Tips for Effective Literature Searching in the Health Sciences

Medline Searching (Ovid or PubMed):

- 1. Start with a "seed" article. This is an article that is "spot on;" it covers your research topic well and is authoritative.
- 2. Pull up the article in Medline using "Single Citation Matcher" in PubMed or "Find Citation" in Ovid.
- 3. Take a careful look at the Medical Subject Headings (MeSH) assigned to that article.
- 4. Build your search using those terms and others you have come across during your research.
- 5. Remember to "think like the author." Use any possible synonyms for a term; generic/brand names of drugs; British/American spellings of words. (In Ovid, use Advanced Search and be sure the "Map to Subject Headings" box is clicked. In PubMed, look at the Search Details area on the left to see if your terms mapped to MeSH headings.)
- 6. Limit/refine your search. Look at the MeSH headings assigned to several more relevant articles to be sure you've caught all applicable headings.
- 7. When perusing citations, be sure to follow any relevant "Find Similar" links (in Ovid) or "Related Citations" (in PubMed).
- 8. Save search strategies. In Ovid, create a personal account and save projects in "My Workspace." In PubMed, set up a "MyNCBI" account and use the "Clipboard". You will later need to duplicate these search strategies in other databases.
- 9. Save or export citations into a reference management software (like EndNote or Reference Manager). A program that "de-dupes" citations is helpful.
- 10. "Snowball" the fulltext articles. Looks at the references at the end of each article to catch more relevant articles.
- 11. If your project continues over a period of months, set up an "Auto-Alert." This feature automatically runs a previously saved search and sends you results periodically. You can choose to receive results weekly, monthly, etc.
- 12. Run your search in any other relevant databases. Keep the search parameters exactly the same, if possible.
- 13. If your project is comprehensive, look for "Grey Literature" on your topic. (See below for more on Grey Literature.)

Suggested Databases

• <u>Ovid MEDLINE</u> – covers the international literature on biomedicine, including the allied health fields and the biological and physical sciences, humanities, and information science as they relate to medicine and health care. Information is indexed from approximately 5,400 journals published world-wide. Produced by the National Library of Medicine. *The SOM Library pays a subscription fee for this product. Includes fulltext links to journals to which the library subscribes.*



- <u>**PubMed**</u> comprises more than 23 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites. *Freely available. Includes fulltext links to journals to which the library subscribes.*
- <u>CINAHL</u> Cumulative Index of Nursing and Allied Health Literature. This is the largest and most in-depth nursing research database. *Available through Thomas Cooper Library (link accessed from SOM Library's Databases page).*
- <u>PsycINFO</u> American Psychological Association's (APA) resource for abstracts of scholarly journal articles, book chapters, books, and dissertations. It's the largest resource devoted to peer-reviewed literature in *behavioral science and mental health*. Journal coverage, which spans from the 1800s to the present, includes international material selected from around 2,500 periodicals. *Available through Thomas Cooper Library (link accessed from SOM Library's Databases page).*
- <u>Cochrane Library</u> Contains high-quality, independent evidence to inform healthcare decisionmaking. Includes reliable evidence from Cochrane and other systematic reviews, clinical trials, and more. Cochrane reviews bring you the combined results of the world's best medical research

studies, and are recognized as the gold standard in evidence-based health care. Available through Thomas Cooper Library (link accessed from SOM Library's Databases page).

Grey Literature

Grey literature is created by researchers and practitioners in various fields, but is not controlled by commercial publishing. The groups that produce grey literature may be government, industry, advocacy or other organizations that disseminate information in the form of reports or working papers rather than by publishing scholarly articles in commercial journals.

Grey literature can be found in the form of:

- reports
- conference papers, posters or proceedings
- policy documents
- preprints
- data sets
- standards

- translations
- clinical trial data
- factsheets
- dissertations
- committee reports

More often than not, grey literature is not indexed in databases and so can be a puzzle to find. Locating grey literature can be a very different process than locating scholarly articles.

In the health sciences, grey literature is vital for developing a more complete view of research on a particular topic and for producing **systematic reviews** and other rigorous approaches to evidence synthesis. Grey literature can be a good source for data, statistics, and for very recent research results. Because there's no publisher-enforced limitation on length, these reports can be much more detailed than the journal literature.

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