Annals of Internal Medicine

EDITORIAL

Rapid and Living Guidance for COVID-19

The COVID-19 pandemic is stress testing our evidence systems (1). The tremendous output of COVID-19 research and the need for clinicians and other decision makers to have trusted, up-to-date sources of evidence and guidance during a time of great uncertainty have highlighted the limitations of conventional approaches. The pandemic has been a reminder that too often our decisions are informed either by guidance developed using rigorous scientific methods or by sources that are up to date with the latest research—but not both. Seldom do we find sources that are an accurate reflection of research knowledge by being both methodologically rigorous and current.

Although the COVID-19 pandemic has highlighted many of the flaws in our evidence systems, it has also shown the value of novel approaches, including in examples where the rigor or currency tradeoff has been broken. Qaseem and colleagues at the American College of Physicians (ACP) responded to the urgent need for guidance during the pandemic by producing living, rapid practice points. They report their methods in this issue of *Annals* (2).

The ACP team followed conventional processes for the development of recommendations, with 2 important modifications. First, their initial development was accelerated using methods for rapid reviews and recommendations. Second, these practice points are being maintained in a living, frequently updated state to incorporate new research as it becomes available.

Methodological options for rapid review (3) and guideline (4) development are well established. One option is to increase the resources allocated to the process. An alternative is to adapt the development process, such as by narrowing the scope or modifying aspects of the methodology used. The quality of rapidly developed guidelines varies substantially (5), highlighting that not all shortcuts are created equal and it matters how you modify the methodology. Not doing a systematic review may save time, but the resulting guidance will not be as trustworthy because of higher risk of bias in the selection of the evidence underpinning the recommendations.

The approach the ACP team took was to invest more resources and narrow the scope, avoiding the need to sacrifice important methodological steps, such as systematic review of the evidence, management of conflicts of interest, and use of the GRADE (Grading of Recommendations Assessment, Development and Evaluation) method, thereby ensuring both rapid and trustworthy guidance.

Although the field of living evidence has developed more recently, it builds on the work of Iain Chalmers, who launched the Oxford Database of Perinatal Trials, the precursor to the Cochrane Collaboration, as a "library of trial overviews which will be updated when new data become available" (6). During the subsequent 35 years, achieving that vision has been hampered by ongoing growth in research output and increasing methodological expectations.

However, in recent years, a renewed interest in achieving both rigor and currency (7), along with advances in supporting technologies and processes, has created the foundations for frequent or living approaches to updating (8).

Before the COVID-19 pandemic, the first living systematic reviews were developed (Cochrane and non-Cochrane); the first version of relevant methods was documented; and the first national evidence-based guidelines (the Australian Clinical Guidelines for Stroke Management) were transitioned into "living mode," reducing the time between updates from 7 years to 2 months (9).

With the advent of the COVID-19 pandemic, it became clear that clinical practice guidelines needed to quickly and reliably address questions and keep pace with the explosion of COVID-19 research. In the first few months of the global response, there was a commensurate explosion of rapid evidence syntheses and rapid development of normative statements, including guidelines, position statements, protocols, and practice points. Unfortunately, much of this work was duplicative and of low quality—one of the key lessons the global evidence community must recognize when reflecting on our response to the pandemic. Furthermore, there was often no commitment to the updating of these rapid evidence products, leading to a rapid decay in currency and accuracy.

In parallel, several groups used the foundational work on living approaches to launch COVID-19 living systematic reviews and living guidelines, including the publication of several living systematic reviews and ACP practice points in *Annals*. In Australia, we established the National COVID-19 Clinical Evidence Taskforce and have been updating national, living, GRADE-based guidelines weekly since March 2020. In France, the COVID-NMA group maintains several living network meta-analyses, and more recently, both the World Health Organization and the United Kingdom National Institute for Health and Care Excellence have transitioned their COVID-19 guidelines into living mode.

Although rapid methods have been widely used during the pandemic, and living approaches have come of age, these approaches are still young, and several challenges and research questions remain. Qaseem and colleagues identified the important role strong project management plays in both rapid and living approaches, along with several methodological questions related to frequent updating and the need to ensure adequate resourcing. In our own work maintaining frequently updated living recommendations for over a year, we have seen substantial efficiencies achieved during the "maintenance" phase (analogous to walking along a plateau after the initial climb up a mountain). Overall, these challenges highlight the importance of carefully choosing topics for living guidance (sometimes embedded within a conventional guideline) and keeping in mind that "living guidelines are not a life sentence" and can be transitioned back to intermittent updating when appropriate.

We agree with Qaseem and colleagues' conclusion that rapid and living development of trustworthy guidance has application beyond COVID-19. Rapid approaches are appropriate when decision makers require guidance quickly. A living approach should be considered for high-priority

This article was published at Annals.org on 25 May 2021.

questions where new evidence is likely to emerge and to change recommendations (10). Used appropriately, these methods are important additions to the tools we have available to translate research and improve health outcomes. Put simply, what we know changes rapidly, and guidelines can now reflect this.

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Disclosures: Disclosures can be viewed at www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M21-2245.

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Ann Intern Med. doi:10.7326/M21-2245

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