

**MULTIPLE CHOICE**

1. Evidence-informed practice is a problem-solving approach to making decisions about patient care that is grounded in
  - a. the latest information found in textbooks.
  - b. systematically conducted research studies.
  - c. tradition in clinical practice.
  - d. quality improvement and risk-management data.

ANS: B

The best evidence comes from well-designed, systematically conducted research studies described in scientific journals. Portions of a textbook often become outdated by the time it is published. Many health care settings do not have a process to help staff adopt new evidence in practice, and nurses in practice settings lack easy access to risk-management data, relying instead on tradition or convenience. Some sources of evidence do not originate from research. These include quality improvement and risk-management data, infection control data, retrospective or concurrent chart reviews, and clinicians' expertise. Although non-research-based evidence is often very valuable, it is important that you learn to rely more on research-based evidence.

DIF: Cognitive Level: Comprehension REF: Purpose

OBJ: Differentiate between evidence-based and evidence-informed practice.

TOP: Evidence-Based Practice

KEY: Nursing Process Step: Assessment

MSC: NCLEX: Safe and Effective Care Environment (management of care)

2. When evidence-informed practice is used, patient care will be
  - a. standardized for all.
  - b. unhampered by patient culture.
  - c. variable according to the situation.
  - d. safe from the hazards of critical thinking.

ANS: C

Using your clinical expertise and considering patients' cultures, values, and preferences ensures that you will apply available evidence in practice ethically and appropriately. Even when you use the best evidence available, application and outcomes will differ; as a nurse, you will develop critical thinking skills to determine whether evidence is relevant and appropriate.

DIF: Cognitive Level: Application REF: Purpose

OBJ: Differentiate between evidence-based and evidence-informed practice.

TOP: Evidence-Based Practice

KEY: Nursing Process Step: Assessment

MSC: NCLEX: Safe and Effective Care Environment (management of care)

3. When a PICO(TS) question is developed, the letter that corresponds with the usual standard of care is
  - a. P.
  - b. I.

- c. C.
- d. O.

ANS: C

C = Comparison of interest. What standard of care or current intervention do you usually use now in practice?

P = Patient population of interest. Identify your patient by age, gender, ethnicity, disease, or health problem.

I = Intervention of interest. What intervention (e.g., treatment, diagnostic test, and prognostic factor) do you think is worthwhile to use in practice?

O = Outcome. What result (e.g., change in patient's behaviour, physical finding, and change in patient's perception) do you wish to achieve or observe as the result of an intervention?

DIF: Cognitive Level: Understanding REF: Ask a Clinical Question

OBJ: Explain the components of a PICO(TS) question. TOP: PICO

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Safe and Effective Care Environment (management of care)

4. A well-developed PICO(TS) question helps the nurse
- a. search for evidence.
  - b. include all five elements of the sequence.
  - c. find as many articles as possible in a literature search.
  - d. accept standard clinical routines.

ANS: A

The more focused a question that you ask is, the easier it is to search for evidence in the scientific literature. A well-designed PICOT question does not have to include all five elements, nor does it have to follow the PICOT sequence. Do not be satisfied with clinical routines. Always question and use critical thinking to consider better ways to provide patient care.

DIF: Cognitive Level: Analysis REF: Ask a Clinical Question

OBJ: Explain the components of a PICO(TS) question. TOP: Evidence-Based Practice

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Safe and Effective Care Environment (management of care)

5. The nurse is not sure that the procedure the patient requires is the best possible for the situation. Using which of the following resources would be the quickest way to review research on the topic?
- a. CINAHL
  - b. PubMed
  - c. MEDLINE
  - d. The Cochrane Database

ANS: D

The Cochrane Community Database of Systematic Reviews is a valuable source of synthesized evidence (i.e., preappraised evidence). The Cochrane Database includes the full text of regularly updated systematic reviews and protocols for reviews currently happening. MEDLINE, CINAHL, and PubMed are among the most comprehensive databases and represent the scientific knowledge base of health care.

DIF: Cognitive Level: Synthesis

REF: Search for the Best Evidence

OBJ: Discuss the process for critiquing evidence in the literature.  
TOP: Evidence-Based Practice KEY: Nursing Process Step: Implementation  
MSC: NCLEX: Safe and Effective Care Environment (management of care)

6. The nurse is getting ready to develop a plan of care for a patient who has a specific need. The best source for developing this plan of care would probably be
- The Cochrane Database.
  - MEDLINE.
  - NGC.
  - CINAHL.

ANS: C

The National Guidelines Clearinghouse (NGC) is a database supported by the Agency for Healthcare Research and Quality (AHRQ). It contains clinical guidelines—systematically developed statements about a plan of care for a specific set of clinical circumstances involving a specific patient population. The NGC is a valuable source when you want to develop a plan of care for a patient. The Cochrane Community Database of Systematic Reviews, MEDLINE, and CINAHL are all valuable sources of synthesized evidence (i.e., preappraised evidence).

DIF: Cognitive Level: Synthesis REF: Search for the Best Evidence  
OBJ: Discuss the process for critiquing evidence in the literature.  
TOP: Evidence-Informed Practice KEY: Nursing Process Step: Implementation  
MSC: NCLEX: Safe and Effective Care Environment (management of care)

7. The nurse has done a literature search and found 25 possible articles on the topic that he or she is studying. To determine which of those 25 best fit his or her inquiry, the nurse first should look at
- the abstracts.
  - the literature reviews.
  - the “Methods” sections.
  - the narrative sections.

ANS: A

An abstract is a brief summary of an article that quickly tells you whether the article is research based or clinically based. An abstract summarizes the purpose of the study or clinical query, the major themes or findings, and the implications for nursing practice. The literature review usually gives you a good idea of how past research led to the researcher’s question. The “Methods” or “Design” section explains how a research study is organized and conducted to answer the research question or to test the hypothesis. The narrative of a manuscript differs according to the type of evidence-informed article—clinical or research.

DIF: Cognitive Level: Application REF: Critique the Evidence  
OBJ: Discuss the process for critiquing evidence in the literature.  
TOP: Randomized Controlled Trials KEY: Nursing Process Step: Implementation  
MSC: NCLEX: Safe and Effective Care Environment (management of care)

8. The nurse wants to determine the effects of cardiac rehabilitation program attendance on the level of depression in individuals who have had a myocardial infarction. The type of study that would best capture this information would be a
- randomized controlled trial.
  - qualitative study.

- c. case-control study.
- d. descriptive study.

ANS: B

Qualitative studies examine individuals' experiences with health problems and the contexts in which these experiences occur. A qualitative study is best in this case of an individual nurse who wants to examine the effectiveness of a local program. Randomized controlled trials involve close monitoring of control groups and treatment groups to test an intervention against the usual standard of care. Case-control studies typically compare one group of participants with a certain condition against another group without the condition to look for associations between the condition and predictor variables. Descriptive studies focus mainly on describing the concepts under study.

DIF: Cognitive Level: Synthesis REF: Search for the Best Evidence  
 OBJ: Discuss ways to apply evidence in nursing practice.  
 TOP: Randomized Controlled Trials KEY: Nursing Process Step: Implementation  
 MSC: NCLEX: Safe and Effective Care Environment (management of care)

9. Six months after an early mobility protocol was implemented, the incidence of deep vein thrombosis in patients has been decreased. This is an example of what stage in the evidence-informed practice process?
  - a. Asking a clinical question
  - b. Applying the evidence
  - c. Evaluating the practice decision
  - d. Communicating your results

ANS: C

After implementing a practice change, your next step is to evaluate the effect. You do this by analyzing the outcomes data that you collected during the pilot project. Outcomes evaluation tells you whether your practice change improved conditions, created no change, or worsened conditions.

DIF: Cognitive Level: Application REF: Knowledge-To-Action Framework  
 OBJ: Discuss ways to apply evidence in nursing practice. TOP: Evidence-Based Practice  
 KEY: Nursing Process Step: Evaluation  
 MSC: NCLEX: Safe and Effective Care Environment (safety and infection control)

10. A systematic review explains whether the evidence that you are searching for exists and whether there is good cause to change practice. In \_\_\_\_\_, all entries include information on systematic reviews.
  - a. CINAHL
  - b. MEDLINE
  - c. The Cochrane Database
  - d. The National Guidelines Clearinghouse

ANS: C

A systematic review explains whether the evidence that you are searching for exists and whether there is good cause to change practice. In the Cochrane Database, all entries include information on systematic reviews.

DIF: Cognitive Level: Synthesis REF: Search for the Best Evidence  
 OBJ: Discuss ways to apply evidence in nursing practice. TOP: Systematic Reviews

KEY: Nursing Process Step: Implementation  
MSC: NCLEX: Safe and Effective Care Environment (management of care)

11. Which of the following are the gold standard for research?
- Randomized controlled trials (RCTS)
  - Systematic reviews
  - Case-control studies
  - Cohort studies

ANS: A

Individual randomized controlled trials (RCTs) are the gold standard for research. An RCT establishes cause and effect and is excellent for testing therapies.

DIF: Cognitive Level: Understanding REF: Search for the Best Evidence  
OBJ: Discuss the process for critiquing evidence in the literature.  
TOP: Randomized Controlled Trials KEY: Nursing Process Step: Implementation  
MSC: NCLEX: Safe and Effective Care Environment (management of care)

12. The researcher explains how to apply findings in a practice setting for the types of participants studied in the \_\_\_\_\_ section of a research article.
- Abstract
  - Introduction
  - Methods
  - Results

ANS: D

A research article includes a section called “Results” or “Findings” that explains whether the findings from the study have clinical implications. The researcher explains how to apply findings in a practice setting for the types of participants studied.

DIF: Cognitive Level: Application REF: Critique the Evidence  
OBJ: Discuss the process for critiquing evidence in the literature.  
TOP: Randomized Controlled Trials KEY: Nursing Process Step: Implementation  
MSC: NCLEX: Safe and Effective Care Environment (management of care)

13. Which of the following is the extent to which a study’s findings are valid, reliable, and relevant to your patient population of interest?
- Scientific rigour
  - Ethics
  - Peer review
  - Knowledge translation

ANS: A

Scientific rigour is the extent to which a study’s findings are valid, reliable, and relevant to your patient population of interest.

DIF: Cognitive Level: Application REF: Search for the Best Evidence  
OBJ: Discuss the process for critiquing evidence in the literature.  
TOP: Randomized Controlled Trials KEY: Nursing Process Step: Implementation  
MSC: NCLEX: Safe and Effective Care Environment (management of care)

14. Which is the intervention in the following PICO(TS) question: “In children with asthma, does humidified oxygen decrease the frequency of prn salbutamol when compared with regular oxygen?”
- Asthma
  - Humidified oxygen
  - Regular oxygen
  - Salbutamol

ANS: B

The intervention being studied is humidified oxygen. Children with asthma is the population; regular oxygen is the comparison; prn salbutamol is the outcome.

DIF: Cognitive Level: Application

REF: Ask a Clinical Question

OBJ: Explain the components of a PICO(TS) question.

TOP: Randomized Controlled Trials

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Safe and Effective Care Environment (management of care)

15. Which is the outcome in the following PICO(TS) question: “Does family-centred care decrease the rate of hospital readmissions in patients who have suffered from a myocardial infarction, compared with standard discharge practices?”
- Family-centred care
  - Patients who have suffered from a myocardial infarction
  - Rate of hospital readmissions
  - Standard discharge practices

ANS: C

The outcome that will be observed is the rate of hospital readmissions. Family-centred care is the intervention; patients who have suffered from a myocardial infarction is the population; standard discharge practices is the comparison.

DIF: Cognitive Level: Application

REF: Ask a Clinical Question

OBJ: Explain the components of a PICO(TS) question.

TOP: Randomized Controlled Trials

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Safe and Effective Care Environment (management of care)

## MULTIPLE RESPONSE

1. To use evidence-informed practice (EIP) appropriately, you need to collect the most relevant and best evidence and to critically appraise the evidence you gather. This process also includes (*Select all that apply.*)
- asking a clinical question.
  - applying the evidence.
  - evaluating the practice decision.
  - communicating your results.

ANS: A, B, C, D

EIP comprises six steps (Melnik and Fineout-Overholt, 2010):

1. Ask a clinical question.
2. Search for the most relevant and best evidence that applies to the question.
3. Critically appraise the evidence you gather.

4. Apply or integrate evidence along with one's clinical expertise and patient preferences and values in making a practice decision or change.
5. Evaluate the practice decision or change.
6. Communicate your results.

DIF: Cognitive Level: Analysis

REF: Knowledge-To-Action Framework

OBJ: Discuss how scientific evidence improves the relevance and efficacy of nursing skills.

TOP: Evidence-Based Practice

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Safe and Effective Care Environment (management of care)

2. In a clinical environment, evidence-informed practice (EIP) has the ability to improve (*Select all that apply.*)
  - a. the quality of care provided.
  - b. patient outcomes.
  - c. clinician satisfaction.
  - d. patients' perceptions.

ANS: A, B, C, D

EIP has the potential to improve the quality of care that nurses provide, patient outcomes, and clinicians' satisfaction with their practice. Your patients expect nursing professionals to be informed and to use the safest and most appropriate interventions. Use of evidence enhances nursing, thereby improving patients' perceptions of excellent nursing care.

DIF: Cognitive Level: Application

REF: Purpose

OBJ: Discuss how scientific evidence improves the relevance and efficacy of nursing skills.

TOP: Randomized Controlled Trials

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Safe and Effective Care Environment (management of care)

3. Which of the following could be considered as an intervention in a PICO(TS) question? (*Select all that apply.*)
  - a. Family-centred care
  - b. Acetaminophen
  - c. Women with breast cancer
  - d. Decreased pain scores

ANS: A, B

Family-centred care and medication (such as acetaminophen) are considered interventions. Women with breast cancer would be considered a patient or population. Decreased pain scores would be considered an outcome.

DIF: Cognitive Level: Application

REF: Ask a Clinical Question

OBJ: Explain the components of a PICO(TS) question.

TOP: Randomized Controlled Trials

KEY: Nursing Process Step: Implementation

MSC: NCLEX: Safe and Effective Care Environment (management of care)