Working with the HSLS Systematic Review Program

Who's eligible to use the HSLS Systematic Review Program?
- Faculty, staff and students in the Schools of the Health Sciences, University of Pittsburgh
- UPMC Residents and Fellows
- UPMC physicians with University of Pittsburgh faculty appointments

Timeframe for Literature Searches
The Cochrane Collaboration has reported that comprehensive literature searches for systematic reviews may require 3 to 8 months for completion. For this reason, HSLS librarians collaborate on a limited number of systematic reviews at any one time and may not be able to immediately begin work on your literature searches. In the event a librarian is not immediately available to work with you, your request will be placed on a waiting list and HSLS will contact you about an estimated start date.

A Protocol is Required
HSLS librarians will not begin work on literature searches for a systematic review until a final protocol has been provided. Any protocols provided to HSLS may be reviewed internally to ensure completeness. See this HSLS Update article for examples of protocols. HSLS encourages all investigators to register their protocols. IOM Standards: 2.6, 2.8

Librarian Authorship
A librarian who has completed comprehensive literature searches for a review project has made a major scholarly contribution to that project. As such, the librarian should be included as a co-author on any abstracts or manuscripts that arises from the project and will draft the literature search sections required for these documents. The librarian will be included in discussions about where to submit abstracts or manuscripts, and will be given the opportunity to review, and give final approval of, all abstracts or manuscripts prior to their submission for publication.

Applying for Funding to Support Completion of the Systematic Review?
If so, plan on including the librarian as a co-investigator or consultant on your application or proposal. Please discuss appropriate allocation of effort or salary with your librarian prior to submission to the funding agency.

During your systematic review consultation, you may be asked some or all of the questions below. Here’s why:
We ask the questions below to avoid situations in which a librarian makes a significant scholarly contribution to a review project, only to lose touch with the investigator, or to be left unclear about the status of the project, what to do with the products of his/her work, or how to plan for future involvement in the project.
Did a librarian assist you in determining that there are no existing systematic reviews or systematic review protocols that address your question?
There are few things more frustrating than putting a large amount of time and effort into a systematic review, only to discover that someone else has already addressed your research question. A librarian can complete a thorough search of databases and other resources, e.g., CRE’s Prospero, to ensure that you are not duplicating the work of others.

Who is on your research team?
Many steps in the systematic review process must be performed by more than one individual or require individuals with specialized skills. At a minimum, your team will need to include:

- 2 individuals who can independently perform screening and data extraction
- An individual with data management skills or experience, who will be responsible for the design of screening and data extraction forms, and other data related duties such as report generation and data cleaning
- If you are planning to do a meta-analysis, a biostatistician should be on the review team. IOM Standard: 2.1.

Are you a student or post-doc planning to conduct a systematic review under the supervision of your advisor or mentor? If so, please note that your advisor or mentor must attend initial discussions with HSLS librarians about your plans.

Do you know that systematic reviews require literature searches in multiple databases and other information resources?
There is no single database that contains all the relevant evidence on a topic, so limiting the literature search to a single database will substantially increase the risk of bias in your review’s findings. The appropriate number and types of resources to be searched will depend on your research question and outcomes of interest, among other factors. IOM standards 3.1; 3.2.1.

How will you manage the results of comprehensive literature searches?
Literature searches in bibliographic databases may produce thousands of records. Your ability to successfully organize and manage these results will impact your ability to complete your systematic review. Projects on which HSLS librarians are active collaborators have the option of using DistillerSR, a web-based software designed for systematic reviews. Ask your HSLS librarian for details. The literature search process will not begin until you have in place a system for managing and screening search results.

Do you have the time to screen the results of comprehensive literature searches?
As noted above, literature searches produce thousands of records that must be systematically and independently screened by research team members. The literature search results and the results
of the screening process must themselves be thoroughly documented. IOM Standards 3.3; 3.4; 3.5

**Have you thought about how you will obtain the articles you want to use in your review?**
Many articles will be available through HSLS’s electronic journals. Other articles may not be available electronically or from HSLS. In those instances, [HSLS Document Delivery](#) will locate and obtain those items for you. Librarians are not responsible for obtaining full-text articles for systematic reviews.

**Have you thought about where you would like to publish your systematic review?**
Not all journals publish systematic reviews, and those that do may have submission criteria or author instructions that are specific to systematic reviews.

**Are you prepared to update your systematic review?**
It’s likely that a significant amount of time will elapse between the initial literature searches and the point at which you are ready to begin analyses for your review. For that reason, you should plan on updating the searches on a schedule that is “…appropriate to the pace of generation of new information for the research question being addressed” (IOM, 2011, pg. 64). A plan should also be developed for post-publication updating of the review. IOM Standard 3.1.7

**Are you aware of existing standards for the design, conduct and reporting of systematic reviews?**
If you are not familiar with them, we highly recommend that you take a look at the IOM report *Finding What Works in Healthcare: Standards for Systematic Reviews,* and the PRISMA statement (complete citation information is in the Reference section).

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**For more information see**
[HSLS’s Systematic Review Program](#) or [Ask A Librarian](#)

**References**


[http://www.crd.york.ac.uk/PROSPERO/](http://www.crd.york.ac.uk/PROSPERO/) “International prospective register of systematic reviews in health and social care.”