

Asking a Good Question (PICO) (IHI)

Asking the right question is a difficult skill to learn, yet it is fundamental to the evidence-based decision-making process. This process almost always begins with a patient question or problem. A "well-built" question should include four parts, referred to as PICO that identify the [patient problem or population \(P\)](#), [intervention \(I\)](#), [comparison \(C\)](#) and [outcome\(s\) \(O\)](#). [1](#)

The first step in developing a well-built question is to identify the patient problem or population. Describe either the patient's chief complaint or generalize the patient's condition to a larger population.

When identifying the P in PICO it is helpful to ask:

How could you describe a group with a similar problem?

How you would describe the patient to a colleague?

What are the important characteristics of this patient?

- Primary Problem
- Patient's main concern or chief complaint
- Disease or health status
- Age, Race, Sex, Previous ailments, current medications

Should these characteristics be considered as I search for evidence? [1](#)

The P phrase could be more detailed if the added information influences the results you expect to find.

Identifying the Intervention is the second step in the PICO process. It is important to identify *what you plan to do for that patient*. This may include the use of a specific diagnostic test, treatment, adjunctive therapy, medication or the recommendation to the patient to use a product or procedure. The intervention is the main consideration for that patient or client. [1](#)

The Comparison is the third phase of the well-built question, which is *the main alternative you are considering*. [1](#) It should be specific and limited to one alternative choice in order to facilitate an effective computerized search.

The Comparison is the only optional component in the PICO question. One may only look at the Intervention without exploring alternatives, and in some cases, there may not be an alternative.

The Outcome is the final aspect of the PICO question. It specifies the result(s) of what you plan to accomplish, improve or affect and should be measurable. Outcomes may consist of:

relieving or eliminating specific symptoms
improving or maintaining function
or enhancing esthetics.

Specific outcomes will yield better search results and allow you to find the studies that focus on the

outcomes you are searching for. When defining the outcome, *more effective* is not acceptable unless it describes *how* the intervention is more effective.

For example, more effective in preventing caries, or in decreasing probing depths.

In addition to identifying the PICO components, it is important to clarify the type of question you are asking and the related research method. The categories for types of questions are:

Therapy/Prevention

Diagnosis

Etiology

Prognosis

Based on four PICO component, a final PICO question can be stated as:

For a patient with Tetracycline staining, will chairside (ZOOM) bleaching as compared to over the counter White Stips decrease staining and increase tooth whiteness.

Once you have identified a patient problem and defined your question using PICO, you are ready to find the most current valid evidence.

The [PICO Worksheet and Search Strategy](#) provides the framework for developing this step of the process by guiding one to write each component of the PICO question and is also a guide in developing a search strategy, which aids in the retrieval of relevant clinical evidence.

Conducting a computerized [search](#) with maximum efficiency to answer the question is the second step in the EBDM process

[LINKS to PICO Resources](#)

References

1. Sackett DL, Richardson WS, Rosenberg W, Haynes RB (1997). Evidence-based medicine: How to practice and teach EBM. New York: Churchill Livingstone.