What is a PICOT Question?

The PICOT question format is a consistent "formula" for developing answerable, researchable questions. Writing these questions is deceptively simple! When you write a good one though it makes the rest of the process of finding and evaluating evidence much more straightforward. As strange as it sounds deciding what you are looking for related to your outcome can be one of the hardest parts! When you determine the outcome it helps you hone the process of searching for evidence. Remember evidence is not just what you want the outcome to be.. it is evaluating the evidence supporting or refuting what influences the outcome. If you are interested in getting to the heart of the effect of testing foley balloons on the rates of UTIs then you need to find evidence on the pros and cons of testing the balloon!

Question Templates for Asking PICOT Questions:

P: Population/disease (i.e. age, gender, ethnicity, with a certain disorder)

I: Intervention or Variable of Interest (exposure to a disease, risk behavior, prognostic factor)

C: Comparison: (could be a placebo or "business as usual" as in no disease, absence of risk factor, Prognostic factor B)

O: Outcome: (risk of disease, accuracy of a diagnosis, rate of occurrence of adverse outcome)

T: Time: The time it takes to demonstrate an outcome (e.g. the time it takes for the intervention to achieve an outcome or how long participants are observed).

Note: Not every question will have an intervention (as in a meaning question) or time (when it is implied in another part of the question) component.

For an intervention/therapy:

In _______(P), what is the effect of _______(I) on ______(O) compared with ______(C) within ________ (T)?

For etiology:

Are ____ (P) who have _______ (I) at ___ (Increased/decreased) risk for/of_______ (O)
compared with ______ (P) with/without ______ (C) over _____ (T)?

**Diagnosis or diagnostic test:**

Are (is) _________ (I) more accurate in diagnosing ________ (P) compared with ______(C) for _______ (O)?

**Prevention:**

For ________ (P) does the use of ______ (I) reduce the future risk of ________ (O) compared with __________ (C)?

**Prognosis/Predictions**

Does __________ (I) influence ________ (O) in patients who have _______ (P) over ______ (T)?

**Meaning**

How do __________ (P) diagnosed with ________ (I) perceive _____ (O) during _____ (T)?


**Examples of Evidence-Based PICOT Questions**

**1. Population:** Bariatric adolescents considering or undergoing gastric bypass surgery.

**Intervention:** The nurse’s role as a primary member of the multidisciplinary team regarding perioperative care of the bariatric adolescent patient.

**Comparison:** The nurse's role as a secondary member of the multidisciplinary team without any specialized training and is only involved in perioperative care of the bariatric adolescent patient.

**Outcome:** When the nurse is involved as one of the primary members in the multidisciplinary team approach, the bariatric adolescent patient has better continuity of care.

**Time:** perioperative including the 6 weeks post recovery.

**PICOT Question:** Does the bariatric adolescent patient undergoing gastric bypass have better continuity of care perioperatively and postoperatively when the nurse is a primary
member of the multidisciplinary team versus when the nurse is a secondary member whose only role is in providing perioperative care and has no specialized training?

2. **Intervention PICOT Question: An Intervention example:** In adult patients with total hip replacements (Patient population) how effective is PCA pain medication (Intervention of interest) compared to prn IM pain medication (Comparison intervention) in controlling postoperative pain (Outcome) during the perioperative and recovery time?

   **Note:** The IM pain medication would be called the control group. It would be unethical to have a control group that received NO pain medication. Many times the control group means they get "business as usual!" or the current standard of care.

3. **Therapy PICOT Question: A non-intervention example:** What is the duration of recovery (O) for patients with total hip replacement (P) who developed a post-operative infection (I) as opposed to those who did not (C) within the first six weeks of recovery (T)?

4. **Etiology PICOT Question:** Are kids (P) who have obese adoptive parents (I) at Increased risk for obesity (O) compared with kids (P) without obese adoptive parents (C) during the ages of five and 18 (T)?

5. **Diagnostic PICOT Question:** Is a PKU test (I) done on two week old infants (P) more accurate in diagnosis inborn errors in metabolism (O) compared with PKU tests done at 24 hours of age (C)? Time is implied in two weeks and 24 hours old.

6. **Prevention PICOT Question:** In OR nurses doing a five minute scrub (P) what are the differences in the presence and types of microbes (O) found on natural polished nails and nail beds (I) and artificial nails (C) at the time of surgery (T)?

7. **Prognosis/Prediction PICOT Question:** Does telemonitoring blood pressure (I) in urban African Americans with hypertension (P) improve blood pressure control (O) within the six months of initiation of the medication (T)?

8. **Meaning PICOT Question:** How do pregnant women (P) newly diagnosed with diabetes (I) perceive reporting their blood sugar levels (O) to their healthcare providers during their pregnancy and six weeks postpartum (T)?