

**Summary of “Quick Literature Searches” Module
National Nighttime Curriculum**

- I. Create an answerable question.
 - a. Use the PICO format
 - i. P: population
 - ii. I: intervention
 - iii. C: comparison
 - iv. O: outcome

- II. Identify the type of question being asked.
 - a. Diagnosis: how to select and interpret diagnostic tests
 - b. Therapy: how to select treatments to offer patients that do more good than harm and that are worth the efforts and costs of using them
 - c. Prognosis: how to estimate the patient's likely clinical course over time and anticipate likely complications of disease
 - d. Harm/Etiology: how to identify the negative impact of a medical intervention/environmental agent OR the causation of disease

- III. Identify the best study to answer the question.
 - a. Diagnosis: prospective, blind comparison to a gold standard
 - b. Therapy: RCT > cohort > case control > case series
 - c. Prognosis: cohort study > case control > case series
 - d. Harm/Etiology: RCT > cohort > case control > case series
 - e. Meta-analysis and systematic reviews, if available, are usually considered the best available literature as they are compilations of multiple studies

- IV. Create a successful search.
 - a. Use MeSH terms
 - b. Combine search terms with AND, OR, and NOT (in all capital letters)
 - c. Use the Clinical Queries feature in PubMed to perform the search
 - d. Identify the Category (type) of question
 - e. Select the Scope of search, narrow (increased specificity) vs broad (increased sensitivity)
 - f. Run the search and click “See All” to scan available articles
 - g. Limit the search, using the Limits feature on the results page, if desired

- V. Quickly appraise the article.
 - a. Use the abstract to scan for validity, statistical accuracy, and applicability
 - b. Identify the type of study, the higher up the hierarchy the more internal validity
 - c. Identify the population studied
 - d. Review the methods section to screen for bias
 - e. Review the results section to assess if results were derived logically and their relevance
 - f. Make a decision about how applicable the study seems to your patient