

Systematic Review Services Galter Health Sciences Library

Preparing for your systematic review

If you request librarian assistance with a systematic review, please be prepared to discuss the following questions in the early planning phase of your project.

What is your research question?

We will need a short description of the question or topic you plan to address in your review. To assist the librarian in developing the best possible search strategy, plan to discuss the reasons why a systematic review is the appropriate methodology for addressing the research question. We will also need to discuss your awareness of existing literature on the topic as this will aid in identifying possible terminology to include in the search.

Have you determined that there are no existing systematic reviews or systematic review protocols that address your question?

Before starting your project, it is important to verify whether someone has previously addressed the research question in a review. We can conduct a preliminary search of databases and other resources (e.g. <u>PROSPERO</u>) to ensure that you are not duplicating the work of others. If a systematic review already exists, you may want to assess the review's quality (e.g. <u>AMSTAR</u>) or whether an update would be warranted.

Do you have a protocol?

Like any well-designed research study, a systematic review should begin with the development of a protocol (a detailed description of the rationale, objectives, and methods of the review). We can recommend resources on developing protocols, including existing standards and examples. The librarian can also assist in developing the section of the protocol that describes the literature search methodology. The literature search process is aided greatly by a written protocol. You should strongly consider registering your protocol with PROSPERO, Systematic Reviews, or other appropriate entity (IOM 2011, Shamseer 2015, Umscheid 2013).

Do you have a team?

Many tasks in the systematic review process should be performed by more than one individual (e.g. screening search results) or require individuals with specialized skills. Sharing tasks also increases efficiency and reduces risk of bias. Do you have appropriate expertise in all the required domains for completing a rigorous review? Ideally, your team should include subject specialists, a systematic review methods expert, a librarian or information specialist with training in systematic review methods, and a quantitative methods/meta-analysis specialist (IOM 2011).

Do you have a plan for managing search results?

Literature searches for systematic reviews may produce thousands of records. Your ability to organize and manage these results will impact your ability to complete the systematic review. Galter librarians currently support EndNote as a reference management tool. We can also work with you if you are considering using Covidence or other systematic review management platforms.

Do you have time to screen the results of comprehensive literature searches?

Systematic review searches can produce thousands of records that must be systematically and independently screened by research team members. You must be prepared to document and report decisions made during the initial screening and full-text review. Librarians can recommend tools and software designed to help you streamline workflows associated with several of these tasks. IOM Standards 3.3; 3.4; 3.5.

What is your timetable for the systematic review?

Like other types of studies, systematic reviews require substantial time to complete (one year or longer is a realistic expectation). Establishing a timetable for your project will help the librarian develop a reasonable schedule for conducting searches and delivering results. IOM Standard 2.6.11.

Where are you planning 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 standards for systematic reviews, we highly recommend that you take a look at the <u>IOM Standards for Systematic Reviews</u> and the <u>PRISMA Statement</u>. If you are planning a Cochrane review, you will need to become familiar with the <u>MECIR standards</u> and the <u>Cochrane Handbook</u>.

Is this for a grant proposal?

If your project is in support of a grant proposal, plan to discuss the appropriate allocation of effort and include the librarian as a co-investigator or consultant.

Will the librarian be a co-author on the review?

Librarians collaborating on systematic reviews commonly satisfy the <u>criteria for authorship set forth by ICMJE</u>. A librarian who designs and conducts comprehensive literature searches for a systematic review makes a major scholarly contribution to that project. As such, the librarian should be included as a co-author on the primary

manuscript that arises from the project. As a co-author, the librarian will be responsible for writing the sections of the protocol and manuscript that describe the search methods.

References

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