

***Handbook of Informatics for Nurses & Health Care Professionals, 6e (Hebda)***  
**Chapter 1 An Overview of Informatics in Healthcare**

1) A large healthcare organization is planning to implement a clinical information system. What should be considered when selecting this system?

- A) Training on the system should be limited.
- B) Nursing staff documentation needs are the priority.
- C) The organization needs to meet multiple competing demands.
- D) Laboratory data and pharmacy integration is considered nonessential.

Answer: C

Explanation: A) No evidence supports limiting training on the system.

B) Every department in a large healthcare organization has an essential role in patient care.

C) The healthcare organization today is a complex system faced with multiple, competing demands.

D) Every department in a large healthcare organization has an essential role in patient care.

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Cognitive Level: Applying

Client Need & Sub: Safe and Effective Care Environment: Management of Care

Standards: QSEN Competencies: VI.A.1. Explain why information and technology skills are essential for safe patient care | AACN Essential Competencies: IV.7. Recognize the role of information technology in improving patient care outcomes and creating a safe care environment | NLN Competencies: Quality & Safety | Nursing/Integrated Concepts:

Assessment/Communication and Documentation

Learning Outcome: Provide an overview of the current state of healthcare delivery.

2) The leadership team of a multisystem healthcare organization are analyzing potential clinical documentation systems. Which demands should the team keep in mind when selecting the system? Select all that apply.

- A) Adopting new models of care
- B) Eliminating disparities in care
- C) Financing the system
- D) Evolving roles for practitioners
- E) Ensuring quality, safety, and transparency

Answer: A, B, D, E

Explanation: A) The healthcare delivery system today is a complex system faced with multiple, competing demands. Among these demands are the need to adopt new models of care.

B) The healthcare delivery system today is a complex system faced with multiple, competing demands. Among these demands are efforts to eliminate disparities in care.

C) The healthcare delivery system today is a complex system faced with multiple, competing demands. Financing the system is not an identified demand.

D) The healthcare delivery system today is a complex system faced with multiple, competing demands. Among these demands are evolving roles for practitioners.

E) The healthcare delivery system today is a complex system faced with multiple, competing demands. Among these demands are the need for quality, safety, and transparency.

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Cognitive Level: Applying

Client Need & Sub: Safe and Effective Care Environment: Management of Care

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Learning Outcome: Provide an overview of the current state of healthcare delivery.

3) The leadership team of a multisystem healthcare organization is hesitant to agree that the current electronic medical record should be replaced with one that would integrate information throughout the entire system. For which reasons should the organization update the system?

Select all that apply.

- A) Decrease costs
- B) Reduce staff turnover
- C) Improve communication
- D) Enable the delivery of safe quality care
- E) Ensure care is provided in an effective, efficient manner

Answer: A, C, D, E

Explanation: A) Technology is a pervasive part of every aspect of society, including healthcare delivery. Health information technology (HIT) provides the tools to decrease costs.

B) Technology is a pervasive part of every aspect of society, including healthcare delivery. Health information technology (HIT) is not identified as a mechanism to reduce staff turnover.

C) Technology is a pervasive part of every aspect of society, including healthcare delivery. Health information technology (HIT) provides the tools to improve communication.

D) Technology is a pervasive part of every aspect of society, including healthcare delivery. Health information technology (HIT) enables the delivery of safe, quality care.

E) Technology is a pervasive part of every aspect of society, including healthcare delivery. Health information technology (HIT) ensures care is provided in an effective, efficient manner.

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Learning Outcome: Discuss the role that technology plays in healthcare.

4) A healthcare provider practice associated with a multisystem healthcare organization uses paper documentation for patient notes and stores laboratory data in the electronic health record. What does this process exemplify?

- A) Resistance to change
- B) Insufficient number of electronic devices
- C) Slow to use technology to its full potential
- D) Limited time to learn the electronic system

Answer: C

Explanation: A) The healthcare sector has been slow to adopt and use technology to its full potential. This may or may not be due to resistance to change.

B) The healthcare sector has been slow to adopt and use technology to its full potential. This may or may not be due to an insufficient number of electronic devices.

C) The healthcare sector has been slow to adopt and use technology to its full potential. This is viewed as being due to the complexity of healthcare delivery.

D) The healthcare sector has been slow to adopt and use technology to its full potential. This may or may not be due to the time required to learn the electronic system.

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Assessment/Communication and Documentation

Learning Outcome: Discuss the role that technology plays in healthcare.

- 5) The informatics nurse is preparing a presentation for new nursing staff. Which definition should the nurse use when explaining informatics to these colleagues?
- A) A subspecialty of nursing that focuses on training in the use of computers
  - B) A specific area of medicine that highlights the importance of technology in patient care
  - C) A profession that is seeking an identity separate from medicine, nursing, or other behavioral sciences
  - D) An interdisciplinary field that includes computer, decision, information, management, and cognitive sciences

Answer: D

Explanation: A) Informatics is not a subspecialty of nursing that focuses on training in the use of computers.

B) Informatics is not a specific area of medicine that highlights the importance of technology in patient care.

C) Informatics is not a profession that is seeking an identity separate from medicine, nursing, or other behavioral sciences.

D) The American Medical Informatics Association states that informatics is an interdisciplinary field that draws from, as well as contributes to, computer science, decision science, information science, management science, and cognitive science.

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Planning/Teaching/Learning

Learning Outcome: Provide a definition for informatics.

6) The nurse is considering attending a program that focuses on informatics. On which field will the curriculum most likely be based?

- A) Clinical informatics
- B) Public health informatics
- C) Translational bioinformatics
- D) Consumer health informatics

Answer: A

Explanation: A) Clinical informatics focuses on the delivery of timely, safe, efficient, effective, evidence-based, and patient-centered care. Nursing informatics is an example of this field.

B) Public health informatics focuses on surveillance, prevention, health promotion, and preparedness.

C) Translational bioinformatics focuses on the storage, analysis, and interpretation of large volumes of data.

D) Consumer health informatics focuses on the consumer, or patient, view and the structures and processes that enable consumers to manage their own health.

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Assessment/Teaching/Learning

Learning Outcome: Provide a definition for informatics.

7) The nurse is preparing a white paper, explaining how informatics supports the use of data. Which example should the nurse include that demonstrates a structure for data use?

- A) Care plans
- B) Concept map
- C) Nursing process
- D) Nursing diagnosis

Answer: D

Explanation: A) Care plans are not identified as a structure to use data.

B) Concept maps are not identified as a structure to use data.

C) The nursing process is a problem-solving approach to provide patient care. It is not a structure to use data.

D) To be useful, data and information must be available when needed and in a form that can be analyzed or used. Improved communication among professionals requires the adoption of standardized languages and terminologies. An example of a standardized language is NANDA, which provides standardized terms for nursing diagnoses.

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Planning/Teaching/Learning

Learning Outcome: Discuss the significance of informatics for healthcare.