

# CORE COMPETENCIES IN EVIDENCE-BASED MEDICINE

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1. Ability to generate clinical question, in appropriate format (e.g., PICO)
  
2. Ability to find the evidence, i.e., search the medical literature (database searching, not going to UpToDate)
  
3. Ability to assess the available evidence
  - a. Determine type of evidence
    - i. Understand the “evidence pyramid”
      1. Case reports
      2. Case series
      3. Case-controls
      4. Cohort studies
      5. Randomized controlled trials (RCTs)
      6. Meta-Analysis/Systematic reviews
    - ii. Understand limitations of types of evidence
  - b. Assess validity of evidence
    - i. Understand how patients/problems/interventions were included/excluded in evidence
    - ii. Understand (conceptually, at least) how “evidence” can be misleading
      1. Bias
      2. Confounding
  - c. Identify & interpret the results
    - i. Understand (at basic level) some measures of association used in analyzing evidence
      1. Absolute risk and absolute risk reduction/increase
      2. Relative risk and relative risk reduction/increase
      3. Confidence intervals
      4. Number needed to treat/harm
      5. Odds ratio
      6. Likelihood ratio
        - a. ? Sensitivity/specificity
    - ii. Understand that statistical significance does not necessary equal clinical significance
  - d. Apply to patients
    - i. Are patients/problems studied in available evidence similar to patients/problems in which we’re interested?