

Question Development Tool
Appendix B

What is the problem?
What are the data and sources of information that validate the problem?
<input type="checkbox"/> Safety and risk management concerns: _____ <input type="checkbox"/> Data: _____ <input type="checkbox"/> Financial information: _____ <input type="checkbox"/> Lack of evidence for current practice: _____ <input type="checkbox"/> Quality indicators: _____ <input type="checkbox"/> Practice observations: _____ <input type="checkbox"/> Other: _____
Why is the problem important and relevant? What would happen if it were not addressed?
What is the current practice?
Is this a background question to establish the state of the evidence on a topic (with no comparison group) or a foreground question to compare specific interventions?
<input type="checkbox"/> Background <input type="checkbox"/> Foreground
What are the PICO components?
P (patient, population, or problem): I (intervention): C (comparison with other interventions if <i>foreground</i> question): O (outcomes):
Initial EBP question:

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List possible search terms for each part of the PICO question:	
PICO Element	Possible Search Terms
P	
I	
C	
O	
What are preliminary inclusion and exclusion criteria (e.g., date, population, setting, other)?	
Inclusion:	Exclusion:
What evidence needs to be reviewed? (Check all that apply)	
<input type="checkbox"/> Peer-reviewed publications (from databases such as PubMed, CINAHL, Embase) <input type="checkbox"/> Standards (regulatory, professional, community) <input type="checkbox"/> Clinical Practice Guidelines <input type="checkbox"/> Organizational data (e.g., quality improvement or financial data, local clinical expertise, patient/family preferences) <input type="checkbox"/> Evidence-based professional organization position statements <input type="checkbox"/> Consensus studies (e.g., commissioned reports from the National Academy of Medicine, professional organizations, philanthropic foundations) <input type="checkbox"/> Other _____	
Revised EBP question:	
What are measures that indicate if the EBP project is successful? (Measures may be structure, process, and/or outcome)	

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Directions for Use of the Question Development Tool

See Chapter 11, Lessons from Practice, for examples of completed tools.

Purpose: This form guides the EBP team to develop an answerable EBP question. It is meant to be fluid and dynamic as the team engages in the PICO question development process. As the team becomes familiar with the evidence base for the topic of interest, they revisit, revise, and/or refine the question, search terms, search strategy, and sources of evidence.

What is the problem?

Describe and specify the problem that needs to be addressed. What led the team to question this practice? Validate the problem statement with staff who experience it day to day. It is important for the interprofessional team to work through the problem definition process together to probe the problem description, reflect, gather information, observe current practice, and listen to clinicians' perspectives. This team deliberation ensures the problem statement defines the actual problem rather than a solution and guides the type of measure(s) they will use to determine if the intervention results in improvements once implemented.

What are the data and sources of information that validate the problem?

Confirm the problem with concrete, rather than anecdotal, information. Concrete information exists in the form of staff or patient safety concerns, data demonstrating unsatisfactory process or outcome measures, financial reports, identification of the lack of evidence for a current practice, or unsatisfactory quality indicators. Formal information or observations may demonstrate variations within the practice setting or variation within the community. These elements are not mutually exclusive, and the problem may be evidenced in multiple areas.

Why is the problem important and relevant? What would happen if it were not addressed?

Establishing a sense of importance and urgency for a practice problem can help build support for the EBP project and on-board other stakeholders. Emphasize why the problem must be addressed and the potential consequences of not doing so. This is the place to establish your "burning platform" for practice change.

What is the current practice?

Define the current practice as it relates to the problem by identifying the gap or performance issue. Think about current policies and procedures as well as adherence to these guidelines. What is commonly considered acceptable among the staff related to their daily practice? Do policy and practice align? What do you see?

Is this a background question to establish the evidence on a topic (with no comparison group) or a foreground question to compare specific interventions?

Select if you are intending to write a background or foreground question. Background questions are broad and produce a wide range of evidence to establish best practices when the team has little knowledge, experience, or expertise in the area of interest. Background questions do not include a "comparison" group. Foreground questions are focused, with specific comparison of two or more ideas or interventions. Foreground questions often flow from an initial background question and evidence review.

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What are the PICO components?

Complete each section. Definitions of each PICO element are included below.

P (patient, population, problem): This may include characteristics such as age, sex, setting, ethnicity, condition, disease, type of patient or community.

I (intervention): This can be a best practice statement or include a specific treatment, medication, education, diagnostic test, or care practice.

C (comparison): Not applicable for background questions. For foreground questions, comparisons are typically with current practice or an intervention identified in the evidence.

O (outcomes): structure, process, or outcomes measures that indicate the success of evidence translation. More than one measure can be listed; examples include structure (e.g., adequacy of resources, space, people, training), process (e.g., care coordination, adherence to protocols for care, performance), or outcomes (e.g., satisfaction scores or retention, fall rates, rates of disease in a population).

Initial EBP Question:

Combine each element of the PICO to create an answerable EBP question. The initial question is refined throughout the PET process.

List possible search terms for each part of the PICO question:

Select concepts from each PICO component to identify search terms. Mapping search terms to each component aids the evidence search; ensure terms are neither too broad nor too narrow. Brainstorm common synonyms for each concept. Be sure to consider alternate spellings or terms used in different countries (e.g., “ward” vs. “unit”) as well as brand names of specific interventions. It may be appropriate to leave some of the rows blank (e.g., the O in PICO) in order to avoid building solutions into the search itself (e.g., words like “reduction” will only provide evidence that exhibited reductions in the outcome of interest and may miss evidence with no change or even an increase).

What are preliminary inclusion and exclusion criteria (e.g., publication date, population, and setting)?

As a team, list initial characteristics you want to include or exclude from your evidence search (for example you may want to include student nurses but do not want to include post-licensure nurses). This will help to ensure the team has a mutual understanding of the scope of the project. The group should revisit the list throughout the process to provide further clarifications and refine evidence search results.

What evidence needs to be reviewed?

Select the types of evidence you intend to gather based on the PICO and initial EBP question. This will guide you to the appropriate sources to begin the search.

Revised EBP question:

Often the question that you start with will not be the final EBP question. Needed revisions to the EBP question may not be evident until after the initial evidence review; examples include revision to the background question

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or a change from a background to a foreground question. Additionally, preliminary reviews of the evidence may indicate a need to focus or broaden the question, update terminology, and/or consider additional measures of success.

What are measures that indicate if the EBP project is successful? (Measures may be structure, process and/or outcome)

It is essential to consider a measurement plan from the onset of an EBP project. As a team, reflect on how you will determine project success. Success can be captured in many ways, and measures can include:

- Structure measures that describe the physical or organizational environment (e.g., nurse-patient ratios)
- Outcome measures that occur at the conclusion of a project (e.g., number of safety events)
- Process measures that are gathered throughout to track progress toward the goals (e.g., use of a new tool or protocol)