

Update of the preliminary findings from COVID-19-related recommendation mapping

I. OVERVIEW

Introduction

1. Following the outbreak of the coronavirus disease (COVID-19) pandemic, numerous evaluations, reviews and assessments of the global COVID-19 response have been carried out by various panels and committees.

2. The WHO Secretariat has been analysing and compiling recommendations from various sources regarding the COVID-19 pandemic response in order to obtain an objective overview of the gaps in global pandemic preparedness and response. This work to map the COVID-19-related recommendations also takes into account proposals of how to strengthen WHO preparedness for and response to health emergencies and highlights the similarities and differences between the various recommendations.

3. In line with the request of the Working Group on Strengthening WHO Preparedness and Response to Health Emergencies (the “Working Group”) at its first meeting, this document has been developed to present the preliminary findings of the WHO Secretariat’s COVID-19-related recommendation mapping exercise. It is divided into two substantive sections that offer the following analysis as of 16 August 2021:

- Section II provides a high-level mapping of 215 recommendations found in 11 source documents, including:
 - official reports mandated by Member States and presented to the Seventy-fourth World Health Assembly (the Independent Panel for Pandemic Preparedness and Response, the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme, and the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response);
 - documents issued by intergovernmental bodies (such as the G20, the G7,¹ and the Global Health Summit);

¹ This includes recommendations from two sources: the G7 100 Days Mission to Respond to Future Pandemic Threats (<http://www.g7.utoronto.ca/summit/2021cornwall/pandemic-report/210612-pandemic-report.html>, accessed 20 August 2021) and the G7 Panel on Economic Resilience (<https://www.g7uk.org/economic-resilience-panel/>, accessed 20 August 2021).

- reports or papers published by recognized independent expert parties that are pertinent to the COVID-19 pandemic (for example, the Global Preparedness and Monitoring Board,¹ the Panel for a Global Public Health Convention, and the Pan-European Commission on Health and Sustainable Development).
- Section III provides a high-level mapping of 131 recommendations found in four source documents published by:
 - the Independent Panel for Pandemic Preparedness and Response;
 - the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme;
 - the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response; and
 - the Global Preparedness and Monitoring Board.

4. As noted in paragraph 41, this document has been updated for the third meeting of the Working Group to provide additional analysis of the 131 recommendations contained in four source documents: the report of the Independent Panel for Pandemic Preparedness and Response; the report of the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme; the report of the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response; and the 2020 report of the Global Preparedness and Monitoring Board. Unless otherwise noted, the analysis contained in this update focuses solely on the 131 recommendations issued by these four panels and committees. All new analysis is contained in boxes; paragraphs have been renumbered accordingly and a few non-substantive edits have been made to improve clarity or coherence.

5. The main objectives of this update are to provide more granular information in the following four areas: (i) how recommendations may be grouped to show convergences and reduce the overall number of themes and areas for action; (ii) where divergences among recommendations exist; (iii) the time frames given for implementation; and (iv) where implementation is under way.

6. While other documents (non-papers) issued by Member States are included in the database to ensure a comprehensive compendium of recommendations, they are not covered in this mapping exercise since they fall outside of its central focus, namely to inform Working Group discussions on how to prepare for and respond to future pandemics. This document remains a living document that may be updated as necessary.

Methodology

7. Pursuant to resolution WHA74.7 (2021) and in accordance with the requests of the Working Group, the WHO Secretariat has created an Excel database containing:

- all recommendations related to the COVID-19 pandemic;

¹ This includes recommendations from two sources: the 2019 report and 2020 report of the Global Preparedness and Monitoring Board (https://apps.who.int/gpmb/annual_report.html, accessed 20 August 2021).

- any World Health Assembly resolutions related to COVID-19 (such as resolutions WHA73.1 (2020), WHA73.8 (2020) and WHA74.7); and
- the recommendations of review panels of past outbreaks.¹

8. The themes, target groups and areas of work used to categorize the 215 COVID-19-related recommendations are derived from the original recommendations themselves. Building on the database, the Secretariat has developed a dashboard² that provides several useful operations to assist the Working Group in its deliberations.

9. Any recommendations of a financial nature should be reviewed by the Working Group on Sustainable Financing, including those directly related to its work. Close coordination should be maintained between the two working groups to avoid any duplication or possible contradiction between their respective findings.

10. The analysis in this document excludes the recommendations contained in World Health Assembly resolutions since Member States, the Secretariat and relevant bodies already have the mandate to implement them.

Structure of the database

11. The database groups the COVID-19 recommendations according to the following criteria:
- Scope – each recommendation is categorized according to one of the following: leadership and governance; systems and tools; financing; and equity.
 - Theme – each recommendation is categorized according to one or more of 28 themes.³
 - Areas of work – each recommendation is categorized according to one of five fields: national preparedness; national response; regional or global preparedness; regional or global response; and recovery.
 - Target group – each recommendation is categorized according to which entity or group is responsible for implementation. To date, nine target groups⁴ have been identified.

¹ It is worth noting that the review panels and committees also considered recommendations made during previous outbreaks, such as the influenza A (H1N1) pandemic and the Ebola virus disease outbreak in West Africa.

² WHO dashboard of COVID-19-related recommendations, accessible at: <https://app.powerbi.com/view?r=eyJrIjoiodGyYjRmZjQtN2UyNi00NGE4LTg1YzYzE2OGFhZjBiYzFjIiwidCI6ImY2MTBjMGI3LWJkMjQtNGIzOS04MTBiLTNkYzI4MGFmYjU5MCIsmMiOjh9&pageName=ReportSection729b5bf5a0b579e86134> (accessed 19 August 2021).

³ See the Annex for the list of themes.

⁴ See the Annex for the list of target groups.

12. In developing this update, the first step taken by the Secretariat was to assess each recommendation against the following criteria.

- (a) Is the recommendation clear, with concrete steps for implementation?
- (b) Have adequate resources (human and financial) been provided to implement the recommendation?
- (c) Does the recommendation provide a clear time frame for implementation?

Limitations

13. The recommendations under review differ considerably depending on the panel or committee that issued them and with respect to their level of specificity, concreteness and complexity. Despite all efforts to define objective criteria to guide the analysis, there was an inherent and unavoidable subjective element to the analyses undertaken in each exercise.

II. PRELIMINARY FINDINGS: POSSIBLE CATEGORIES FOR GROUPING RECOMMENDATIONS

14. This section presents a brief overview of possible categories for grouping the 215 recommendations, according to the areas identified by Member States at the first meeting of the Working Group.

A.1. Areas of convergence

15. A high-level analysis shows convergence on several key recommendations, including on the following points:

- The global health architecture and governance for pandemic preparedness and response needs to be strengthened in the light of the key findings and lessons learned from the COVID-19 pandemic. The reports acknowledge the role of WHO during this pandemic but also emphasize the need to strengthen the Organization through sustainable, predictable financing.
- There was a significant disconnect between the actual and perceived levels of preparedness when the pandemic did occur. This largely relates to the importance of improving International Health Regulations (2005) implementation at the national level as well as compliance.
- The International Health Regulations (2005) remain a useful instrument but lack proper implementation and enforcement mechanisms to ensure compliance.
- Financing of both preparedness and response at the national, regional and global levels continues to be suboptimal. This created inequities at various stages of the response. The financing of public common goods is an important area to focus on moving forward.
- The rapid development of vaccines in record time was a success for the research and development component of the response. However, inequitable access to COVID-19 vaccines is recognized as one of the most critical issues to be addressed and urgent actions are required in several areas.

- Adopting a One Health approach and strengthening surveillance and preparedness at the human-animal-environment interface is of great importance.
- Rapid risk assessment, alert, and rapid response, including the determination of a public health emergency of international concern, require improvements on the part of both WHO and Member States.

16. With a view to grouping similar and convergent recommendations, the Secretariat reviewed the 131 recommendations of the four panels and committees¹ by searching for commonalities. In so doing, six overarching topics were developed under which to group the 131 recommendations. This exercise included the following steps, the results of which are set out in the table below.

- Among the 28 themes, identify those that have similar implications.
- Identify the appropriate overarching topic for each of the 131 recommendations.
- For very specific recommendations or recommendations that could fit under more than one overarching topic, determine the best suited singular overarching topic.

Table 1: Grouping of similar and convergent recommendations² under overarching topics

Overarching topic	Recommendations
Global health architecture and governance for pandemic preparedness and response	GPMB: 3, 9, 25 IHR RC: 14, 22, 36 IPPPR: 01, 16, 17
Proper implementation and enforcement mechanisms for the International Health Regulations (2005) to ensure compliance	GPMB: 1, 10, 23 IHR RC: 1, 2, 3, 5, 6, 10, 15, 16, 18, 19, 20, 21, 23, 24, 25, 26, 28, 32, 34, 37, 38 IOAC: 10, 11 IPPPR: 13, 18
Financing of pandemic preparedness and response	GPMB: 2, 3, 4, 6, 7, 8, 19, 20, 21, 22 IHR RC: 31, 32 IOAC: 5, 17, 25, 27, 28, 29, 30, 31, 32 IPPPR: 4, 22, 27, 30, 31, 33
Equitable access to COVID-19 countermeasures, including vaccines	GPMB: 13, 17, 25 IHR RC: 35 IOAC: 1, 2, 31 IPPPR: 19, 21, 30, 31

¹ The Independent Panel for Pandemic Preparedness and Response; the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme; the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response; and the Global Preparedness and Monitoring Board.

² This grouping is inherently subjective, given the text of the individual recommendations that may often cover several areas. The acronyms and recommendation numbers refer to the codes contained in the dashboard.

Overarching topic	Recommendations
One Health approach and strengthening surveillance	GPMB: 16, 23 IHR RC: 10, 13, 14, 16, 22, 33 IOAC: 3, 4 IPPPR: 15, 16
Rapid risk assessment, alert and rapid response	IHR RC: 15, 17, 18, 19, 21, 23, 33, 34 IPPPR: 17, 25

A.2. Areas of divergence

17. More analysis is needed to identify areas of divergence given the different mandates of each panel and committee and their respective methods of work. For example, each panel and committee approached the possibility of amending the International Health Regulations (2005), procuring pandemic response products, and strengthening global supply chain mechanisms differently.

18. A further analysis of the 131 recommendations was conducted to identify divergences among the recommendations. The results highlighted the following points.

- Although the recommendations are consistent regarding the need for sustained investment in pandemic preparedness and response, there is divergence in how this should be done; options contained in the four reports include developing a mechanism under the United Nations, WHO or international financial institutions, as well as creating a new international pandemic financing facility.
- The recommendations converge around the leading, coordinating and convening role of WHO in supporting Member States during a health emergency. However, on the issue of delivery, there are differing views as to whether WHO should take on procurement and supply functions.
- All four panels and committees concluded that the International Health Regulations (2005) remain an important tool and that the weakness lies in their implementation. One idea put forward in the recommendations was that amendments should be proposed to the International Health Regulations (2005), while another was to focus on enhancing implementation and compliance.
- The four panels and committees came to the same conclusions regarding the need for WHO access to relevant sites during an outbreak to facilitate public health investigations. However, there was divergence over the means by which this should be implemented: some advocated that WHO should be given explicit power to investigate, while others suggested that WHO be limited to offering immediate technical support to the concerned Member State(s).

19. It is worth noting that although the mandates of the review panels and committees as well as their methods of work were different, the recommendations are mainly consistent across their reports.

B. Target groups

20. About 70% of the recommendations are addressed to more than one target group. For the purpose of compiling recommendations in the database in a consistent manner, the Secretariat has identified nine target groups from the original recommendations.

21. The analysis indicates that out of a total of 215 recommendations (from the 11 source documents referred to above), around 120 are addressed to the WHO Secretariat, around 98 are addressed to Member States, and about 56 require collective action by the WHO governing bodies – with some recommendations being addressed to more than one target group. More than sixty recommendations call for action from other international bodies such as the Coalition for Epidemic Preparedness Innovations, the World Bank, and the International Monetary Fund, and around 23 are addressed to United Nations agencies.

22. If focusing solely on the reports of the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme, the Independent Panel for Pandemic Preparedness and Response, and the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response, the analysis indicates that less than half of the recommendations issued in those reports are directed to the WHO Secretariat and around a fifth urge political leaders to take action at the country level. Out of a total of 106 recommendations issued in those three reports, about 35 may require collective action by the World Health Assembly.

C. Theme

23. The Secretariat identified 28 themes from the 215 recommendations. Each recommendation was then mapped to one or more themes, according to the focus of its content. The top five emerging or recurrent themes were: direction/coordination; International Health Regulations (2005) implementation/compliance; global finance – public common goods; research and development, regulations, manufacturing of medical countermeasures; and global architecture/governance.

D. Time-frame for implementation

24. The likely time frame required to implement the recommendations is dependent upon a number of factors. These include identification of the possible mechanisms for implementation, priorities to be established by Member States, resource implications, and the implementation target group.

25. For this exercise, the Secretariat analysed the 131 recommendations to assess whether the recommendations include terminology related to the time frame for their implementation, and if such terminology exists, whether it is subjective or specifies a set deadline.

26. The results show that 49 of 131 recommendations (37%) include information about the time frame for implementation. Of these 49 recommendations, 25 contain terminology that specifies a set deadline, while the remaining 24 use subjective terms. There are wide discrepancies among each of the reports: the most detailed is the Independent Panel for Pandemic Preparedness and Response where 100% of the recommendations include a time frame for implementation; following this, in decreasing order were, the Global Preparedness and Monitoring Board with 20%, the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response with 15%, and the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme with 12.5%.

E. Geographical reach or scope

27. The overall analysis indicates that most of the recommendations are focused on improving regional and global preparedness and response. This is understandable given the mandates of the different panels and committees, which were of a global scope. Of the total 215 recommendations, around 76 are aimed at improving national preparedness and response.

III. POSSIBLE MECHANISMS IMPLEMENTING EACH RECOMMENDATION

28. This section presents a brief analysis of a subset of the recommendations found in the database. It is limited to the 131 recommendations made by the Global Preparedness Monitoring Board, the Review Committee on the functioning of the International Health Regulations (2005) during the COVID-19 Response, the Independent Oversight Advisory Committee, and the Independent Panel for Pandemic Preparedness and Response.

29. Following the identification of five categories of implementation by Member States at the first meeting of the Working Group, the Secretariat undertook a preliminary mapping of the recommendations. The results were very much preliminary and have been updated following deliberations during the second meeting of Working Group. It is worth highlighting that some recommendations mapped under categories A and B below may overlap, given the nature of the two categories. Additionally, some of the recommendations included in this analysis are already reflected in resolution WHA74.7.

30. Building on the preliminary mapping, the update started by assessing each recommendation to determine whether implementation is under way. To do this, each of the 131 recommendations was reviewed by the WHO Secretariat using the following questions.

- Is implementation currently underway? If a recommendation contained several actionable elements, a recommendation was considered under way only if a majority of those elements were under implementation.
- If implementation is under way, is implementation being undertaken by WHO?
- If implementation is under way, what are the implementation mechanisms or tools being used?

31. Given the nature of the categories of implementation identified by Member States and used to develop the preliminary mapping, such analysis was possible for a majority of the recommendations mapped under categories A and B, and some recommendations under category C (where an amendment is not needed). High-level findings are provided for each of these categories.

32. Given the nature of categories D and E, this exercise was not applicable.

A. *Recommendations that can be implemented through the regular technical work of WHO as per its normative functions*

33. Around 44 recommendations could be implemented under this category. These include recommendations related to:

- promoting, advocating and/or supporting Member States to implement whole-of-government and whole-of-society approaches to strengthen pandemic preparedness and response;
- working with partners to develop and implement mechanisms that promote fair and equitable access to pandemic supplies and countermeasures;
- providing access to timely, accurate, and easy-to-understand advice and information from trusted sources on public health events;

- supporting Member States to develop and operationalize strategies and plans for pandemic preparedness and response that include measurable targets and benchmarks and ensure full implementation of the core capacities required by the International Health Regulations (2005);
- supporting Member States, WHO and partners to implement disease-specific strategies, including through capacity-strengthening for pandemic preparedness and response;
- supporting the processes and coordination mechanisms of the Secretariat’s technical, normative and managerial work across all three levels of the Organization;
- providing adequate resources for WHO country offices to respond to requests from national governments; and
- robust exercising of the Secretariat’s flexibilities under the International Health Regulations (2005).

34. Around 65% of the recommendations mapped under this category are being implemented via WHO’s technical work. These are primarily recommendations made by the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response and the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme.

B. Recommendations that can be implemented immediately through existing frameworks (International Health Regulations (2005) obligations, World Health Assembly resolutions/decisions)

35. Around 19 recommendations could be implemented immediately under this category. These include recommendations related to:

- fully implementing and complying with the obligations under the International Health Regulations (2005) by both States Parties and the Secretariat;
- fully implementing WHO’s general programme of work; and
- empowering the Secretariat to fulfil its constitutional mandates.

36. Around 60% of the recommendations mapped under this category are being implemented through existing frameworks. These are primarily recommendations made by the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response and a few by the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme.

C. Recommendations that can be implemented by amending or building on existing frameworks (International Health Regulations (2005), World Health Assembly resolutions/decisions)

37. Around 26 recommendations could be implemented under this category. These include recommendations related to:

- adjusting or amending the International Health Regulations (2005);
- establishing a global system for surveillance based on full transparency by all parties;

- strengthening WHO's financing for emergency preparedness and response, including the WHO Contingency Fund for Emergencies; and
- strengthening the governance capacity of the WHO Executive Board for health emergencies.

38. Around 40% of the recommendations mapped under this category are being implemented by building on existing frameworks. These are primarily recommendations made by the Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme and the Review Committee on the Functioning of the International Health Regulations (2005) during the COVID-19 Response.

D. Recommendations that may effectively/optimally be implemented through new WHO international agreement(s)/instrument(s)

39. Around 30 recommendations could be implemented under this category. These include recommendations related to:

- the establishment of a pandemic framework convention under Article 19 of the WHO Constitution;
- Member State commitments to and accountability for prioritizing pandemic preparedness through national whole-of-government and/or whole-of-society strategies and budgetary plans, including through peer review of preparedness and response capacities;
- the adoption of a One Health approach and recognition of the links between human, animal and environmental health in emerging zoonotic diseases;
- sustainable financing for pandemic preparedness and response;
- the timely sharing of materials, including genomic sequencing data;
- equitable and timely access to countermeasures; including personal protective equipment, diagnostics, therapeutics and vaccines;
- effective and scalable supply chains for the rapid development and deployment of countermeasures;
- scalable and funded research and development for timely and innovative manufacturing of medical countermeasures and their regulation;
- timely technology transfer, sharing of know-how and/or voluntary licensing; and
- the empowerment of communities, strengthening of civil society and upholding of human rights principles.

E. Recommendations that may address/or involve external bodies/actors

40. Around 12 recommendations fall under this category. These include recommendations related to:

- the mandate of international financial institutions;
- the establishment of bodies or issuance of declarations under the aegis of the United Nations; and
- actions to be taken by other intergovernmental bodies.

IV. NEXT STEPS

41. The work presented here is very much preliminary and intended to initiate discussion among the Working Group on how to refine and take the recommendations forward. Under the guidance of the Bureau, the Secretariat will continue to refine and review the database and the analysis stemming from it based on the discussions of the Working Group at its second meeting, held on 1–3 September 2021, and the input received thereafter. An updated version of this document will be prepared ahead of the third meeting of the Working Group.

42. The work presented here provides an update to document A/WGPR/2/3 on the preliminary findings from COVID-19-related recommendation mapping. It has been revised according to the discussions of the Working Group at its second meeting, held on 1–3 September 2021, and the input received thereafter. Based on the discussions of the Working Group at its third meeting, the Secretariat may continue to refine and review the database and the analysis stemming from it.

ANNEX

Categories

Scope	Revised themes
Leadership and governance	Global architecture/governance
	Independent monitoring, evaluation and oversight
	Direction/coordination
	Policies/norms/guidance
	International Health Regulations (2005) implementation/compliance
	Legal/regulatory frameworks
	International pandemic treaty/convention
	Multisectoral/partner engagement
	Community engagement
System and tools	Early warning/surveillance
	Rapid investigation, risk assessment, rapid response
	Sample sharing, genomic sequence, other data
	One Health
	Capacity-building/assessment
	Digitalization
	Universal health coverage/health system/core capacity
	Public information and risk communication
	Research and development, regulations, manufacturing of medical countermeasures
	Procurement, supply chain, stockpile
	Economic and social protection, human rights
Financing	Global finance – public common goods
	Global finance – lower-middle-income country preparedness
	WHO financing
	Domestic financing
	Global finance – surge for response
Equity	Economic and social protection, human rights
	Equitable access to health care goods and services, including vaccines and/or non-pharmaceutical measures
	Equitable representation and participation (gender, geographic, socioeconomic status)

Target groups

Revised target groups
WHO Secretariat
WHO governing bodies
Countries (political leaders/national authorities)
Private sector
Communities/civil societies/nongovernmental organizations/citizens
G20/G7
United Nations
Other international entities
Academia/scientific community

Areas of work

National preparedness
National response
Regional or global preparedness
Regional or global response
Recovery

= = =