



COVID-END global horizon-scanning panel Insights from panelists from the panel meeting on 24 February 2021 (Last updated on 28 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 and cross-cutting themes).

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)

Cross-cutting

- 1) Developing **tailored messages in creative formats** (such as graphic novels) for different audiences to convey best practices related to individual- and household-level public-health measures and other pandemic responses
- 2) Capturing **lessons learned** from the pandemic from the perspective of individual citizens in clear and concise ways in order to effectively apply them in future

Public-health measures

- 1) Keeping track of emergent SARS-CoV-2 **variants** and clarifying the criteria for moving from a ‘variant’ to a ‘variant of concern’ as well as the optimal time to adjust public-health measures in response
- 2) Clarifying the **effectiveness of individual public-health measures**, how they can be **optimally combined** into packages, and the trade-offs among the packages
- 3) Understanding the **relative effectiveness of vaccines** overall, in relation to ‘variants of concern,’ and for specific populations, as well as addressing vaccine hesitancy
- 4) Enhancing our understanding of the level of vaccination required to reach **herd immunity**

Clinical management of COVID-19 and pandemic-related conditions

- 1) Understanding the impact of **non-COVID-19 treatment delays** across the full range of conditions and using that knowledge to drive re-opening sequencing and prioritization
- 2) Optimizing **packages of COVID-19 treatments**
- 3) Monitoring the rising levels of emerging **mental-health challenges** and formalizing supports to address them

Health-system arrangements

- 1) Expanding **pandemic modelling** beyond epidemiological data to incorporate data related to population-level adherence to public-health measures, behavioural insights, mental well-being/distress, and social impacts
- 2) Optimizing the **healthcare workforce** through recruitment, training and retention strategies
- 3) Improving the organization, delivery and management of **vaccines**, including:
 - a) clarifying the interplay between national and international considerations for vaccine supply and addressing **vaccine nationalism and hoarding**
 - b) addressing **availability, timely delivery and administration of vaccines** for targeted groups
 - c) managing the conflict between the ‘public good’ of herd immunity and individual choice
 - d) considering **standardizing vaccine documentation** within and across jurisdictions

Economic and social responses

- 1) Addressing **job losses**, which have been particularly pronounced for women and minorities
- 2) Identifying mechanisms to effectively deal with the ongoing **racial targeting** of particular communities
- 3) Understanding and enhancing government capacities for **policy learning**

Considerations raised related to the evidence ecosystem

- 1) Addressing the challenges with **pre-print** journal articles and the ‘spin’ they can cause, and balancing the trade-offs between timely access to new information with the consequences of spreading misinformation due to low-quality studies
- a) Developing **mechanisms to support timely study appraisals and interpretation**, such as rapid pre-print review panels
- 2) Bringing more **coherence** to the increasingly large number of **primary studies**
- 3) Identifying and addressing the **knowledge-translation challenges** related to the understanding that this is not one homogenous pandemic globally or even within jurisdictions

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 blue row header). Topics for which at least some evidence syntheses are available have a light-green row header, and topics for which we are aware of existing or planned living evidence syntheses have a dark-green row header.

Rank	Prioritized topics from panel
Cross-cutting	
1	Optimizing packages of responses (public-health measures, health-system arrangements, and economic and social responses), including combinations of centralized and decentralized approaches, in terms of both their health benefits and their economic and social costs
2	Understanding real-world comparative vaccine effectiveness (in addition to trials data about safety and efficacy), including in relation to variants of concern , and the implications for public-health measures (e.g., vaccine substitution and timing for second dose; changes to infection prevention and control measures; and when herd immunity will be reached) and health-system arrangements (e.g., PPE, cohorting, and HVAC) <i>*** see health-system arrangements for vaccine roll-out ***</i>
3	Understanding the ‘pipeline’ of SARS-CoV-2 variants , the conditions under which they become ‘variants of concern’ , their transmission characteristics, and their implications for public-health measures (e.g., vaccine choice and sequencing, double masking, quarantine length, and border closures) and for health-system arrangements (e.g., capacity planning, PPE, cohorting, and HVAC systems)
4	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 and that address inequalities in COVID-19 burden
5	Supporting coordination across government sectors and across non-governmental organizations, citizen groups, academia, and others, including ‘non-typical’ stakeholders (both in general and specifically to avoid future cycles of lockdowns and re-openings) and increasing capacity for policy learning across jurisdictions
6	Integrating data systems and monitoring and evaluation mechanisms to support pandemic response
New	Capturing lessons learned from this pandemic from the perspective of individual citizens/households in clear and concise ways in order to effectively apply them in future
Public-health measures	
1	Supporting adherence to public-health measures , including addressing barriers to adherence (e.g., safe transportation to testing and vaccination sites, paid time off work, and publicly funded isolation facilities),

Rank	Prioritized topics from panel
	optimizing public messaging about individual- and household-level measures (and using creative formats to convey these messages), and using appropriate behavioural interventions
2	Building rapid-response mechanisms to support interdisciplinary outbreak studies (and addressing litigation and other concerns related to sharing information about outbreaks) and to support timely study appraisals and interpretation (and finding other ways to avoid preprints inappropriately driving action before their quality has been determined)
3	Adapting strategies for testing that optimize the use of existing capacity and incorporating neighbourhood-based approaches like sewage testing to identify outbreaks
4	Understanding patterns in and consequences of the greater geographic dispersion of infections, including the role of internal and international migration and of tourism in transmission, and of case fatality rates
Clinical management of COVID-19 and pandemic-related conditions	
1	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
2	Documenting and addressing long-haul symptoms of COVID (also known as 'long COVID') among people without severe COVID and/or long-term sequelae of severe COVID
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 the protective effects of antibodies (e.g., duration of protection) and the role of auto-antibodies in more severe illness
New	Optimizing packages of COVID-19 treatments including drug treatments, respiratory support (including pulse oximetry), and physical interventions such as proning
Health-system arrangements	
1	Optimizing vaccine roll-out , including securing and distributing a reliable supply of vaccines and ancillary supplies, allocating vaccines and ancillary supplies equitably, communicating vaccine-allocation plans and the safety and effectiveness of vaccines (and addressing the factors that contribute to vaccine hesitancy in particular population groups), administering vaccines in ways that optimize timely uptake, and surveillance, monitoring and evaluation, and reporting (including the documentation of vaccination status and adverse events)
2	Restoring non-COVID services after surges (including prioritizing and sequencing service restoration based on risk) and addressing the effects of interrupted care on people with chronic conditions, including those with rare diseases
3	Addressing in an agile way health worker shortages, motivation and wellbeing, including strategies to build resilience, manage burnout, and recruit and retrain staff
4	Leveraging primary care as the foundation for the health-system response to COVID-19
5	Consolidating and optimizing the value achieved through shifts in virtual care (including developing or updating of legal frameworks and policies)
6	Strategic purchasing of supplies and equipment (e.g., personal protective equipment and liquid nitrogen for vaccine storage)
7	Strengthening health-system governance (including by addressing corruption and avoiding the politicization of decision-making processes)
Economic and social responses	
1	Financial protection – Enhancing economic security by addressing pandemic-related job losses and adjusting 'safety nets' (and keeping in mind differential impacts on women and other vulnerable populations) and enhancing workforce development (in healthcare as well as private businesses)
2	Economic development and growth – Embracing new approaches to public financing that support fairness and equity (especially for women and other vulnerable populations) while avoiding fiscal cliffs (expiring tax cuts and government spending cuts) and debt traps
3	Education - Benefits and risks to students, educators and families arising from school closures, re-openings, changes to operations (e.g., school-year adjustments) and pedagogical innovations (e.g., e-learning) that can support ongoing education

Rank	Prioritized topics from panel
4	Food safety and security – Addressing food supply-chain challenges and food insecurity , including both community-based and nationally led actions
5	Community and social services - Promoting children’s resilience and recovery via social policy
6	Citizenship - Linking citizen and community participation in pandemic planning, policymaking and response with outcomes and capturing innovations in government approaches
7	Culture and gender – Understanding the additional risks of gender-based and domestic violence arising from restrictions and identifying appropriate ways to address such violence
8	Economic development and growth – Understanding and addressing the impacts of the abrupt shift toward nationalism as a governing strategy for the economy and of the ‘new economy’ imposed on many countries by COVID-19
9	Climate action – Maximizing the opportunity for synergies between the COVID-19 response and climate action , including exploring a ‘green recovery’
10	Transportation - Safely re-opening the tourism and travel industry and managing the related risks (e.g., through testing protocols) and spill-over effects on other countries (e.g., testing requirements before travel)
New	Culture and gender – Confronting pandemic-induced or pandemic-exacerbated racism

Tips for teams taking up priority topics for living evidence syntheses [No change]

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

- an explicit commitment to:
 - foregrounding equity considerations,
 - examining benefits and harms (health outcomes but also economic and social outcomes), citizen experiences, and costs,
 - 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).

Considerations raised related to the evidence ecosystem [Newly added]

The panel identified a number of other considerations related to the evidence ecosystem:

- addressing the challenges with **pre-print** journal articles and the ‘spin’ they can cause and balancing the trade-offs between timely access to new information with the consequences of spreading misinformation due to low-quality and/or erroneous studies (which includes the previously mentioned need for developing **mechanisms to support timely study appraisals and interpretation**, such as rapid pre-print review panels)
- bringing more **coherence** to the increasing large number of **primary studies**
- identifying and addressing the **knowledge-translation challenges** related to the understanding that this is not one homogenous pandemic globally or even within jurisdictions.

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Additional insights from Canadian horizon-scanning panel members [Newly added]

The first full meeting of the Canadian horizon-scanning panel for COVID-19 will not be convened until April 2021, however, a sub-group of members were able to attend February's global panel meeting and stayed online to participate in additional discussions specific to Canada.

Canadian panelists raised concerns about the mixed messages being received regarding vaccine roll-out (i.e., different prioritization schemes and roll-out procedures across and even within provinces) and identified the need to: 1) examine the impacts of the de-centralized Canadian health system on policies and messaging to citizens (e.g., about vaccinations and lockdowns); and 2) develop clear national recommendations that provinces and territories need to follow.

Canadian panelists tended to provide similar rankings to the global panel for the list of priority topics for evidence synthesis. The most marked exception to this was cross-cutting themes. Canadian panelists identified “*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 and that address inequalities in COVID-19 burden*” as their top priority (#1) (whereas it was ranked #4 of 6 by global panelists) and ranked “*Optimizing **vaccine roll-out**, including securing a reliable supply of vaccines and ancillary supplies, distributing vaccines through efficient logistics channels and cold chains for timely distribution (and considering partnerships with the private sector to support distribution), allocating vaccines and ancillary supplies equitably, communicating vaccine-allocation plans and the safety and effectiveness of vaccines (and addressing the factors that contribute to vaccine hesitancy in particular population groups), administering vaccines in ways that optimize timely uptake, and surveillance, monitoring and evaluation, and reporting (including the documentation of vaccination status and adverse events)*” as their lowest priority (#6) (whereas it was ranked #1 of 6 by global panelists).