User cases for the 'Enhance my RIS file' project

Introduction

The COVID-END website currently divides content between researchers and 'decision makers'. Researchers may include primary researchers but is predominantly those engaged in evidence synthesis: producing systematic or rapid reviews. The latter group includes policy makers, health professionals and patients. Intermediaries such as guidelines groups and HTA bodies can fulfil both roles depending on circumstances.

Characteristically, decision makers need rapid answers – within minutes or hours rather than days, weeks or months. Intermediaries' and researchers' timelines are also being severely squeezed by the COVID-pandemic as the decision makers, funders and intermediaries look for rapid answers to address the severe public health, societal and economic challenges. Researchers and intermediaries who are required to deliver answers within days or weeks may need to tailor their efforts accordingly.

Broadly there seem to be two distinct use cases:

- People who want to find everything that is out there relating to a given topic. This group is mainly comprised of researchers or intermediaries
- People who want to filter out the content that meets their specific needs. This group may include both researchers but is most likely to be composed of decision makers or intermediaries

'Comprehensive' search use cases

Researchers are likely to fall into the first category: wanting all of the relevant high quality evidence from primary studies to conduct a systematic review, finding gaps and duplications of the evidence base via the production of an evidence map, or determining whether their planned research is likely to duplicate existing or ongoing research.

Case scenario 1:
A researcher wishes to undertake a systematic or rapid review to address a question that is relevant to COVID. Depending on the nature of the research question and the resources and time limits imposed this may incorporate some of the following variables:
- Data sources, including the full spectrum of relevant primary research, grey literature, 'big data' from administrative databases, previously published systematic or narrative reviews, national or international guidance
- Methods – depending on the nature of the research question and the skills and resources available
- Characteristics of the research – this may be limited to people affected by COVID-19 or be wider, for example looking at broader health consequences such as acute respiratory distress syndrome or 'hospital at home' services, or

the wider consequences of pandemics in general such as poverty and unemployment.

In an ideal world all such evidence would be 'living' but the need for research to incorporate new findings in 'real time' is probably more associated with clinical interventions aimed at diagnosis, prognosis, prevention, treatment and rehabilitation where the research and findings are specific to COVID-19, reflecting its novel context.

Filter based searches

Most decision makers and intermediary groups such as guidelines bodies will wish to filter out the high quality, most up to date resources. In these scenarios high quality systematic reviews, evidence profiles and guidelines, where they exist, are likely to be the preferred sources. Alternatively, in some cases, all of these groups, including researchers, may wish to identify all the studies that post-date previously published systematic reviews or guidance.

Case Scenario 2:
A guidelines body wishes to provide recommendations to its national health system on the use of a given clinical intervention will seek the following from the COVID specific literature as the highest priority:

1. Network meta-analysis of the named intervention compared with other plausible options in specific clinical scenarios
2. High quality evidence syntheses, GRADE evidence tables and guidelines that have addressed the comparison of intervention plus standard care versus standard care alone
3. Rapid reviews may help to guide a decision but only where the evidence is clear cut or the question is not judged to have potential for high impact e.g. vitamin use to prevent severe complications of COVID, or where the timeline for a decision is short
4. For questions where there are no systematic reviews, or the systematic reviews are out of date, the decision makers may wish to identify and assess individual trials but given the current circumstances this will be rarely needed

Case Scenario 3:
A policy maker who may have to make a decision on whether temperature scanning at points of entry to public places should be mandated may wish to review the results of relevant diagnostic test accuracy or intervention reviews, preferably in summarised form, or as an evidence profile, or commentaries on these documents. However, other information such as high quality national guidelines or policy briefs by respected national or international bodies are likely to be equally or more influential. Rapid reviews may provide a sufficient guide to base an opinion, particularly if it is clear that the evidence base is uncertain. It is unlikely that individual studies will be a high priority given the likely time constraints and challenges in assessing them for validity and applicability, even when the available synthesised evidence is out of date or sparse.

Case scenario 4:
An HTA agency or group of researchers may be tasked with identifying the best current evidence for a specific question that was previously well addressed by a well conducted and

reported systematic review that is now out of date. For this purpose the group may wish to filter only the relevant research that addresses the question since the search date of the previous systematic review with all other factors (data sources, search strategy, methods) unchanged.

Conclusion

This paper aims to identify some of the most common user cases where individuals or groups may wish to identify the research that addressed a specific question. The users may be researchers, decision makers or intermediaries, and their needs will vary accordingly. Time and many other factors will also play a critical part in determining how broad or deep their search will need to be. I have divided the user cases into those where a comprehensive search of the relevant literature is required, and those where a limited search is more appropriate whether that is determined by quality criteria, content characteristics or the need to update previous high quality research.