

Using Synthesized Research Evidence to Inform the COVID-19 Response

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HEALTH FORUM



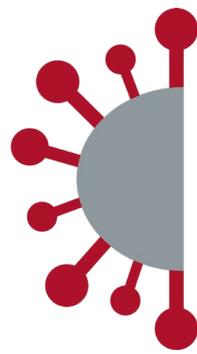
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- **Time-limited network** that has come together in response to the COVID-19 pandemic to help
 - Those supporting decision-making about COVID-19 to find and use the best available scientific evidence (i.e. evidence-demand side)
 - Researchers to avoid waste by reducing duplication in and better coordinating the COVID-19 evidence syntheses, technology assessments & guidelines being produced (i.e., evidence-supply side)
- Partners include **50+** of the world's leading evidence-synthesis, technology-assessment, and guideline **groups**
- Covers the **full spectrum** of pandemic responses
 - Public-health measures, clinical management, health-system arrangements, and economic & social responses
 - High-income and low-and-middle-income country contexts



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COVID-19 Evidence Network
to support Decision-making



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COVID-END Resources for Those Supporting Decision-making (<https://www.covid-end.org>)

- **Inventory of ‘best’ evidence syntheses for COVID-19 decisions**
- **Horizon scans for emerging issues**
- Community of those supporting decision-making
- Living hub of COVID-19 knowledge hubs
- Additional supports
 - Guide to COVID-19 evidences sources
 - Evidence-packaging resources
 - Evidence-support models
 - Tips and tools

COVID-END Resources for Researchers

(<https://www.covid-end.org>)

- Priorities for new evidence syntheses and guidelines (coming soon)
- **Supports for evidence synthesizers**
- Supports for guideline developers (coming soon)

Case for Doing Things Differently As We Transition from a Sprint to a Marathon

- Remarkable number of single studies being published everyday has created a very **high noise-to-signal ratio**;
- One-off reviews on long-term and recurring issues are quickly **out of date**
- Many rapid (and full) reviews are of **low quality**
- Few reviews about interventions provide a GRADE evidence profile that speaks to the **level of certainty** of the available evidence
- Too many evidence syntheses address the **same topic** (e.g., >200 prognostic reviews and only 5 such reviews address ≥ 5 factors)
- Too many key decisions have **no available evidence synthesis** (let alone a living evidence synthesis that is updated as new studies are published)
- The small number of existing **living evidence syntheses** often address same topic (e.g., 3 living network meta-analyses of COVID-19 treatments)

Case for Doing Things Differently As We Transition from a Sprint to a Marathon (2)

- More on the high noise-to-signal ratio →
Start with recently updated, high-quality **evidence syntheses, which**
 - Reduce the likelihood that decision-makers will be **misled** by research (by being more systematic and transparent in the identification, selection, appraisal, and synthesis of studies)
 - Increase **confidence** among decision makers about what can be expected from an intervention (by increasing the number of units for study)
 - Allow decision makers to focus on **how findings do or don't vary by context and population (ideally using an explicit equity lens) and hence what the evidence means for a specific jurisdiction at a specific moment in time**
 - Allow stakeholders, including public interest or civil society groups, to **constructively contest** research evidence because it is laid out for them in a more systematic and transparent way
- These evidence syntheses are distinct from **jurisdictional scans**

What Does the Marathon Look Like?

- **Inventory of best evidence syntheses** for COVID-19 decisions
 - 'Best' defined by recency of search, quality of review, and GRADE evidence profile availability
 - Declarative title to facilitate relevance assessments (e.g., PICO and certainty level)
 - Additional information about 'living' status, synthesis type, and synthesis question
- **Horizon scans** for emerging issues and topic prioritization
 - Monthly briefing note drawing on horizon scans from around the globe
 - Monthly meeting of a panel of 36+ diverse strategic and 'out-of-the-box' thinkers and doers (with diversity defined in relation to our taxonomy, target audiences, WHO regions, and primary languages spoken)
- **List of priority topics** for living evidence syntheses (and efforts to encourage, nudge and cajole teams to take them on)
- **Robust local efforts to contextualize** the evidence for decision-making
 - E.g., rapid-evidence profiles in 4 hours, 1 day, 2 days or 3 days (which provide both 'best evidence' and jurisdictional scans)

Where Are We in the Transition to Marathon?

- Inventory of best evidence syntheses for COVID-19 decisions (as of 13/11)
 - **3,300+ harvested** (with PROSPERO protocols our only key source outstanding)
 - 2,400+ non-duplicates
 - 1,100+ decision-relevant syntheses included in database
 - **150+ included** in inventory based on three criteria for 'best' evidence syntheses
- Horizon scans for emerging issues and topic prioritization
 - Four monthly panel meetings to date (with all **reports available on our website**)
 - Starting to use up and down voting for priority topics for evidence syntheses
- List of priority topics for living evidence syntheses (and efforts to encourage, nudge and cajole interdisciplinary teams to take them on, plus tips for teams)
 - **First draft of the list will be posted any day** and team building to begin soon

What's on our List of Priority Topics for Living Evidence Syntheses?

- Public-health measures
 - Supporting **adherence** to measures, including better communicating the rationale including trade-offs (including in politicized contexts and for politicized issues)
 - **Strategies** for testing and for test-track-trace approaches that optimize the use of existing capacity
 - Outbreak **contributors** (from interdisciplinary outbreak studies)
 - Surveillance, analytic and synthesis **capacity** in public-health units **and linkages** to other parts of the health system
- Clinical management of COVID-19 and pandemic-related conditions
 - **Long COVID** (among people without severe COVID) and/or long-term sequelae of severe COVID
 - Screening for and managing emergent **mental health** and substance use issues
 - **Concurrent management** of COVID-19 and other (seasonal) infections
 - Emergence of **endemic diseases** in urban environments

What's on our List of Priority Topics for Living Evidence Syntheses? (2)

- Health-system arrangements
 - Managing **vaccine** purchasing, allocation, ordering, distribution and inventories under shortage conditions, leveraging vaccine trust and addressing vaccine hesitancy, and capturing lessons learned from roll-outs
 - Approaches to **strategic purchasing** of supplies and equipment (e.g., personal protective equipment and liquid nitrogen for vaccine storage) that balance accountabilities up & out
 - Responsive and agile
 - Restoration of **non-COVID services** when possible (by developing or capitalizing on 'slack' within health systems)
 - Efforts to address **health human resource** shortages (and motivation & wellbeing)
 - Consolidating and optimizing the value achieved through shifts in **virtual care**
 - **Packages of responses** (public-health / health-system) and **combinations of centralized & decentralized approaches** (from studies of variations in response to local and regional outbreaks and/or changes in incidence rates)

What's on our List of Priority Topics for Living Evidence Syntheses? (3)

- Economic and social responses
 - **Culture and gender** - Additional risks of **gender-based and domestic violence** arising from restrictions and appropriate ways to address such violence
 - **Education** - Benefits and harms to students, educators and families arising from **school** closures, re-openings and **operations** as well as for pedagogical innovations that can support ongoing education
 - **Financial protection** - Enhancing **financial security** by adjusting 'safety nets' and supporting workforce (re)training
 - **Food safety and security** – Approaches to addressing food supply-chain challenges and **food poverty**
 - **Climate action** – Additional risks of **environmental crisis** and maximizing the opportunity for synergies between the COVID-19 response and climate action
 - **Transportation** - Managing the risks related to **tourism** and **travel**
 - **Citizenship** - Linking **community participation** in the pandemic response with outcomes and capturing innovations in participatory approaches

Tips for Teams Taking Up Priority Topics for Living Evidence Syntheses

- Consider committing to explicitly
 - Foreground **equity** considerations
 - Examine **benefits and harms** (health outcomes but also economic and social outcomes), citizen experiences, and costs
 - Acknowledge variation in **government capacity**
- Consider **interdisciplinary teams** (e.g., laboratory, IPAC, engineering, data modeling, outbreak studies, behavioural & social sciences, equity, science communication and citizens) alongside methodological experts
- Consider committing to **explicit cycles or triggers for updating** living evidence syntheses (and/or at least to finding a home for an evidence synthesis when an emergent issue becomes long-term or recurring and needs to become a living evidence synthesis)



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