



COVID-END horizon-scanning global panel Briefing note (Last updated 21 January 2021)

Current pandemic context

Confirmed COVID-19 cases are nearing 100 million worldwide and COVID-19-attributed deaths have surpassed 2 million. Some countries have approved one or more vaccines, and over 50 million vaccine doses have been administered in an increasing number of countries.

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

- Concerns about the emergence of novel coronavirus variants and the implications for transmission, prognosis and vaccine effectiveness
- Increasing visibility on the challenges emerging related to vaccine nationalism and supply inequities globally, and the need to address them
- Reflecting on the ethical implications of vaccine or immunity passports and emerging arguments in favour of them

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

- New studies quantifying impacts of COVID-19 lockdowns and COVID-19 care prioritization displacing and delaying care for other illnesses in emergency, acute and chronic care settings
- Many health workers are at a 'tipping point' for their mental and physical health, and trying new interventions to retain stamina like cooling vests and 'emotional PPE'
- Oxygen shortages in hospitals continue to hamper ventilation and respiratory care efforts

3) Health-system arrangements

- Developing local vaccine manufacturing capacity to address global supply challenges
- Health system weaknesses revealed by COVID-19 and the need for health system renewal globally, including modifications to governance, financial, and delivery arrangements, as well as key principles, such as equity, that can drive renewal efforts

4) Economic and social responses

- Several countries are calling for extraordinary measures—such as approaches to relax intellectual property rights and facilitate technology transfer—to increase the timely and equitable supply of vaccines and other medical products, especially for low- and middle-income countries
- The tourism industry continues to struggle globally and additional policy responses to support the industry in the short-term and enable a sustainable and resilient recovery are needed [as an additional frame on the existing priority 'safely re-opening the tourism and travel industry and managing the related risks']

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, we are sharing topics prioritized at the November 2020 panel meeting. New additions and revisions to existing topics are highlighted in yellow.

Rank	Prioritized topics from panel
Public health	
1	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’)
2	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
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 in the second wave of COVID-19
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
Clinical management of COVID-19 and pandemic-related conditions	
1	Long-haul symptoms of COVID (also known as ‘long COVID’) among people without severe COVID and/or long-term sequelae of severe COVID
2	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
3	Concurrent management of COVID-19 and other (seasonal) infections
4	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
New	Understanding the protective effects of antibodies (e.g., duration of protection) and the role of auto-antibodies in more severe illness
Health-system arrangements	
1	Managing vaccine allocation, communication, administration and reporting <i>*Note the details on page 1 of this report</i>
2a	Strengthening health-system governance (including by addressing corruption and avoiding the politicization of decision-making processes) <i>*Note that 2a and 2b had been combined but will be separated in future briefing notes</i>
2b	Leveraging primary care as the foundation for the health-system response to COVID-19
3a	Responsive and agile efforts to address health human resource shortages, motivation and wellbeing <i>*Note that 3a and 3b had been combined but will be separated in future briefing notes</i>
3b	Restoring non-COVID services after surges and addressing the effects of interrupted care (e.g., access to drugs, procedures, equipment and international travel for treatment) on people with chronic conditions, including those with rare diseases
4	Approaches to strategic purchasing of supplies and equipment (e.g., personal protective equipment and liquid nitrogen for vaccine storage) that balance accountabilities up and out
5	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)

Rank	Prioritized topics from panel
6	Consolidating and optimizing the value achieved through shifts in virtual care (including through the development or updating of legal frameworks and policies)
Economic and social responses	
1	Financial protection – Enhancing financial security by adjusting ‘safety nets’ (and keeping in mind differential impacts on women and other vulnerable populations) and enhancing workforce training
2	Community and social services - Differential impact of COVID-19 on vulnerable populations and increasing inequalities
3	Education - Benefits and risks to students, educators and families arising from school closures, re-openings, operations and pedagogical innovations that can support ongoing education
4	Economic development and growth – Embracing new approaches to public financing that support fairness and equity (especially for women and other vulnerable populations), avoiding fiscal cliffs (expiring tax cuts and government spending cuts), and avoiding debt traps
5	Food safety and security – Approaches to addressing food supply-chain challenges and food poverty , including both community-based or nationally-led actions
6	Transportation - Safely re-opening the tourism and travel industry and managing the related risks (e.g., through testing protocols)
7	Culture and gender - Additional risks of gender-based and domestic violence arising from restrictions, and appropriate ways to address such violence
8	Citizenship - Linking citizen and community participation in pandemic planning, policymaking and response with outcomes and capturing innovations in government approaches
9	Climate action – Additional risks of environmental crisis and maximizing the opportunity for synergies between the COVID-19 response and climate action
New	Economic development and growth - Impacts of the abrupt shift toward nationalism as a governing strategy for the economy
Cross-cutting	
New	Equity – Working with vulnerable groups in society to 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
New	Governance - Strategies to support coordination across government sectors and across non-governmental organizations, citizen groups, academia, and others

Tips for teams taking up priority topics for living evidence syntheses

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

- 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, 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).

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	Novel SARS-CoV-2 variants <ul style="list-style-type: none"> • New issue
Taxonomy component	Pandemic tracking
Source(s)	<ul style="list-style-type: none"> • Using the natural history of coronaviruses to understand COVID-19 variants and public health-related implications. Link (Magazine – Forbes) • The race against viral evolution causing global spread of COVID-19 that could overwhelm countries and reinforcing the need to restrict travel, ‘double down’ on surveillance and contact tracing, and vaccinate widely as quickly as possible. Link (Website – The Conversation)

Theme	Unequal and inequitable distribution of vaccine and vaccine nationalism <ul style="list-style-type: none"> • Additional frame on existing issue
Taxonomy component	Future possible public-health measures – vaccination (susceptibility reduction)
Source(s)	<ul style="list-style-type: none"> • Worrisome trend of vaccine nationalism may lead to premature approvals of vaccine candidates in lower income countries further perpetuating the risks of vaccine nationalism on public health and the global economy. Link (News - STAT News) • Vaccine nationalism requires global collaboration and collective response to ensure high income countries do not monopolize the vaccine supply. Link (Magazine - The Atlantic) • Public health, moral and ethical obligations that require investments in vaccines that can be delivered using non-cold-chain approaches. Link (Website - The Conversation)

Theme	Vaccine or immunity passports
Taxonomy component	Broader public-health measures – pandemic tracking
Source(s)	<ul style="list-style-type: none"> • Legitimacy of digital vaccine passports requires rethinking despite previous concerns regarding their ethics and efficacy. Link (Website - The Conversation)

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

Theme	Clinical management of pandemic-related impacts on health more generally
Taxonomy component	Routine management considerations for chronic and other existing health conditions

Source(s)	<ul style="list-style-type: none"> • In a US study, there was a significant drop in childhood immunisations rates after social distancing guidelines were released. Link (Journal – JAMA) • A Scottish report outlines how their childhood vaccination rates have stayed high despite the pandemic Link (Journal – the Lancet)
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Theme	Reproductive care for patients with COVID-19
Taxonomy component	Reproductive care for patients with COVID-19 – Newborn care
Source(s)	<ul style="list-style-type: none"> • Many newborns are discharged early, not offered the same previous breastfeeding supports compared to pre-pandemic levels; breastfeeding support will need to transition to better follow-up and at-home services Link (Report – CDC)

Theme	Clinical management of pandemic-related impacts on health more generally
Taxonomy component	Burn-out and trauma in essential workers
Source(s)	<ul style="list-style-type: none"> • Nurse burnout has soared, as has concern about bringing home the virus to their families; data are from six months into the pandemic Link (News – Medscape) • Half of staff in intensive care units in the UK now meet criteria for anxiety, problem drinking, or post-traumatic stress disorder; a significant proportion are having suicidal thoughts Link (News – Reuters) • Many nurses looking to unionise as a consequence of COVID-19, lack of PPE and safety measures taken by their employers Link (News – Kaiser Health) • Nurses who wear “cooling vests” under their PPE report less heat stress during their shifts, including less sweating, fewer headaches Link (News – Reuters) • Mental health workers are donating their time to health professionals dealing with COVID-19-related stress aligned with the concept of “Emotional PPE” Link (News - JAMA)

Theme	Clinical treatment of COVID-19
	<ul style="list-style-type: none"> • Elaboration on existing issue – new settings
Taxonomy component	Ventilation
Source(s)	<ul style="list-style-type: none"> • In multiple US locations, both oxygen and the equipment required to distribute it in hospitals and in the supply chain is low, leading to efforts to conserve it Link (News – Medscape) • Brazil called in its air force to evacuate neonatal intensive care patients from hospitals who ran out of oxygen Link (News – CNN/Guardian)

3) Health-system arrangements

Theme	Development of independent vaccine manufacturing capacity <ul style="list-style-type: none"> • New issue
Taxonomy component	(Addition to) Strategic purchasing of supplies and equipment
Source(s)	<ul style="list-style-type: none"> • Development of independent local capacity for COVID-19 vaccine manufacturing marks an important step towards the establishment of vaccine production capacity in South Africa. Link (Website - The Conversation)

Theme	Health system renewal <ul style="list-style-type: none"> • New issue
Taxonomy component	Identification of weaknesses revealed by COVID-19 and lessons learned for health system renewal
Source(s)	<ul style="list-style-type: none"> • Eight lessons learned from the weaknesses exposed by COVID-19 in the US health system. Link (Journal – International Journal of Health Services) • Characterizing the health system impacts of the ‘vertical response’ to COVID-19 in low- and middle-income countries and suggestions for mitigation. Link (Website – reliefweb) • Compares health system responses from jurisdictions that vary in global health security and universal health coverage and identifies four essential recommendations (integration, financing, resilience and equity). Link (Journal – The Lancet)

4) Economic and social responses

Theme	COVID-19-related medical product supply, intellectual property, and technology transfer <ul style="list-style-type: none"> • New issue
Taxonomy component	Economic development and growth -- intellectual property
Source(s)	<ul style="list-style-type: none"> • India and South Africa have petitioned the WTO to provide an intellectual property waiver on COVID-19-related drugs and technologies and facilitate technology and know-how transfer, which they argue will facilitate more production and access, but several high-income countries and pharmaceutical companies opposed this and argue for voluntary mechanisms. Link (Journal - The Lancet) • The rift at the WTO over intellectual property rights and the inequitable distribution of vaccines signal the emerging need to reconsider how approaches to intellectual property rights, procurement policy, research and development, and development aid may hinder or contribute to the pandemic recovery—particularly for low-income countries. Link (News - Financial Times)

Theme	The future of domestic and international tourism <ul style="list-style-type: none"> • Elaboration on an existing issue – safely re-opening the tourism and travel industry and managing the related risks
Taxonomy component	Transportation – quarantining travellers, private transportation restrictions

Source(s)

- The tourism industry and the communities dependent on tourism have suffered significantly during the pandemic; domestic tourism is providing some relief but a significant, evidence-informed re-thinking of tourism policy is needed to enable more sustainable and resilient tourism in the medium- and long-term. [Link](#) (Report - OECD Policy Responses)

Citation: Bullock HL, Sharma K, MacLean A, Al-Khateeb, 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); 25 January 2021.