Developing a PICO Question Tutorial

Introduction
Welcome to Marymount Library’s tutorial on developing PICO questions.

In this tutorial we will cover:
- What PICO a question is
- Why PICO questions are important
- How to develop a PICO question and
- How PICO questions will improve your research to improve patient outcomes

Evidence-Based Practice: Why is it Important?
The Institute of Medicine recommends that educators, accreditation, licensing and certification organizations ensure that health care students and working professionals develop and maintain proficiency in five core areas: that they be educated to deliver patient-centered care, while working on inter-professional teams, emphasizing evidence-based practice, quality improvement, and information technology (informatics).

The current state of healthcare
Even though the Institute of Medicine’s competencies have been integrated into many health care curricula, accreditation, licensing, and certification organizations, according to the 2012 study described in, “The State of Evidence-Based Practice in Nursing,” despite the improved patient outcomes and decreased costs, clinicians continue to rely on outdated policies and procedures without questioning their current relevance or accuracy.” Clinicians appreciate that research exists, but they don’t look for it and/or apply it despite efforts of building research infrastructures that support EBP.

The future state of healthcare
The Institute of Medicine has set a goal that by 2020, 90% of all health care decisions in the U.S. will be evidence-based, but the majority of health care professional are still not consistently implementing evidence-based practice in their clinical settings.

Evidence-Based Practice
Evidence-Based Practice is a practical, problem solving approach that combines the best evidence from research studies found in literature, patient preferences, along with clinician expertise. When delivered in the context of a caring and supportive organizational culture, the highest quality of care and best patient outcomes can be achieved. Evidence based practice always begins and ends with the patient.

There are five steps in the evidence-based practice process: to ASK a searchable question, to ACQUIRE the literature that best answers the questions, to APPRAISE the literature, to APPLY the results in clinical practice, and to ASSESS the outcomes of the application. We will focus on the first step ASK a searchable question in this video and the second step ACQUIRE the literature in the second video.

An important element of Evidence-Based Practice is question building. Developing PICO questions is an efficient method for clinicians to use in answering clinical questions.
Before we get into the specifics of what a PICO question is, it is important to understand why you will need to formulate a PICO question.

A PICO question must be asked in order to determine which of two interventions is the most effective in improving patient outcomes.

PICO questions makes specific comparisons between the two interventions and provides an efficient framework for searching electronic databases to retrieve only those articles that are relevant to the clinical questions. Formulating a good PICO question increases the likelihood that the answer will be found quickly and efficiently.

Now that you understand why PICO statements are important and how you will use them to ensure your research is as thorough and efficient as possible let’s look at the PICO acronym and learn how to formulate a PICO question.

**What does the Acronym PICO Mean?**

P – Patient, Population, or Problem
How would you describe the patient, population, or problem?

I – Intervention
Which intervention, prognostic factor, exposure, administrative intervention, or process of care are you considering?

C – Comparison
What is the standard or alternative treatment to compare with the intervention?

O – Outcome
What can you hope to accomplish measure, improve, or affect?

When writing a PICO question it is helpful to use a question type template.

Let’s look at a scenario and then formulate an appropriate PICO question. The question type template to use for this scenario is for creating a therapy question. There are additional question type templates found in a separate handout from your Instructor.

In ___(P- the patient, population or problem), how does ___ (I- the intervention) compared with ___ (C- the comparison) affect ___ (O- the outcome)?

**PICO Scenario**

Recently the Centers for Medicare and Medicaid Services (CMS) have transferred the financial burden of inpatient fall prevention to hospitals. As a nurse manager in an acute care hospital, you notice that falls have become particularly problematic at a rate of 7.3 falls per 1,000 inpatient days, with about 25% of those resulting in serious injury. You would like to decrease this number in order to improve patient outcomes and decrease the costs to your hospital. You recently read an article about fall rates and noticed that most hospitals haven’t implemented
plans that might affect fall rates. You think that a new hourly rounding plan might positively impact fall rates. You visit your hospital library to develop your PICO Question and to search the literature.

Using this template formulate a PICO questions, click the continue button at the top of the screen when you’re ready to review the answer.

**Answer:** In hospitalized adults how does hourly rounding compared with no rounding affect fall rates?

In Video 2, we will use this same therapy question to identify appropriate types of studies to research in the databases.

**Remember Why You Should Use PICO**
- Help you form a focused question that will return relevant results
- Helps you retrieve a manageable amount of results
- Assists you in brainstorming keywords for your research
- Saves time!

You have now completed video 1 in how to formulate a PICO question. If you have any questions or concerns feel free to contact a librarian via email, live chat or in person at the reference desk.