Formulating the Clinical Question

Clinical Questions

Complex clinical questions are best answered by going to the primary journal articles or pre-assessed studies in the literature. These patient-centered problematic questions often involve the interpretation and consideration of the risk vs. benefits for a particular patient or group of patients.

PICO

These questions can be approached efficiently and effectively if you start by first systematically clarifying the question and understanding what type of clinical question it is and what type of study design is appropriate for that type of question.

Using the PICO acronym will help you organize your query into a searchable question.

PICO

<table>
<thead>
<tr>
<th>Patient/Problem</th>
<th>Intervention</th>
<th>Comparison/Control</th>
<th>Outcome/Effects</th>
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</table>

Question Categories

Once you have clearly formulated your question, determine what type of question it is by selecting from the following common categories:

<table>
<thead>
<tr>
<th>Prognosis</th>
<th>Diagnosis</th>
<th>Etiology/Risk/Harm</th>
<th>Prevention</th>
<th>Therapy</th>
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Prognosis: Refers to disease progression over time. What is the patient’s likely course of disease, or how to screen for or reduce risk?

EX: *What are the risk factors for developing diabetes mellitus type II in adolescent males?*

Diagnosis: How to select a diagnostic test or how to interpret the results of a particular test.

EX: *In patients with suspected depression what is the accuracy of a two-question case finding instrument for depression compared with six previously validated instruments?*

Etiology, Harm or Risk: Etiology looks at the causative factors of a disease, while risk looks at whether there are harmful effects of a particular treatment, or how can these harmful effects be avoided?

EX: *What are the risks of treating asthma patients with beta-adrenergic agonists?*

Prevention: How can the patient’s risk factors be adjusted to help reduce the risk of disease?

EX: *For patients 65 years and older, does the use of the influenza vaccine reduce the future risk of pneumonia compared with patients who have not received the vaccine?*

Therapy: Which treatment is the most effective or what is an effective treatment given a particular condition?

EX: *In patients with acute bronchitis, do antibiotics reduce sputum production, cough, or days off work?*