

Test Bank for Evidence-Based Practice in Nursing & Healthcare - A Guide to Best Practice 5th Melnyk

Chapter 2, Test Generator Questions

1. A nurse has identified a clinical issue based on internal quality/safety evidence. There has been an increased number of patient falls between 11 pm and 3 am in the medical/surgical units. Which example **best** represents the "P" in the PICOT search question for the above issue?

- A) What can nurses working in medical/surgical units do to prevent falls?
- B) On surgical units, what is happening between 11 pm and 3 am to result in falls?
- C) In medical/surgical patients, how does education, compared to current practice, affect falls during the night shift?
- D) In nurses working in medical/surgical units, how do bedside reports, compared to recorded reports, affect patient falls during hospitalization?

Ans: C

Feedback:

The "P" in the PICOT format denotes the population of interest or problem, such as patients in the medical/surgical units. In answers A and B, the questions are written in background or research formats, not PICOT format. The population in answer D, nurses, does not match the outcome of patient falls or the population in the clinical issue.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Apply

Difficulty: Moderate

Header: Introduction

Integrated Process: Nursing Process

Objective: 1

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2. Quality data for a rehabilitation department has reported increased incidents of pressure ulcers over the past 6 months. An interprofessional EBP team created a PICOT to guide their literature search. What is the "O" outcome for the PICOT?

- A) Patients in rehabilitation
- B) Pressure ulcers
- C) Pressure ulcer prevention pads
- D) Frequent turning of the patient

Ans: B

Feedback:

The population "P" for the PICOT would be "patients in rehabilitation." The intervention "I" is "pressure ulcer prevention pads." The comparison "C" is the frequent turning of the patients. The outcome "O" is pressure ulcer rates or incidence.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Moderate

Header: Introduction

Integrated Process: Nursing Process

Objective: 1

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3. There are five types of PICOT foreground questions: intervention/issue, prognosis/prediction, diagnosis, etiology, and meaning. If the nurse is concerned about patient experiences who have been diagnosed with viral sepsis, which type of foreground questions would be appropriate to guide the search?

- A) Intervention/issue
- B) Diagnosis
- C) Meaning

D) Prognosis/prediction

Ans: C

Feedback:

A meaning question asks how an experience can influence an outcome.

Interventions ask what interventions effectively lead to an outcome. Diagnosis questions ask what mechanism or test will most accurately diagnose an outcome. Prognosis/prediction questions ask what indicators are most predictive of or carry the most associated risk for an outcome.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Apply

Difficulty: Moderate

Header: Formatting Foreground Questions to Drive the Search

Integrated Process: Nursing Process

Objective: 3

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4. Nurses working on a fall initiative have the following PICOT question, “*In hospitalized patients, how does fall prevention compared to current practice affect outcomes?*” The search for fall prevention has produced over 10,000 articles. Which strategy would the nurse use to narrow the search?

- A) Narrow the search by using filters such as language, age, time frame, etc.
- B) Limit to randomized control trials
- C) Use the Boolean term OR
- D) Search in more databases

Ans: A

Feedback:

The use of filters/limiters like language, age, and time frame (past 5 years) will identify the most relevant and current studies. Limiting the searches to one type of study design may prevent you from finding other quality studies about fall prevention. The Boolean term OR will increase not limit the number of articles. Searching additional databases will increase not decrease your number of studies to review.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Apply

Difficulty: Moderate

Header: The Haystack: Too Much Information

Integrated Process: Nursing Process

Objective: 2

Page: 40

5. Nurses working at a large children's hospital care for children who present to the emergency department (ED) with signs and symptoms of asthma. Which background question can **best** assist the nurse in the EBP process?

- A) What pediatric asthma treatments are most effective to manage symptoms in the ED?
- B) Are nebulizers more effective than metered-dose inhalers (MDI)?
- C) Do children outgrow asthma?
- D) Do more children than adults present in the ED with asthma?

Ans: A

Feedback:

Background questions ask for general information about a clinical issue and have two components: the starting place (e.g., what, where, when, why, and how) and the outcomes of interest (e.g., clinical diagnosis). The other answers are research questions.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Difficult

Header: Background Questions

Integrated Process: Nursing Process

Objective: 3

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6. A school nurse is concerned that more students are reporting allergic symptoms after eating. What would the nurse consider when creating a well-developed foreground question?

- A) The population/problem and intervention/issue need to align for the question to be a foreground and not background question
- B) Include directional terms to narrow the scope and find the studies that align with organizational goals and priorities
- C) Identify specific terms or phrases for the PICOT components to focus the search to locate the best evidence about treatment, diagnosis, prognosis, or experiences
- D) Include local terms to assure that the foreground question supports the practice at your organization and that your team will understand

Ans: C

Feedback:

Foreground questions are those that can be answered from scientific evidence about patient treatment, diagnosis, prognosis, or health experiences. These questions focus on specific knowledge. Population and outcomes should align. Do not use directional or local terms.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Apply

Difficulty: Moderate

Header: Foreground Questions

Integrated Process: Nursing Process

Objective: 3

Page: 42

7. An EBP mentor is working with a team of professionals in the oncology department to implement an EBP initiative to address patient anxiety secondary to diagnosis and treatment. Which of the questions is a foreground question that can guide the team?

- A) Why are benzodiazepines and analgesics provided before clients have a bone marrow biopsy?
- B) How often are bone marrow biopsies performed on the unit?
- C) In oncology patients how does guided imagery compared to current practice affect anxiety in patients undergoing bone marrow biopsy?
- D) What is the clinical rationale for using bone marrow biopsy to gauge and predict the course of a client's cancer?

Ans: C

Feedback:

Asking about the effectiveness of a particular intervention (guided imagery) in preventing an outcome (anxiety) compared to current practice or no intervention exemplifies a useful foreground question. Questions about current practice, the treatment rationale, and the prevalence or incidence of clinical interventions are examples of background questions.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Moderate

Header: Foreground Questions

Integrated Process: Nursing Process

Objective: 4

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8. The EBP mentor is providing feedback to the team writing PICOT questions that can clearly articulate the question from the spirit of inquiry. Which of the following PICOT questions best guides the team in their search?

- A) In elderly patients with COVID-19 on the medical unit, how does placing the patients on their abdomen several times a day affect recovery and complications during their hospitalization?
- B) In older COVID-19 patients in the 3-West medical unit, does turning the patients every few hours improve their recovery and reduce complications?
- C) How do COVID-19 patients who lay in different positions each day compared to one position recover and experience complications?
- D) In COVID-19 patients, how does proning compared to turning every 2 hours affect recovery during hospitalization?

Ans: D

Feedback:

Clearly stated PICOT terms presented in a concise format will guide the systematic search of the databases. The population is COVID-19 patients, intervention is proning, comparison intervention is turning every 2 hours, outcome is recovery, and time frame is hospitalization. The other answers are wordy, use local terms, and do not have all the PICOT elements. Recovery can include complication and other outcomes not listed.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Difficult

Header: Posing the Question Using PICOT

Integrated Process: Nursing Process

Objective: 5

Page: 45

9. The EBP mentor is reviewing various PICOT questions from the team. Which PICOT is a “meaning” question?

- A) In parents, how does social media information compared to provider education influence decisions to refuse immunizations for their children aged 3 to 24 months?
- B) Are ex-miners who have asbestos exposure compared to those without exposure at higher risks for mesothelioma over their lifetime?
- C) How do pregnant women with high-risk pregnancies perceive mandatory bedrest until delivery?
- D) In girls, how do warning labels on cigarettes compared to peer education affect smoking rates during adolescence?

Ans: C

Feedback:

A PICOT question that focuses on the meaning of a health issue explores the personalized significance and experience, such as the meaning of having to remain on bed rest during pregnancy. Meaning questions can also address the scope of a phenomenon or perhaps the influence of culture on healthcare. Questions that explore interventions, prediction/prognosis, and etiology are not categorized as “meaning” questions

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Difficult

Header: Formatting Foreground Questions to Drive the Search

Integrated Process: Nursing Process

Objective: 5

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10. When identifying the specific population for the PICOT question, what should the team consider when formulating the question?

- A) Use careful consideration of the patient and the specific setting of interest to define the population.
- B) Always limit the populations to a certain age group or special subgroup (e.g., females with lung cancer).
- C) Use local terms to help assure that your population is identified correctly for the search.
- D) Include arbitrary designations for the patient population to help identify relevant evidence.

Ans: A

Feedback:

Clinicians will apply the evidence to the population for the practice change. It needs to be carefully identified to not be too specific, contain local terms, or have arbitrary designations that will limit or negatively influence the search.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Moderate

Header: Posing the Question Using PICOT

Integrated Process: Nursing Process

Objective: 5

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11. There is a large variation in information being provided to breastfeeding mothers on how to thaw frozen breastmilk to be fed to their premature newborns.

Which answer **best** illustrates the “I” component to identify best practices?

A) In thawing breastmilk, how does using a bottle warmer compared to a microwave on low setting affect the quality and temperature of the milk for feeding?

B) How do breastfeeding mothers, who need to thaw the milk for their newborns, perceive education received from the NICU nurses?

C) Does frozen breastmilk break down when heated in the microwave?

D) How much do newborns eat when given thawed breastmilk compared to fresh breastmilk?

Ans: A

Feedback:

When formulating the intervention “I” in the PICOT, the terms/phrases used should clearly identify a treatment, intervention, or issue, such as “using a bottle warmer.” The other answers represent a meaning question, background question, and research question.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Moderate

Header: Posing the Question Using PICOT

Integrated Process: Nursing Process

Objective: 5

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12. When formatting a PICOT question what should **not** be considered when identifying the outcome(s) to assure it is a concise search question?

- A) Use directional terms with the outcomes to get to the outcomes that you think will be best
- B) Identify the outcome that is most challenging within the clinical setting and focus on it first in the search for relevant evidence
- C) If more than one outcome is included in the PICOT, make sure that the terms or phrases are linked logically
- D) Use synonyms for the term or phrase to increase the number of studies that may identify the specific outcome

Ans: A

Feedback:

Do not use directional terms with the outcome(s). This will limit and potentially bias the search strategy. Identify the most challenging outcome to find the most relevant evidence to address the issue. When possible, it is preferable to use fewer outcomes and cluster these. An example includes the common symptoms of tachycardia, dry mouth, and irritability, which are indications of dehydration. Use synonyms to expand the outcome term or phase to expand the possible number of relevant studies.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Difficult

Header: Posing the Question Using PICOT

Integrated Process: Nursing Process

Objective: 5

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13. A new graduate nurse is interested in understanding sleep quality in patients being treated for breast cancer. Which search question might identify a systematic review meta-analysis on this topic?

- A) In breast cancer patients, how does chemotherapy compared to radiation therapy affect sleep during treatment?
- B) In women with breast cancer, how does a lumpectomy compared to mastectomy predict survival over 5 years?
- C) How do women with breast cancer perceive their sexuality during treatment?
- D) Are women who have a complete mastectomy compared to those with a lumpectomy at greater risk of poor self-esteem over the year after the surgery?

Ans: A

Feedback:

The intervention question on chemotherapy compared to radiation therapy and its effects on sleep is the best choice. Systematic review meta-analysis includes quantitative studies to address the topic of interest.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Easy

Header: Table 2.4 Examples of Different Types of Clinical Questions in PICOT

Format and Their Associated Levels of Evidence Hierarchy

Integrated Process: Nursing Process

Objective: 5

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14. When mentoring an EBP team on how to select the strongest intervention or issue of interest search terms, what information do you provide to assist them in developing the PICOT?

- A) The intervention must be something considered important by your organization.
- B) The intervention should be one being done on your unit to see if you are currently using best practice strategies.
- C) The intervention should be supported by the providers working in the organization.
- D) The intervention/issue can be a therapy, exposure to disease, prognostic factor, or risk behavior.

Ans: D

Feedback:

Intervention or issues of interest include therapy, exposure to disease, prognostic factors, and risk behaviors. Identify the "I" to search for best practices from the evidence. It may not be something that the organization is currently doing or feels that it should be doing.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Apply

Difficulty: Moderate

Header: Clinical Scenario 2.1 Intervention Example

Integrated Process: Nursing Process

Objective: 5

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15. The EBP mentor shares this PICOT with the team: *Are fair-skinned females (P) who have prolonged unprotected UV ray exposure (>1 hour) (I) compared to darker-skinned females without prolonged unprotected ultraviolet ray exposure (C) at increased risk of melanoma (O)?* What type of clinical question is this?

- A) Intervention
- B) Prognosis/prediction
- C) Diagnosis
- D) Etiology

Ans: D

Feedback:

Etiology questions help clinicians address potential causality and harm. These questions can be answered by cohort or case-control studies that indicate what outcomes may occur in groups over time. The difference in an etiology/harm question and an intervention question is that the conditions (*I* and *C*) cannot be randomized owing to the potential for harm, which is often the reason for the question.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Apply

Difficulty: Moderate

Header: Clinical Scenario 2.2 Prognosis Example

Integrated Process: Nursing Process

Objective: 5

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16. The Adult Nurse Practitioner is working with a team to assess best practices for diagnosing deep vein thrombosis. The PICOT is: *In patients with suspected deep vein thrombosis (P) is D-dimer assay (I) compared to ultrasound (C) more accurate in diagnosing deep vein thrombosis (O)?* What levels of evidence might address this question?

- A) Systematic reviews with meta-analysis of cohort studies
- B) RCTs and clinical control trials without randomization
- C) All levels of evidence may contribute to the body of evidence

D) Qualitative studies and systematic reviews with meta-synthesis

Ans: C

Feedback:

The evidence to answer this type of question requires substantiated certainty that the diagnostic test will reliably provide a true positive (i.e., the outcome does exist and is diagnosed accurately by the test) or true negative (i.e., the outcome does not exist and is accurately diagnosed as such by the test). It would be unethical to randomly assign a diagnostic test to some patients and not others because the risks of the diagnostic test or misdiagnosing the outcome are too high; therefore, diagnostic studies be found in all levels of evidence.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Apply

Difficulty: Moderate

Header: Clinical Scenario 2.2 Prognosis Example

Integrated Process: Teaching/Learning

Objective: 5

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17. An older adult resident in a local Alzheimer Memory Home has fallen and suffered a hip fracture. The orthopedic surgeon has recommended a hip replacement and aggressive physical therapy. The family is concerned and questions whether this is the best treatment for their father based on his mental prognosis. What type of evidence would **best** address their questions and concerns?

- A) Qualitative studies
- B) Systematic review and meta-analysis of cohort or case-control studies
- C) Systematic review and meta-analysis of RCTs
- D) Descriptive, cross-sectional studies

Ans: B

Feedback:

The first level of evidence for a prognosis or predictive question is a systematic review with meta-analysis of cohort studies or case-control studies. It would not be ethical to conduct RCTs with this population. Qualitative and descriptive, cross-sectional studies can be included, but after a review of cohort and case-control studies.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Moderate

Header: Table 2.4 Examples of Different Types of Clinical Questions in PICOT

Format and Their Associated Levels of Evidence Hierarchy

Integrated Process: Nursing Process

Objective: 5

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18. A women's health nurse wants to identify best practices to encourage mammograms. Which would be an appropriate foreground question for this issue?

- A) Which cultural influence is preventing women from getting mammograms?
- B) What environmental issue contributes to low mammogram adherence?
- C) What common misconception is influencing low mammogram compliance?
- D) In women at average risk for breast cancer, how does screening mammography education, compared to pamphlets on breast health, affect mammogram rates biannually?

Ans: D

Feedback:

The question in PICOT format is the only foreground question. The other questions are background questions.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Physiological Integrity: Reduction of Risk Potential

Cognitive Level: Apply

Difficulty: Moderate

Header: Foreground Questions

Integrated Process: Nursing Process

Objective: 3

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19. A nurse leader is encouraging the nurses to use EBP to improve practice outcomes. Buy-in is slow with the nurses and staff across the organization. What is **not** a potential barrier to implementing EBP?

- A) We've always done it this way, why change?
- B) There is not enough time in the day to do the steps of EBP.
- C) The Quality Department already monitors and reports process improvement, and benchmark data.
- D) The computers on the unit do not have access to databases for searching for the evidence.

Ans: C

Feedback:

A Quality Department that is already monitoring quality, safety, and benchmark outcomes can provide internal data and identify issues in clinical outcomes. Barriers can include a lack of time to search; access to electronic resources; lack of comfort in computer use; knowledge in creating searchable, answerable questions; low comfort level with library and search techniques; access to information; and comfort with traditional practice.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Apply

Difficulty: Easy

Header: The Haystack: Too Much Information

Integrated Process: Nursing Process

Objective: 2

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20. A team of nurses and interprofessionals is formulating a PICOT question to identify relevant best practices for teaching fall prevention methods to patients after hip arthroplasty. What information is **not** needed to identify the key terms and phrases for the components?

A) What is the population or problem?

B) What outcome(s) are we wanting to address?

C) What is the cost-benefit of the EBP initiative so that it can be appropriately budgeted?

D) Do we want to search for “best practices or strategies” or do we know of interventions to include or compare?

Ans: C

Feedback:

Population, outcome(s), interventions, comparison intervention, and time frames are all part of the PICOT. Cost-benefit of the effectiveness of an EBP initiative is part of the evaluation step in the process and not part of the PICOT.

Format: Multiple Choice

Chapter Number: 2

Client Needs: Safe and Effective Care Environment: Management of Care

Cognitive Level: Analyze

Difficulty: Moderate

Header: Posing the Question Using PICOT

Integrated Process: Nursing Process

Objective: 1

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