Forming an Evidence-Based Clinical Question

To begin the Evidence-Based Medicine (EBM) search process start with a well-developed and answerable question. A good clinical question will:

- Save time when researching
- Keep the focus directly on the patient's need
- Suggest the appropriate form that a useful answer may take

The clinical question will impact the entire Evidence-Based Medicine (EBM) literature searching process.

### Elements of the Clinical Question

A good clinical question will have four major elements considered: Patient, Intervention, Comparison and Outcome, commonly known as PICO.

**Patient:** A clinical question must identify a patient or patient group and include any information that is relevant to the treatment or diagnosis or the patient.

For example: You might include the patient's sex, age, race, disease history and primary complaint.

**Intervention:** The intervention is what you plan to do for your patient or patient group.

For example, you might: run tests, prescribe drug treatment, refer to a specialist or schedule surgery.

**Comparison:** In general most, but not all, clinical questions have a comparison. A comparison is the alternative that you want to compare to your intervention.

For example: Is aspirin as effective in preventing strokes as warfarin?

**Outcome:** The outcome is the hoped for effect of the intervention.

For example: If I prescribe aspirin for my patient it will prevent strokes. Outcome = Prevented Strokes.

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**Sample Case:** A 75 year-old non-compliant male patient with chronic venous insufficiency refuses to wear his compression stockings because of discomfort. He’s heard that horse chestnut seed extract was just as effective and would like to try that therapy.

For example: In the case of a 75 year old male (Patient) is horse chestnut seed extract (Intervention) as effective as compression stockings (Comparison) in treating chronic venous insufficiency (Outcome)?

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For more information on EBM searching visit [http://medlib.bu.edu/tutorials/ebm/](http://medlib.bu.edu/tutorials/ebm/)

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