

COVID-END global horizon-scanning panel Insights from panelists from the panel meeting on 27 January 2021 (Last updated on 3 February 2021)

Panelists identified a number of emergent issues (or previously missed long-term and recurring issues and/or elaborations on these issues) related to COVID-19 for which evidence syntheses are or will be needed. The points raised for consideration spanned all four areas of the COVID-END taxonomy and are listed below.

Panelists also reviewed a list of priority topics for 'living' evidence syntheses that was developed by identifying when issues they had identified in past calls were not addressed by high quality, recently updated evidence syntheses included in the COVID-END inventory of 'best' evidence syntheses. They provided feedback about how these topics can be framed in ways that are optimal to support decision-making and completed an online poll that allowed them to re-order the topics to reflect their urgency or importance (within each of the four parts of the COVID-END taxonomy).

This summary of insights is divided into two sections to reflect these separate, but linked, discussions.

Emergent issues (and previously missed long-term and recurring issues and/or elaborations on these issues)

Public-health measures

- 1) Keeping abreast of the implications of SARS-CoV-2 variants for public-health measures
- 2) Understanding transmission risks in schools and the measures that are effective in reducing or eliminating transmission
- 3) Understanding the impacts of within-country and cross-border migration on transmission and access to services (as well as the previously identified impacts of within-country and cross-border tourism-related travel)
- 4) Implementing measures to support **adherence** to public-health measures (e.g., paid sick leave)
- 5) Considering risks related to accessing public-health services from an equity perspective (e.g., sick people needing to use public transit to get to testing sites)
- 6) Identifying alternatives to individual testing for COVID-19, such as the use of sewage testing, to identify neighbourhood-level outbreaks
- 7) Understanding the need for, and limits to, reporting information about outbreaks (e.g., litigation concerns)
- 8) Public choice related to vaccination (i.e., are they mandatory in certain circumstances or always voluntary?)
- 9) Understanding the rationale for recent changes to national and international public-health recommendations (e.g., N95 masks for the public while in transit and longer quarantine requirements)

Clinical management of COVID-19 and pandemic-related conditions

- 1) Exploring alternatives to vaccines including drugs and other medical treatments that prevent serious illness
- 2) Using **pulse oximeters** for home monitoring, including equipment availability, cost, distribution and training
- 3) Identifying strategies to reach high-risk but hard-to-reach groups that are often excluded from vaccination, testing and treatment (such as migrants, refugees, sex workers, and people with no fixed address)
- 4) Improving the adaptation of clinical guidelines for humanitarian settings and/or developing new guidelines that are applicable in these contexts

Health-system arrangements

- 1) Managing the additional pressures on healthcare and public-health systems created by **policies in other countries** (e.g., testing requirements for travel)
- 2) Optimizing health system capacity to deal with COVID-19-related impacts while understanding the trade-offs (e.g., should vaccines be prioritized for health workers or the elderly and what are the benefits and harms of each approach?)

- Optimizing vaccine supply and developing equitable vaccine-allocation plans, vaccine-communication plans, and vaccine-administration infrastructures [as additional elaborations on vaccine considerations introduced in past meetings]
 - a) Optimizing **vaccine supply**, which includes the potential for supporting national vaccine-manufacturing capacity to ensure a stable supply and appropriate pricing
 - b) Developing **equitable vaccine-allocation plans**, which includes when each country can expect to receive vaccine shipments and which groups in society will be prioritized in what sequence
 - c) Developing **vaccine-communication plans** to manage expectations about when the effects of a massvaccination campaign will be realized, to address vaccine hesitancy and combat mis-information, and to clarify safety and effectiveness considerations for particular population groups (e.g., older age groups)
 - d) Leveraging existing, and filling gaps in, vaccination-administration **infrastructures**, which includes the documentation of vaccination status (and possibly 'vaccine passports' for use in cross-border travel and work-related migration) and the documentation and follow-up of adverse events

Economic and social responses

- 1) Developing stimulus grants and/or recovery packages that are designed using a 'green' approach
- 2) Understanding how to leverage the full range of existing social-protection measures as part of the pandemic response (e.g., employment insurance and conditional cash transfers)
- 3) Understanding the downstream impacts of missed education

Priority topics for living evidence syntheses

The following list reflects the re-ordering of topics by panelists, changes to the wording of topics by panelists (highlighted in yellow), and the addition of new topics by panelists (with these new rows added to the bottom of each part of the list and with a different background colour). The list is complemented by a column that provides a summary of available and planned syntheses that address at least part of the topic. A full list of syntheses, including quality ratings, date of last search and declarative titles, is available upon request.

Rank	Prioritized topics from panel	
Public Health Measures		
1	Strategies for testing and test-track-trace approaches, and for the use of antigen testing (and alternatives	
	like lateral flow testing) as a screening strategy, that optimize the use of existing capacity	
2	Supporting adherence to public-health measures, including better communicating the rationale and any	
	trade-offs between benefits in terms of reduced transmission and potential harms in other domains	
	(including in politicized contexts and for politicized issues and in the face of 'pandemic fatigue'), as well as	
	enabling mechanisms to support adherence (paid time off work, isolation facilities, etc.)	
3	Surveillance, analytic and synthesis capacity and linkages to other parts of the health system	
4	Understanding patterns in and consequences of the greater geographic dispersion of infections,	
	including COVID-19 variants, and the role of internal, and internation migration and tourism in	
	transmission	
5	Building rapid-response mechanisms to support interdisciplinary outbreak studies (e.g., examining the	
	role of freight, including frozen foods, handling in transmission) and to support monitoring and evaluation	
	more generally	
New	Addressing issues around mask types (including double masking) for general public	
New	Changes in quarantine recommendations to 21 days	
New	Understanding all factors that contribute to vaccine hesitancy (immunocompromised people,	
	pregnant women, mistrust in system, etc.) and measures to address the factors and communicate	
	in appropriate, effective manner	

Rank	Prioritized topics from panel
New	Vaccine immunity perseverance including the need for boosters as well as effectiveness of vaccine
	substitution when multiple doses are needed
New	Addressing barriers to accessing public health services, such as testing or vaccination sites,
	that may also reduce risk of community spread (e.g., safe transportation alternatives for
	individuals who do not have access to private vehicles)
New	Understanding the impacts of internal and international migration as well as tourism on transmission
	al management of COVID-19 and pandemic-related conditions
1	Long-haul symptoms of COVID (also known as 'long COVID') among people without severe COVID
1	and/or long-term sequelae of severe COVID
2	Understanding the protective effects of antibodies (e.g., duration of protection) and the role of auto-
-	antibodies in more severe illness
3	Screening for and managing emergent mental health and substance use issues and understanding the
	links with between substance use and pandemic-related increases in domestic violence and suicide
4	Understanding COVID-19 as a 'syndemic' that co-occurs with a range of other communicable and non-
	communicable diseases that differentially affect population groups, and adjusting supports accordingly
New	Pulse oximeters for home monitoring of patients
New	The effects of the emerging COVID-19 variants either as more infectious agents and/or efficacy of
	vaccines on these variants
New	Use of colchicine to reduce hospitalizations
	Concurrent management of COVID-19 and other (seasonal) infections
Health	n-system arrangements
1	Optimizing vaccine supply and managing vaccine allocation, communication, administration,
	infrastructure and reporting
2	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)
3	Responsive and agile efforts to address health human resource shortages, motivation and wellbeing,
	including strategies to build resilience, manage burnout, recruit and retrain staff
4	Strengthening health-system governance (including by addressing corruption and avoiding the
	politicization of decision-making processes)
5	Leveraging primary care as the foundation for the health-system response to COVID-19
6	Approaches to strategic purchasing of supplies and equipment (e.g., personal protective equipment and
7	liquid nitrogen for vaccine storage) that balance accountabilities up and out Consolidating and optimizing the value achieved through shifts in virtual care (including through the
/	development or updating of legal frameworks and policies)
8	Restoring non-COVID services after surges and addressing the effects of interrupted care (e.g., access
0	to drugs, procedures, equipment and international travel for treatment) on people with chronic conditions,
	including those with rare diseases
Econo	omic and social responses
1	Education - Benefits and risks to students, educators and families arising from school closures, re-
	openings, operations and pedagogical innovations that can support ongoing education and the
	downstream impacts of missed education
2	Community and social services - Differential impact of COVID-19 on vulnerable populations and
	increasing inequalities
3	Financial protection – Enhancing economic security by adjusting 'safety nets' (and keeping in mind
	differential impacts on women and other vulnerable populations) and enhancing workforce training
4	differential impacts on women and other vulnerable populations) and enhancing workforce training Food safety and security – Approaches to addressing food supply-chain challenges and food insecurity,

Rank	Prioritized topics from panel
5	Economic development and growth – Embracing new approaches to public financing that support
5	fairness and equity (especially for women and other vulnerable populations), such as conditional cash
	transfers, avoiding fiscal cliffs (expiring tax cuts and government spending cuts), and avoiding debt traps
6	Culture and gender - Additional risks of gender-based and domestic violence arising from restrictions,
0	and appropriate ways to address such violence
7	Citizenship - Linking citizen and community participation in pandemic planning, policymaking and
	response with outcomes and capturing innovations in government approaches
8	Climate action – Additional risks of environmental crisis and maximizing the opportunity for synergies
	between the COVID-19 response and climate action, including exploring a 'green recovery'
9	Transportation - Safely re-opening the tourism and travel industry and managing the related risks (e.g.,
	through testing protocols)
10	Economic development and growth - Impacts of the abrupt shift toward nationalism as a governing
	strategy for the economy
New	Economic development and growth - Clarifying the trade-offs between, and interconnectedness of,
	public-health measures (such as lockdowns) and economic productivity across a wide range of outcomes
New	Economic development and growth - Using incentives to encourage workforce development (in
	healthcare as well as private businesses) and renew infrastructure (e.g., bridges and roads)
Cross-	cutting
1	Equity – Engaging vulnerable groups in society to develop and customize packages of public-health
	measures, clinical-management approaches, health-system arrangements, and economic and social
	responses that are sensitive to equity, diversity and inclusion considerations
2	Governance - Strategies to support coordination across government sectors and across non-governmental
	organizations, citizen groups, academia, and others, including 'non-typical' stakeholders
New	Infrastructure – Integrating data systems to support pandemic management

Tips for teams taking up priority topics for living evidence syntheses

The panel suggests that all synthesis activities should be undertaken with several key considerations in mind:

- an explicit commitment to:
 - o foregrounding equity considerations,
 - examining benefits and harms (health outcomes but also economic and social outcomes), citizen experiences, and costs,
 - o being attentive to variation in state capacity;
- interdisciplinary teams (e.g., laboratory, infection prevention and control, engineering, data modeling, outbreak studies, behavioural and social sciences, equity, science communication, and citizens) alongside methodological experts; and
- 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).

Links shared during the panel meeting

- NCCMT living rapid review about COVID-19 transmission in daycare and schools: <u>https://www.nccmt.ca/covid-19/covid-19-rapid-evidence-service/19</u>
- EU review regarding COVID-19 transmission in schools: <u>https://www.ecdc.europa.eu/en/publications-data/children-and-school-settings-covid-19-transmission</u>

- EU research projects about COVID-19: <u>https://ec.europa.eu/info/sites/info/files/research and innovation/research by area/documents/ec rtd coron</u> <u>avirus-new-research-projects.pdf</u>
- Paper about green fiscal recovery: <u>https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf</u>
- Data reports by Health Data Research UK (published every two weeks): <u>https://www.hdruk.ac.uk/covid-19/capability-to-support-covid-19-research-questions/</u>
- Data on long COVID: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/dataset s/prevalenceoflongcovidsymptomsandcovid19complications
- Data event organized by the International COVID-19 Data Alliance (ICODA): https://icoda-research.org/icoda-forum-2020-all-the-content-from-the-event/
- Translated resources from Doctors of the World: https://www.doctorsoftheworld.org.uk/
- Webpage about pulse oximetry and virtual wards: <u>https://www.ahsnnetwork.com/covid-oximetry</u>
- UK response: https://www.nhsconfed.org/supporting-members/covid19/latest-developments

Citation: Bullock HL, Lavis JN, Sharma K, MacLean A and Al-Khateeb S. Insights from COVID-END's global horizon-scanning panel meeting on 27 January 2021. Hamilton, Canada: COVID-19 Evidence Network to support Decision-making about COVID-19 (COVID-END); 3 February 2021.