**Guiding Principles for Systematic Reviews**

* Clearly state the research question
  + Concise statements of approximately 10 words
* Establish criteria to select databases/sources
  + Search multiple databases
  + Primary sources will be peer-reviewed journals
  + Other resources may include
    - Google Scholar
    - “grey literature”
      * Conference Proceedings
      * Theses
      * Government agency reports
      * Technical reports, etc.
    - HON (Health on the Net Foundation) accredited websites
* Develop and record keywords/search terms
  + Keywords from review articles and PubMed MeSH terms may provide guidance
* Ask for expert advice
  + *Review research question, search terms, and framework with EIC. EIC members who are unable to attend this meeting should submit their comments in writing to the director prior to the scheduled meeting.*
* Develop and apply practical screening criteria
  + May screen titles and abstracts prior to selection of full text articles.
  + Publication language limited to English as multiple reviewers may conduct searches. Publications in other languages will be considered with justification.
  + Study content (research design, setting, samples/subjects)
  + Date limited to publications within the last 20 years. Exceptions made for widely cited benchmark papers.
  + Source of funding clearly stated
    - *Note: peer-reviewed journals began to require this in ~2004. COI statements may be less clear prior to that date.*
  + State and justify reasons for inclusion/exclusion
* Develop and apply methodological screening criteria (quality appraisal)
  + Evaluate the “body of evidence” and rank confidence in the study
    - Questions to ask to assist in determining above ranking:
      * Type of study (highest weight given to 1)
        1. randomized sampling with controls
        2. quasi-experimental design
        3. uncontrolled
        4. cohort studies
      * Samples represent the population (sampling methods)?
      * Adequate sample size?
      * Controls for each variable tested where feasible?
      * Researchers blinded where feasible?
      * Sound statistical analysis?
      * Data/study precision?
      * Replicated/consistent results?
      * Risk of bias or reporting bias?
      * Study designed to minimize confounding factors?
  + State and justify reasons for inclusion/exclusion
  + Document search strategy
  + Save searches for re-analysis
    - Exclude duplicates citations—use most complete source
    - Citations based on original sources of research, not secondary sources (reviews)
* *(Pilot test review process. Review with subject librarian.)*
* Synthesize results
* Write descriptive review
  + A peer review group of experts in the field (TBD) will review each paper prior to submission for publication.
  + Plagiarism detection software, iThenticate, will be used prior to publication

Key Concepts: “systematic, explicit, comprehensive, and reproducible”

**References:**

1. Fink A. Conducting Research Literature Reviews: From Internet to Paper. 4th Ed. Los Angeles: Sage; 2014.
2. Okoli C. A Guide to Conducting a Standalone Systematic Literature Review. Communications of the Association for Information Systems. 2015Nov;37(43):879-910.
3. Handbook for Conducting a Literature-Based Health Assessment Using OHAT Approach for Systematic Review and Evidence Integration. Office of Health Assessment and Translation. 2015Jan09.
4. Eden J, Levit L, Berg A, Mordon S, editors. Finding What Works in Health Care: Standards for Systematic Reviews. Washington, DC: The National Academies Press; 2011.