

COVID-END horizon-scanning global panel Briefing note

(Last updated 26 October 2020)

Current pandemic context

Confirmed COVID-19 cases are well over 42 million worldwide with over 400,000 cases added daily – the highest rate seen thus far. Many countries are experiencing a resurgence in cases an introducing additional public-health measures.

Potential issues for consideration from the scan

To inform panelists' deliberations about emergent issues (or previously missed long-term and recurring issues) that may need to be prioritized, the COVID-END team has prepared the following bulleted summary of issues identified through available documents (e.g., academic journals and magazines), websites (e.g., international organizations and traditional media), and social media (e.g., Twitter), which are organized using the four parts of the COVID-END taxonomy of decisions related to COVID-19.

1) Public-health measures

- Shifts in the mask use dialogue from encouraging adherence to contemplating enforcement measures [as an additional frame on the existing priority of 'supporting adherence to public-health measures']
- Considering the value of a vaccine under different conditions (e.g., during a lockdown when a vaccine may have a significant economic benefit versus during a period of high community transmission when a vaccine may have a significant health benefit) and the need for public buy-in [as an additional frame on the existing priorities of 'supporting adherence to public-health measures' and 'managing vaccine distribution and allocation under shortage conditions, leveraging vaccine trust and addressing vaccine hesitancy, and capturing lessons learned from roll-outs']

2) Clinical management of COVID-19 and pandemic-related conditions

- Emerging conflicting findings related to the value of Remdesivir as a drug treatment for COVID-19
- The politicization of burnout and trauma among essential workers in some countries and the need to identify accountable institutions that provide 'psychological PPE' [as an additional frame on the existing priority of 'screening for and managing emergent mental health and substance use issues]
- Innovations in treatments for people with alcohol use issues that have developed or worsened with COVID-19 [as an additional frame on the existing priority of 'screening for and managing emergent mental health and substance use issues]

3) Health-system arrangements

• Growing concerns related to the sustainability of gains made related to virtual care [as an additional frame on the existing priority of 'consolidating and optimizing the value achieved through shifts in virtual care']

4) Economic and social responses

- Understanding and harnessing the value of economically and socially integrated disaster preparedness to better respond to COVID-19 and future pandemics or other disasters
- Hunger and other social issues created or worsened by COVID-19 has forced a rethinking of the collaboration between various levels of government and non-governmental organization to delivery locally appropriate interventions [as an additional frame on the existing priority related to 'food safety and security']
- Promoting a 'green recovery' through attending to biodiversity and creating economic recovery plans that have a low carbon footprint [as an additional frame on the existing priority related to 'climate action']

• Given the reality of cycling lockdowns, more effective online learning practices are needed at all educational levels [as an additional frame on the existing priority related to 'education']

The team has also prepared a more detailed appendix containing lists of hyperlinked descriptors of the issues addressed in identified documents, websites, and social media (Appendix 1).

Potential top priorities for 'living' evidence syntheses where they are currently lacking

To inform panelists' deliberations about top priorities for 'living' evidence syntheses, the COVID-END team has reviewed priorities identified by the panel in the past and compared them with the COVID-END inventory of 'best' evidence syntheses as well as other available and planned syntheses (as captured in the COVID-END database that feeds the inventory) to identify areas where evidence syntheses do and do not exist.

Prioritized topics from past panel	Identified available and planned syntheses		
meetings			
Public health			
Supporting adherence to publichealth measures, including better communicating the rationale including trade-offs (including in politicized contexts and for politicized issues)	 One 'best evidence' synthesis addresses behaviour change support for the public to reduce facial touching One 'best evidence' synthesis addresses behaviour change support related to infection prevention and control guidelines, but only for health care workers Seven other syntheses and five planned syntheses address a range of topics related to adherence, including public-focused adherence and for health care/frontline workers specifically, adherence to specific measures (such as PPE or quarantine) and how to communicate measures effectively to support adoption and uptake 		
Strategies for testing and for test-track-trace approaches that optimize the use of existing capacity	 Two 'best evidence' syntheses address reducing turn-around times via rapid point-of-care testing (synthesis 1, synthesis 2) One 'best evidence' synthesis addresses innovations in testing technologies One 'best evidence' synthesis addresses digital contact tracing Ten other syntheses and seven planned syntheses with a focus on timeliness and the use of apps and automation 		
Outbreak contributors (from interdisciplinary outbreak studies)	 One 'best evidence' synthesis addresses outbreak locations (long-term care facilities) Nine other syntheses and four planned syntheses address the spread of the outbreak across a range of settings (long-term care, schools, prisons, etc.), and the role of air quality 		
Surveillance, analytic and synthesis capacity in public-health units and linkages to other parts of the health system	 One 'best evidence' synthesis addresses symptoms that could be used for screening in primary care and outpatient settings Four other syntheses and no planned syntheses address the identification of vulnerable groups and settings that should be a priority for surveillance and screening 		
Clinical management of COVID-19 and pandemic-related conditions			
Long COVID (among people without severe COVID) and/or long-term sequelae of severe COVID	• Three 'best evidence' syntheses address the neurological impacts of COVID-19 (synthesis 1, synthesis 2, synthesis 3)		

	• Fifteen other syntheses and six planned syntheses address a wide range of emerging and long-term sequelae of COVID-19, with most of the planned syntheses focusing on 'long COVID' specifically
Screening for and managing emergent mental health and substance use issues	 Three 'best evidence' syntheses address who is at risk for mental health issues and effective treatment and supports, but not how to screen them (synthesis 1, synthesis 2, synthesis 3) Two 'best evidence' syntheses address mental health concerns related to health-care workers specifically (synthesis 1, synthesis 2) Sixty-four other syntheses and 25 planned syntheses address the extent of mental health problems due to the pandemic including who is at risk as well as the effectiveness of digital and telehealth interventions, however, most focus on mental health and less on substance use or addictions
Concurrent management of COVID- 19 and other (seasonal) infections	 No 'best evidence' syntheses were identified Two other syntheses and six planned syntheses address the differential diagnosis and management of COVID-19 and influenza as well as managing co-infections
Health-system arrangements	
Managing vaccine distribution and allocation under shortage conditions, leveraging vaccine trust and addressing vaccine hesitancy, and capturing lessons learned from roll-outs	 No 'best evidence' syntheses were identified No other syntheses and four planned syntheses address vaccine hesitancy and acceptance as well as the economic benefits of vaccines in infectious disease outbreaks
Approaches to strategic purchasing of supplies and equipment (e.g., personal protective equipment and liquid nitrogen for vaccine storage) that balance accountabilities up & out	No best evidence syntheses were identified No other syntheses and two planned reviews address communication consultation and ethical allocation of healthcare resources
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 and wellbeing)	 Two 'best evidence' syntheses address decisions related to restoration of emergency surgery and deferral of urologic oncology surgeries One 'best evidence' synthesis addresses health human resource planning related to medical student disaster training Three other syntheses and one planned synthesis address the restoration of non-COVID services, for hospital and surgery services in particular Three other syntheses and one planned synthesis address health human resource planning, including workforce re-configuration and re-deployment
Consolidating and optimizing the value achieved through shifts in virtual care	 One 'best evidence' synthesis addresses virtual care for people with COVID-19 Three 'best evidence' syntheses address virtual care for specific clinical areas: urology, neurosurgery, and psychiatry(schizophrenia) One 'best evidence' synthesis addresses virtual care to reduce loneliness in older adults Seven available syntheses and two planned syntheses address virtual care for a variety of conditions, including those with COVID-19

Packages of responses (public-health / health-system) and combinations of centralized and decentralized approaches (from studies of variations in response to local and regional outbreaks and/or changes in incidence rates)	No 'best evidence' syntheses were identified One available synthesis and one planned synthesis address packages of responses with one focusing on packages of public health measures and the other more broadly about transmission and economic impact mitigation strategies
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	No 'best evidence' syntheses were identified Two available syntheses and five planned syntheses address gender-based and domestic violence, including prevalence and services to address it
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	One 'best evidence' synthesis (protocol only) addresses changes to classrooms and schools more generally One available synthesis and 14 planned syntheses address the effects of school closures as well as measures to reduce transmission risk but only one addresses pedagogical innovations
Financial protection - Enhancing financial security by adjusting 'safety nets' and enhancing workforce training	 No 'best evidence' syntheses were identified Three available syntheses and six planned syntheses address the economic impacts of the pandemic but very few focus on measures to address them
Food safety and security – Approaches to addressing food supply-chain challenges and food poverty, including both community-based and nationally led actions	No 'best evidence' syntheses were identified No available syntheses and one planned synthesis addresses food security
Climate action – Additional risks of environmental crisis and maximizing the opportunity for synergies between the COVID-19 response and climate action	No 'best evidence' syntheses were identified No available syntheses and three planned syntheses address environmental factors, climate factors and rainfall on the transmission of COVID-19
Transportation - Managing the risks related to tourism and travel	 No 'best evidence' syntheses were identified One available synthesis and no planned syntheses address travel-related control measures
Citizenship - Linking community participation in the pandemic response with outcomes and capturing innovations in government approaches	 No 'best evidence' syntheses were identified No available or planned syntheses were identified
[Cross-cutting perspective] - Role of international aid and maintaining investment in it despite increasing country-level debt	 No 'best evidence' syntheses were identified No available or planned syntheses were identified

[Cross-cutting perspective – see tips for teams] – Addressing variation in state capacity, including the unique needs of fragile countries	 No 'best evidence' syntheses were identified No available or planned syntheses were identified
[Cross-cutting perspective – see tips for teams] - Differential impact of COVID-19 on vulnerable populations and increasing inequalities	 No 'best evidence' syntheses were identified Four available syntheses and nine planned syntheses identify disparities created by the pandemic and populations vulnerable to its effects (including stigma related to COVID-19) as well as approaches to addressing the inequities, such as social prescribing)

A full list of syntheses categorized by priority topic, including (when available) quality ratings, date of last search and declarative titles, is available upon request.

Draft list of tips for teams taking up priority topics for 'living' evidence syntheses

Some of the input provided in past meetings of the global panel pertained to perspectives that should be brought to bear across many or all evidence syntheses (not just to a particular priority topic being discussed). Additional input has been provided by decision-makers and researchers. Below we provide a draft list of tips for teams taking up priority topics for living evidence syntheses:

- 1) consider committing to explicitly
 - a) examine benefits and harms (health outcomes), citizen experiences, and costs (both for delivery and for the economic and social consequences),
 - b) foreground equity considerations;
- 2) consider **interdisciplinary teams** (e.g., laboratory, IPAC, engineering, data modeling, outbreak studies, behavioural and social sciences, and science communication) alongside methodological experts; and
- 3) 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-tern or recurring and needs to become a living evidence synthesis.

Appendix 1: Emergent issues (or previously missed long-term and recurring issues) for consideration, as identified from the monthly scan

1) Public-health measures

Theme	 Enforcing the use of masks Elaboration on an existing issue – shifting from 'compliance' to 'enforcement'
Taxonomy component	Infection prevention – wearing masks
Source(s)	Masking enforcement policies along with a public education campaign require policymakers to consider leveraging existing public health mechanisms for public cooperation such as smoke-free zones. Link (Health Affairs)

Theme	Vaccine distribution and allocation
	Elaboration on an existing issue – understanding value of vaccine and need for buy-in
Taxonomy component	Future possible public-health measures - Vaccination
Source(s)	 The benefits (health and economics) of vaccination depend on the counterfactual situation (the degree of suppression) and should be considered when purchasing and allocating vaccine doses. Link (Twitter) There is a need determine the optimal allocation of vaccine(s) for the world's population and create public buy-in in this process; however, the information from vaccine trials may not completely demonstrate the effectiveness of any vaccine across all segments of the population. Link (Journal – Nature)

2) Clinical management of COVID-19 and pandemic-related conditions

Theme	Drugs for Covid-19
	Elaboration on existing issue – conflicting findings
Taxonomy	Antivirals
component	
Source(s)	• In a US study, Remdesivir was been shown to be superior to placebo in shortening the time to recovery in adults who were
	hospitalized with Covid-19 and had evidence of lower respiratory tract infection. Link (Journal – NEJM)
	In a WHO study, Remdesivir shows no benefit over placebo. Link (News – Medscape)

Theme	Burn-out and trauma in essential workers	
	Elaboration on existing issue – politicization and accountability	

Taxonomy	Psychosocial support
component	
Source(s)	 Venezuelan government prosecuting doctors and academics providing information about the pandemic's impact on health care workers, hospitals, and patient care Link (Journal – BMJ) Supporting the mental health of clinicians is crucial and needs a proactive approach, which can be enabled by institutions through a series of programs – and they should be accountable for their staff's wellbeing. Link (Journal – NEJM) Psychological PPE' for healthcare staff that are continually experiencing high levels of trauma, grief, and fatigue as the pandemic and safeguarding health workers' mental health is vital for sustaining an effective healthcare system as the pandemic enters the second wave. Link (The Guardian)

Theme	 Mental health and addictions issues related to the pandemic response Elaboration on existing issue – innovations to address substance use
Taxonomy	Remote management of existing conditions
component	
Source(s)	Treatment via mobile phones suggested as an option for those struggling with alcohol use disorder in Kenya, a nation with very
	high AUD rates and mobile access. Link (Journal – the Lancet)

3) Health-system arrangements

Theme	Virtual care
	Elaboration on existing issue – questions emerging related to sustainability of virtual care
Taxonomy	Virtual visits
component	
Source(s)	• As the pandemic plateaus in some parts of the world, the virtual visits will also plateau and fall in number as payors revert to their old ways Link (Journal – JAMA)
	• In areas in which digital public health has the potential to accelerate effective public health responses to COVID-19 and future pandemics, the barriers appear to be the resistance of new ways of working and thinking and the cost and literacy of digital technologies, especially in low-income settings. Link (The Lancet Public Health)

4) Economic and social responses

Theme	Integrated disaster preparedness	
	• Elaboration on an existing issue – focus on integrated response	
Taxonomy	Economic development and growth – Economic resilience; Government services	
component		

Source(s)	•	Sri Lanka has been mostly successful at handling the pandemic due to preparedness but improved integrated risk management,
		fiscal & financial risk management, and social protection & social insurance can ensure better preparation for future disasters. Link
		(Institute of Policy Studies of Sri Lanka)

Theme	State capacity to delivery essential aid
	Elaboration on an existing issue – mechanisms to support aid delivery
Taxonomy	Community and social services – Supports for community resilience; Food safety and security
component	
Source(s)	COVID-19 and related measures triggered a hunger crisis in India that challenged the established Public Distribution System; this has forced a rethinking of the collaboration between various ranks of government (and non-governmental organizations) to delivery locally appropriate interventions. Link (Centre for Policy Research India)

Theme	Green recovery		
	Elaboration on an existing issue – consideration of biodiversity		
Taxonomy	Climate action - Climate-action focused economic stimulus; Economic development and growth – Economic resilience; Environmental		
component	conservation		
Source(s)	 As governments embark on unprecedented economic recovery trajectories, there is a unique opportunity to make structural changes that encourage a low-carbon economy through purposeful expenditures and well-designed tax policies. Link (OECD – Policy Responses) Biodiversity loss is a driver of biological threats to humanity and poses other social and economic risks yet is not being taken into account in 'green' COVID-19 recovery plans (especially when compared to climate change); nonetheless, there exists several mechanisms that may allow biodiversity conservation to be integrated into COVID-19 recovery plans. Link (OECD – Policy Responses) 		

Theme	Improving online education
	Elaboration on an existing issue – increasing effectiveness of online education (rather than shifts to it)
Taxonomy	Education – Online instruction; Student supports; Instructor supports
component	
Source(s)	 In many areas where returns to in-person schooling are not feasible, progress needs to be made to improve the delivery of education to children and improve the supports available to students, parents, and instructors that can facilitate online learning. Link (News – Bloomberg Opinion) Given the reality of cycling lockdowns, more effective online learning practices are needed—particularly those that target attributes a trivial or towards a children for experts and to other to support learning.
	students' attitudes towards online learning, the ability of parents and teachers to support learners, and engagement between schools and parents. Link (OECD – Policy Responses)

Citation: Bullock HL, Sharma K, MacLean A, Al-Khateeb S, Moat K, Mansilla C, McKinlay J, Lavis JN. Potential issues for consideration and top priorities for living evidence syntheses where they are currently lacking. Hamilton, Canada: COVID-19 Evidence Network to support Decision-making about COVID-19 (COVID-END); 28 October 2020.