

What is PICO?

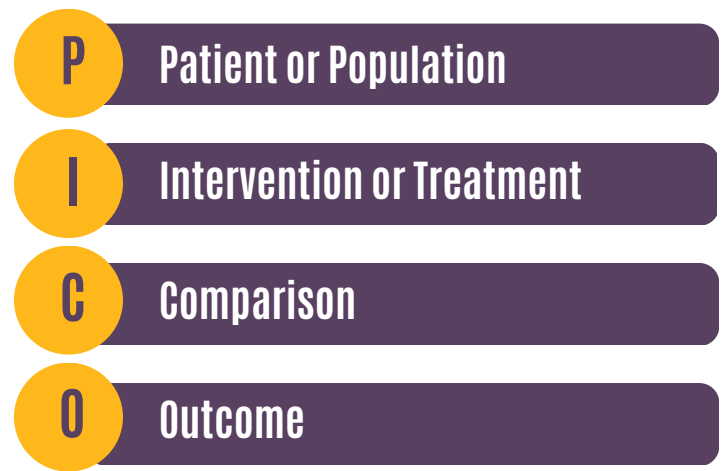
PICO is a format for developing a good clinical research question *prior* to starting your research.

It is a mnemonic used to describe the four elements of a sound clinical question.

The question needs to identify the:

- Patient or population you intend to study
- Intervention or treatment you plan to use
- Comparison of one intervention to another (if applicable)
- Outcome you anticipate

These make up the four elements of the PICO model:



In some questions, a T is added to the PICO framework as well to help find a specific level of evidence.
T: Timeframe, Type of Study, or Type of Question

The PICO Process

The PICO process starts with a case scenario from which a question is constructed that is *relevant* to the case and is phrased in such a way as to facilitate finding an answer. Once a well-structured question is formulated, researchers will be in a better position to search the literature for evidence that will support their original PICO question.

Steps to the Perfect PICO Search

1 Formulate the PICO Question

2 Identify Keywords for Each PICO Element

3 Plan the Search Strategy

4 Execute the Search

5 Refine the Results

6 Review the Literature

7 Assess the Evidence

You work on a Urology unit. One of your patients is a 55-year-old man who is recovering from abdominal surgery – specifically a laparoscopic prostatectomy. The patient complains of abdominal pain and nausea. His abdomen is distended, and he has no bowel sounds. The registrar suspects a paralytic ileus and confirms the diagnosis based on the combination of clinical features and imaging.

At the next Evidence-Based Nursing Practice Committee meeting, you discuss this case. The committee decides to do a case study to determine if there is evidence to suggest that a simple intervention such as chewing gum post-operatively can prevent a post-operative ileus following abdominal surgery.

1 Formulate the PICO Question

Based on this scenario, our research question is: *“In patients undergoing abdominal surgery, is there evidence to suggest that chewing gum post-operatively compared with not chewing gum post-operatively affects post-operative ileus?”*

2 Identify Keywords for Each PICO Element

“In patients undergoing abdominal surgery, is there evidence to suggest that chewing gum post-operatively compared with not chewing gum post-operatively affects post-operative ileus?”

PICO ELEMENTS	KEYWORDS
P (Patient or Population)	Patients undergoing abdominal surgery
I (Intervention)	Chewing gum
C (Comparison)	Not chewing gum
O (Outcome)	Affects post-operative ileus

3 Plan the Search Strategy

- Determine which database(s) to search
- Identify the major elements of your question
- Translate natural language terms to subject descriptors, MeSH (medical subject headings), or synonyms

Fostering a culture of evidence-based nursing practice within a hospital is no easy task. It involves the *integration* of clinical expertise, patient values, and the best research evidence (Sackett D, 2002). The actual search for high quality clinical research evidence can be overwhelming to many. By using the PICO format, the search process will be streamlined and will give the best available evidence to support clinical decisions and explore alternative treatments and procedures.