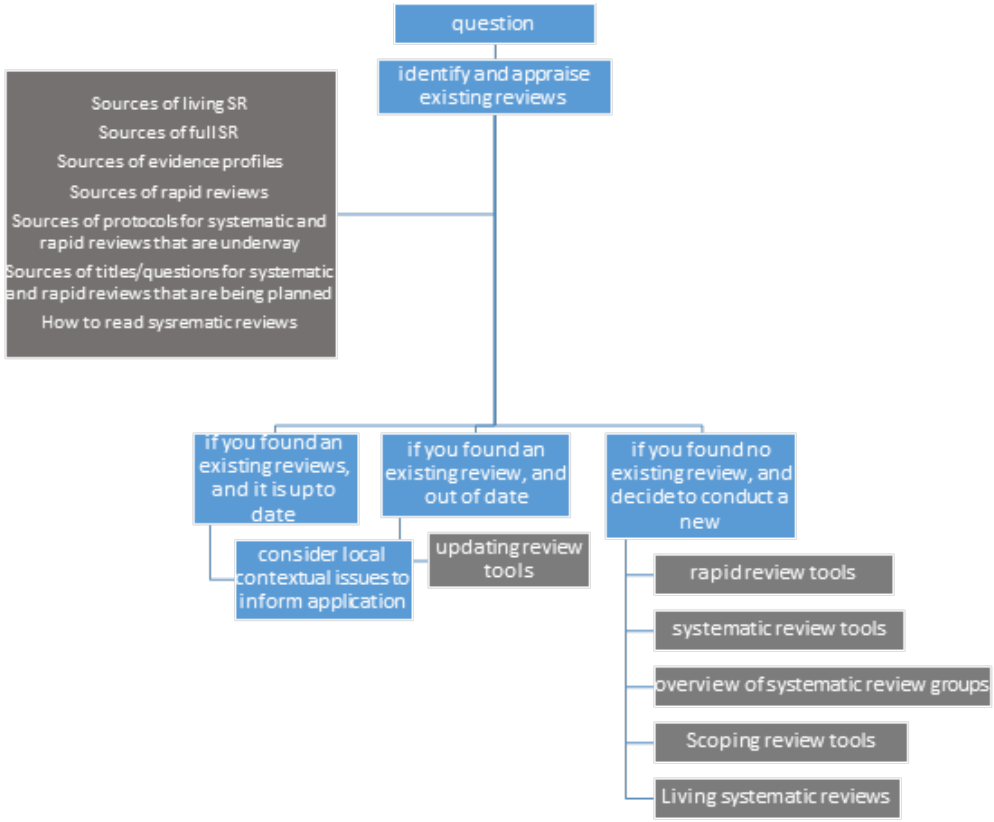
COVID-END
COVID-19 Evidence Network to support Decision-making

Resources and Tools for Evidence Synthesis

Prepared by the COVID-END Synthesizing Working Group

Using the following diagram (prepared by Taryn Young) to help navigate through the synthesizing process, we have compiled lists of resources and tools to support those doing evidence synthesis, with a range of end-products in mind. This is a living document and we appreciate all suggestions, corrections and additions.



Determining Need for a review- exploring if similar or adjacent review already exists

1. Get ideas for an evidence synthesis, technology assessment or guideline by reviewing the four-part taxonomy of decisions that will need to be informed by research evidence as the pandemic and pandemic response enter (or re-enter) different phases (which COVID-END is now using to create inventories of evidence and possibly a searchable database in future)
2. Reviewing the guide to key COVID-19 evidence sources, which includes:
    a. living SR
    b. full SR
    c. evidence profiles (or tables)
    d. rapid reviews

e. scoping reviews (OpenScience Framework, Campbell)
f. protocols for systematic reviews and rapid reviews that are underway
g. protocols for systematic reviews and rapid reviews that are planned
h. guidelines

Recommendations for search strategies (eg. WHO database, with key complementary databases)

Make sure that a timely, relevant, high-quality product hasn't already been produced, hasn't already been registered (e.g., on PROSPERO) and is underway, or hasn't already been prioritized as a question to be addressed by another group (e.g., Cochrane Rapid Review Registry)

Developing a review question- review taxonomy of decisions related to COVID-19

General resources for developing a review question:

Developing a Research Question (University of Maryland)

Rapid review of existing question formulation frameworks

Research question frameworks (Welch Medical Library, Johns Hopkins University)

Identifying the type of review needed to answer your question (reporting standards for each of these reviews)

Rapid review

Cochrane Rapid Review resources for COVID-19 (workflow, template, full review template)

Systematic review

What kind of systematic review should I conduct? (BMC Med Res Meth)

Overview of systematic reviews (reviews of reviews)

Scoping reviews/ Evidence Maps

Living systematic review

Qualitative review

HTA/Guidelines

Protocol for evidence synthesis support for COVID-19 (targeted for HTA/guideline development) (HQIA)

Protocol for the identification and review of new and updated public health guidance - COVID-19 (HQIA)

Health emergency interim guidelines: a WHO guideline development framework and toolkit (currently being adapted by WHO for COVID)

GRADE Evidence Profiles

General resources

EQUATOR Network for general reporting guidelines

Cochrane Guides and Handbooks (systematic reviews of interventions, diagnostic test accuracy, GRADE Handbook, etc)

What Review Is Right For You

Rapid reviews to strengthen health policy and systems: a practical guide (WHO)

Planning the search

1. Start searches with the sources in the guide to key COVID-19 evidences sources and follow established standards for the type of product you are producing, such as the EQUATOR Network for reporting all types of research, Cochrane for rapid reviews, and AGREE or GRADE for guidelines, and/or use established platforms for such work (e.g., Cochrane-affiliated platforms for Cochrane reviews and GRADEproand MAGICapp for guidelines)
2. Existing COVID-related search strings
    a. https://www.mlanet.org/page/covid-19-literature-searching

Registering Reviews

1. Submit your proposed title to an appropriate review group in Cochrane or the Campbell Collaboration (which provide quality assurance, publishing, translation and other benefits for eligible and accepted titles and protocols), your review protocol to PROSPERO (if it's within scope), or your rapid review title to the National Collaborating Centre for Methods and Tools
2. International Platform of Registered Systematic Reviews and Meta-Analysis Protocols (can search for free, but registering requires payment) https://inplasy.com

Technology to support syntheses

1. Review support: RevMan, Distiller SR, Covidence, EPPI tool, JBI tool
2. Automation tools: Rayyan, RCT Classifier
3. Guideline link tools: GRADEPro, MAGIC, ETD
4. Cochrane Crowd, Task Exchange

Appraising existing reviews

- AMSTAR for evidence syntheses and either AGREE or TRUST for guidelines

Updating existing reviews

Contextualizing reviews

Publishing /Sharing reviews

1. Prepare a product that can be easily understood and used by different types of decision-makers (e.g., using a grade-entry format that provides a bottom-line message followed by more detail for those who want to know more), in different languages, and in the limited time that they have available (and don't assume that they have the time, inclination or capacity to make sense of long technical reports)