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Living systematic reviews at *The BMJ*

We will consider living systematic reviews in fast moving research areas

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In many areas of medicine the rapid accumulation of evidence is unmanageable. The covid-19 pandemic has further accelerated the production of research and produced an urgent need for timely access to high quality, up-to-date syntheses of this evidence. Systematic reviews and meta-analyses are the best way to aggregate and appraise studies that examine a particular research question, but they take time to produce. Even when published rapidly, they may lag behind accumulated evidence by months or years. Living systematic reviews overcome this problem by allowing authors to update previously vetted and peer reviewed evidence syntheses in response to relevant new information.^{1,2}

The BMJ's first living systematic review, evaluating prognostic models in covid-19, was published in April 2020 and has already been updated twice.³ Our second living review is a network meta-analysis of treatments for covid-19, which underpins several accompanying rapid recommendations and is accompanied by an infographic (doi:10.1136/bmj.m2980).⁴ Several more living reviews are planned, including one on pregnancy outcomes among women infected with SARS-CoV-2.

The concept of living systematic reviews is gathering momentum. The Cochrane Collaboration and *Annals of Internal Medicine* are also testing this format.^{5,6} There are no broadly accepted criteria for when a living systematic review should be preferred to a traditional review, although guidance might be developed based on existing consensus about when to update traditional reviews.⁷ Reasons include methodological developments, changing clinical scenarios, and new information. Nor is there consensus about when is it time to stop one review and start work on a new one. Nonetheless, we will consider living systematic reviews in dynamic research areas, and we are willing to learn as we go.

Living systematic reviews at *The BMJ* will be handled by our research team and must meet our usual methodological standards. Most traditional systematic reviews that we publish seek to provide a conclusive, clinically actionable answer to important clinical questions, often in areas where the research is mature. In contrast, early versions of living systematic reviews may tackle important questions in areas where evidence is preliminary and expected to evolve. We will consider living systematic reviews that address a research question of immediate importance where decisions must be taken on the basis of available evidence even when it is incomplete.

Living systematic reviews may reduce research waste and redundant publications, but these benefits must be balanced with the risk that limiting the overall

number of reviews will inadvertently confer authority on a small number of authorship groups and journals. This could limit scientific discourse. It is also the case that different groups of authors, appraising the same evidence, can reach different conclusions.⁸

Living systematic reviews come with practical challenges. Existing journal platforms and processes are poorly equipped to move from single publications to living systematic reviews. Review updates require sustained time, resources, and expert input from authors, peer reviewers, and journals. Funding for such ongoing projects is not yet the norm. The academic rewards for living systematic reviews are unclear.

We will update our approach to living systematic reviews and guidance to authors as we gain experience. Our preliminary guidance on how living systematic reviews should be reported will be found with other instructions for authors on bmj.com.⁹ We welcome feedback on this new initiative and any ideas on how *The BMJ* might maximise the usefulness of living systematic reviews to better inform policy and practice, and ultimately improve health. You can share your views and experiences by posting a rapid response to this editorial on bmj.com. All submission inquiries for living systematic reviews should be made to *The BMJ*'s head of research.

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