Racing against COVID-19: Rapid responses to equip public health with evidence for COVID-19

Maureen Dobbins, RN, PhD
The National Collaborating Centre for Methods and Tools

- Encourages and scales evidence-informed decision making

- Provides high-quality resources, real world training and practical mentorship
Evidence-Informed Decision Making (EIDM)

The process of **distilling** and **disseminating** the best available evidence from research, context and experience, and using that evidence to **inform** and **improve** public health practice, programs and policy.
EIDM during COVID-19

NEED

CAPACITY
Rapid Review Repository

- Urgent need for synthesized evidence
- Common questions
- No centralized coordination of reviews across 75+ Canadian public health jurisdictions

Rationale
- Centralized database
- Reduce duplication
- Facilitate connections between reviewers
- Enhance sharing of evidence
Creating the Repository

1. Consultations with web developer, NCCMT team, and librarians
2. Introduction of repository through external blasts
3. Creation of an online repository
Impact

- COVID-19 Rapid Evidence Reviews: [nccmt.ca/covid-19/covid-19-evidence-reviews](nccmt.ca/covid-19/covid-19-evidence-reviews)
- 50 submissions within first month
- > 250 submissions total
- 44 groups across Canada and internationally
Rapid Evidence Service

• Urgent and ongoing need for synthesized evidence; little to no capacity among front line public health service delivery organizations

• Pivot from synthesis training and support to conducting evidence syntheses

• Response to public health decision makers’ requests for evidence on priority public health questions
Methods: Rapid Evidence Service

• NCCMT prioritizes questions from received requests

• Modified steps from the *NCCMT Rapid Review Guidebook*

• “Relay race”

• Reviews completed within 5-10 days
Critical Appraisal

• By the end of April 2020, preprints accounted for approximately 40% of all English-language COVID-19 scientific work (Fraser, 2020)

• Few syntheses appraising evidence

• How to identify the most trustworthy findings?
NCCMT Approach

- Critical appraisal completed for included evidence
  - AMSTAR-1 Tool – Systematic Reviews
  - Joanna Briggs Institute Tools – All other study designs
    - Some exceptions

- Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach rates overall certainty of the findings
  - How likely are the findings to change with more evidence?
Final Product

• Question

• Executive Summary
  • Key findings and certainty
  • What has changed (update)
  • Overview of evidence and knowledge gaps

• Methods

• Results
  • Tables
Dissemination: Rapid Evidence Service

- COVID-19 Rapid Evidence Service: nccmt.ca/res
- 52 reviews & updates on 27 unique questions (March 12 2021)
- New/updated reviews posted to the NCCMT’s website
  - e-mail notifications
  - social media
  - monthly newsletter
Impact

• Over 10,000 page views since June 2020
• Priority questions from various organizations (e.g. the World Health Organization, Public Health Ontario, public health units, etc.)
• Collaborated with Public Health England on an update
• Email subscribers in all provinces and all but one territory
• Reviews indexed in various databases and updates
• Media coverage in over 30 outlets

Accessed in 69 countries as shown in the map above.
Conclusion & Implications

• Implementation of a strategy that resulted in rapidly coordinated efforts on a national scale

• Reduce duplication and disseminate quality evidence into the hands of decisions makers

• Continuous evolution of methods as COVID evidence changes

• Transitioning to training and supporting other organizations to conduct high quality rapid reviews
RES Team
Maureen Dobbins, RN, PhD
Sarah Neil-Sztramko, PhD
Susan Snelling, PhD
Emily Belita, RN, PhD
Emily Clark, MSc

Leah Hagerman, MPH
Izabelle Siqueira, MPH
Rachel Jansen, RN
Claire Howarth, MPH
Taylor Colangeli