

Chapter 1, Making the Case for Evidence- Based Practice and Cultivating a Spirit of Inquiry

1. The EBP paradigm is composed of components that are integrated into the seven-step EBP process. What are the key components of evidence-based practice?
- A) A quality-focused culture, patient outcomes, and cost/benefit
 - B) Relevant best evidence, clinician expertise, and patient preferences and values
 - C) Relevant best evidence, quality outcomes, and patient voice
 - D) A quality-focused culture, clinical expertise, and patient preferences and values

ANS: B

Feedback:

The EBP paradigm includes the systematic search for and critical appraisal of the most relevant and best research (external evidence) to answer a clinical question; clinical expertise includes the integration of internal evidence from various sources (practice, outcomes management, patient assessment, and outcomes, etc.) to achieve desired patient outcomes; and patient/family values and preferences. Together these inform evidence-based decision making.

PTS: 1

DIF: Moderate

REF: Header: Differences Among EBP, Research, Quality Improvement, and Evidence-Based Quality Improvement | Page: 9

OBJ: 2

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Understand

NOT: Multiple Choice

2. Nurses on the postsurgical unit are wondering if the time of first patient ambulation after surgery was impacting the length of stay, and if so, what could they do to reduce the length of stay. They plan to complete a retrospective chart review for this baseline information. Which component of EBP would this describe?
- A) Integrating organizational priorities
 - B) Integrating patient preference
 - C) Integrating internal evidence
 - D) Integrating external evidence

ANS: C

Feedback:

The nurses are questioning their practice and want to know if there are ways to improve the outcomes—Spirit of Inquiry. As part of this Step 0, internal evidence from chart reviews can identify baseline information to support inquiry and best practice change.

PTS: 1

DIF: Moderate

REF: Header: Definition and Evolution of Evidence-Based Practice | Page: 8

OBJ: 1

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply

NOT: Multiple Choice

3. An experienced nurse working in a memory care home observed that reorienting residents with dementia as frequently as possible seemed to minimize their agitation in the evening. The nurse wonders if this is the best practice. As the EBP expert, what would you recommend?
- A) Conduct a research study on reorienting compared to not reorienting residents with dementia in memory care homes
 - B) Pull a team together to create a policy so that all residents have decreased agitation while in the memory care home
 - C) Identify a team to explore the external evidence, clinician expertise/experiences, and preferences of the residents/families
 - D) Call the Quality Department to help with a PDSA project for the reorientation of patients

ANS: C

Feedback:

The EBP paradigm includes the integration of evidence, clinical expertise, and patient preferences to make best practice clinical decisions about care. An EBP initiative would identify if the nurse's practice is the best practice.

PTS: 1

DIF: Moderate

REF: Header: Components of Evidence-Based Practice | Page: 11 OBJ: 2

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Analyze NOT: Multiple Choice

4. An EBP mentor is leading a team in the critical care department to implement the central line–associated bloodstream infections (CLABSI) bundle across all critical care units in the system. Which outcomes would indicate the effectiveness of this EBP implementation?
- A) System-wide improvement of patient quality and safety outcomes for patients with central lines
 - B) Provider satisfaction in trauma critical care
 - C) Consistency in care across the healthcare system in pain management
 - D) Cost reduction in supplies for all systems departments

ANS: A

Feedback:

EBP leads to the highest quality and safety of care and the best patient outcomes while reducing costs. EBP implementation of best practice bundles in critical care can reduce complications and improve care for this patient population. It is important to evaluate the effectiveness of EBP practice change initiatives on patient outcomes.

PTS: 1

DIF: Easy

REF: Header: Why Evidence-Based Practice? | Page: 13 OBJ: 2

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply NOT: Multiple Choice

5. The Institute of Medicine's Roundtable on Evidence-based Medicine set a landmark goal that by 2020, 90% of clinical decisions would be supported by accurate, timely, and up-to-date information based on the best available evidence. The EBP Council has been asked to assist the organization to meet this goal by identifying best practice evidence to guide policies, procedures, and patient care practices. Which of the goals of the IOM Roundtable would **not** apply to the Council's charge?
- A) Generating evidence to support which healthcare strategies are most effective and produce the greatest value
 - B) Accelerating the progress toward a learning healthcare system, in which evidence is applied and developed as a product of patient care
 - C) Comparing the implementation of EBP in the United States with that of other developed countries
 - D) Improving public awareness and understanding of the nature of evidence and its importance for their healthcare

ANS: C

Feedback:

The IOM Roundtable was charged with accelerating the progress toward a learning healthcare system, generating new evidence to support which healthcare strategies are most effective, and improving public awareness and understanding of EBP. Comparison with other countries' EBP implementation was not the focus of the IOM Roundtable recommendations.

PTS: 1

DIF: Moderate

REF: Header: The Institute of Medicine's Roundtable on Evidence-Based Medicine | Page: 15

OBJ: 2

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply

NOT: Multiple Choice

6. Nurses working in a trauma unit have noticed that many of their patients on enteral feedings are required to be NPO at midnight before each scheduled procedure. For many of the patients, this has greatly extended their length of stay and resulted in weight loss. The nurses were wondering "What can we do to assure the patient receives the nutrition that they need while reducing the risks of aspiration during procedures?" This is an example of what step in EBP?
- A) Formulating the clinical search question/PICOT
 - B) Systematically searching for the best most relevant evidence
 - C) Cultivating a Spirit of Inquiry and curiosity
 - D) Evaluation and sustainability of practice

ANS: C

Feedback:

Step 0 in the EBP process—Spirit of Inquiry, occurs when there is curiosity and questioning of "Why do we do it this way"? This step starts the EBP process by identifying a clinical issue using internal evidence and inquiry.

PTS: 1

DIF: Easy

REF: Header: Step 0: Cultivate a Spirit of Inquiry Within an EBP Culture and Environment | Page: 19

OBJ: 3

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process
BLM: Cognitive Level: Apply NOT: Multiple Choice

7. New graduate nurses in a residency program are asked to identify best practices in the evidence and need to create a PICOT question. Which of the following is a PICOT question?
- A) What effect does parents' smoking have on the smoking habits of their children aged 13 to 16 years?
 - B) In clients aged 8 to 12 years, is the effectiveness of a pain scale using faces superior to a numeric rating scale in the emergency room context?
 - C) How do parents who raise children with fetal alcohol spectrum disorders (FASD) cope and develop resilience?
 - D) In cancer patients, how does meditation compared to benzodiazepines affect anxiety during radiation treatments?

ANS: D

Feedback:

The PICOT question will include population or problem, intervention or issue of interest, comparison intervention or group, outcome, and time frame. Only the question about cancer patients is written as a PICOT question. The other questions are background or research questions.

PTS: 1 DIF: Difficult
REF: Header: Step 1: Formulate the Clinical PICOT Question OBJ: 3
NAT: Client Needs: Safe and Effective Care Environment: Management of Care
TOP: Chapter 1 KEY: Integrated Process: Nursing Process
BLM: Cognitive Level: Analyze NOT: Multiple Choice

8. After developing a PICOT to guide the search, what strategies should be used for searching for the best external evidence?
- A) Start with each word/phrase in the PICOT and conduct a search, then combine the searches to limit to the articles that answer your search
 - B) Start with GOOGLE to see if there are articles on the topic, then go to the organization's library to find full-text articles
 - C) Search MEDLINE or CINAHL only because they have the most nursing articles to address the question
 - D) Search GOOGLE SCHOLAR to locate systematic reviews and systematic review meta-analysis or metasynthesis

ANS: A

Feedback:

The PICOT will guide the search. Use each element of the PICOT separately, and then combine elements to help find evidence that addresses the question. For a comprehensive, systematic search, use multiple databases from nursing and other applicable disciplines.

PTS: 1 DIF: Easy
REF: Header: Step 2: Systematically Search for and Collect the Most Relevant Best Evidence | Page: 20 OBJ: 3
NAT: Client Needs: Safe and Effective Care Environment: Management of Care
TOP: Chapter 1 KEY: Integrated Process: Nursing Process
BLM: Cognitive Level: Understand NOT: Multiple Choice

9. An EBP team has completed a search of the evidence to identify the best pharmacologic interventions to manage hypertension in obese patients. When searching for the evidence what type of study would provide the strongest level of evidence?
- A) A qualitative study describing the feelings of obese individuals with hypertension
 - B) A randomized control trial comparing beta-blockers to calcium channel blockers for hypertension
 - C) An integrative review of studies on the management of obese hypertensive adults
 - D) A systematic review meta-analysis of randomized control trials on pharmacological management of hypertension

ANS: D

Feedback:

The highest level of evidence is a systematic review meta-analysis of randomized control trials—Level I. The other studies may contribute to the body of evidence but are lower levels of evidence: qualitative—Level VI, single randomized control trial—Level II, and integrative review—Level VI.

PTS: 1 DIF: Moderate

REF: Header: Box 1.3 Rating System for the Hierarchy of Evidence for Intervention/Treatment Questions | Page: 21 OBJ: 3

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply NOT: Multiple Choice

10. An EBP team in the post-anesthesia care unit is evaluating current practices for ambulatory surgery patients. They identify studies that address recovery management of short-stay patients. Based on the titles from the search which article would they want to review in full text?
- A) Randomized Control Trial on End-tidal Carbon Dioxide Monitoring in Critical Care
 - B) Legal and Accreditation Recommendations for Ambulatory Settings: Systematic Review
 - C) Chronic Orthopedic Pain in Adults: Qualitative Review
 - D) Clinical Practice Guidelines for Postoperative Management

ANS: D

Feedback:

Evidence-based clinical practice guidelines are unique sources of information comprised of multiple, specific practice recommendations that are grouped on a specific topic. They can address multiple questions such as the management of the postoperative patient in ambulatory settings.

PTS: 1 DIF: Moderate

REF: Header: Step 3: Critical Appraisal of Evidence | Page: 22 OBJ: 3

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply NOT: Multiple Choice

11. A nurse is conducting a literature review on the evidence regarding the use of vacuum dressings on pressure ulcers. After locating a recent study that appears to be relevant, which question provides key considerations when critically appraising the study?
- A) "Are the findings of this study cost-effective in our clinical context?"
 - B) "Are the findings valid, reliable, and applicable to my population?"
 - C) "Are the findings of the study significantly different from what we are currently doing on the unit?"
 - D) "Are the patients in the study similar to the population?"

ANS: B

Feedback:

The critical appraisal looks at the validity of the study results (best research methods for the question), the reliability of the results (statistically significant and/or clinically meaningful), and the applicability of the results (apply to the PICOT population). Cost-effectiveness is part of the implementation of the initiative. Significance is only one piece of the appraisal, as is the similarity of the population.

PTS: 1

DIF: Moderate

REF: Header: Step 3: Critical Appraisal of Evidence | Page: 22

OBJ: 3

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply

NOT: Multiple Choice

12. The healthcare provider of a 49-year-old male client has briefly explained the best practice evidence that supports beginning regular digital rectal examinations as part of the annual physical assessment. Which factor would justify not performing a digital rectal examination today in the clinic?
- A) The client states that he does not want to have a digital rectal examination today.
 - B) The best practice clinical guidelines for prostate care do not address men under the age of 60.
 - C) The clinician has previously waited until clients are over 55 for this exam.
 - D) The clinician is basing the practice recommendation on one large RCT.

ANS: A

Feedback:

Client preference, such as opposition to a particular assessment or intervention, should be implemented in clinical decision making. Prostate issues are most common in older men but can occur in men earlier than age 60. The providers' previous practices may not apply to this client. Practice should not be based on one RCT.

PTS: 1

DIF: Moderate

REF: Header: Step 4: Integrate the Evidence with Clinical Expertise and Patient/Family Preferences to Make the Best Clinical Decision | Page: 25

OBJ: 3

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply

NOT: Multiple Choice

13. A group of nurses on the postsurgical unit has completed the implementation and evaluation of daily CHG baths for all postoperative patients to reduce infections. Which action would the nurses initiate as the final step of the EBP initiative?
- A) Calculating the return on investment of the initiative to determine if the initiative

- was cost-effective
- B) Developing a sustainability plan to monitor and report adherence to the leadership team
 - C) Sharing the effectiveness of the EBP initiative with other healthcare providers in the organization
 - D) Conducting a secondary search of the literature to determine if there is any new evidence on this issue

ANS: C

Feedback:

The final step in the EBP process is the dissemination of outcomes/effectiveness of the practice change. Dissemination should be done internally to the organization, and externally through presentations and publications if possible.

PTS: 1 DIF: Moderate

REF: Header: Step 6: Disseminate the Outcomes of the Evidence-Based Practice Change | Page: 26 OBJ: 3

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

TOP: Chapter 1 KEY: Integrated Process: Communication and Documentation

BLM: Cognitive Level: Apply NOT: Multiple Choice

14. A nurse manager wants staff to apply the EBP process to improve patient outcomes. Which action by the nurse would be important to overcome barriers and sustain a culture of EBP?
- A) Recruit baccalaureate-level or higher nurses to participate in EBP initiatives in the organization
 - B) Increase accountability for patient outcomes in the annual evaluations and unit score cards
 - C) Seek funding to support EBP initiatives from the hospital or organizational foundation
 - D) Get stakeholder buy-in from the staff, providers, practice leaders, and administration

ANS: D

Feedback:

Stakeholder buy-in and support from staff, providers, practice leaders, and administration can facilitate a culture of readiness for EBP implementation and sustainability of practice changes. Having baccalaureate-educated or higher staff nurses, increased accountability for patient outcomes in the annual evaluation, and increased funding are not noted to increase the implementation of EBP.

PTS: 1 DIF: Moderate

REF: Header: Facilitators of Evidence-Based Practice | Page: 28 OBJ: 4

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply NOT: Multiple Choice

15. A team of nurses in the pediatric department has been asked to revise policies, procedures, and guidelines to reflect evidence-based practice. What is the best approach to identify the best evidence to support this activity?
- A) Bring together the most experienced staff to serve as practice experts
 - B) Work with the librarian to identify evidence from databases of peer-reviewed

- journals such as Cochrane, PubMed, CINAHL
- C) Ask the nurse educator/professional development specialist for assistance
 - D) Look for lay publications on Google before searching in peer-reviewed journals

ANS: B

Feedback:

Working with the librarian to search databases such as the Cochrane Library, PubMed, CINAHL, and the Emergency Care Research Institute (ECRI) can provide nurses with quick, easily retrievable, systematic reviews, quantitative and qualitative studies, and evidence-based clinical practice guidelines to inform their practices. Expert staff and educators can address clinician expertise but not best practice without searching the evidence. Lay publications do not address best-practice evidence.

PTS: 1 DIF: Moderate
REF: Header: Correcting Misperceptions | Page: 30 OBJ: 4
NAT: Client Needs: Safe and Effective Care Environment: Management of Care
TOP: Chapter 1 KEY: Integrated Process: Communication and Documentation
BLM: Cognitive Level: Apply NOT: Multiple Choice

16. A new administrator wants to implement EBP due to concerns that the internal evidence shows that the organization is not meeting benchmarks for key outcomes. Some staff and providers do not believe that EBP can make a difference. How would the administrator address these concerns?
- A) Wait 6 months to assess the culture and to see if the outcomes improve with current practice
 - B) Provide an overview of EBP methods/steps and examples of EBP initiatives including outcomes and return on investments
 - C) Identify a small group to explore if EBP would work in the organization to improve outcomes
 - D) Create a provider expert panel to decide what should be done to improve Outcomes

ANS: B

Feedback:

Providers and staff who are hesitant about implementing EBP need to be educated on the steps of EBP and how the methodology can be used to guide best practice change. Presenting examples of EBP initiatives that show the effectiveness of the EBP practice change including return on investment can engage nurses, staff, and providers to implement EBP. Waiting to see if outcomes will improve is not acceptable. For an organizational change, a small group or provider expert panel is not adequate.

PTS: 1 DIF: Moderate
REF: Header: Overcoming Barriers to Evidence-Based Practice | Page: 29
OBJ: 4 NAT: Client Needs: Health Promotion and Maintenance
TOP: Chapter 1 KEY: Integrated Process: Nursing Process
BLM: Cognitive Level: Apply NOT: Multiple Choice

17. A nurse in a bariatric clinic is searching for best practice evidence on maintaining weight loss after bariatric surgery. For a rapid critical appraisal of a clinical trial, which question would be the **best** to determine validity?
- A) Did the control group match my population?

- B) Was the follow-up time frame adequate for the study design?
- C) Were the subjects randomly assigned to groups?
- D) Were the outcomes statistically significant?

ANS: C

Feedback:

Validity, reliability, and appraisal are the three key questions of the rapid critical appraisal process when evaluating a study. Validity includes determining whether the subjects of a study were randomly assigned to a treatment or control group. Follow-up time frame and statistical significance are questions that address reliability. Applicability is addressed with the population being similar to the study group(s).

PTS: 1

DIF: Difficult

REF: Header: Step 3: Critical Appraisal of Evidence | Page: 22

OBJ: 3

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply

NOT: Multiple Choice

18. A nursing leader is encouraging EBP methodology to be used for all practice change initiatives and is requiring synthesis documentation to be included for all policies, procedures, and guidelines. Which EBP step is the nurse leader addressing?
- A) Integrating patient preferences is one element that needs to be considered for a practice change recommendation
 - B) Through a spirit of inquiry identify internal evidence that can define clinical issues for the organization
 - C) Appraisal and synthesis of external evidence to guide best practice change recommendations
 - D) Research utilization by providing a reference article for each policy, procedure, and guideline

ANS: C

Feedback:

Appraisal and synthesis of relevant best practice evidence should be used to guide practice in policies, procedures, and guidelines. Patient preferences and the spirit of inquiry are components of EBP. The use of one study or research utilization is not providing a body of evidence for practice.

PTS: 1

DIF: Moderate

REF: Header: Definition and Evolution of Evidence-Based Practice | Page: 8

OBJ: 2

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply

NOT: Multiple Choice

19. An EBP team of hospital clinicians has conducted a comprehensive search of the literature to determine best practices for preventing pressure ulcers. Through the rapid critical appraisal process, the team will select the best quality studies for the body of evidence. Which study should be included in the body of evidence?
- A) Systematic review meta-analysis of 20 RCTs on pressure ulcer prevention
 - B) Single RCT with 2,500 subjects comparing early to late ambulation of postsurgical patients

- C) Clinical practice guidelines on pressure ulcer prevention published in the *Women's Home Journal*
D) Systematic internet searches

ANS: A

Feedback:

The level and quality of evidence equal the strength of the evidence. The stronger the evidence the increased confidence in the practice change recommendation. Evidence from the systematic review meta-analysis of RCT studies would be included. The single RCT focus may not include pressure ulcers. Systematic internet searches and guidelines published in lay journals may be inconsistent and questionable in sources and quality of the evidence.

PTS: 1

DIF: Moderate

REF: Header: Components of Evidence-Based Practice | Page: 37 OBJ: 2

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

TOP: Chapter 1 KEY: Integrated Process: Nursing Process

BLM: Cognitive Level: Apply NOT: Multiple Choice

20. The American Nurses Credentialing Center oversees the Magnet Recognition Program. Initiatives to support quality care indicators, research, and EBP are required for Magnet status. Which of the Magnet component supports evidence-based practice?
- A) Transformational leadership to meet future goals and ever-changing demands
B) Professional opportunities to recruit experienced providers
C) Highly reliable physician practice standards
D) Strong research program for physicians in the organization

ANS: A

Feedback:

The Magnet program is based on five key components: (1) transformational leadership; (2) structural empowerment; (3) exemplary professional practice; (4) new knowledge, innovation, and improvements that emphasize new models of care, application of existing evidence through EBP, and visible contributions to the science of nursing through the generation of new evidence; and (5) empirical quality results.

PTS: 1

DIF: Moderate

REF: Header: Magnet Recognition Program | Page: 17

OBJ: 2

NAT: Client Needs: Health Promotion and Maintenance

TOP: Chapter 1

KEY: Integrated Process: Caring

BLM: Cognitive Level: Apply

NOT: Multiple Choice