



COVID-19 SHORT REPORT

The eCOVID-19 living recommendations map and gateway to contextualisation

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Introduction and background

The rapidly unfolding Coronavirus Disease of 2019 (COVID-19) pandemic and an ever-increasing volume of relevant literature presents considerable strain for decision makers. Those decision makers are interested in information not only about benefits and harms of interventions but also contextual information such as people's values and preferences, costs, equity, acceptability, and feasibility. The technical and time-consuming effort required to gather, assess, synthesize, and evaluate the certainty of relevant evidence using GRADE is not realistic for the individual clinician, public health official, policy, patient, caregiver, or citizen decision maker.

Our large, international collaborative team is building a platform that will present to all stakeholders a living, comprehensive map of recommendations from high-quality guidelines, along with their evidence base (Figure 1). A key feature of the platform is providing a gateway to allow users to decide whether to adopt the available recommendation as it is, adapt it to their context, or create a de novo recommendation, a process known as 'adoption'.^[1] To our knowledge, this is the first living map of recommendations on COVID-19 to include an interactive feature that supports users in 'adopting' existing recommendations using the GRADE Evidence-to-Decision (EtD) Frameworks.^[2–4] The platform also harnesses

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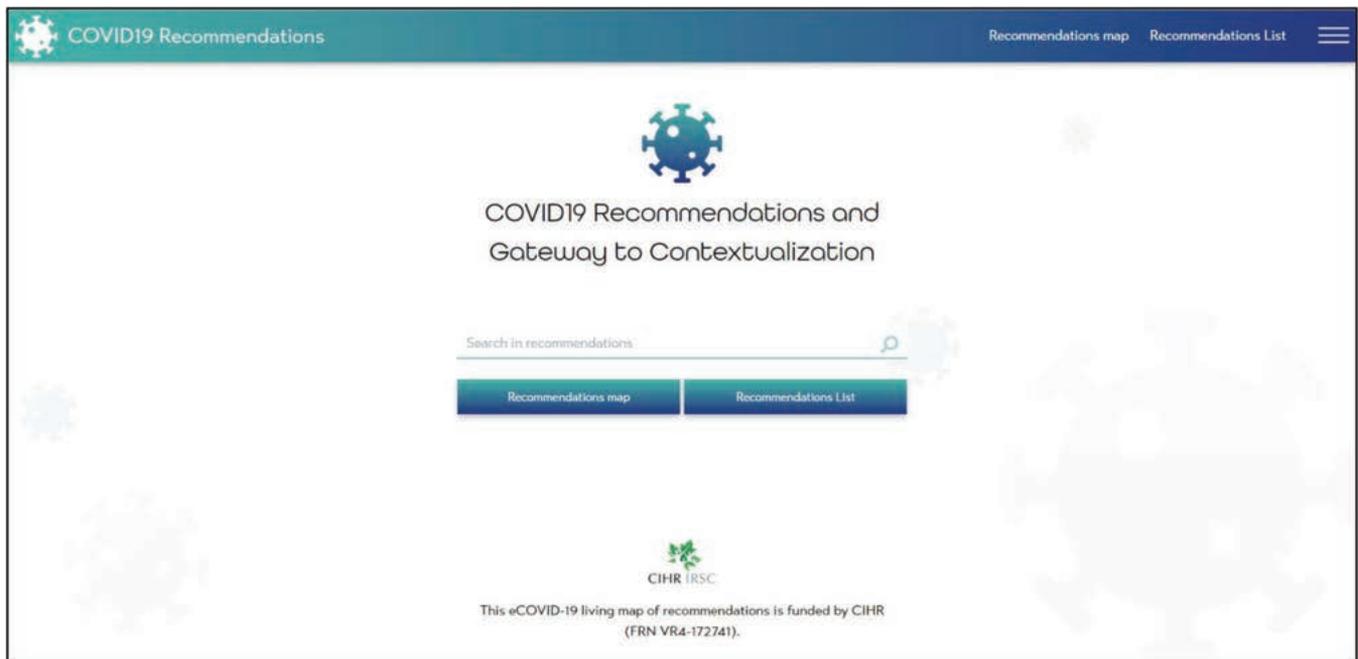


Figure 1. eCOVID19 Guidelines: the catalogue of recommendations

decisions made by users to then share with other users of the map, further adding novelty.

Our aim is to cover a broad array of COVID-19 topics. We intend for this map to serve as a knowledge translation vehicle to help to ease the burden on decision makers by providing access to information to facilitate evidence-informed decisions. By capitalising on efforts invested to date in COVID-19 guideline development, we will reduce waste.

Although our platform maps COVID-19 recommendations, we link to a separate portal, produced by the Norwegian government, that maps COVID-19 evidence (fhi.no/en/qk/systematic-reviews-hta/map/). We will present our living recommendations map in both official languages of Canada, English and French, but with the hope of translation to other languages.

Led and centrally co-ordinated by Cochrane Canada and the World Health Organization (WHO) Collaborating Centre (WHO-CC) for Infectious Diseases, Research Methods and Recommendations at McMaster University, our team includes Cochrane-, GRADE-, JBI- and G-I-N-affiliated groups, key investigators situated in low-and-middle-income settings, Cochrane Consumer leadership, clinical and policy decision makers (including public health leaders directly connected with Canadian indigenous communities), artificial intelligence and information technology experts, software developers, and language translators. In addition to the key linkage with the Norwegian Institute of Public Health (NIPH)'s Systematic and Living Map on COVID-19 Evidence, the McMaster's COVID-19 Evidence Alerts (plus.mcmaster.ca/COVID-19), Pan American Health

Organization (PAHO)'s BIGG Database (sites.bvsalud.org/biggbiblio/), and the Epistemonikos Living Overview of Evidence (L-OVE) Platform (iloveevidence.com) resources are integral to acquiring the guideline and contextual literature and for portal linking. This map will also provide access to information to the WHO Model List of Essential Medicines.

Roles of participating individuals and groups collectively span informing the methodology, populating the recommendations map, disseminating the map, and facilitating adoption with key stakeholder partners through professional networks.

Key activities and strategies

A prototype of the recommendations map was developed for the grant funding submission and is based on previous collaborative work between a subset of this group (MacGRADE and Evidence Prime) and the World Health Organization Global Tuberculosis Department (tuberculosis.evidenceprime.com).

We formed a project Executive Team that has met weekly since mid-July to guide the overall methodological and development approach, in concert with Evidence Prime's refinement and customisation of the electronic map and GRADEpro software (grade.pro). A total of 10 working groups have been formed according to the various activities related to the totality of the work, such as literature searching, guideline appraisal, equity considerations, language translation, and activities related to facilitating the adoption of recommendations by stakeholders. These groups report their activities and decisions back to the



Executive Team. Research teams mobilised from within the grant team participate in training and calibration exercises prior to extracting guideline and recommendation information and constructing the EtD frameworks in GRADEpro. We will seek feedback from knowledge users within our grant team to refine its development. A consultancy team comprising clinical, public health, and consumer expertise will allow us to seek pertinent content and contextual feedback as we develop the map.

Modules housed within the portal facilitate user-directed adoption, that is, they support the user in how to consider the evidence and additional considerations provided in the EtD domains to inform their judgement of what the recommendation should be for their context and any additional considerations for its application.

Current funding allows us to undertake this work as a living project through May 2021 with daily searches of the guideline literature and make it freely available globally. We are planning relevant methodological projects, such as assessing processes for improving the timeliness of guideline development and how to assess and mitigate inequities that may be magnified in the context of the pandemic.

Outcomes and impact of activities

We will publicly launch this platform when it is populated with a sufficient volume of EtDs and has undergone satisfactory user testing; we will make the link available through Cochrane Canada's social media channels. We would highly desire closer linkages with Cochrane and other groups to create synergies in the development and use of this map. In addition to disseminating the outcomes of the methodological projects, we plan to share examples of how this tool has impacted COVID-19 decision making.

Lessons for the future: sustainability and transferability

The expected volume of work and extensive co-ordination required to bring together and align the multiple working groups and internationally situated research sites necessitates the funding we were successful in receiving. However, additional funding would be needed to accommodate literature growth and continued decision support in the long term. We have been able to mobilise quickly on funding notice because of established collaborations, strong leadership and team cohesion, and development of the platform prototype prior to the receipt of funds. As the work unfolds, our experience and lessons learned will inform future efforts of building and using interactive electronic maps of evidence and recommendations that allow and harness user-directed adoption.

Declarations of interest

Evidence Prime is a for-profit company co-owned by McMaster University and information technology experts. Depending on the type of use, licensing fees may apply for using GRADEpro GDT but not for the use of Evidence to Decision Frameworks produced in this study. JB, AN, BD and JL are employed by Evidence Prime (JB is employed outside of this submitted work). AN, BD and JL are shareholders of Evidence Prime Inc.

Grading of Recommendations, Development, and Evaluation (GRADE) Working Group and Centres members and staff include AS, TL, EAA, MF, TK, RBP, DKC, SD, SF, AHaj, AI, MK, MWL, IN, TP, PT, GV, VW, MD, LK, JK, ZM, GR, KS, PA, JB, JJM, RAM, RN, NS and HJS. The GRADE software is GRADEpro, which is programmed by Evidence Prime. Guidelines International Network (G-I-N) members and staff are TK, JLM, MK, MWL, EH, LK, JK, ZM, PAC, JJM and HJS.

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LR is a staff member of the Pan American Health Organization and LM, MR and TKuc are staff members of the World Health Organization. The authors alone are responsible for the views expressed in this publication. They do not necessarily represent the decisions or policies of funding or employing organisations.

Any study team member who is a co-author on prospective guidelines (or underlying evidence synthesis products) included in the platform would not be involved in its appraisal or extraction or in any quality control processes implemented in the development of the platform. In addition, any clinical or contextual advisors with conflicts of interest relevant to the included guidelines would abstain from providing clinical feedback.

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dissemination of relevant products, nor decision to publish this work in any form. HS also reports grants from the World Health Organization during the conduct of this study.

Additional resources

For information on guideline development, refer to g-i-n.net.

To access GRADEpro software, consult gradepr.org.

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