Using PICO in formulating Patient Centered Questions

Evidence-based healthcare begins and ends with the patient. Defining a clinical question in terms of the specific patient problem aids in leading to clinically relevant evidence.

P **Patient, Population, or Problem**

How would you describe a group of patients similar to yours? What are the most important characteristics of the patient? This may include the primary problem, disease, or co-existing conditions. Sometimes the sex, age, or ethnicity of a patient might be relevant to the diagnosis or treatment of a disease.

I **Intervention, Prognostic Factor, or Exposure**

Which main intervention, prognostic factor, or exposure are you considering? What do you want to do for the patient? Prescribe a drug? Order a test? Order surgery? What factor may influence the prognosis of the patient? Age? Co-existing problems? What was the patient exposed to? Asbestos? Cigarette smoke?

C **Comparison of Intervention (if appropriate)**

What is the main alternative to compare with the intervention? Are you trying to decide between two drugs, a drug and no medication or placebo, or two diagnostic tests? Your clinical question may not always have a specific comparison.

O **Outcome you would like to measure or achieve**

What can you hope to accomplish, measure, improve or affect? What are you trying to do for the patient? Relieve or eliminate the symptoms? Reduce the number of adverse events? Improve function or test scores?

PICO Examples:

A 50 y.o. male with poorly controlled type II diabetes mellitus and proteinuria. He presents for follow-up of his diabetes.

Diagnosis: **P** **I** **O**
[In diabetics], how well does a [random urine protein to creatinine ratio] [diagnose proteinuria] versus a [24 hour urine collection for protein]?
C

Therapy: **P** **I** **C**
[In diabetics with proteinuria], will [ACE inhibitors] compared to [tight glucose control] [improve proteinuria]?
O

Prognosis: **P** **I** **O**
[In diabetics with proteinuria], what is the [average length of time] to develop [endstage renal failure]?