely denotes the evolution in WWW use and versatility, which according to WWW inventor, Tim Berners-Lee, is precisely what he intended in the first place.

Rationale 4: The term *Web 2.0* has yet to be defined; however, it has been described as consisting of a set of “core characteristics” including: user-centered design, crowd-sourcing, Web as platform, collaboration, power decentralization, dynamic content, SaaS (Software as a Service), and rich user experience (Sharma, 2008). No formal updates to the World Wide Web technical specifications have occurred. The term merely denotes the evolution in WWW use and versatility, which according to WWW inventor, Tim Berners-Lee, is precisely what he intended in the first place.

Rationale 5: The term *Web 2.0* has yet to be defined; however, it has been described as consisting of a set of “core characteristics” including: user-centered design, crowd-sourcing, Web as platform, collaboration, power decentralization, dynamic content, SaaS (Software as a Service), and rich user experience (Sharma, 2008). No formal updates to the World Wide Web

technical specifications have occurred. The term merely denotes the evolution in WWW use and versatility, which according to WWW inventor, Tim Berners-Lee, is precisely what he intended in the first place.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 21

Type: MCSA

Which of the following answers is not an advantage of Web 2.0 technologies?

1. Minimizes communication
2. Manages information
3. Enriches health care professional collaboration
4. Can employ podcasts as a learning strategy

Correct Answer: 1

Rationale 1: These technologies can enhance effective communication, manage information, and enrich professional collaboration. Examples of Web 2.0 technologies include blogs, podcasts, vodcasts, wikis, and YouTube.

Rationale 2: These technologies can enhance effective communication, manage information, and enrich professional collaboration. Examples of Web 2.0 technologies include blogs, podcasts, vodcasts, wikis, and YouTube.

Rationale 3: These technologies can enhance effective communication, manage information, and enrich professional collaboration. Examples of Web 2.0 technologies include blogs, podcasts, vodcasts, wikis, and YouTube.

Rationale 4: These technologies can enhance effective communication, manage information, and enrich professional collaboration. Examples of Web 2.0 technologies include blogs, podcasts, vodcasts, wikis, and YouTube.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 22

Type: MCSA

Which of the following is an accurate statement of YouTube's usefulness in the classroom setting?

1. Digital natives desire multimedia educational experiences.
2. Students are uncomfortable accessing videos on YouTube.
3. Most instructors do not see the usefulness of YouTube.
4. YouTube videos are not relevant for classroom learning activities.

Correct Answer: 1

Rationale 1: YouTube is an appropriate e-learning (Web 2.0) technology for nursing students. An important aspect is the ability to network with fellow students who may be anywhere around the globe. In addition, nursing students can use different senses to understand content. Digital natives are characterized by their understanding of multimedia and sophisticated skill with computer technologies. They prefer multimedia and the “multi-tasking” it requires and are quite comfortable using technology. In light of the needs and preferences of this twenty-first century student, engaging these students and new employees requires the nurse educator to begin exploring the use of strategies like YouTube and Second life. YouTube “is a place for people to engage in new ways with video by sharing, commenting on, and viewing videos” (YouTube, 2007).

Rationale 2: Digital natives are characterized by their understanding of multimedia and sophisticated skill with computer technologies. They prefer multimedia and the “multi-tasking” it requires and are quite comfortable using technology. In light of the needs and preferences of this twenty-first century student, engaging these students and new employees requires the nurse educator to begin exploring the use of strategies like YouTube and Second life. YouTube “is a place for people to engage in new ways with video by sharing, commenting on, and viewing videos” (YouTube, 2007).

Rationale 3: Digital natives are characterized by their understanding of multimedia and sophisticated skill with computer technologies. They prefer multimedia and the “multi-tasking” it requires and are quite comfortable using technology. In light of the needs and preferences of this twenty-first century student, engaging these students and new employees requires the nurse

educator to begin exploring the use of strategies like YouTube and Second life. YouTube “is a place for people to engage in new ways with video by sharing, commenting on, and viewing videos” (YouTube, 2007).

Rationale 4: Digital natives are characterized by their understanding of multimedia and sophisticated skill with computer technologies. They prefer multimedia and the “multi-tasking” it requires and are quite comfortable using technology. In light of the needs and preferences of this twenty-first century student, engaging these students and new employees requires the nurse educator to begin exploring the use of strategies like YouTube and Second life. YouTube “is a place for people to engage in new ways with video by sharing, commenting on, and viewing videos” (YouTube, 2007).

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 23

Type: MCSA

Mobile technology can be found in health care organizations and useful in teaching nursing students. Which of the following devices are not currently used in the educational setting?

1. Moodle
2. PDA
3. Clicker
4. MP3 player

Correct Answer: 1

Rationale 1: The term *mobile learning* or “m-learning” is a popular term that denotes the use of mobile technologies, such as the personal digital assistant (PDA). It also includes the mobile phone and iPod. Moodle is an online learning platform.

Rationale 2: The term *mobile learning* or “m-learning” is a popular term that denotes the use of mobile technologies, such as the personal digital assistant (PDA). It also includes the mobile phone and iPod.

Rationale 3: The term *mobile learning* or "m-learning" is a popular term that denotes the use of mobile technologies, such as the personal digital assistant (PDA). It also includes the mobile phone and iPod. Moodle is an online learning platform.

Rationale 4: The term *mobile learning* or "m-learning" is a popular term that denotes the use of mobile technologies, such as the personal digital assistant (PDA). It also includes the mobile phone and iPod. Moodle is an online learning platform.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 24

Type: MCSA

Distance education allows faculty and students connectivity to telecommunications via sophisticated phone systems. Which of the following is considered a component of distance learning?

1. Story board
2. Computer
3. Flash drive
4. Notebook

Correct Answer: 2

Rationale 1: Distance education is the use of print, audio, video, computer, teleconferencing capability, or the World Wide Web (WWW) to connect faculty and students who are located at a minimum of two different locations.

Rationale 2: Distance education is the use of print, audio, video, computer, teleconferencing capability, or the World Wide Web (WWW) to connect faculty and students who are located at a minimum of two different locations.

Rationale 3: Distance education is the use of print, audio, video, computer, teleconferencing capability, or the World Wide Web (WWW) to connect faculty and students who are located at a minimum of two different locations.

Rationale 4: Distance education is the use of print, audio, video, computer, teleconferencing capability, or the World Wide Web (WWW) to connect faculty and students who are located at a minimum of two different locations.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 25

Type: MCSA

Which of the following statements best describes the use of a clicker?

1. A clicker is a handheld device that beams information showing the response to specific, real time questions projected overhead to a group of students to a receiver on the instructor's computer which transforms the data into a chart detailing the responses.
2. A clicker beams information to the class about a current event.
3. A clicker is not useful in measuring knowledge.
4. A clicker is not a valuable educational tool.

Correct Answer: 1

Rationale 1: A clicker is a handheld device that beams information showing the response to specific, real time questions projected overhead to a group of students to a receiver on the instructor's computer which transforms the data into a chart detailing the responses.

Rationale 2: A clicker is a handheld device that beams information showing the response to specific, real time questions projected overhead to a group of students to a receiver on the instructor's computer which transforms the data into a chart detailing the responses.

Rationale 3: A clicker is a handheld device that beams information showing the response to specific, real time questions projected overhead to a group of students to a receiver on the instructor's computer which transforms the data into a chart detailing the responses.

Rationale 4: A clicker is a handheld device that beams information showing the response to specific, real time questions projected overhead to a group of students to a receiver on the instructor's computer which transforms the data into a chart detailing the responses.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 26

Type: MCSA

With the adoption of the electronic health record and importance of technology, there is a need for nurses with technology experience. What are the two ways nurses can specialize in informatics?

1. Complete a BSN
2. RN with experience as a super user
3. A nurse with a graduate degree in informatics
4. Operating room nurse who is on the technology committee
5. A BSN nurse who completes a certificate in web based design

Correct Answer: 3

Rationale 1: The BSN is an important credential but the curriculum does not focus on an informatics specialist. The graduate is considered a generalist.

Rationale 2: A RN with vast technology experience in house can be considered an informatician.

Rationale 3: A nurse with a master's degree in informatics can be considered a specialist or informatician.

Rationale 4: An operating room nurse who is on the technology committee does not necessarily have enough experience in informatics to be considered an informatician.

Rationale 5: Web based design is a skill but does not offer enough education and experience for an individual to specialize in informatics.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment
Client Need Sub: Management of Care
Nursing/Integrated Concepts: Teaching and Learning
Learning Outcome:

Question 27

Type: MCMA

Nurses with information technology experience are in greater demand as more organizations incorporate the use of the electronic health record and computerized order entry. Which of the following are considered skills and/or competencies for nurses to develop to prepare for the changes in health care?

Standard Text: Select all that apply.

1. Collaboration and communication
2. Organizational and interpersonal skills
3. Ability to review, critique, and evaluate evidence available through clinical practice guidelines and research
4. Aptitude for translating clinical practice recommendations into algorithms
5. Proficiency to disseminate research findings

Correct Answer: 1,3,4,5

Rationale 1: -Ability to articulate the vision for clinical workflow through technology that benefits patient care

Rationale 2: -Ability to articulate the vision for clinical workflow through technology that benefits patient care

Rationale 3: -Ability to articulate the vision for clinical workflow through technology that benefits patient care

Rationale 4: -Ability to articulate the vision for clinical workflow through technology that benefits patient care

Rationale 5: -Ability to articulate the vision for clinical workflow through technology that benefits patient care

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 28

Type: MCMA

Distance education incorporates more than the World Wide Web (WWW) to connect educator and students who are located at a minimum of two different locations. Which of the following tools are also used to facilitate the teaching learning process?

Standard Text: Select all that apply.

1. Audio
2. Video
3. Teleconferencing
4. Television
5. Computer

Correct Answer: 1,2,3,4,5

Rationale 1: Distance education in this context is the use of audio, video, computer, television, teleconferencing, or the WWW to connect educator and students who are located at a minimum of two different locations.

Rationale 2: Distance education in this context is the use of audio, video, computer, television, teleconferencing, or the WWW to connect educator and students who are located at a minimum of two different locations.

Rationale 3: Distance education in this context is the use of audio, video, computer, television, teleconferencing, or the WWW to connect educator and students who are located at a minimum of two different locations.

Rationale 4: Distance education in this context is the use of audio, video, computer, television, teleconferencing, or the WWW to connect educator and students who are located at a minimum of two different locations.

Rationale 5: Distance education in this context is the use of audio, video, computer, television, teleconferencing, or the WWW to connect educator and students who are located at a minimum of two different locations.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 29

Type: MCMA

Web-based instruction (WBI) has become an important facet of the educational experience. Which of the following are considered advantages of WBI?

Standard Text: Select all that apply.

1. Comprehensive instructional design
2. Minimal communication
3. Lack of control
4. Lack of intellectual stimulation
5. Ability to work in an asynchronous environment

Correct Answer: 1,5

Rationale 1: •Lack of intellectual stimulation. Programs that fail to maintain interest may cause learners to feel that they wasted their time.

Rationale 2: •Lack of intellectual stimulation. Programs that fail to maintain interest may cause learners to feel that they wasted their time.

Rationale 3: •Lack of intellectual stimulation. Programs that fail to maintain interest may cause learners to feel that they wasted their time.

Rationale 4: •Lack of intellectual stimulation. Programs that fail to maintain interest may cause learners to feel that they wasted their time.

Rationale 5: The ability to work asynchronously is considered an advantage of online learning.

Chapter 22 Data Mining as a Research Tool

1. When applying the seven areas of nursing informatics to the categories of medical informatics, which of the following corresponds to the decision-making category of medical informatics?
 - A) Defining data needed in patient care
 - B) Using data, information, and knowledge for patient care
 - C) Applying ergonomics to interfaces
 - D) Creating new tools for patient care
2. A nurse has become certified in nursing informatics. The nurse would need to renew this certification after how long?
 - A) 2 years
 - B) 3 years
 - C) 4 years
 - D) 5 years
3. When describing nursing informatics theory to a group of students, the instructor determines that the students need additional teaching when they state which of the following as a key component?
 - A) Data
 - B) Information
 - C) Terminology
 - D) Knowledge
4. When describing the various theories underlying informatics, which of the following would an instructor identify as addressing change in society and an individual?
 - A) Rogers' Diffusion of Innovation Theory
 - B) Lewin's Field Theory
 - C) Chaos Theory
 - D) General Systems Theory
5. A nurse informatics specialist applies Lewin's Field Theory to implementing a new documentation system. Which of the following would be most important for the nurse to do first?
 - A) Enlist members to be involved in the process
 - B) Ignore members' reluctance to change systems
 - C) Engage the administration in supporting the change
 - D) Provide positive feedback about new skill acquisition

6. A group of students is reviewing Rogers' Diffusion of Innovation Theory for a test. The students demonstrate understanding of the stages of individual change when they put the following in the proper sequence from first to last.
- A. Confirmation
 - B. Implementation
 - C. Knowledge of an innovation
 - D. Decision
 - E. Persuasion
- A) C, E, D, B, A
B) A, D, B, C, E
C) C, A, B, E, D
D) D, C, E, B, A
7. An informatics nurse is working on evaluating a system that has been implemented in an agency. Which of the following would the nurse identify as reflecting the goals of usability?
- A) A user has some difficulty performing the tasks when the system is used for the first time.
 - B) A user can perform the needed tasks quickly once he or she has learned the system.
 - C) A user needs some time to become proficient again after not using the system for a while.
 - D) A user is prone to making errors, but these errors can be rectified rather easily.
8. After teaching a group of students about informatics nurses and nurse informatics specialists, the students demonstrate understanding when they identify which of the following as a role for a nurse informatics specialist?
- A) Information technology advocate
 - B) Systems educator
 - C) Project director
 - D) Clinical systems coordinator
9. An informatics nurse specialist is presenting a seminar on nursing informatics. After the seminar, a group of nurses are talking with the presenter and one of the nurses states, "I'm pretty good with computers, so I should become an informatics nurse." Which of the following responses would be most appropriate?
- A) "Computer competency is absolutely essential to this practice."
 - B) "It sounds like you have a good idea about what's involved."
 - C) "The computer is just a tool for the real focus, information management."
 - D) "I can recommend some very good educational programs if you're interested."

10. An informatics nurse is searching the Web for professional informatics groups. Which of the following would the nurse find as the largest group?
- A) International Medical Informatics Association
 - B) American Medical Informatics Association
 - C) European Federation for Medical Informatics
 - D) Healthcare Information and Management Systems Society
11. A nurse certified in nursing informatics is preparing a presentation for prospective candidates for certification. Which of the following would the nurse include as being necessary to write the examination for certification? Select all that apply.
- A) Active RN licensure
 - B) Associate degree in nursing
 - C) 5 years of practice as an RN
 - D) 30 hours of continuing education in the last year
 - E) 2,000 hours in informatics nursing within the past 3 years
12. An instructor is describing nursing informatics theory. When explaining information, which of the following would the instructor include?
- A) Discrete objective facts
 - B) Data with context
 - C) Synthesis of information
 - D) Visualizing patterns
13. A group of nursing students are reviewing information about the different theories associated with nursing informatics. The students demonstrate understanding of the information when they identify which of the following as related to the General System Theory?
- A) Innovators, early adopters, early majority, late majority, and laggards.
 - B) Unfreezing, moving, and refreezing
 - C) Input, throughput, output, and feedback
 - D) Information management tools, knowledge, skills, rewards, and authority structures
14. A nurse is working as a clinical systems analyst. For which of the following would the nurse be most likely responsible? Select all that apply.
- A) Assessing the needs for nurses with technology
 - B) Coordinating the planning of information systems
 - C) Supporting a clinical system
 - D) Implementing an informatics project
 - E) Analyzing what a client wants and needs

15. A nurse practicing in nursing informatics is a guest speaker for a nursing class. One of the students in the class asks the nurse how she gained her knowledge. Which response by the nurse would be most likely?
- A) "I went to graduate school to obtain a master's degree."
 - B) "I basically learned on-the-job and with continuing education."
 - C) "I got my RN after going to business school first to learn about computers."
 - D) "I have a doctorate degree in nursing and computer science."

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Answer Key

1. B
2. D
3. C
4. A
5. A
6. A
7. B
8. C
9. C
10. A
11. A, E
12. B
13. C
14. B, C
15. B

Chapter 23 Translational Research: Generating Evidence for Practice

Question 1

Type: MCSA

A qualitative researcher studying lived experiences of congestive heart failure clients wishes to analyze data obtained from client interviews. Which of the following software programs are best suited for this researcher's purpose?

1. SYSTAT and HyperRESEARCH
2. NUD*IST and Nvivo
3. BMDP and DataDesk
4. SAS and SPSS

Correct Answer: 2

Rationale 1: NUD*IST, Nvivo, and HyperRESEARCH are all programs used to analyze qualitative data. The others are used for quantitative data analysis.

Rationale 2: NUD*IST, Nvivo, and HyperRESEARCH are all programs used to analyze qualitative data. The others are used for quantitative data analysis.

Rationale 3: NUD*IST, Nvivo, and HyperRESEARCH are all programs used to analyze qualitative data. The others are used for quantitative data analysis.

Rationale 4: NUD*IST, Nvivo, and HyperRESEARCH are all programs used to analyze qualitative data. The others are used for quantitative data analysis.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: MCSA

An ethnographer selects Ethnograph, a software program to analyze data obtained from client interviews. Which of the following is a potential disadvantage of using software for qualitative research?

1. Data must be sorted manually into subsets for future analysis.
2. Research may be molded to fit the software program.
3. The researcher must input data separately for the best analysis.
4. There is less available time for data analysis.

Correct Answer: 2

Rationale 1: Research may be molded to fit the software program. This can result in data that are forced into patterns provided by the software program, possibly altering the final results. Computer capabilities may also tempt researchers to use large populations, thus sacrificing in-depth study for breadth. Data do not need to be sorted manually into subsets for future analysis.

Rationale 2: Research may be molded to fit the software program. This can result in data that are forced into patterns provided by the software program, possibly altering the final results. Computer capabilities may also tempt researchers to use large populations, thus sacrificing in-depth study for breadth.

Rationale 3: Research may be molded to fit the software program. This can result in data that are forced into patterns provided by the software program, possibly altering the final results. Computer capabilities may also tempt researchers to use large populations, thus sacrificing in-depth study for breadth. Separate data input is not required.

Rationale 4: Research may be molded to fit the software program. This can result in data that are forced into patterns provided by the software program, possibly altering the final results. Computer capabilities may also tempt researchers to use large populations, thus sacrificing in-depth study for breadth. There is actually more available time for data analysis.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: MCSA

Which statement is true regarding the realization of a universal electronic health record (EHR)?

1. Security and confidentiality issues have been resolved.
2. The EHR exists only in private, for-profit acute-care institutions.
3. Health care providers are unified in the standardization of the EHR.
4. The lack of common language prevents the EHR from becoming a reality.

Correct Answer: 4

Rationale 1: The lack of common language prevents the universal EHR from becoming a reality. Although the EHR is not fully realized at this time, it is a common hope that it will be fully developed. The competition among providers, limited interoperability, limited health information exchange, concerns over the confidentiality of private health information, limited funding and technical issues have all impeded its progress.

Rationale 2: The lack of common language prevents the universal EHR from becoming a reality. Although the EHR is not fully realized at this time, it is a common hope that it will be fully developed. The competition among providers, limited interoperability, limited health information exchange, concerns over the confidentiality of private health information, limited funding and technical issues have all impeded its progress.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: MCSA

Which statement regarding data collection via the Internet is accurate?

1. Ethical issues are minimized because complete privacy of client response is assured.
2. E-mails cannot be used because there may be errors in interpretation and transcription.
3. Selection bias is eliminated because the Internet allows participation from all over the world.
4. Data collection is automated, allowing the data to be exported to other programs more easily.

Correct Answer: 4

Rationale 1: This statement about the Internet is accurate: Data collection is automated, allowing the data to be exported to other programs more easily. E-mails may provide useful information. Ethical issues do remain a concern, especially those regarding privacy and confidentiality; human subjects must still be protected. Selection bias is another factor that limits the generalizability of results. This is because the Internet population is nonrepresentative; open surveys conducted via the Web get volunteer participants and not all potential participants have Internet access.

Rationale 2: This statement about the Internet is accurate: Data collection is automated, allowing the data to be exported to other programs more easily. E-mails may provide useful information. Ethical issues do remain a concern, especially those regarding privacy and confidentiality; human subjects must still be protected. Selection bias is another factor that limits the generalizability of results. This is because the Internet population is nonrepresentative; open surveys conducted via the Web get volunteer participants and not all potential participants have Internet access.

Rationale 3: This statement about the Internet is accurate: Data collection is automated, allowing the data to be exported to other programs more easily. E-mails may provide useful information. Ethical issues do remain a concern, especially those regarding privacy and confidentiality; human subjects must still be protected. Selection bias is another factor that limits the generalizability of results. This is because the Internet population is nonrepresentative; open surveys conducted via the Web get volunteer participants and not all potential participants have Internet access.

Rationale 4: Data may be indeed collected easily and quickly via the Internet because much is automated. E-mails may provide useful information. Ethical issues do remain a concern, especially those regarding privacy and confidentiality; human subjects must still be protected. Selection bias is another factor that limits the generalizability of results. This is because the Internet population is nonrepresentative; open surveys conducted via the Web get volunteer participants and not all potential participants have Internet access.

Global Rationale:

Cognitive Level: Evaluating

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCSA

For which type of research is knowledge discovery in databases (KDD) least appropriate?

1. To cross-link risk factors for type 2 diabetes and cardiovascular disease
2. To identify the efficacy of a treatment for children with the rare and fatal Batten disease.
3. To test the hypothesis that polycystic kidney disease is best treated with antihypertensive
4. To determine the most significant risk factors for congestive heart failure

Correct Answer: 2

Rationale 1: KDD is least appropriate for identifying the efficacy of a treatment for children with the rare and fatal Batten disease. KDD identifies complex patterns and relationships in collected data; it is a powerful tool, suitable for the analysis of large amounts of data. KDD may be used to identify risk factors for diseases or efficacy of particular treatment modalities. However, KDD is not used when insufficient data would be available, as in the case of a rare disease.

Rationale 2: KDD is indeed least appropriate for identifying the efficacy of a treatment for children with the rare and fatal Batten disease. KDD identifies complex patterns and relationships in collected data; it is a powerful tool, suitable for the analysis of large amounts of data. KDD may be used to identify risk factors for diseases or efficacy of particular treatment modalities. KDD is not used when insufficient data would be available, as in the case of a rare disease.

Rationale 3: KDD is least appropriate for identifying the efficacy of a treatment for children with the rare and fatal Batten disease. KDD identifies complex patterns and relationships in collected data; it is a powerful tool, suitable for the analysis of large amounts of data. KDD may be used to identify risk factors for diseases or efficacy of particular treatment modalities. However, KDD is not used when insufficient data would be available, as in the case of a rare disease.

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Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCMA

A nursing student wishes to initiate a search for interesting research topics. The student decides to peruse client positioning during pulmonary artery catheter readings. Among the following, which are suitable for this topic?

Standard Text: Select all that apply.

1. PsychINFO
2. MEDLINE
3. Google
4. CINAHL

5. PubMed

Correct Answer: 1,2,4,5

Rationale 1: All of these except for Google are suitable to initiate a search about client positioning during pulmonary artery catheter readings. Google pulls together a variety of sources, not all of which are medical; the other databases are medically or nursing oriented.

Rationale 2: Google pulls together a variety of sources, not all of which are medical; all the other databases named are medically or nursing oriented.

Rationale 3: All of these except for Google are suitable to initiate a search about client positioning during pulmonary artery catheter readings. Google pulls together a variety of sources, not all of which are medical; the other databases are medically or nursing oriented.

Rationale 4: All of these except for Google are suitable to initiate a search about client positioning during pulmonary artery catheter readings. Google pulls together a variety of sources, not all of which are medical; the other databases are medically or nursing oriented.

Rationale 5: All of these except for Google are suitable to initiate a search about client positioning during pulmonary artery catheter readings. Google pulls together a variety of sources, not all of which are medical; the other databases are medically or nursing oriented.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 7

Type: MCSA

Which type of research is best suited for using nurmetrics?

1. The compilation of unified medical language systems into a universal language
2. The collapsing of databases into one large data set for research purposes
3. The generation and testing of new models of health care delivery using computers
4. The collection of data to create a uniform data set for nursing care and outcomes

Correct Answer: 3

Rationale 1: The option best suited for using nurmetrics is the generation and testing of new models of health care delivery using computers. Nurmetrics uses mathematical form and statistics to test, estimate, and quantify nursing theories and solutions to problems. This application is cost effective and can demonstrate how factors such as education may affect health practices and outcomes over time without the need to first implement the program and wait for results.

Rationale 2: The option best suited for using nurmetrics is the generation and testing of new models of health care delivery using computers. Nurmetrics uses mathematical form and statistics to test, estimate, and quantify nursing theories and solutions to problems. This application is cost effective and can demonstrate how factors such as education may affect health practices and outcomes over time without the need to first implement the program and wait for results.

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Rationale 4: The option best suited for using nurmetrics is the generation and testing of new models of health care delivery using computers. Nurmetrics uses mathematical form and statistics to test, estimate, and quantify nursing theories and solutions to problems. This application is cost effective and can demonstrate how factors such as education may affect health practices and outcomes over time without the need to first implement the program and wait for results.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCSA

Which of the following is an advantage of uniform nursing languages, such as The Omaha System?

1. Standards for information systems are no longer needed.
2. Nursing data may be collected only in similar health care settings.

3. All contain the same type of data on nursing care and outcomes.
4. Studies using the same language may be replicated more easily.

Correct Answer: 4

Rationale 1: Studies using the same language may be replicated more easily, an advantage of uniform nursing languages. A standardized nursing language allows accurate communication among nurses which aids research and subsequently adds to the body of nursing knowledge. Research utilizing standardized terms allows the researcher an increased confidence that results might be compared or replicated more easily, since the terms have the same definitions. The American Nurses Association has recognized several standardized languages and terminologies to support nursing practice. These include The Omaha System.

Rationale 2: Studies using the same language may be replicated more easily, an advantage of uniform nursing languages. A standardized nursing language allows accurate communication among nurses which aids research and subsequently adds to the body of nursing knowledge. Research utilizing standardized terms allows the researcher an increased confidence that results might be compared or replicated more easily, since the terms have the same definitions. The American Nurses Association has recognized several standardized languages and terminologies to support nursing practice. These include The Omaha System.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 9

Type: MCSA

Data mining supports sifting through large volumes of data at rapid speeds. In which instance would the use of data mining be inappropriate?

1. To provide information that may enhance the company's market share
2. To hide confidential information in databases using real values
3. To identify common factors relating to medication errors
4. To search databases to review trends in the health care arena

Correct Answer: 2

Rationale 1: Data mining would be inappropriate for hiding confidential information in databases using real values. However, the confidentiality of individual records may be protected by hiding confidential information while maintaining underlying aggregate relationships of the database.

Rationale 2: Data mining would be inappropriate for hiding confidential information in databases using real values. However, the confidentiality of individual records may be protected by hiding confidential information while maintaining underlying aggregate relationships of the database.

Rationale 3: Data mining would be inappropriate for hiding confidential information in databases using real values. However, the confidentiality of individual records may be protected by hiding confidential information while maintaining underlying aggregate relationships of the database.

Rationale 4: Data mining would be inappropriate for hiding confidential information in databases using real values. However, the confidentiality of individual records may be protected by hiding confidential information while maintaining underlying aggregate relationships of the database.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: MCSA

A nurse researcher selects a notebook computer to collect data for a research study. Which statement regarding data collection using mobile devices is accurate?

1. Transcription errors may occur during data transmission.
2. An interactive data collection tool may not be appealing to the participant.
3. Time and costs relating to scrubbing data are usually much reduced.
4. Redundant data entry may occur until the researcher becomes more skilled.

Correct Answer: 3

Rationale 1: Time and costs relating to scrubbing data are usually reduced when data are collected using mobile devices such as a notebook computer. This eliminates transcription errors and lost or illegible paper notes, while speeding the data collection and analysis process. Interactive data collection tools offer the advantages of engaging the participant and eliminate redundant data entry.

Rationale 2: Time and costs relating to scrubbing data are usually reduced when data are collected using mobile devices such as a notebook computer. This eliminates transcription errors and lost or illegible paper notes, while speeding the data collection and analysis process. Interactive data collection tools offer the advantages of engaging the participant and eliminate redundant data entry.

Rationale 3: Time and costs relating to scrubbing data are usually reduced when data are collected using mobile devices such as a notebook computer. This eliminates transcription errors and lost or illegible paper notes, while speeding the data collection and analysis process. Interactive data collection tools offer the advantages of engaging the participant and eliminate redundant data entry.

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Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: MCMA

From a health information technology perspective, health care research has faced some impediments. Which of the following has impeded health care research?

Standard Text: Select all that apply.

1. Slow adoption of uniform languages
2. Limited funding
3. Rapid adoption of data exchange standards
4. Confidentiality of private health information (PHI)
5. Failure to attain a birth-to-death electronic health record (EHR)

Correct Answer: 1,2,4,5

Rationale 1: From a health information technology perspective, health care research has been impeded by all of these except a rapid adoption of data exchange standards. Slow adoption of data exchange standards and uniform languages, a failure to realize a birth-to-death electronic health record, limited interoperability, limited health information exchange, concerns over the confidentiality of private health information, and limited funding all hinder research. Many technical issues also still need to be resolved.

Rationale 2: From a health information technology perspective, health care research has been impeded by all of these except a rapid adoption of data exchange standards. Slow adoption of data exchange standards and uniform languages, a failure to realize a birth-to-death electronic health record, limited interoperability, limited health information exchange, concerns over the confidentiality of private health information, and limited funding all hinder research. Many technical issues also still need to be resolved.

Rationale 3: From a health information technology perspective, health care research has been impeded by all of these except a rapid adoption of data exchange standards. Slow adoption of data exchange standards and uniform languages, a failure to realize a birth-to-death electronic health record, limited interoperability, limited health information exchange, concerns over the confidentiality of private health information, and limited funding all hinder research. Many technical issues also still need to be resolved.

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confidentiality of private health information, and limited funding all hinder research. Many technical issues also still need to be resolved.

Rationale 5: From a health information technology perspective, health care research has been impeded by all of these except a rapid adoption of data exchange standards. Slow adoption of data exchange standards and uniform languages, a failure to realize a birth-to-death electronic health record, limited interoperability, limited health information exchange, concerns over the confidentiality of private health information, and limited funding all hinder research. Many technical issues also still need to be resolved.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: MCSA

The Health Insurance Portability and Accountability Act (HIPPA) requires health care providers and insurers to obtain additional documentation from researchers related to assurances of patient safety and confidentiality. Which of the following is the key concern about human subjects in health care research?

1. That all subjects are protected from the researcher getting access to their confidential information before disclosing their health information
2. That authorization is still required even if an institutional review board grants a waiver or alteration of authorization requirements
3. That authorization is still required even if information has been de-identified according to Privacy Rule standards
4. That one signed authorization form for research is valid for a current research study and covers any future research projects

Correct Answer: 1

Rationale 1: The key concern about human subjects in health care research is that all subjects, irrespective of their age, are protected from the researcher getting access to their confidential information before disclosing health information to them. A signed authorization form for research is valid only for a specific research study, not for future projects. Authorization is not required when the researcher obtains appropriate documentation that an institutional review

board or a privacy board has granted a waiver or alteration of authorization requirements. Authorization is also not required once information has been de-identified according to Privacy Rule standards.

Rationale 2: The key concern about human subjects in health care research is that all subjects, irrespective of their age, are protected from the researcher getting access to their confidential information before disclosing health information to them. A signed authorization form for research is valid only for a specific research study, not for future projects. Authorization is not required when the researcher obtains appropriate documentation that an institutional review board or a privacy board has granted a waiver or alteration of authorization requirements. Authorization is also not required once information has been de-identified according to Privacy Rule standards.

Rationale 3: The key concern about human subjects in health care research is that all subjects, irrespective of their age, are protected from the researcher getting access to their confidential information before disclosing health information to them. A signed authorization form for research is valid only for a specific research study, not for future projects. Authorization is not required when the researcher obtains appropriate documentation that an institutional review board or a privacy board has granted a waiver or alteration of authorization requirements. Authorization is also not required once information has been de-identified according to Privacy Rule standards.

Rationale 4: The key concern about human subjects in health care research is that all subjects, irrespective of their age, are protected from the researcher getting access to their confidential information before disclosing health information to them. A signed authorization form for research is valid only for a specific research study, not for future projects. Authorization is not required when the researcher obtains appropriate documentation that an institutional review board or a privacy board has granted a waiver or alteration of authorization requirements. Authorization is also not required once information has been de-identified according to Privacy Rule standards.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 13

Type: MCMA

Constant changes in health care and its delivery creates challenges for clinicians to keep abreast of the latest evidence-based practice (EBP) findings and recommendations. What can health care

professionals do in order to narrow the time in synthesizing research from the "bench" to the client's "bedside"?

Standard Text: Select all that apply.

1. Use available toolkits to locate existing guidelines and develop EBP guidelines.
2. Locate nursing research Web links.
3. Enroll in a doctoral program.
4. Foster health care informatics skills.
5. Join a focused online discussion group to help identify specific areas for EBP or original research.

Correct Answer: 1,2,4,5

Rationale 1: To get research quickly from the "bench" to the client's "bedside," health care professionals can do all of these except for the doctoral program. Some experts estimate a lag of as long as 17 years for getting the "bench" research translated into "bedside" care. It is essential that clinicians are more dedicated to narrowing this time frame. EBP provides a mechanism for hospitals and other health care delivery systems to meet research and excellence requirements inherent in the American Nurses Credentialing Center (ANCC) Magnet designation. Those hospitals that are seeking or already have Magnet status are a great resource.

Rationale 2: To get research quickly from the "bench" to the client's "bedside," health care professionals can do all of these except for the doctoral program. Some experts estimate a lag of as long as 17 years for getting the "bench" research translated into "bedside" care. It is essential that clinicians are more dedicated to narrowing this time frame. EBP provides a mechanism for hospitals and other health care delivery systems to meet research and excellence requirements inherent in the American Nurses Credentialing Center (ANCC) Magnet designation. Those hospitals that are seeking or already have Magnet status are a great resource.

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Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: MCSA

Which of the following statements about evidence-based practice (EBP) is true?

1. Hospitals have not yet begun to build EBP into their clinical ladders.
2. The standards of practice are not currently established with evidence-based competencies.
3. Staff nurses indicate higher levels of familiarity with EBP than advanced practice nurses.
4. A number of facilities now consider EBP to be part of everyday clinical practice.

Correct Answer: 1

Rationale 1: It is true that a number of facilities now consider EBP to be part of everyday clinical practice. Facilities use evidence-based competencies to establish the standards of practice and build EBP into their clinical ladders. Advanced practice nurses, not staff nurses, indicate higher levels of familiarity with EBP.

Rationale 2: It is true that a number of facilities now consider EBP to be part of everyday clinical practice. Facilities use evidence-based competencies to establish the standards of practice and build EBP into their clinical ladders. Advanced practice nurses, not staff nurses, indicate higher levels of familiarity with EBP.

Rationale 3: It is true that a number of facilities now consider EBP to be part of everyday clinical practice. Facilities use evidence-based competencies to establish the standards of practice and build EBP into their clinical ladders. Advanced practice nurses, not staff nurses, indicate higher levels of familiarity with EBP.

Rationale 4: It is true that a number of facilities now consider EBP to be part of everyday clinical practice. Facilities use evidence-based competencies to establish the standards of practice and build EBP into their clinical ladders. Advanced practice nurses, not staff nurses, indicate higher levels of familiarity with EBP.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 15

Type: MCSA

A program outcome essential for health care students is that they be skilled in which of the following?

1. Electronic spreadsheet applications
2. Electronic database management applications
3. Applications that facilitate electronic literature searches
4. Electronic slide presentation applications

Correct Answer: 3

Rationale 1: A program outcome essential for health care students is that they be skilled in applications facilitating electronic literature searches. Despite the availability and merits of this type of search, students fail to find useful information when their choice of search limiters or terms is not appropriate. Software for database management, spreadsheets, and presentations are useful but are not essential program outcomes.

Rationale 2: A program outcome essential for health care students is that they be skilled in applications facilitating electronic literature searches. Despite the availability and merits of this type of search, students fail to find useful information when their choice of search limiters or terms is not appropriate. Software for database management, spreadsheets, and presentations are useful but are not essential program outcomes.

Rationale 3: A program outcome essential for health care students is that they be skilled in applications facilitating electronic literature searches. Despite the availability and merits of this type of search, students fail to find useful information when their choice of search limiters or terms is not appropriate. Software for database management, spreadsheets, and presentations are useful but are not essential program outcomes.

Rationale 4: A program outcome essential for health care students is that they be skilled in applications facilitating electronic literature searches. Despite the availability and merits of this type of search, students fail to find useful information when their choice of search limiters or terms is not appropriate. Software for database management, spreadsheets, and presentations are useful but are not essential program outcomes.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 16

Type: MCMA

The lack of a common language to facilitate data collection and decision making was recognized as a problem in health care and nursing several years ago. Which of the following are recognized nursing languages?

Standard Text: Select all that apply.

1. CCC
2. UMLS
3. NOC
4. PNDS
5. ICNP

Correct Answer: 1,3,4,5

Rationale 1: All options are recognized as nursing languages except Unified Medical Language System (UMLS). These are: Clinical Care Classification (CCC), PeriOperative Nursing Data Set (PNDS), Nursing Outcomes Classification (NOC), and International Classification for Nursing Practice (ICNP).

Rationale 2: All options are recognized as nursing languages except Unified Medical Language System (UMLS). These are: Clinical Care Classification (CCC), PeriOperative Nursing Data Set (PNDS), Nursing Outcomes Classification (NOC), and International Classification for Nursing Practice (ICNP).

Rationale 3: All options are recognized as nursing languages except Unified Medical Language System (UMLS). These are: Clinical Care Classification (CCC), PeriOperative Nursing Data Set (PNDS), Nursing Outcomes Classification (NOC), and International Classification for Nursing Practice (ICNP).

Rationale 4: All options are recognized as nursing languages except Unified Medical Language System (UMLS). These are: Clinical Care Classification (CCC), PeriOperative Nursing Data Set (PNDS), Nursing Outcomes Classification (NOC), and International Classification for Nursing Practice (ICNP).

Rationale 5: All options are recognized as nursing languages except Unified Medical Language System (UMLS). These are: Clinical Care Classification (CCC), PeriOperative Nursing Data Set (PNDS), Nursing Outcomes Classification (NOC), and International Classification for Nursing Practice (ICNP).

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 17

Type: MCSA

Knowledge discovery in databases (KDD) is a term used in other industries that is now seen in health care circles. Which of the following statements about KDD is accurate?

1. It is a powerful tool suitable for the analysis of large or small amounts of data.
2. It is not available commercially, but platforms can be custom built to suit the facility.
3. The confidentiality of individual records may be protected through the use of data perturbation.
4. The lack of bias is guaranteed by the vendor related to the complex patterns in collected data.

Correct Answer: 3

Rationale 1: This statement about KDD is accurate: The confidentiality of individual records may be protected through the use of data perturbation. This is a technique that modifies actual data values to hide confidential information while maintaining underlying aggregate relationships of the database. Further research is needed on the use of data perturbation and its potential to introduce bias (lack of bias is not guaranteed by the vendor). Commercial packages are available in a range of prices and platforms. KDD provides a powerful tool suitable for the analysis of large amounts of data, but not small amounts.

Rationale 2: This statement about KDD is accurate: The confidentiality of individual records may be protected through the use of data perturbation. This is a technique that modifies actual data values to hide confidential information while maintaining underlying aggregate relationships of the database. Further research is needed on the use of data perturbation and its potential to introduce bias (lack of bias is not guaranteed by the vendor). Commercial packages are available in a range of prices and platforms. KDD provides a powerful tool suitable for the analysis of large amounts of data, but not small amounts.

Rationale 3: This statement about KDD is accurate: The confidentiality of individual records may be protected through the use of data perturbation. This is a technique that modifies actual data values to hide confidential information while maintaining underlying aggregate relationships of the database. Further research is needed on the use of data perturbation and its potential to introduce bias (lack of bias is not guaranteed by the vendor). Commercial packages are available in a range of prices and platforms. KDD provides a powerful tool suitable for the analysis of large amounts of data, but not small amounts.

Rationale 4: This statement about KDD is accurate: The confidentiality of individual records may be protected through the use of data perturbation. This is a technique that modifies actual data values to hide confidential information while maintaining underlying aggregate relationships of the database. Further research is needed on the use of data perturbation and its potential to introduce bias (lack of bias is not guaranteed by the vendor). Commercial packages are available in a range of prices and platforms. KDD provides a powerful tool suitable for the analysis of large amounts of data, but not small amounts.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 18

Type: MCSA

Sigma Theta Tau International completed a landmark EBP study in 2006. Which of the following was included in the findings?

1. Nurses are comfortable seeking information to provide EBP patient care and had sufficient access to appropriate materials to personally engage in EBP.
2. Nurses who entered practice less than two years earlier were least comfortable with providing EBP patient care.
3. Nurses who entered practice five or more years earlier were most comfortable with providing EBP patient care.
4. Nurses lacked access to appropriate materials to personally engage in EBP.

Correct Answer: 4

Rationale 1: This landmark EBP study found that nurses needed information to provide patient care but many reported lacking comfort, skills, time, or access to appropriate materials to personally engage in EBP. This finding was particularly true for nurses entering practice five or more years earlier.

Rationale 2: This landmark EBP study found that nurses needed information to provide patient care but many reported lacking comfort, skills, time, or access to appropriate materials to personally engage in EBP. This finding was particularly true for nurses entering practice five or more years earlier.

Rationale 3: This landmark EBP study found that nurses needed information to provide patient care but many reported lacking comfort, skills, time, or access to appropriate materials to personally engage in EBP. This finding was particularly true for nurses entering practice five or more years earlier.

Rationale 4: This landmark EBP study found that nurses needed information to provide patient care but many reported lacking comfort, skills, time, or access to appropriate materials to personally engage in EBP. This finding was particularly true for nurses entering practice five or more years earlier.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Teaching and Learning

Learning Outcome:

Question 19

Type: MCSA

Clinical researchers have experienced barriers due to HIPAA. These researchers need to be aware of HIPAA's Privacy Rule because it establishes the conditions under which covered entities can use or disclose PHI. Which of the following statements about HIPAA covered entities is accurate?

1. Researchers are not covered entities unless they are also health care providers or employed by a covered entity or engage in any of the electronic transactions covered under HIPAA.
2. Researchers are always considered to be covered entities for transactions covered under HIPAA so long as they are conducting a valid study.
3. When difficulties arise with small sample size, covered entities are not allowed to disclose PHI to researchers to aid in study recruitment.
4. Covered entities do not include providers that transmit health information electronically for HIPAA transactions, health plans, and clearinghouses unless they are certified via a national examination.

Correct Answer: 1

Rationale 1: Researchers are not covered entities unless they are also health care providers or employed by a covered entity or engage in any of the electronic transactions covered under HIPAA.

Rationale 2: Researchers are not covered entities unless they are also health care providers or employed by a covered entity or engage in any of the electronic transactions covered under HIPAA.

Rationale 3: Researchers are not covered entities unless they are also health care providers or employed by a covered entity or engage in any of the electronic transactions covered under HIPAA. Covered entities actually may disclose PHI to researchers to aid in study recruitment.

Rationale 4: Researchers are not covered entities unless they are also health care providers or employed by a covered entity or engage in any of the electronic transactions covered under HIPAA. Covered entities actually do include providers that transmit health information electronically for HIPAA transactions, health plans, and clearinghouses. There is no national certification examination.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 20**Type:** MCSA

Standardized languages provide a mechanism to ensure common meanings to terms, facilitate data collection, and aid research. Which of the following languages includes all nursing specialties and demonstrates the ability to encompass other standardized nursing languages?

1. ICNP
2. NANDA
3. NIC
4. NOC

Correct Answer: 1

Rationale 1: ICNP includes all nursing specialties and demonstrates the ability to encompass other standardized nursing languages. It is a widely accepted standard in nursing. The other answers are specialized languages: NANDA for classifying nursing diagnoses, NIC for nursing interventions, and NOC for nursing outcomes. Currently, standardized nursing languages are fodder for research as well as a tool to enhance research through shared meanings.

Rationale 2: It is ICNP that includes all nursing specialties and demonstrates the ability to encompass other standardized nursing languages. It is a widely accepted standard in nursing. The other answers are specialized languages: NANDA for classifying nursing diagnoses, NIC for nursing interventions, and NOC for nursing outcomes. Currently, standardized nursing languages are fodder for research as well as a tool to enhance research through shared meanings.

Rationale 3: It is ICNP that includes all nursing specialties and demonstrates the ability to encompass other standardized nursing languages. It is a widely accepted standard in nursing. The other answers are specialized languages: NANDA for classifying nursing diagnoses, NIC for nursing interventions, and NOC for nursing outcomes. Currently, standardized nursing languages are fodder for research as well as a tool to enhance research through shared meanings.

Rationale 4: It is ICNP that includes all nursing specialties and demonstrates the ability to encompass other standardized nursing languages. It is a widely accepted standard in nursing. The other answers are specialized languages: NANDA for classifying nursing diagnoses, NIC for nursing interventions, and NOC for nursing outcomes. Currently, standardized nursing languages are fodder for research as well as a tool to enhance research through shared meanings.

Global Rationale:**Cognitive Level:** Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 21

Type: MCSA

Which of the following best supports the need for translational research in health care?

1. More emphasis will be placed on interdisciplinary translation of research in the coming decade.
2. Nurses are the only health care provider capable of understanding best practice models.
3. There is not as much demand for translational research today as there was five years ago.
4. Translational research is a new concept in health care.

Correct Answer: 1

Rationale 1: Correct. There is a need to collect, analyze, synthesize, and disseminate research findings to improve patient care outcomes. Therefore, collaboration among the disciplines can enhance the research process and emphasize team work.

Rationale 2: There is a need to collect, analyze, synthesize, and disseminate research findings to improve patient care outcomes. Therefore, collaboration among the disciplines can enhance the research process and emphasize team work.

Rationale 3: Not correct. There is an enhanced need to collect, analyze, synthesize, and disseminate research findings to improve patient care outcomes. Therefore, collaboration among the disciplines can enhance the research process and emphasize team work.

Rationale 4: There is a need to collect, analyze, synthesize, and disseminate research findings to improve patient care outcomes. Therefore, collaboration among the disciplines can enhance the research process and emphasize team work.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 22

Type: MCSA

Which of the following provides an effective means of researching primary research in a logical and systematic manner, providing a more efficient and effective means to find credible scientific information than if one were doing a general Web search?

1. Wikis
2. Systematic literature searches
3. Blogging
4. Telehealth

Correct Answer: 2

Rationale 1: Systematic literature searches provide an effective means of researching primary research in a logical and systematic manner, providing a more efficient and effective means to find credible scientific information than if one were doing a general Web search. This is a relevant concept in the process of locating and examining research because there is opportunity to examine primary data sources in one location (Sigma Theta Tau International, 2005).

Rationale 2: Systematic literature searches provide an effective means of researching primary research in a logical and systematic manner, providing a more efficient and effective means to find credible scientific information than if one were doing a general Web search. This is a relevant concept in the process of locating and examining research because there is opportunity to examine primary data sources in one location (Sigma Theta Tau International, 2005).

Rationale 3: Not correct. Systematic literature searches provide an effective means of researching primary research in a logical and systematic manner, providing a more efficient and effective means to find credible scientific information than if one were doing a general Web search. This is a relevant concept in the process of locating and examining research because there is opportunity to examine primary data sources in one location (Sigma Theta Tau International, 2005).

Rationale 4: Not correct. Systematic literature searches provide an effective means of researching primary research in a logical and systematic manner, providing a more efficient and effective means to find credible scientific information than if one were doing a general Web search. This is a relevant concept in the process of locating and examining research because there is opportunity to examine primary data sources in one location (Sigma Theta Tau International, 2005).

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 23

Type: MCMA

Data collection via the Internet can offer special advantages. Which of the following tools also facilitates research?

Standard Text: Select all that apply.

1. Electronic databases
2. Online group discussions
3. Privacy standards
4. Cookies
5. Digital libraries

Correct Answer: 1,2

Rationale 1: Electronic literature searches, online discussion groups, and digital libraries facilitate both evidence-based practice and research through the identification of questions, location of literature, systematic reviews, and resources.

Rationale 2: Electronic literature searches, online discussion groups, and digital libraries facilitate both evidence-based practice and research through the identification of questions, location of literature, systematic reviews, and resources.

Rationale 3: Electronic literature searches, online discussion groups, and digital libraries facilitate both evidence-based practice and research through the identification of questions, location of literature, systematic reviews, and resources.

Rationale 4: Electronic literature searches, online discussion groups, and digital libraries facilitate both evidence-based practice and research through the identification of questions, location of literature, systematic reviews, and resources.

Rationale 5: Electronic literature searches, online discussion groups, and digital libraries facilitate both evidence-based practice and research through the identification of questions, location of literature, systematic reviews, and resources.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 24

Type: FIB

_____ have the capacity to locate a plethora of research, data, and information in a rapid period of time.

Standard Text:

Correct Answer: Computerized literature searches

Rationale : Computerized literature searches have the capacity to locate a plethora of research, data, and information in a rapid period of time. Computerized searches offer access to literature that can support studies or data that can create best practice models.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 25

Type: MCSA

Which of the following is essential to provide the means to search the literature and apply clinical knowledge, improving practice and safety as well as meeting the standards of excellence required for regulatory and credentialing standards and Magnet status?

1. Information technology tools
2. Computerized databases
3. Technology websites
4. Online libraries

Correct Answer: 1

Rationale 1: Information technology (IT) tools are essential to provide the means to search the literature and apply clinical knowledge, improving practice and safety as well as meeting the standards of excellence required for regulatory and credentialing standards and Magnet status.

Rationale 2: Information technology (IT) tools are essential to provide the means to search the literature and apply clinical knowledge, improving practice and safety as well as meeting the standards of excellence required for regulatory and credentialing standards and Magnet status.

Rationale 3: Information technology (IT) tools are essential to provide the means to search the literature and apply clinical knowledge, improving practice and safety as well as meeting the standards of excellence required for regulatory and credentialing standards and Magnet status.

Rationale 4: Information technology (IT) tools are essential to provide the means to search the literature and apply clinical knowledge, improving practice and safety as well as meeting the standards of excellence required for regulatory and credentialing standards and Magnet status.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 26

Type: FIB

_____ is an approach to providing care that integrates nursing experience and intuition with valid and current clinical research to achieve the best patient outcomes

Standard Text:

Correct Answer: Evidence-based practice

Rationale : Evidence-based practice (EBP) is an approach to providing care that integrates nursing experience and intuition with valid and current clinical research to achieve the best patient outcomes.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care
Nursing/Integrated Concepts: Teaching and Learning
Learning Outcome:

Question 27

Type: MCSA

Which of the following methods is not useful in the facilitation of both evidence-based practice and research through the identification of questions, location of literature, systematic reviews, and resources?

1. Electronic literature searches
2. Online discussion groups
3. Comparative effectiveness research (CER)
4. Digital libraries

Correct Answer: 3

Rationale 1: Electronic literature searches, online discussion groups, and digital libraries facilitate both evidence-based practice and research through the identification of questions, location of literature, systematic reviews, and resources. These tools enhance the research process by providing comprehensive literature support for developing clinical questions for inquiry.

Rationale 2: Online discussion groups can facilitate both evidence-based practice and research through the identification of questions, location of literature, systematic reviews, and resources. Discussion groups can assist in the identification of a clinical through group communication and consensus.

Rationale 3: CER is playing a big part in improving the quality of care while decreasing costs for health care.

Rationale 4: Digital libraries can facilitate both evidence-based practice and research through the identification of questions, location of literature, systematic reviews, and resources. Digital libraries offer rapid access that enhances the research process by providing comprehensive literature support.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation
Learning Outcome:

Question 28

Type: MCSA

A busy, inner city CCU has had a record number of nosocomial infections during the month of December. The head nurse held a meeting with the department to begin a systematic review process of all of the infected patients. In order to facilitate the collection of relevant data, she can eliminate a barrier to the collection of data by the point of care staff through which of the following?

1. Allowing nurses who are comfortable with the research process to collect data
2. Hiring a consultant to create the research process and collect data
3. Providing workshops and preceptors to guide the nurses
4. Asking the staff to work an extra hour per week to facilitate collection

Correct Answer: 3

Rationale 1: Nurses are important members of the health care profession with unique experiences and education. Nurses have the ability to collect data, record it, and assist in the analysis to develop evidence to support improved patient care practices. Nurses can learn to be integral members of a research team.

Rationale 2: The use of an outside consultant can be cost prohibitive. Therefore, as part of job descriptions, nurses can be offered an opportunity to learn about and participate in the collection of data relevant to any research question.

Rationale 3: Once nurses have been taught the research process and its usefulness in improving patient care, resistance may diminish. With any relevant workshop or seminar, nurses can learn the tools to enhance clinical practice through the collection and analysis of data.

Rationale 4: Adding additional work to a nurse's load does not necessarily decrease resistance and may decrease job satisfaction.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Safety and Infection Control

Nursing/Integrated Concepts: Nursing Process: Assessment

Learning Outcome:

Question 29**Type:** MCSA

Which of the following technologies does collaborative computing not use to achieve its goals?

1. E-mail and desktop videoconferencing
2. Digital libraries
3. Handheld devices
4. Shared databases

Correct Answer: 3

Rationale 1: E-mail and desktop videoconferencing can enhance communication across the globe in an effort to share information and data.

Rationale 2: Digital libraries enable the user instant access literature and research and can be sent electronically to any location throughout the globe.

Rationale 3: Collaborative computing may use e-mail, desktop videoconferencing, other telecommunication tools, digital libraries, or shared databases to join persons of like interests from locations across the globe.

Rationale 4: Shared databases enhance the collection and sharing of data with other health care professionals in an attempt to collaborate over a project or sharing of relevant data.

Chapter 24 Bioinformatics, Biomedical Informatics, and Computational

Question 1**Type:** MCSA

What is the primary purpose of system integration in a health care facility?

1. Provide reliable flow of information between facility and physician offices
2. Offer seamless data exchange among disparate information systems
3. Prevent system data errors via large scale electronic exchanges
4. Customize information systems within a department

Correct Answer: 2

Rationale 1: The purpose of system integration is to ensure that disparate information systems can communicate and exchange data among the different systems. Most health care facilities have a variety of different users that need system data. Integration is defined as the process by which different information systems are able to exchange data in a fashion that is seamless to the end user. Providing a reliable flow of information between the facility and physician offices is a specialized case and does not address the overall purpose.

Rationale 2: The purpose of system integration is to ensure that disparate information systems can communicate and exchange data among the different systems. Most health care facilities have a variety of different users that need system data. Integration is defined as the process by which different information systems are able to exchange data in a fashion that is seamless to the end user. Customizing information systems within a department is a specialized case and does not address the overall purpose.

Rationale 3: The purpose of system integration is to ensure that disparate information systems can communicate and exchange data among the different systems. Most health care facilities have a variety of different users that need system data. Integration is defined as the process by which different information systems are able to exchange data in a fashion that is seamless to the end user. Preventing system data errors via large scale electronic exchanges does not address the overall purpose.

Rationale 4: The purpose of system integration is to ensure that disparate information systems can communicate and exchange data among the different systems. Most health care facilities have a variety of different users that need system data. Integration is defined as the process by which different information systems are able to exchange data in a fashion that is seamless to the end user. Customizing information systems within a department is a specialized case and does not address the overall purpose.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: MCSA

The timely flow of information is critical to institutional survival. Which of the following statements about interfaces is accurate?

1. Interfaces use an open systems technology provided by the vendor.

2. Interfaces require installation of a Health Level Seven (HL7) device.
3. Interface connections between different information systems are invisible to the user.
4. Interfaces physically join two or more disparate information systems.

Correct Answer: 3

Rationale 1: Interface connections between different information systems are invisible to the user. Vendors often claim their products are based on open systems technology, which is the ability to communicate with other systems. The reality is there has been little incentive for vendors to market products that readily work with their competitors' products. Interfaces do not require HL7 devices; open systems technology is a concept; and interfaces do not physically join systems.

Rationale 2: Interface connections between different information systems are invisible to the user. Vendors often claim their products are based on open systems technology, which is the ability to communicate with other systems. The reality is there has been little incentive for vendors to market products that readily work with their competitors' products. Interfaces do not require HL7 devices; open systems technology is a concept; and interfaces do not physically join systems.

Rationale 3: Interface connections between different information systems are invisible to the user. Vendors often claim their products are based on open systems technology, which is the ability to communicate with other systems. The reality is there has been little incentive for vendors to market products that readily work with their competitors' products. Interfaces do not require HL7 devices; open systems technology is a concept; and interfaces do not physically join systems.

Rationale 4: Interface connections between different information systems are invisible to the user. Vendors often claim their products are based on open systems technology, which is the ability to communicate with other systems. The reality is there has been little incentive for vendors to market products that readily work with their competitors' products. Interfaces do not require HL7 devices; open systems technology is a concept; and interfaces do not physically join systems.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: MCMA

Health Level Seven (HL7) standards are not the only standards that are evolving to fit the changing health care model. What other organizations are instrumental in supporting the development of standards and helping to define data exchange?

Standard Text: Select all that apply.

1. Department of Defense
2. Centers for Medicare and Medicare Services
3. National Science Foundation
4. Institute of Medicine
5. American Medical Informatics Association

Correct Answer: 2,3,4,5

Rationale 1: Included in development of these standards are: National Science Foundation, Institute of Medicine, American Medical Informatics Association, and Centers for Medicare and Medicare Services. (There are also several others such as HIMSS.) Department of Defense is not included.

Rationale 2: Included in development of these standards are: National Science Foundation, Institute of Medicine, American Medical Informatics Association, and Centers for Medicare and Medicare Services. (There are also several others such as HIMSS.) Department of Defense is not included.

Rationale 3: Included in development of these standards are: National Science Foundation, Institute of Medicine, American Medical Informatics Association, and Centers for Medicare and Medicare Services. (There are also several others such as HIMSS.) Department of Defense is not included.

Rationale 4: Included in development of these standards are: National Science Foundation, Institute of Medicine, American Medical Informatics Association, and Centers for Medicare and Medicare Services. (There are also several others such as HIMSS.) Department of Defense is not included.

Rationale 5: Included in development of these standards are: National Science Foundation, Institute of Medicine, American Medical Informatics Association, and Centers for Medicare and Medicare Services. (There are also several others such as HIMSS.) Department of Defense is not included.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: MCSA

The master patient index (MPI) is a database that lists all identifiers assigned to one client in all the information systems used within an enterprise. It assigns a global identification number for each client and allows clients to be identified by demographic information provided at the point of care. When the MPI cannot match a client's record based on demographic data, what is provided to the user?

1. The data dictionary resources
2. Non-citizen information so that the user may find a different identifier
3. All possible matches so that the user may view and select
4. The Social Security number

Correct Answer: 3

Rationale 1: When the MPI cannot match a client's record based on demographic data, all possible matches are provided for the user to view and select. The MPI may use first and last names, birthdates, Social Security numbers, and driver's license numbers. It cannot rely on a single type of number, such as a Social Security number, because of duplicates and the fact that some people, such as noncitizens, may not have one.

Rationale 2: When the MPI cannot match a client's record based on demographic data, all possible matches are provided for the user to view and select. The MPI may use first and last names, birthdates, Social Security numbers, and driver's license numbers. It cannot rely on a single type of number, such as a Social Security number, because of duplicates and the fact that some people, such as noncitizens, may not have one.

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Rationale 4: When the MPI cannot match a client's record based on demographic data, all possible matches are provided for the user to view and select. The MPI may use first and last names, birthdates, Social Security numbers, and driver's license numbers. It cannot rely on a

single type of number, such as a Social Security number, because of duplicates and the fact that some people, such as noncitizens, may not have one.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCMA

The master patient index (MPI) saves work because vital information can be obtained from the database rather than rekeyed with each client visit. This decreases the possibility of making a mistake and eliminates the inadvertent creation of duplicate records. Which of the following are key features of an effective MPI?

Standard Text: Select all that apply.

1. It is flexible enough to allow inclusion of additional identification.
2. It facilitates the evaluation of client care.
3. It locates records in real time for timely retrieval of information.
4. It is easily reconfigured to accommodate network changes.
5. It can grow to fit an organization of any size.

Correct Answer: 1,3,4,5

Rationale 1: Key features of an effective MPI are: locates records in real time for timely retrieval of information, is flexible enough to allow inclusion of additional identification, is easily reconfigured to accommodate network changes, and can grow to fit an organization of any size. Facilitating the evaluation of client care would apply to NANDA, NIC, and NOC.

Rationale 2: Key features of an effective MPI are: locates records in real time for timely retrieval of information, is flexible enough to allow inclusion of additional identification, is easily reconfigured to accommodate network changes, and can grow to fit an organization of any size. Facilitating the evaluation of client care would apply to NANDA, NIC, and NOC.

Rationale 3: Key features of an effective MPI are: locates records in real time for timely retrieval of information, is flexible enough to allow inclusion of additional identification, is

easily reconfigured to accommodate network changes, and can grow to fit an organization of any size. Facilitating the evaluation of client care would apply to NANDA, NIC, and NOC.

Rationale 4: Key features of an effective MPI are: locates records in real time for timely retrieval of information, is flexible enough to allow inclusion of additional identification, is easily reconfigured to accommodate network changes, and can grow to fit an organization of any size. Facilitating the evaluation of client care would apply to NANDA, NIC, and NOC.

Rationale 5: Key features of an effective MPI are: locates records in real time for timely retrieval of information, is flexible enough to allow inclusion of additional identification, is easily reconfigured to accommodate network changes, and can grow to fit an organization of any size. Facilitating the evaluation of client care would apply to NANDA, NIC, and NOC.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCMA

The term *interoperability* is used when discussing the large scale electronic exchange of health care information across enterprises for the purpose of accessing and maintaining longitudinal health records. The term *interoperability* is understood to mean which of the following?

Standard Text: Select all that apply.

1. Has the ability to exchange the structure of the data, but not the meaning of data
2. Has the ability to exchange the structure of data and meaning of data
3. Has the ability to exchange the meaning of data, but not the structure of data
4. Is the ability of two entities, whether human or machine, to exchange and use data
5. It is accurate to use the term *interoperability* interchangeably with the term *interface*

Correct Answer: 2,4

Rationale 1: The structure and meaning of the data can both be exchanged. Interoperability is the ability of two entities, whether human or machine, to exchange and predictably use data or information while retaining the original meaning of that data. It is inaccurate to use the terms

interface and *interoperability* interchangeably. The interface engine routes information from one system to another but stops short of enabling the second system to understand and use that information. Most discussions that involve the large scale electronic exchange of health care information across enterprises for the purpose of accessing and maintaining longitudinal health records speak of interoperability.

Rationale 2: The structure and meaning of the data can both be exchanged. Interoperability is the ability of two entities, whether human or machine, to exchange and predictably use data or information while retaining the original meaning of that data. It is inaccurate to use the terms *interface* and *interoperability* interchangeably. The interface engine routes information from one system to another but stops short of enabling the second system to understand and use that information. Most discussions that involve the large scale electronic exchange of health care information across enterprises for the purpose of accessing and maintaining longitudinal health records speak of interoperability.

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Rationale 4: The structure and meaning of the data can both be exchanged. Interoperability is the ability of two entities, whether human or machine, to exchange and predictably use data or information while retaining the original meaning of that data. It is inaccurate to use the terms *interface* and *interoperability* interchangeably. The interface engine routes information from one system to another but stops short of enabling the second system to understand and use that information. Most discussions that involve the large scale electronic exchange of health care information across enterprises for the purpose of accessing and maintaining longitudinal health records speak of interoperability.

Rationale 5: The structure and meaning of the data can both be exchanged. Interoperability is the ability of two entities, whether human or machine, to exchange and predictably use data or information while retaining the original meaning of that data. It is inaccurate to use the terms *interface* and *interoperability* interchangeably. The interface engine routes information from one system to another but stops short of enabling the second system to understand and use that information. Most discussions that involve the large scale electronic exchange of health care information across enterprises for the purpose of accessing and maintaining longitudinal health records speak of interoperability.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 7

Type: MCMA

What are the benefits of data integration?

Standard Text: Select all that apply.

1. Potential for improved remote access of clinical data from various systems
2. Trend analysis of financial and clinical data
3. Encouraging the use of systems customized to meet department specifications
4. Development of a computer-based patient record
5. Facilitation of data collection for accreditation purposes

Correct Answer: 1,2,4,5

Rationale 1: Data integration benefits include: development of a computer-based patient record; trend analysis of financial and clinical data; potential for improved remote access of clinical data from various systems; and facilitation of data collection for accreditation purposes. Integration is a necessary component for the development of the electronic health record and for integrated delivery systems. The use of systems that are highly customized to meet individual department specifications is discouraged because it complicates the integration process.

Rationale 2: Data integration benefits include: development of a computer-based patient record; trend analysis of financial and clinical data; potential for improved remote access of clinical data from various systems; and facilitation of data collection for accreditation purposes. Integration is a necessary component for the development of the electronic health record and for integrated delivery systems. The use of systems that are highly customized to meet individual department specifications is discouraged because it complicates the integration process.

Rationale 3: Data integration benefits include: development of a computer-based patient record; trend analysis of financial and clinical data; potential for improved remote access of clinical data from various systems; and facilitation of data collection for accreditation purposes. Integration is a necessary component for the development of the electronic health record and for integrated delivery systems. The use of systems that are highly customized to meet individual department specifications is discouraged because it complicates the integration process.

Rationale 4: Data integration benefits include: development of a computer-based patient record; trend analysis of financial and clinical data; potential for improved remote access of clinical data

from various systems; and facilitation of data collection for accreditation purposes. Integration is a necessary component for the development of the electronic health record and for integrated delivery systems. The use of systems that are highly customized to meet individual department specifications is discouraged because it complicates the integration process.

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Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCMA

Which of the following answers are factors that slow systems integration?

Standard Text: Select all that apply.

1. Vendors' false claims that their information systems are interoperable with other systems
2. Unrealistic institutional timetable set due to a lack of understanding of the complexity of the integration process.
3. Vendors who do not provide enough support and assistance to facilitate the integration efforts.
4. Existing systems are insufficiently documented.
5. Merged institutions do not agree on which systems to use.

Correct Answer: 1,2,3,4,5

Rationale 1: Factors that slow systems integration include:

1. Vendors often falsely promise that their information systems are interoperable with other systems.
2. Unrealistic institutional timetable set due to a lack of understanding of the complexity of the integration process.

3. User specifications change as the integration process proceeds; users frequently request additional capabilities or change their minds regarding initial specifications.
4. Vendors may not provide enough support and assistance to facilitate the integration efforts.
5. Existing systems are insufficiently documented which is imperative for achieving successful integration.
6. Merged institutions may not agree on which systems to use which means there are more systems to integrate.
7. All components of a vendor's products may not work together.

Rationale 2: Factors that slow systems integration include:

1. Vendors often falsely promise that their information systems are interoperable with other systems.
2. Unrealistic institutional timetable set due to a lack of understanding of the complexity of the integration process.
3. User specifications change as the integration process proceeds; users frequently request additional capabilities or change their minds regarding initial specifications.
4. Vendors may not provide enough support and assistance to facilitate the integration efforts.
5. Existing systems are insufficiently documented which is imperative for achieving successful integration.
6. Merged institutions may not agree on which systems to use which means there are more systems to integrate.
7. All components of a vendor's products may not work together.

Rationale 3: Factors that slow systems integration include:

1. Vendors often falsely promise that their information systems are interoperable with other systems.
2. Unrealistic institutional timetable set due to a lack of understanding of the complexity of the integration process.
3. User specifications change as the integration process proceeds; users frequently request additional capabilities or change their minds regarding initial specifications.
4. Vendors may not provide enough support and assistance to facilitate the integration efforts.
5. Existing systems are insufficiently documented which is imperative for achieving successful integration.
6. Merged institutions may not agree on which systems to use which means there are more systems to integrate.
7. All components of a vendor's products may not work together.

Rationale 4: Factors that slow systems integration include:

1. Vendors often falsely promise that their information systems are interoperable with other systems.
2. Unrealistic institutional timetable set due to a lack of understanding of the complexity of the integration process.
3. User specifications change as the integration process proceeds; users frequently request additional capabilities or change their minds regarding initial specifications.
4. Vendors may not provide enough support and assistance to facilitate the integration efforts.
5. Existing systems are insufficiently documented which is imperative for achieving successful

integration.

6. Merged institutions may not agree on which systems to use which means there are more systems to integrate.

7. All components of a vendor's products may not work together.

Rationale 5: Factors that slow systems integration include:

1. Vendors often falsely promise that their information systems are interoperable with other systems.

2. Unrealistic institutional timetable set due to a lack of understanding of the complexity of the integration process.

3. User specifications change as the integration process proceeds; users frequently request additional capabilities or change their minds regarding initial specifications.

4. Vendors may not provide enough support and assistance to facilitate the integration efforts.

5. Existing systems are insufficiently documented which is imperative for achieving successful integration.

6. Merged institutions may not agree on which systems to use which means there are more systems to integrate.

7. All components of a vendor's products may not work together.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 9

Type: MCSA

A female client goes to the clinic's office complaining of a cough and fever. She gives her name and date of birth at the admitting registration desk. The registration clerk verifies her current address and asks if she is still covered by IVY insurance. Client responds yes, is given a chart with the number 3948JAV04830 on it, and is directed to the physician's exam room. The physician orders a chest x-ray. The client is sent to the radiology department and checks in with the registration desk. The registration clerk verifies her current address and asks if she is still covered by IVY insurance. The client responds yes and is given an order sheet with the number 3948JAV04830 on it. The admitting office for the clinic and the radiology office use different information systems. The process depicted in this scenario illustrates the use of which of the following?

1. Uniform language

2. Master patient index

3. Data dictionary

4. Clinical data repository

Correct Answer: 2

Rationale 1: This scenario is an example of the use of the MPI of patient identifiers. Both information systems, though different, used the same global identification number for the client and allowed for client identification at the point of care. The data dictionary defines terminology, the clinical data repository is a database where collective data from all information systems are stored, and many efforts to develop uniform languages are under way in the health care arena.

Rationale 2: This scenario is an example of the use of the MPI of patient identifiers. Both information systems, though different, used the same global identification number for the client and allowed for client identification at the point of care. The data dictionary defines terminology, the clinical data repository is a database where collective data from all information systems are stored, and many efforts to develop uniform languages are under way in the health care arena.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: MCSA

Which of the following is a classification system for surgical, diagnostic, and therapeutic procedures and is used for hospital billing and payer reimbursement?

1. NOC

2. CPT-4

3. NIC

4. NANDA

Correct Answer: 2

Rationale 1: CPT-4 is a classification system for surgical, diagnostic, and therapeutic procedures and is used for hospital billing and payer reimbursement.

Rationale 2: CPT-4 is a classification system for surgical, diagnostic, and therapeutic procedures and is used for hospital billing and payer reimbursement.

Rationale 3: CPT-4 is a classification system for surgical, diagnostic, and therapeutic procedures and is used for hospital billing and payer reimbursement. NIC categorizes nursing interventions based on clinical judgment.

Rationale 4: NANDA is a classification system used for nursing diagnoses.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: MCMA

The role of the nurse in the system integration efforts should include which of the following?

Standard Text: Select all that apply.

1. Ensuring that data will be collected in only one system and shared as needed among others
2. Involvement in the formation and maintenance of the electronic health record
3. Promoting the development and maintenance of archetypes
4. Determining measures to assure the quality of data
5. Identifying and defining data elements

Correct Answer: 1,2,4,5

Rationale 1: The role the nurse in the system integration efforts should include the formation and maintenance of the electronic health record; ensuring that data will be collected in only one system and shared among all other systems requiring it (eliminates redundant efforts while ensuring data integrity); identifying and defining data elements; and assuring the quality of data. Developing archetypes and creating communications standards would not be appropriate for nurses.

Rationale 2: The role the nurse in the system integration efforts should include the formation and maintenance of the electronic health record; ensuring that data will be collected in only one system and shared among all other systems requiring it (eliminates redundant efforts while ensuring data integrity); identifying and defining data elements; and assuring the quality of data. Developing archetypes and creating communications standards would not be appropriate for nurses.

Rationale 3: The role the nurse in the system integration efforts should include the formation and maintenance of the electronic health record; ensuring that data will be collected in only one system and shared among all other systems requiring it (eliminates redundant efforts while ensuring data integrity); identifying and defining data elements; and assuring the quality of data. Developing archetypes and creating communications standards would not be appropriate for nurses.

Rationale 4: The role the nurse in the system integration efforts should include the formation and maintenance of the electronic health record; ensuring that data will be collected in only one system and shared among all other systems requiring it (eliminates redundant efforts while ensuring data integrity); identifying and defining data elements; and assuring the quality of data. Developing archetypes and creating communications standards would not be appropriate for nurses.

Rationale 5: The role the nurse in the system integration efforts should include the formation and maintenance of the electronic health record; ensuring that data will be collected in only one system and shared among all other systems requiring it (eliminates redundant efforts while ensuring data integrity); identifying and defining data elements; and assuring the quality of data. Developing archetypes and creating communications standards would not be appropriate for nurses.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: MCSA

One step in the integration process is the development of a uniform definition of terms, or language. The American Nurses Association sponsors the Congress of Nursing Practice Steering Committee on Databases. Which of the following is a primary goal of this steering committee?

1. Categorize interventions that nurses carry out.
2. Measure client outcome position.
3. Develop a mapping system to link various classification schemes.
4. Identify client care problems that nurses treat independently.

Correct Answer: 3

Rationale 1: A primary goal of the Congress of Nursing Practice Steering Committee on Databases is to develop a mapping system to link the various classification schemes. This would allow for the development of national data sets for use by nursing. The following are actually special classification systems: categorize interventions that nurses carry out is NIC; identify client care problems that nurses treat independently is NANDA; measure client outcome is NOC.

Rationale 2: A primary goal of the Congress of Nursing Practice Steering Committee on Databases is to develop a mapping system to link the various classification schemes. This would allow for the development of national data sets for use by nursing. The following are actually special classification systems: categorize interventions that nurses carry out is NIC; identify client care problems that nurses treat independently is NANDA; measure client outcome is NOC.

Rationale 3: Developing a mapping system to link the various classification schemes would allow for the development of national data sets for use by nursing. The following are actually special classification systems: categorize interventions that nurses carry out is NIC; identify client care problems that nurses treat independently is NANDA; measure client outcome is NOC.

Rationale 4: A primary goal of the Congress of Nursing Practice Steering Committee on Databases is to develop a mapping system to link the various classification schemes. This would allow for the development of national data sets for use by nursing. The following are actually special classification systems: categorize interventions that nurses carry out is NIC; identify client care problems that nurses treat independently is NANDA; measure client outcome is NOC.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 13

Type: MCSA

Web-based tools can provide benefits of an alternative method for obtaining patient information from diverse information systems. Which of the following is accurate regarding recent advances toward interoperability?

1. The framework has been built and is in place.
2. National priorities will be set within the next five years.
3. Data exchange standards need to be developed.
4. Interoperability of electronic health data will be costly.

Correct Answer: 4

Rationale 1: Interoperability of electronic health data will be costly and much work lies ahead. Recently though, data exchange standards have been refined, national priorities have been set, and work has started on building the framework needed to make interoperability of electronic health data a reality. This will not be easy or quick but the promised benefits will be immeasurable.

Rationale 2: Interoperability of electronic health data will be costly and much work lies ahead. Recently though, data exchange standards have been refined, national priorities have been set, and work has started on building the framework needed to make interoperability of electronic health data a reality. This will not be easy or quick but the promised benefits will be immeasurable.

Rationale 3: Interoperability of electronic health data will be costly and much work lies ahead. Recently though, data exchange standards have been refined, national priorities have been set, and work has started on building the framework needed to make interoperability of electronic health data a reality. This will not be easy or quick but the promised benefits will be immeasurable.

Rationale 4: Interoperability of electronic health data will indeed be costly and much work lies ahead. Recently though, data exchange standards have been refined, national priorities have been set, and work has started on building the framework needed to make interoperability of electronic health data a reality. This will not be easy or quick but the promised benefits will be immeasurable.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: MCMA

Interface engines work in the background and are not seen by the user. This technology allows applications to interact with hardware and other applications. Which of the following are considered benefits associated with the use of interface engines?

Standard Text: Select all that apply.

1. Improves timeliness and availability of critical administrative and clinical data
2. Improves data quality because of data mapping and consistent use of terms
3. Allows clients to select the best system for their needs
4. Preserves institutional investment in existing systems
5. Preserves institutional investment in existing systems

Correct Answer: 1,2,3,4,5

Rationale 1: 1. Improves timeliness and availability of critical administrative and clinical data
2. Decreases integration costs by providing an alternative to customized point-to-point interface application programming
3. Improves data quality because of data mapping and consistent use of terms
4. Allows clients to select the best system for their needs
5. Preserves institutional investment in existing systems
6. Simplifies the administration of health care data processing
7. Simplifies systems integration efforts
8. Shortens the time required for integration
9. Improves management of care, the financial tracking of care rendered, and efficacy of treatment

Rationale 2: 1. Improves timeliness and availability of critical administrative and clinical data
2. Decreases integration costs by providing an alternative to customized point-to-point interface application programming
3. Improves data quality because of data mapping and consistent use of terms
4. Allows clients to select the best system for their needs
5. Preserves institutional investment in existing systems

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Rationale 3: 1. Improves timeliness and availability of critical administrative and clinical data
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Rationale 4: 1. Improves timeliness and availability of critical administrative and clinical data
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3. Improves data quality because of data mapping and consistent use of terms
4. Allows clients to select the best system for their needs
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Rationale 5: 1. Improves timeliness and availability of critical administrative and clinical data
2. Decreases integration costs by providing an alternative to customized point-to-point interface application programming
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4. Allows clients to select the best system for their needs
5. Preserves institutional investment in existing systems
6. Simplifies the administration of health care data processing
7. Simplifies systems integration efforts
8. Shortens the time required for integration
9. Improves management of care, the financial tracking of care rendered, and efficacy of treatment

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 15

Type: MCMA

Integration is a massive project within institutions and enterprises. It generally requires more time and effort than originally projected. Which of the following are factors that may slow down the integration process?

Standard Text: Select all that apply.

1. Unrealistic institutional timetable
2. Lack of agreement among merged institution
3. Insufficient documentation
4. Changing user specifications
5. Lack of vendor support

Correct Answer: 1,2,3,4,5

Rationale 1: An unrealistic institutional timetable is often based on a lack of understanding of the complexity of the integration process.

Rationale 2: Individual facilities within a merged enterprise may wish to continue use of their existing systems. This means there are more systems to integrate.

Rationale 3: Information regarding existing systems and related programming is imperative for achieving successful integration.

Rationale 4: As the integration process proceeds, users frequently request additional capabilities or change their minds regarding initial specifications.

Rationale 5: Vendors may not provide enough support and assistance to facilitate the integration efforts

Chapter 25 The Art of Caring in Technology-Laden Environments

Question 1

Type: MCSA

Which of the following terms is defined as structured and controlled languages that have been developed according to terminology development guidelines?

1. Standardized terminologies
2. Health care standards
3. Health care terminology
4. Health information standards

Correct Answer: 1

Rationale 1: Standardized terminologies are structured and controlled languages that have been developed according to terminology development guidelines and have been approved by an authoritative body (HIMSS, 2006).

Rationale 2: Standardized terminologies are structured and controlled languages that have been developed according to terminology development guidelines and have been approved by an authoritative body (HIMSS, 2006).

Rationale 3: Standardized terminologies are structured and controlled languages that have been developed according to terminology development guidelines and have been approved by an authoritative body (HIMSS, 2006).

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Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: MCSA

The use of which of the following is a means of ensuring the data collection is accurate and valid?

1. Standardized terminology

2. Tablets
3. Bar coding
4. Handheld devices

Correct Answer: 1

Rationale 1: The use of standardized terminology is a means of ensuring the data collection is accurate and valid. Standardized terminology is essential for successful development and implementation of an EHR. Terminology is required to represent, communicate, exchange, manage, and report data, information, and knowledge. It enables safe, patient-centric, high quality health care that optimizes data collection for the measurement of patient outcomes.

Rationale 2: The use of standardized terminology is a means of ensuring the data collection is accurate and valid. Standardized terminology is essential for successful development and implementation of an EHR. Terminology is required to represent, communicate, exchange, manage, and report data, information, and knowledge. It enables safe, patient-centric, high quality health care that optimizes data collection for the measurement of patient outcomes.

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Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: FIB

The use of standardized nursing terminology will result in better _____ among the interdisciplinary team.

Standard Text:

Correct Answer: communication

Rationale : The use of coded standardized terminology for nurses is vital to bedside nursing and to the nursing profession. It is essential because it enables consistent use of terminologies across clinical settings and specialists. The use of standardized nursing terminology will result in better communication to the interdisciplinary team, increase the visibility of nursing interventions, enhance data collection used to evaluate and analyze patient care outcomes, and support greater adherence to standards of care. Further, the use of standardized nursing terminology can be used to assess nursing competency. Health care facilities are required to demonstrate the competency of staff for the Joint Commission. The nursing interventions delineated in standardized terminologies can be used as a means by which to assess nurse competency in the performance of these interventions (Rutherford, 2008).

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: MCMA

The American Nurses Association established criteria for recognizing standardized terminologies. The terminologies must meet established criteria to be approved. Which of the following are instrumental in the approval process?

Standard Text: Select all that apply.

1. Outcome identification
2. Diagnosis
3. Problem solving
4. Decision making
5. Nursing process data elements

Correct Answer: 1,2,5

Rationale 1: Terminologies must be used to support nursing practice reflecting the nursing process. The nursing process data elements include assessment, diagnosis, outcome identification (goal), planning, implementation (interventions), and evaluation. The terminologies have to contain concepts that are clear and unambiguous with a unique identifier. The terminology developer should have an outlined maintenance and submission process.

Rationale 2: Terminologies must be used to support nursing practice reflecting the nursing process. The nursing process data elements include assessment, diagnosis, outcome identification (goal), planning, implementation (interventions), and evaluation. The terminologies have to contain concepts that are clear and unambiguous with a unique identifier. The terminology developer should have an outlined maintenance and submission process.

Rationale 3: Terminologies must be used to support nursing practice reflecting the nursing process. The nursing process data elements include assessment, diagnosis, outcome identification (goal), planning, implementation (interventions), and evaluation. The terminologies have to contain concepts that are clear and unambiguous with a unique identifier. The terminology developer should have an outlined maintenance and submission process.

Rationale 4: Terminologies must be used to support nursing practice reflecting the nursing process. The nursing process data elements include assessment, diagnosis, outcome identification (goal), planning, implementation (interventions), and evaluation. The terminologies have to contain concepts that are clear and unambiguous with a unique identifier. The terminology developer should have an outlined maintenance and submission process.

Rationale 5: Terminologies must be used to support nursing practice reflecting the nursing process. The nursing process data elements include assessment, diagnosis, outcome identification (goal), planning, implementation (interventions), and evaluation. The terminologies have to contain concepts that are clear and unambiguous with a unique identifier. The terminology developer should have an outlined maintenance and submission process.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCMA

Which of the following terminologies have been approved by the American Nurses Association?

Standard Text: Select all that apply.

1. Nursing Management Minimum Data Set (NMMDS)

2. Nursing Minimum Data Set (NMDS)
3. Alternative Billing Codes (ABC Codes)
4. Clinical Care Classification (CCC)
5. North American Nursing Diagnosis International (NANDA-I)

Correct Answer: 1,2,3,4,5

Rationale 1: The Nursing Management Minimum Data Set (NMMDS), Nursing Minimum Data Set (NMDS), Alternative Billing Codes (ABC Codes), North American Nursing Diagnosis International (NANDA-I), and Clinical Care Classification (CCC) are data sets approved by the ANA.

Rationale 2: The Nursing Management Minimum Data Set (NMMDS), Nursing Minimum Data Set (NMDS), Alternative Billing Codes (ABC Codes), North American Nursing Diagnosis International (NANDA-I), and Clinical Care Classification (CCC) are data sets approved by the ANA.

Rationale 3: The Nursing Management Minimum Data Set (NMMDS), Nursing Minimum Data Set (NMDS), Alternative Billing Codes (ABC Codes), North American Nursing Diagnosis International (NANDA-I), and Clinical Care Classification (CCC) are data sets approved by the ANA.

Rationale 4: The Nursing Management Minimum Data Set (NMMDS), Nursing Minimum Data Set (NMDS), Alternative Billing Codes (ABC Codes), North American Nursing Diagnosis International (NANDA-I), and Clinical Care Classification (CCC) are data sets approved by the ANA.

Rationale 5: The Nursing Management Minimum Data Set (NMMDS), Nursing Minimum Data Set (NMDS), Alternative Billing Codes (ABC Codes), North American Nursing Diagnosis International (NANDA-I), and Clinical Care Classification (CCC) are data sets approved by the ANA.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCSA

Which of the following is a nursing classification designed to document the six steps of the nursing process across the care continuum?

1. International Classification of Nursing Practice (ICNP)
2. NANDA International Nursing Diagnoses
3. NANDA-I Taxonomy II
4. Clinical Care Classification (CCC) System

Correct Answer: 4

Rationale 1: The Clinical Care Classification (CCC) System is a nursing classification designed to document the six steps of the nursing process across the care continuum (Saba, 2007). It facilitates patient care documentation at the point of care. CCC nursing interventions consist of 198 categories classified into 72 major categories and 126 subcategories that represent interventions, procedures, treatments, and activities. CCC is an open source terminology with no license fees. The terminology tables can be freely downloaded from www.sabacare.com. It is copyrighted and use of CCC within an EHR requires written permission.

Rationale 2: The Clinical Care Classification (CCC) System is a nursing classification designed to document the six steps of the nursing process across the care continuum (Saba, 2007). It facilitates patient care documentation at the point of care. CCC nursing interventions consist of 198 categories classified into 72 major categories and 126 subcategories that represent interventions, procedures, treatments, and activities. CCC is an open source terminology with no license fees. The terminology tables can be freely downloaded from www.sabacare.com. It is copyrighted and use of CCC within an EHR requires written permission.

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Rationale 4: The Clinical Care Classification (CCC) System is a nursing classification designed to document the six steps of the nursing process across the care continuum (Saba, 2007). It facilitates patient care documentation at the point of care. CCC nursing interventions consist of 198 categories classified into 72 major categories and 126 subcategories that represent interventions, procedures, treatments, and activities. CCC is an open source terminology with no license fees. The terminology tables can be freely downloaded from www.sabacare.com. It is copyrighted and use of CCC within an EHR requires written permission.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 7

Type: MCMA

Terminologies can be incorporated within the electronic health record (EHR) thereby improving practice. Which of the following are considered uses for this technology in health care?

Standard Text: Select all that apply.

1. Classification

2. Reference

3. Point of care

4. Coding

5. Denial of claims

Correct Answer: 2,3

Rationale 1: Terminologies are used two different ways within EHR systems— first, as a reference terminology and second, as a point-of-care terminology. A reference terminology consists of a set of concepts with definitional relationships. A point-of-care terminology, frequently referred to as an interface terminology, is what the clinicians see on the screen and consists of terms with which clinicians are familiar.

Rationale 2: Terminologies are used two different ways within EHR systems—first, as a reference terminology and second, as a point-of-care terminology. A reference terminology consists of a set of concepts with definitional relationships. A point-of-care terminology, frequently referred to as an interface terminology, is what the clinicians see on the screen and consists of terms with which clinicians are familiar.

Rationale 3: Terminologies are used two different ways within EHR systems—first, as a reference terminology and second, as a point-of-care terminology. A reference terminology consists of a set of concepts with definitional relationships. A point-of-care terminology, frequently referred to as an interface terminology, is what the clinicians see on the screen and consists of terms with which clinicians are familiar.

Rationale 4: Terminologies are used two different ways within EHR systems—first, as a reference terminology and second, as a point-of-care terminology. A reference terminology consists of a set of concepts with definitional relationships. A point-of-care terminology, frequently referred to as an interface terminology, is what the clinicians see on the screen and consists of terms with which clinicians are familiar.

Rationale 5: Terminologies are used two different ways within EHR systems—first, as a reference terminology and second, as a point-of-care terminology. A reference terminology consists of a set of concepts with definitional relationships. A point-of-care terminology, frequently referred to as an interface terminology, is what the clinicians see on the screen and consists of terms with which clinicians are familiar.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: FIB

_____ is a globally recognized controlled health care vocabulary that provides a common language for electronic health applications.

Standard Text:

Correct Answer: SNOMED CT

Rationale : SNOMED CT is a globally recognized controlled health care vocabulary that provides a common language for electronic health applications. SNOMED CT is SNOMED CT enables a consistent way of capturing, sharing, and aggregating health data across specialties and sites of care. The use of SNOMED CT within electronic health records provides interoperable data collection that can be analyzed and used in the implementation of evidence-based practice, decision support rules, reporting of quality measures and administrative billing.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 9

Type: MCSA

The ANA has recognized the Omaha System and integrated the terminology into SNOMED CT. Which of the following best represents the value of the Omaha System?

1. The Omaha System is a problem classification scheme.
2. The Omaha System offers outcome labels.
3. The Omaha System provides nursing diagnoses.
4. The Omaha System provides diagnoses and intervention.

Correct Answer: 1

Rationale 1: The Omaha System is a problem classification scheme that identifies signs and symptoms, clinical findings, intervention scheme interventions, and procedures.

Rationale 2: The Omaha System is a problem classification scheme that identifies signs and symptoms, clinical findings, intervention scheme interventions, and procedures. Nursing Outcomes Classification offers outcome labels.

Rationale 3: The Omaha System is a problem classification scheme that identifies signs and symptoms, clinical findings, intervention scheme interventions, and procedures. NANDA International (NANDA-I) provides nursing diagnoses.

Rationale 4: The Omaha System is a problem classification scheme that identifies signs and symptoms, clinical findings, intervention scheme interventions, and procedures. Clinical Care Classification (CCC) provides diagnoses and interventions.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: MCSA

During the orientation to the renal oncology unit, the head nurse demonstrated the usefulness of the Clinical Care Classification (CCC) System. Throughout the demonstration, the head nurse

discussed the value of the system to patient care. Which of the following statements best reflects the usefulness of CCC?

1. The Clinical Care Classification (CCC) System facilitates the collection and dissemination of lab values.
2. The Clinical Care Classification (CCC) System offers improved outcomes.
3. The Clinical Care Classification (CCC) System facilitates patient care documentation at the bedside.
4. The Clinical Care Classification (CCC) System discloses standardized nursing terminologies.

Correct Answer: 3

Rationale 1: The Clinical Care Classification (CCC) System is a nursing classification designed to document the six steps of the nursing process across the care continuum (Saba, 2007). It facilitates patient care documentation at the point of care.

Rationale 2: The Clinical Care Classification (CCC) System is a nursing classification designed to document the six steps of the nursing process across the care continuum (Saba, 2007). It facilitates patient care documentation at the point of care.

Rationale 3: The Clinical Care Classification (CCC) System is a nursing classification designed to document the six steps of the nursing process across the care continuum (Saba, 2007). It facilitates patient care documentation at the point of care.

Rationale 4: The Clinical Care Classification (CCC) System is a nursing classification designed to document the six steps of the nursing process across the care continuum (Saba, 2007). It facilitates patient care documentation at the point of care.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: MCSA

Which of the following can be used to document the elements of the nursing process within the care plan?

1. The Omaha System
2. The Perioperative Nursing Data Set
3. Personal health record
4. NANDA-I

Correct Answer: 4

Rationale 1: NANDA-I is used to document nursing diagnoses within all settings and across the care continuum. The coding system can be used within the EHR. NANDA-I has been linked to the NIC interventions and NOC outcomes.

Rationale 2: NANDA-I is used to document nursing diagnoses within all settings and across the care continuum. The coding system can be used within the EHR. NANDA-I has been linked to the NIC interventions and NOC outcomes.

Rationale 3: NANDA-I is used to document nursing diagnoses within all settings and across the care continuum. The coding system can be used within the EHR. NANDA-I has been linked to the NIC interventions and NOC outcomes.

Rationale 4: NANDA-I is used to document nursing diagnoses within all settings and across the care continuum. The coding system can be used within the EHR. NANDA-I has been linked to the NIC interventions and NOC outcomes.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: FIB

_____ is standardized classification of interventions that describes the activities that nurses perform.

Standard Text:

Correct Answer: The Nursing Interventions Classification (NIC)

Rationale : The Nursing Interventions Classification (NIC) is standardized classification of interventions that describes the activities that nurses perform. NIC is used in all care settings. An intervention is described as “any treatment, based upon clinical judgment and knowledge, that a nurse performs to enhance patient/client outcomes” (The University of Iowa, 2010a). The current NIC edition (2008) has 542 interventions (Bulechek, Butcher, & Dochterman, 2008). The interventions are grouped together by 30 classes and seven domains. Each intervention includes a label name, a definition, a unique code, and associated nursing activities.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 13

Type: MCSA

Which of the following answers depicts the use of the ANA recognized nursing classifications to codify data?

1. The ANA recognized nursing classifications codify data used during the nursing process such as assessments, nurse sensitive problems, interventions, and outcomes.
2. The ANA recognized nursing classifications codify data is used to support input devices.
3. The ANA recognized nursing classifications align nursing outcomes.
4. The ANA recognized nursing classifications codify data for retrieval of billing invoices.

Correct Answer: 1

Rationale 1: The ANA recognized nursing classifications codify data used during the nursing process such as assessments, nurse sensitive problems, interventions, and outcomes.

Rationale 2: The ANA recognized nursing classifications codify data used during the nursing process such as assessments, nurse sensitive problems, interventions, and outcomes.

Rationale 3: The American Nurses Association (ANA), through the Committee for Nursing Practice Information Infrastructure (CNPII), recognizes terminologies appropriate for use by nursing (Warren & Bakken, 2002). Terminologies must meet defined criteria for approval. The criteria specify that terminologies must be used to support nursing practice reflecting the nursing process. The nursing process data elements include assessment, diagnosis, outcome identification

(goal), planning, implementation (interventions), and evaluation. The terminologies have to contain concepts that are clear and unambiguous with a unique identifier.

Rationale 4: The American Nurses Association (ANA), through the Committee for Nursing Practice Information Infrastructure (CNPII), recognizes terminologies appropriate for use by nursing (Warren & Bakken, 2002). Terminologies must meet defined criteria for approval. The criteria specify that terminologies must be used to support nursing practice reflecting the nursing process. The nursing process data elements include assessment, diagnosis, outcome identification (goal), planning, implementation (interventions), and evaluation. The terminologies have to contain concepts that are clear and unambiguous with a unique identifier.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: MCSA

Mr. Gonzalez is scheduled to undergo a hip replacement after he slipped on an icy step. During the preoperative phase, the nurse begins to enter the assessment findings into the database. Which of the following standardized terminologies will the nurse most likely use?

1. The Omaha System
2. The PeriOperative Nursing Data Set (PNDS)
3. North American Nursing Diagnosis International (NANDA-I)
4. International Classification of Nursing Practice (ICNP)

Correct Answer: 2

Rationale 1: The PeriOperative Nursing Data Set (PNDS), developed by the Association of periOperative Registered Nurses (AORN), is a standardized perioperative nursing vocabulary that provides nurses a clear, precise, and universal language for clinical problems and surgical treatments. The AORN's initial goal was to develop a unified language for nursing care that could be systematically quantified, coded, and easily captured in a computerized format in the perioperative setting (AORN, 2002, p. 13).

Rationale 2: The PeriOperative Nursing Data Set (PNDS), developed by the Association of periOperative Registered Nurses (AORN), is a standardized perioperative nursing vocabulary

that provides nurses a clear, precise, and universal language for clinical problems and surgical treatments. The AORN's initial goal was to develop a unified language for nursing care that could be systematically quantified, coded, and easily captured in a computerized format in the perioperative setting (AORN, 2002, p. 13).

Rationale 3: The PeriOperative Nursing Data Set (PNDS), developed by the Association of periOperative Registered Nurses (AORN), is a standardized perioperative nursing vocabulary that provides nurses a clear, precise, and universal language for clinical problems and surgical treatments. The AORN's initial goal was to develop a unified language for nursing care that could be systematically quantified, coded, and easily captured in a computerized format in the perioperative setting (AORN, 2002, p. 13).

Rationale 4: The PeriOperative Nursing Data Set (PNDS), developed by the Association of periOperative Registered Nurses (AORN), is a standardized perioperative nursing vocabulary that provides nurses a clear, precise, and universal language for clinical problems and surgical treatments. The AORN's initial goal was to develop a unified language for nursing care that could be systematically quantified, coded, and easily captured in a computerized format in the perioperative setting (AORN, 2002, p. 13).

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 15

Type: MCMA

Clinical terminologies consist of concepts that support which of the following facets of health care?

Standard Text: Select all that apply.

1. Diagnostic studies
2. History and physical examinations
3. Visit notes
4. Ancillary department information
5. Outcomes measures

Correct Answer: 1,2,3,4,5

Rationale 1: Clinical terminology enables the capture of data at the level of detail necessary for patient care documentation and is used to describe health conditions and health care activities (ISO/IEC 17115, 2007). Clinical terminologies consist of concepts that support diagnostic studies, history and physical examinations, visit notes, ancillary department information, nursing notes, assessments, flow sheets, vital signs, and outcome measures. A clinical terminology can be mapped to a broader classification system for administrative, regulatory, and fiscal reporting requirements (Giannangelo, 2010, p. 3).

Rationale 2: Clinical terminology enables the capture of data at the level of detail necessary for patient care documentation and is used to describe health conditions and health care activities (ISO/IEC 17115, 2007). Clinical terminologies consist of concepts that support diagnostic studies, history and physical examinations, visit notes, ancillary department information, nursing notes, assessments, flow sheets, vital signs, and outcome measures. A clinical terminology can be mapped to a broader classification system for administrative, regulatory, and fiscal reporting requirements (Giannangelo, 2010, p. 3).

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Rationale 4: Clinical terminology enables the capture of data at the level of detail necessary for patient care documentation and is used to describe health conditions and health care activities (ISO/IEC 17115, 2007). Clinical terminologies consist of concepts that support diagnostic studies, history and physical examinations, visit notes, ancillary department information, nursing notes, assessments, flow sheets, vital signs, and outcome measures. A clinical terminology can be mapped to a broader classification system for administrative, regulatory, and fiscal reporting requirements (Giannangelo, 2010, p. 3).

Rationale 5: Clinical terminology enables the capture of data at the level of detail necessary for patient care documentation and is used to describe health conditions and health care activities (ISO/IEC 17115, 2007). Clinical terminologies consist of concepts that support diagnostic studies, history and physical examinations, visit notes, ancillary department information, nursing notes, assessments, flow sheets, vital signs, and outcome measures. A clinical terminology can be mapped to a broader classification system for administrative, regulatory, and fiscal reporting requirements (Giannangelo, 2010, p. 3).

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 16

Type: MCSA

A classification system is used to categorize the details of the clinical encounter. Which of the following does a classification system not do?

1. Group data to determine costs and outcomes of treatment
2. Captures the level of detail necessary to document specific items at the point of care
3. Provides data to consumers on costs and outcomes of treatment options
4. Used in the collection and reporting of health statistics

Correct Answer: 2

Rationale 1: A classification system is used to categorize the details of the clinical encounter. It does not capture the level of detail necessary to document specific items at the point of care. Classifications consist of mutually exclusive categories that can be used for specific purposes. An example would be to group data to determine costs and outcomes of treatment. A classification system provides data to consumers on costs and outcomes of treatment options. They are used in the collection and reporting of health statistics. The International Classification of Diseases (ICD), which is a classification system, does not consist of definitions or defining relationships between terms.

Rationale 2: A classification system does not capture the level of detail necessary to document specific items at the point of care.

Rationale 3: A classification system is used to categorize the details of the clinical encounter. It does not capture the level of detail necessary to document specific items at the point of care. Classifications consist of mutually exclusive categories that can be used for specific purposes. An example would be to group data to determine costs and outcomes of treatment. A classification system provides data to consumers on costs and outcomes of treatment options. They are used in the collection and reporting of health statistics. The International Classification of Diseases (ICD), which is a classification system, does not consist of definitions or defining relationships between terms.

Rationale 4: A classification system is used to categorize the details of the clinical encounter. It does not capture the level of detail necessary to document specific items at the point of care. Classifications consist of mutually exclusive categories that can be used for specific purposes. An example would be to group data to determine costs and outcomes of treatment. A classification system provides data to consumers on costs and outcomes of treatment options.

They are used in the collection and reporting of health statistics. The International Classification of Diseases (ICD), which is a classification system, does not consist of definitions or defining relationships between terms.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 17

Type: MCSA

The Omaha System has a multitude of functions. The system can store data describing problems, symptoms, modifiers, interventions, and outcomes. One of the benefits of the stored data is which of the following?

1. Decreasing services to elderly
2. Allowing patient input of data
3. Researching quality and effectiveness
4. Decreasing time spent with data collection

Correct Answer: 3

Rationale 1: Researching quality and effectiveness leads to evidence-based practice models and decision support rules. Data can be sorted and compared, and analyzed. The result is meaningful use of data.

Rationale 2: Researching quality and effectiveness leads to evidence-based practice models and decision support rules. Data can be sorted and compared, and analyzed. The result is meaningful use of data.

Rationale 3: Researching quality and effectiveness leads to evidence-based practice models and decision support rules. Data can be sorted and compared, and analyzed. The result is meaningful use of data.

Rationale 4: Researching quality and effectiveness leads to evidence-based practice models and decision support rules. Data can be sorted and compared, and analyzed. The result is meaningful use of data.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 18

Type: MCMA

The use of SNOMED CT within electronic health records has multiple benefits. Which of the following are considered benefits of SNOMED CT?

Standard Text: Select all that apply.

1. Provides interoperable data collection that can be analyzed and used for evidence-based practice models
2. Provides interoperable data collection that can be analyzed and used for decision support rules
3. Provides interoperable data collection that can be analyzed and used in reporting quality measures
4. Provides interoperable data collection that can be analyzed and used for medication renewals
5. Provides interoperable data collection that can be analyzed and used for administrative billing

Chapter 26 Nursing Informatics and the Foundation of Knowledge

Question 1

Type: MCSA

The scientific study of the interaction between people, machines, and their work environments is which of the following?

1. Ergonomics
2. Human–computer interaction (HCI)
3. Human factors
4. Usability

Correct Answer: 3

Rationale 1: Ergonomics focuses on the physical design and implementation of equipment, tools and machines related to human safety, comfort, and convenience.

Rationale 2: HCI is the study of how people design, implement, evaluate, and use interactive computer systems.

Rationale 3: Human factors is the scientific study of the interaction between people, machines, and their work environments.

Rationale 4: Usability addresses specific issues of human performance in achieving specific goals during computer interactions within a particular context.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 2

Type: MCSA

Ergonomics focuses on which of the following?

1. The ability of the nurse to complete computer processing
2. Correct posture while keyboarding
3. Establishing protocols for benchmarking
4. The physical design for safety, comfort, and convenience

Correct Answer: 4

Rationale 1: Ergonomics is concerned with human performance as it relates to the physical characteristics of tools, systems and machines. Ergonomics focuses on designs for safety, comfort, and convenience.

Rationale 2: Ergonomics is concerned with human performance as it relates to the physical characteristics of tools, systems and machines. Ergonomics focuses on designs for safety, comfort, and convenience.

Rationale 3: Ergonomics is concerned with human performance as it relates to the physical characteristics of tools, systems and machines. Ergonomics focuses on designs for safety, comfort, and convenience.

Rationale 4: Ergonomics is concerned with human performance as it relates to the physical characteristics of tools, systems and machines. Ergonomics focuses on designs for safety, comfort, and convenience.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 3

Type: FIB

_____ is the study of how people design, implement, evaluate and use interactive computer systems

Standard Text:

Correct Answer: Human-computer interaction

Rationale : Human-computer interaction or HCI is the study of how people design, implement, evaluate and use interactive computer systems

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 4

Type: MCMA

Usability is a subset of HCI and one of its major components. Which of the following are usability topics?

Standard Text: Select all that apply.

1. Using an application
2. Learning to use a system
3. User satisfaction
4. Efficiency
5. Error-free/error-forgiving interactions

Correct Answer: 1,2,3,4,5

Rationale 1: •Seamless fit of an information system to the task(s) at hand

Rationale 2: •Seamless fit of an information system to the task(s) at hand

Rationale 3: •Seamless fit of an information system to the task(s) at hand

Rationale 4: •Seamless fit of an information system to the task(s) at hand

Rationale 5: •Seamless fit of an information system to the task(s) at hand

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 5

Type: MCSA

The broad goals of usability are to promote acceptance and use of systems through improved interactive systems, software, developing new kinds of applications to support specific work, and promoting job optimization with the use of information systems. A user interface can effectively disappear if which of the following is correct?

1. The system is designed well.
2. The system has multiple partners.
3. The system has a comprehensive set of instructions.
4. The system has little to no downtime.

Correct Answer: 1

Rationale 1: A user interface can effectively disappear if a system is designed well. This allows users to focus only on the task at hand rather than tending to the technology itself.

Rationale 2: A user interface can effectively disappear if a system is designed well. This allows users to focus only on the task at hand rather than tending to the technology itself.

Rationale 3: A user interface can effectively disappear if a system is designed well. This allows users to focus only on the task at hand rather than tending to the technology itself.

Rationale 4: A user interface can effectively disappear if a system is designed well. This allows users to focus only on the task at hand rather than tending to the technology itself.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 6

Type: MCSA

Usability experts cite three main goals of HCI and usability. Which of the following is not a usability goal?

1. Effectiveness
2. Efficiency
3. Replication
4. User satisfaction

Correct Answer: 3

Rationale 1: Effectiveness is related to the usefulness of technology in completing desired goals. The efficiency of systems deals with the expenditures of resources, where resources are time, productivity, error rates of users or the costs of the system to the organization in terms of value of the product compared to the purchase price, little used options or redesign of applications. User satisfaction can be assessed by measuring perceptions about the efficiency or effectiveness of interactions with the system.

Rationale 2: Effectiveness is related to the usefulness of technology in completing desired goals. The efficiency of systems deals with the expenditures of resources, where resources are time, productivity, error rates of users or the costs of the system to the organization in terms of value of the product compared to the purchase price, little used options or redesign of applications. User satisfaction can be assessed by measuring perceptions about the efficiency or effectiveness of interactions with the system.

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Rationale 4: Effectiveness is related to the usefulness of technology in completing desired goals. The efficiency of systems deals with the expenditures of resources, where resources are time, productivity, error rates of users or the costs of the system to the organization in terms of value of the product compared to the purchase price, little used options or redesign of applications. User satisfaction can be assessed by measuring perceptions about the efficiency or effectiveness of interactions with the system.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 7

Type: FIB

_____ guide health informaticists in completing user-centered design processes, usability tests, IT adoption evaluations and usability research.

Standard Text:

Correct Answer: Human-Computer interaction frameworks

Rationale : Human-Computer interaction frameworks guide health informaticists in completing user-centered design processes, usability tests, IT adoption evaluations and usability research.

Global Rationale:

Cognitive Level: Applying

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 8

Type: MCSA

Which of the following frameworks is based on work-centered research and distributed cognition?

1. The FITT framework
2. UFuRT (User, Function, Representation, and Task analysis) framework
3. Human, Organization, Technology-fit (HOT-fit)
4. The Staggers Human–Computer Interaction Framework

Correct Answer: 2

Rationale 1: The FITT framework describes the fit between an individual, tasks, and technology and having these three elements connected by “interactions and influences.”

Rationale 2: The UFuRT (User, Function, Representation, and Task analysis) framework is based on work-centered research and distributed cognition. This framework also combines both elements and usability processes.

Rationale 3: The Human, Organization, Technology-fit (HOT-fit) describes IT adoption with central elements of system ease of use, user satisfaction and system usefulness.

Rationale 4: The Staggers Human–Computer Interaction Framework outlines the interaction between the computer and the individual.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 9

Type: FIB

_____ is the study of how people design, implement, and evaluate interactive computer systems in the context of users' tasks and work.

Standard Text:

Correct Answer: Human-computer interaction (HCI)

Rationale : HCI blends psychology and/or cognitive science, applied work in computer science, sociology and information science into the design, development, purchase, implementation and evaluation of applications.

Global Rationale:

Cognitive Level: Remembering

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 10

Type: MCSA

Usability tests are systematic and structured examinations of the effectiveness, efficiency or satisfaction of any component or interactions in the human–computer interaction framework(s). Which of the following is an example of a usability test?

1. Identifying appropriate hours to offer patients sleep medication
2. Completing a longitudinal study of nursing effectiveness during lunch hours
3. Exploring time management strategies in central supply
4. Describing the satisfaction with a new computerized provider order entry (CPOE) application.

Correct Answer: 4

Rationale 1: Usability studies can be simple or complex. Usability studies can be done at any point in the expanded systems life cycle, 28 from clarifying users' requirements, to initial design or redesign using paper prototypes or simple computerized applications, to iterative prototype development, system selection, product customization or evaluating the impact of a system during and after installation.

Rationale 2: Usability studies can be simple or complex. Usability studies can be done at any point in the expanded systems life cycle, 28 from clarifying users' requirements, to initial design or redesign using paper prototypes or simple computerized applications, to iterative prototype

development, system selection, product customization or evaluating the impact of a system during and after installation.

Rationale 3: Usability studies can be simple or complex. Usability studies can be done at any point in the expanded systems life cycle, 28 from clarifying users' requirements, to initial design or redesign using paper prototypes or simple computerized applications, to iterative prototype development, system selection, product customization or evaluating the impact of a system during and after installation.

Rationale 4: Usability studies are considered methods to identify efficiency and effectiveness of the system.

Global Rationale:

Cognitive Level: Analyzing

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 11

Type: MCSA

Which of the following types of usability studies consists of a detailed review of a sequence of real or proposed actions to complete a task in a system?

1. Simplified usability tests using early prototypes
2. Cognitive walkthrough
3. Heuristic evaluations or heuristic inspection methods
4. Exploratory test

Correct Answer: 2

Rationale 1: Simplified usability tests using early prototypes includes the use of small numbers of users, typically an early prototype (even paper), and a specific method called "think aloud" protocols.

Rationale 2: Cognitive walkthrough method is a type of usability inspection method or task analysis. It consists of a detailed review of a sequence of real or proposed actions to complete a task in a system.

Rationale 3: Heuristic evaluations or heuristic inspection methods compare applications against accepted guidelines or published usability principles.

Rationale 4: An exploratory test is conducted early during development or redesign after very basic or preliminary designs are created.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 12

Type: MCMA

Usability studies can be used to support IT in a number of ways. Which of the following are reasons to complete these studies in a health care setting?

Standard Text: Select all that apply.

1. Assesses the adequacy of a design or redesign early in the systems life cycle
2. Helps determine or clarify users' requirements determination
3. Creates an interest in learning the new system
4. Determines the actual price of the system
5. Supports infrastructure

Correct Answer: 1,2

Rationale 1: 2. Assesses the adequacy of a design or redesign early in the systems life cycle

Rationale 2: 2. Assesses the adequacy of a design or redesign early in the systems life cycle

Rationale 3: Creating an interest in the new system is not a reason for completing a usability study.

Rationale 4: The price of the system is not linked to usability studies.

Rationale 5: The usability study does not have anything to do with supporting the infrastructure.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 13

Type: MCSA

Which of the following entities does not support a role for informaticians in the future?

1. Informaticians require a graduate education.
2. The recent interest in usability will provide interesting work for health informaticists in the future.
3. Informaticians support the training of new systems.
4. Informaticians are key members of the life cycle discussions.

Correct Answer: 1

Rationale 1: As systems become more complex and strategic planners attempt to create an environment where technology is the norm and understood by all stakeholders and point-of-care professionals, informaticians will have clear roles in the health care setting. Informaticians are essential members of the health care team with unique skills that facilitate the acceptance and understanding of the technology.

Rationale 2: As systems become more complex and strategic planners attempt to create an environment where technology is the norm and understood by all stakeholders and point-of-care professionals, informaticians will have clear roles in the health care setting. Informaticians are essential members of the health care team with unique skills that facilitate the acceptance and understanding of the technology.

Rationale 3: As systems become more complex and strategic planners attempt to create an environment where technology is the norm and understood by all stakeholders and point-of-care professionals, informaticians will have clear roles in the health care setting. Informaticians are essential members of the health care team with unique skills that facilitate the acceptance and understanding of the technology.

Rationale 4: As systems become more complex and strategic planners attempt to create an environment where technology is the norm and understood by all stakeholders and point-of-care professionals, informaticians will have clear roles in the health care setting. Informaticians are

essential members of the health care team with unique skills that facilitate the acceptance and understanding of the technology.

Global Rationale:

Cognitive Level: Understanding

Client Need: Safe Effective Care Environment

Client Need Sub: Management of Care

Nursing/Integrated Concepts: Communication and Documentation

Learning Outcome:

Question 14

Type: MCSA

Ethnographic studies have been incorporated within health care settings by informaticians to glean data at the point of care. Which of the following statements about ethnography is true?

1. Ethnography is a quantitative method from anthropology and sociology that includes fieldwork and analysis of people in cultural, social settings.
2. In ethnography researchers describe the person of interest's point of view focusing on experience and interactions in social settings rather than the actions themselves.
3. Ethnography is an outdated method of inquiry.
4. The use of ethnography is criticized as a method to determine HCI effectiveness.

Correct Answer: 2

Rationale 1: Ethnography is a qualitative method from anthropology and sociology that includes fieldwork and analysis of people in cultural, social settings.

Rationale 2: In ethnography researchers describe the person of interest's point of view focusing on experience and interactions in social settings rather than the actions themselves. Data are extrapolated in a systematic manner to determine the effectiveness of an initiative from the person's perspective.

Rationale 3: Ethnographers review data from the participants perspective in a nonbiased manner and is an acceptable research methodology.

Rationale 4: In ethnography researchers describe the person of interest's point of view focusing on experience and interactions in social settings rather than the actions themselves.

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