

Living systematic reviews highlight latest evidence



There are hundreds of studies about COVID-19 published every month. Cochrane has developed ‘living systematic reviews’ to summarise all the evidence and regularly update them as new evidence emerges.

What we did



Background

In April 2020, there were 300 research studies about COVID-19 registered on a clinical trials database. By September 2020, there were more than 3000 trials registered. Systematic reviews compile all the relevant evidence about a topic to help inform decisions. However, where new research is being completed quickly, like COVID-19, a way of regularly updating systematic reviews with new studies is needed, so that all the evidence can be used to support urgent decisions.



Activities

Cochrane has been developing ‘living systematic reviews’. These are evidence reviews in topics where a lot of research is emerging quickly. Living systematic reviews search for evidence much more regularly than standard reviews and incorporate relevant new evidence as it becomes available. Living reviews are important so that decision makers such as policymakers can be sure they have the latest evidence when making decisions. Since May 2020, four living systematic reviews related to COVID-19 have been published:

- Convalescent plasma or hyperimmune immunoglobulin for people with COVID-19: a living systematic review.
- Signs and symptoms to determine if a patient presenting in primary care or hospital outpatient settings has COVID-19 disease.
- Antibody tests for identification of current and past infection with SARS-CoV-2.
- Thoracic imaging tests for the diagnosis of COVID-19.



Collaboration

Living Evidence Network, Cochrane Haematology, Cochrane Infectious Diseases, Cochrane Screening and Diagnostic Tests Methods Group

What we achieved

Cochrane Groups have published four living systematic reviews for topics relating to COVID-19, with more underway. These reviews are very popular, and summaries have been translated into up to 13 languages.

The living review about antibody tests is one of Cochrane's most popular reviews of 2020, with over 700,000 views between March and August 2020. By September 2020 this had been used in 3 guidelines.

We include information on the Cochrane Library about what has changed since the previous version – this helps readers know whether the changes might affect their decision-making.

In addition to the published Cochrane Reviews, other Cochrane Groups have recognised the value of 'living approaches' to compiling evidence by compiling living evidence in their areas of specialty such as Cochrane Rehabilitation and Covid-NMA initiated by Cochrane France.

“Living reviews are an innovative way to manage new evidence and Cochrane is leading the way. In May 2020 our living review about convalescent plasma included eight studies with just 32 participants. By October we included 19 completed studies with over 38,000 participants and we identified 70 more ongoing trials. A traditional review couldn't cope with that pace of change.”

Author of Plasma review

See more here: Cochrane COVID-19 living systematic reviews: why, how, and what has been done? <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD202002>

What we learnt

1

'Living' reviews are ideal for the COVID-19 crisis because people are relying on research evidence to inform their decisions; the conclusions of reviews are likely to change as new evidence emerges; and new evidence becomes available every day. Cochrane has led the way in conducting living systematic reviews, as well as in developing and evaluating 'living methods'.

2

Our living systematic reviews have used innovative methods. Some of our reviews make use of Cochrane Crowd (crowdsourcing tasks) and machine learning techniques to improve the efficiency of review processes. Our living reviews include explicit, transparent and predefined decisions about how frequently new evidence is sought and screened, and when new evidence is included in the review.

3

It is important to constantly update living reviews but we need funding and committed teams to sustain this. We are learning when to transition to less frequent updating. This may be partly linked to funding, but also when the evidence base becomes more stable, when a topic is no longer a high-priority for decision-makers, and/or when less new research is being published.



Learn more

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