



Third Joint Finance and Health Task Force (JFHTF) Meeting

**G20/World Bank/World Health Organization
Operational Playbook for Pandemic Response Financing**

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OPERATIONAL PLAYBOOK FOR PANDEMIC RESPONSE FINANCING¹

EXECUTIVE SUMMARY

The Operational Playbook for Pandemic Response Financing is a non-binding reference tool that aims to enhance the speed, scale, and coordination of financing for future pandemic responses. It builds on the lessons learned from the COVID-19 pandemic and previous large-scale outbreaks, as well as the inputs and feedback from various stakeholders, including governments, international organizations, multilateral development banks, global health initiatives, and civil society.

The Playbook provides an overview of the pandemic response financing needs and sources, covering both domestic and external financing options for different categories of response, such as health, medical countermeasures, and economic and social response. It also outlines the key principles and challenges of effective response financing, such as the need for timely and flexible financing, coordination across sectors and levels, and governance for transparency and accountability.

While the Playbook recognizes that pandemics can vary widely in their characteristics, impacts, and optimal response strategies, and therefore requires a flexible and adaptable approach that respects national sovereignty and existing governance structures, it also acknowledges that pandemic prevention, preparedness, and response are inherently interconnected, and that investments in pre-crisis capacities can significantly reduce the costs and consequences of response. In the same way, this Playbook is not intended to be used to compare country responses or guide countries to any specific measures. Differences in budgetary frameworks, regulations and national context is likely to influence how the Playbook can be applied and used for each country. However, it is clear that international collaboration and information sharing are important to reduce vulnerabilities and speed up access.

The intended audience for the Playbook includes government officials, stakeholders in global health including global health funds and initiatives, international financial institutions, and international organisations. The Playbook is intended to guide potential actions by identifying key response financing gaps and shortcomings, supporting regular assessment of progress in closing these gaps, and serving as a tool for stress-testing. The Playbook is also a living document, which will need to be updated and revised to reflect changes in the response financing ecosystem and evolving identification of best practices or strategies in financing coordination.

1. The Operational Playbook was prepared by the World Bank, the World Health Organization, and the G20 JFHTF Secretariat under the auspices of the G20 Joint Finance and Health Taskforce. It builds on JFHTF report "Pandemic Response Financing Gaps and Issues: Towards a Playbook (June 2024). The section "Key Insights and Actions" was prepared by the JFHTF Secretariat and seeks to identify priorities for countries, IFIs, IOs and other stakeholders, building on the Playbook and other JFHTF products and processes.

OPERATIONAL PLAYBOOK: KEY INSIGHTS AND ACTIONS

The Operational Playbook was developed in response to the request under the New Delhi Leaders declaration, stating that the G20 “look forward to further deliberations on how financing mechanisms could be optimized, better coordinated and, when necessary, suitably enhanced to deploy the necessary financing quickly and efficiently, duly considering discussions in other global forums”.

This “Key Insights and Actions” summary is based on the analysis from the Response Financing Mapping paper and this Operational Playbook, as well as feedback from members from governments, international organizations, including regional organisations and international financial institutions. It also draws on the evaluations conducted on the response of various institutions and to COVID-19.

Key lessons learned on the speed and coordination of financing include **alignment of domestic and international action** where delay in domestic action arose from the lack of predictability in external financing. **The speed of commitment and disbursement was delayed** due to complex trigger criteria, preconditions including the need for emergency declarations, and, in some cases country-level processes and approvals.

Countries in turn faced difficulties in coordinating multiple financing modalities and ensuring flexibility in fund reallocation, particularly when funds were tied to specific uses. **Operational challenges** limited the effective utilization of available financing instruments due to issues such as supply chain disruptions, insufficient funding, and misalignment of efforts among various stakeholders and initiatives.

Lessons learned on the adequacy of financing include the need for more adaptive and scalable financing mechanisms to meet evolving demands. Each country’s macroeconomic situation can provide further challenges to a suitable combination of domestic and external sources of finance and within that grant and credit-based financing.

Underlying the demand for response financing is the need for coordination of access to the relevant medical countermeasures. Any coordination model should both build on the positive aspects of ACT-A and apply lessons learned which could include streamline coordination for more rapid decision-making, improve accountability and inclusivity through stronger regional representation, and focus on coordinated resource mobilization.

While the pandemic financing ecosystem is highly complex and will need to be tailored to the specific circumstances and requirements of countries, as well as organisations, this section seeks to set a summary of high-level potential actions that could be taken by specific actors as a useful reference when considering ways to improve the speed, sequencing and scale of response financing in a pandemic. In addition, it builds on the analysis of at-risk financing and draws out some perspectives on what is needed for at risk financing to be effectively deployed to procure MCMs in order to improve equity in access. These perspectives could potentially provide an initial way forward in future discussions. Finally, the current negotiations by member states on the Pandemic Accord are on-going and this paper does not seek to make any assumptions about those discussions nor the IHR amendments and recognises the leading role of the WHO and member states.

Pre-declaration of pandemics of public health emergencies at different levels:

While the response to a pandemic requires many actors in a complex process under high uncertainty, this section sets out some key considerations on how to speed up access to finance, both domestically and internationally, by planning and agreeing on ways of working with stakeholders and partners ahead of a declaration. This section also draws on evaluation reports for IFIs and GHIs and the Sharing of Experiences From Finance Health Institutional Arrangements.²

For countries:

Improving the speed of access to financing can be supported by considering the following measures:

- **Health and Finance coordination:** Agreeing on appropriately resourced preparedness and response plans having a shared understanding of:
 - Processes for sharing of information and governance for convening and decision-making.
 - Developing approaches to costing responses and planning for budgetary provisions that would support rapid domestic resource mobilisation including fiscal measures to build up reserves for emergencies as well as fiscal escape clauses and use of prearranged mechanisms.³
- **External financing and access to MCMs:** regular discussion with IFIs and GHIs and other partners on putting in place pre-agreements for access to financing, procurement and related processes as well as discussing the scope for redeploying programmed finance⁴, access to contingent financing, and a shared understanding of alignment of triggers, conditionalities and processes that will influence timelines for access, supporting a country's ability to assess the need for overall coordination and scale of adequacy to meet expected financing needs.

For IFIs/IOs/GHI and broader stakeholders

- **Country engagement and support:** Actively support countries in planning and preparation for a pandemic, including, where relevant, through providing technical assistance and improving awareness and access to tools, programming and financial mechanisms to support improved preparedness⁵
- **Information sharing:** Regularly providing countries with relevant and up to date information on the financial mechanisms and tools that could be activated in a

2. Sharing of Experiences From Finance Health Institutional Arrangements, August 2023, under the India G20 Presidency.

3. This could include the use of debt clauses to pause payment in the event of a pandemic or insurance type mechanisms.

4. A key element of the WB Crisis Response Toolkit.

5. This includes the Framework for Health, Social and Economic Risks and Vulnerabilities and programmes such as the RST.

pandemic and where possible pre-agreeing the scope of terms and conditions for accessing additional support.

- **Internal preparations:** Internal planning for the resource requirements both in terms of finance as well as administrative resources, governance and assessment of the triggers and processes required to activate financial mechanisms.
- **Coordination and alignment:** Discuss with relevant IFIs, GHI and IOs as well as relevant private sector and CSOs on a shared understanding of the roles and ways to coordinate processes and avoid duplication of effort in an emergency situation.⁶ This can increase predictability for countries with regards to financing sequencing and access to financing for MCMs in particular. These discussions and preparations may be needed for actors at sectoral, regional as well as global levels. Examples include the role of regional organisations in pooling and coordinating access to MCMs as well as working with regional development banks and other local and regional institutions on financing mechanisms.

Once a pandemic or public health emergency has been declared and processes and plans have been activated, immediate further actions to support better sequencing of financing could include:

- Where external finance is needed, relevant countries or regional organisations to engage with IFIs and other stakeholders to proactively work to agree support on financing country plans including best estimates on the expected timing of flow of grant and concessional finance from all sources to develop a clear understanding of the timeliness and scale of financing for each pillar of a response plan from the start of an emergency. Countries and regional organisations would benefit from coordinating in this matter.
- At risk financing for MCMs will be the most critical factor to be able to enter into contracts to procure MCMs and therefore countries will want to assess the total scale of finance that can be used for this purpose; specifically designated or forms of flexible financing will be critical. This may also need to be coordinated with regional and other mechanisms.
- Where there is an expected impact on the economy, countries could proactively seek advice from key institutions such as the IMF where relevant and engage as early as possible. In turn, intensive close working between the IMF and WB would provide critical advice and support at scale to countries.

The analysis in this paper supports the importance of coordination and timely availability of funding. Timely at-risk procurement financing will only be effective if the supply chain, health system and community are able to meet the rapid advance and scale up needed. To that end, developments to strengthen coordination platforms for research, development and financing for MCMs are critical for addressing bottlenecks.

6. For example, the development of a MoU on surge financing by DFIs.

Options to address at-risk financing revolve around whether existing mechanisms have the scale and potential to address key issues:

- Rapid disbursement of pre-committed financing, which would require pre agreements for grant or contingent concessional financing that has the flexibility to be used in this way. Grant financing was complemented by financing from MDBs during the COVID-19 pandemic but in the future, predictable scale up would have to be significantly faster to support commitments.
- Flows of financing will need to be flexible to allow countries to participate in a plurality of platforms and institutional arrangements.
- Clarity over how the financial risk of product failure or non-delivery will be met, a particular issue with regards to non-grant financing of at-risk procurement.

The need for the availability of finance as soon as contracts can be pre-agreed creates significant timing issues. Therefore, consideration needs to be given to not only assessing the sequencing and scope for expanding existing mechanisms and sources of finance, which, during COVID-19 came from MDB, DFI, GHI, UN Agencies and bilateral donors but also to the role of mechanisms that can reduce timing issues or play a role in risk transfer. The role of mechanisms that can transfer risk, particularly with regards to supporting concessional financing that can be deployed as at-risk financing, could play a significant role. Finally, to facilitate speed of use, earmarking or separate windows could be a potential source, but there may be a range of pooled procurement arrangements and there will be a need to ensure that at risk financing can be used flexibly.

As noted, while it is a complex landscape, this is a narrow and non-exhaustive list of some actions that countries and relevant institutions and organisations can take to improve the efficiency of coordination in a future pandemic emergency. The number of high-quality evaluations of institutional and organisation responses can provide a starting point to track how findings and recommendations have been implemented. In addition, there is scope to further develop the assessment of options to increase the scale and improve the timeliness of at-risk financing.

ACRONYMS

ACT-A	Access to COVID-19 Tools Accelerator
AfDB	African Development Bank
AfEF	Africa Epidemics Fund
AIIB	Asian Infrastructure Investment Bank
AU	African Union
AVAT	Africa Vaccine Acquisition Task Team
AVMA	Africa Vaccine Manufacturing Accelerator
BARDA	Biomedical Advanced Research and Development Authority
C19RM	COVID-19 Response Mechanism
CDC	Centers for Disease Control and Prevention
CEPI	Coalition for Epidemic Preparedness Innovations
CFE	Contingency Fund for Emergencies
CFR	Case fatality rate
CoVDP	COVID-19 Vaccine Delivery Partnership
COVID-19	Coronavirus disease 2019
CRBS	Crisis Response Budget Support
CRW	Crisis Response Window
CERF	Central Emergency Response Fund
CERC	Contingency Emergency Response Component
CPRO	Dedicated Countercyclical Support Facility
DFC	United States International Development Finance Corporation
DFI	Development finance institution
DRC	Democratic Republic of the Congo
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EMT	Emergency Medical Teams
EPI-WIN	Information Network for Epidemics
EVD	Ebola virus disease
FAO	Food and Agriculture Organization
FCV	Fragile and conflict-affected situations
G20	Group of Twenty
GHIs	Global health initiatives
GLEWS	Global Early Warning System for Major Animal Diseases and Zoonoses
GOARN	Global Outbreak and Response Network
GVDN	Global Vaccine Data Network
HAC	Humanitarian Action for Children
HSRC	Health Systems and Response Connector

IASC	Inter-Agency Standing Committee
IDA	International Development Association
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IFI	International financial institution
IHR	International Health Regulations
IMF	International Monetary Fund
IPSN	International Pathogen Surveillance Network
IsDB	Islamic Development Bank
JFHTF	Joint Finance and Health Taskforce
LICs	Low-income countries
LMICs	Lower-middle income countries
MCM	Medical countermeasure
MDB	Multilateral Development Bank
MIGA	Multilateral Investment Guarantee Agency
MPA	Multiphase Programmatic Approach
NIH	National Institutes of Health
NDB	New Development Bank
OCHA	Office for the Coordination of Humanitarian Affairs
OIE	Office International des Epizooties, former name of the World Organisation for Animal Health
PAHO	Pan American Health Organization
PE	Pandemic emergency
PFM	Public Finance Management (?)
PHECs	Public health emergencies of concern
PHEIC	Public health emergency of international concern
PHECS	Public health emergency of continental security
PPRR	Prevention, preparedness, response, and recovery
R&D	Research and development
RCCE	Risk communication and community engagement
UNDCO	United Nations Development Coordination Office
SBP	Standby Partnership Programme
SMEs	Small and medium-sized enterprises
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
US-CDC	United States Centers for Disease Control and Prevention
VII	Vaccine Independence Initiative
WHO	World Health Organization
WOAH	World Organisation for Animal Health

I. INTRODUCTION

The COVID-19 pandemic and prior large-scale disease outbreaks have highlighted important shortcomings in the response financing ecosystem, in particular regarding the speed, scale and adequacy, and coordination of financing for the health response, access to medical countermeasures (MCM), and the broader economic and social response. Coordination challenges have been observed in several domains – e.g. across ministries of health and finance, financing institutions and technical agencies, public and private sectors – and have pertained to both the mobilization and deployment or use of financing.⁷

The risks of future pandemics are stark. It has been estimated that there is a close to a one on three chance that there will be a pandemic of the scale of COVID-19 or worse in the next decade.⁸ Pandemics can arise from a wide variety of pathogens, including viruses and bacteria, and are typically characterized by rapid transmission and high morbidity and/or mortality rates, with substantial spread across geography and populations. The impacts of pandemics will vary both in type and size, but include health risks, economic disruption, and social and political consequences. However, pandemic risks can be mitigated through investments in preparedness as well as timely and scaled response actions.

The purpose of this Operational Playbook (“Playbook”) is to support future pandemic responses by enhancing the speed, scale and coordination of financing. Specifically, the Playbook seeks to share critical information regarding financing sources, coordination platforms, and information sources to key stakeholders in pandemic responses, governments, global health and finance institutions at national, regional and global levels, multilateral development banks (MDBs), global health initiatives (GHIs), as well as other organisations including civil society and NGOs. It is a non-binding reference tool that seeks to enhance transparency regarding the governance and decision-making processes for response financing, both at domestic and international levels. This includes providing clarity and considerations regarding protocols, funding allocation, stakeholder roles, and modalities for coordination. The Playbook is also intended to help identify remaining gaps that require attention and action by the G20 and other actors, including as a supporting document for future simulation or tabletop exercises.

The Playbook has been developed in a dynamic context, with IHR revision, ongoing negotiations of a Pandemic Accord, the development and roll-out of new financing instruments and reforms across many institutions, and active national agendas to address lessons from the COVID-19 pandemic all having likely implications on the Playbook content. Given the evolving nature of the response financing eco-system, the Playbook should be seen as a “living document”, which should be updated on a regular basis.

7. A full picture of the response financing landscape and key challenges have been outlined in the JFHTF report “Pandemic Response Financing Gaps and Issues: Towards a Playbook” (June 2024).

8. Madhav et al. 2023. “Estimated Future Mortality from Pathogens of Epidemic and Pandemic Potential”. <https://www.cgdev.org/sites/default/files/estimated-future-mortality-pathogens-epidemic-and-pandemic-potential.pdf>

II. KEY PRINCIPLES OF THE OPERATIONAL PLAYBOOK

An effective response to a global shock and crisis, such as a pandemic, requires comprehensive coordination between the finance and health sectors, involving both public and private stakeholders. Based on guidance from members, the focus of this Playbook is on health and finance coordination, which is only one part of the wider engagement and participation required for response financing. It emphasizes coordination at the national, regional, and global levels to ensure an effective response, and is underpinned by several principles.

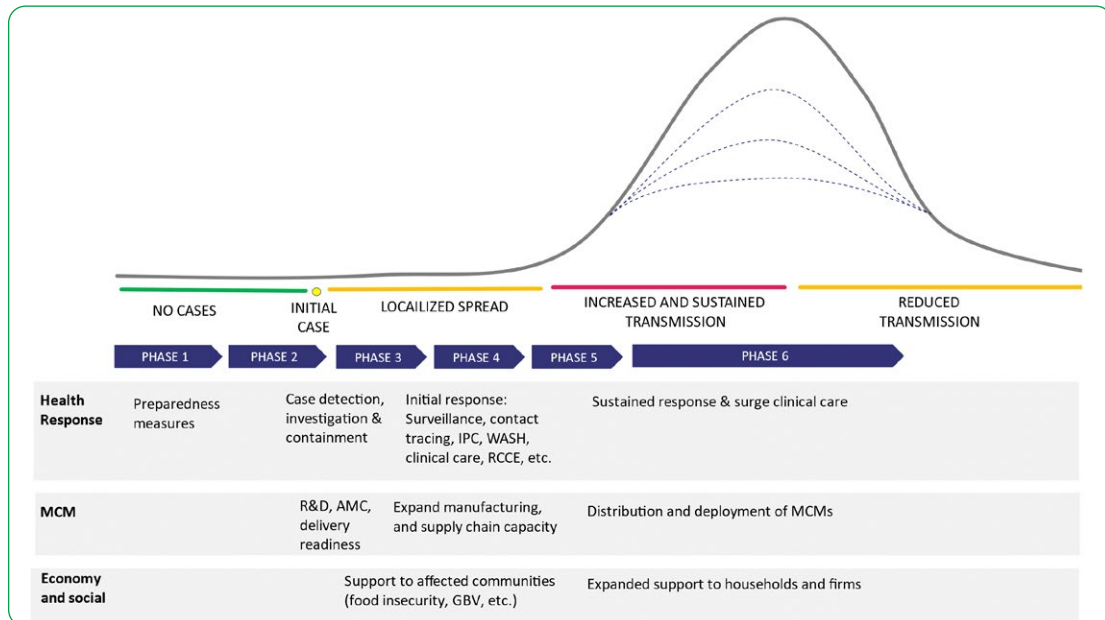
- The Playbook is a non-binding document, premised on a voluntary approach that acknowledges the need for flexibility, rather than a one-size-fits-all solution, and respect for national government sovereignty in policy decision-making and prioritization as well as existing governance structures in international organizations and institutions.
- The Playbook is a non-exhaustive reference document and tool, focused on strengthening response financing, which requires coordination across health and finance domains; public and private sectors; and national, regional and international levels.
- The Playbook is a living document, which is suggested to be updated and revised by the JFHTF Secretariat to reflect changes in the response financing ecosystem and evolving identification of best practices or strategies in financing coordination.
- The Playbook is intended to support action by identifying key response financing coordination gaps and shortcomings, supporting monitoring of progress in closing these gaps, and serving as a tool for stress-testing.
- The Playbook is focused on pandemics but has broader relevance. While the Playbook is focused on outbreaks and pathogens with pandemic potential, many of the assumptions and strategies are also largely applicable to other endemic or smaller scale but more common epidemic infectious diseases.
- The Playbook is focused on response financing, while recognizing that pandemic prevention, preparedness, and response are inherently interconnected, and that early prevention and preparedness can significantly reduce the costs of response before an outbreak reaches the scale of a pandemic.
- The Playbook recognises that not all pandemics will be the same. Substantial Playbook content uses experiences and lessons learned from COVID-19, an unavoidable and necessary emphasis due to the recency, size, and analysis performed of the crisis. However, the next pandemic will be different, as will the most effective response strategy needed to address it. A broad perspective is needed to prevent an overly myopic approach to future pandemic planning.

III. PANDEMIC RESPONSE FINANCING NEEDS AND SOURCES

Pandemic response financing needs and considerations

All disease outbreaks have different trajectories which can be defined by many factors including characteristics of the pathogen, transmission patterns, outbreak context, and response actions during each outbreak phase. However, as described in Figure 1 below, there are some common stages and generic epidemic phases that shape priority response actions, as well as recurring financing needs. Note that policy actions and investments applied before an outbreak emerges that reduce the risk and potential impact of the outbreak are critical and will, in part determine the capacity of countries and other stakeholders to respond. This Playbook focuses on actions and financing needs once the outbreak occurs and an initial case is identified but it is recognised that preparedness investments determine the available options, speed and scale of any response. Greater clarity on response intervention options can help streamline decision-making within the critical first few months, fostering coordination across organisations, avoiding fragmentation, and ultimately enabling a more rapid, effective, and equitable global response.

Figure 1. Stages of a Pandemic and Financing Needs



Note: The phases illustrated in the figure above and described below are simplified and are not intended to imply a single epidemic trajectory paradigm or prejudge any future negotiations by member states. The aim of this section is to describe how the escalation of a situation will require a different scale of financing for different needs as the epidemiological situation develops and illustrates the complexity of financing a response.

Detection of a novel or known pathogen in any country involves a series of processes to identify, verify, and characterise the pathogen by national and, when appropriate, international health agencies including the WHO. This subsequently involves a risk assessment, evaluating the public health significance and potential health impact of the pathogen to cause substantial morbidity and mortality, spread domestically or internationally, and be contained by the existing capacity for response. Such assessments define the necessary response strategy in scope and scale. Development of preparedness and response plans that outline these strategies, identify the financing needs to implement them across space and time, and map potential financing sources is crucial at all levels of the response, and should ideally build on existing contingency plans and preparedness efforts noting the importance of a One Health Approach.

As illustrated in Figure 1, a pandemic creates a wide range of priority actions and associated financing needs related to the health response, access to MCMs (including diagnostics, vaccines, and therapeutics), and the broader economic and social response. These needs evolve as the outbreak unfolds. As such, a national or international response plan should reflect not only the initial strategy, outlining both relative and absolute needs across each critical domain, but also how these may change depending on the epidemic trajectory, acute or sustained impacts, and other incident factors. This will also inform the most appropriate financing mechanisms and coordinated approaches at different stages. However, it is unrealistic to expect an initial response plan to comprehensively address all epidemic scenarios and possibilities. While plans should aim to cover all critical response areas, they must also remain realistic and time-bound in consideration of the many inherent uncertainties and knowledge gaps of pandemics. Identifying, prioritising, and establishing the financing needs for the key elements in each of these core response domains relies on contextual considerations for the epidemic outlook and impact (see Table 1).

Table 1. Response financing needs and key considerations

	Key elements	Considerations	Key information needed
Health response	<p>National</p> <ul style="list-style-type: none"> • Epidemic intelligence • Outbreak investigation and immediate response, diagnostic confirmation • Risk assessment • Core response activities: surveillance and laboratories, risk communications and community protection, safe and scalable care and case management (while maintaining essential health services), access to medical countermeasures • Emergency coordination • Surge capacity from private sector and non-public response actors (health care providers, laboratories, biomedical industries, etc.) 	<ul style="list-style-type: none"> • Effectiveness against key health outcomes (infection, transmission, severe disease, mortality) • Importance of speed and early detection/response for containment • Rapid procurement of supplies often required • Need to be able to scale • Engagement and financing flows to broad set of actors across public and private sectors 	<ul style="list-style-type: none"> • Disease-specific epidemiology and pathogen characteristics (CFR, attack rate, mode of transmission, etc.) • Contextual epidemiological factors (risk factors and population, emergence and transmission chains, geographical spread) • Health system infrastructure • Health and public health response capacity • IHR capacities • MCM candidates, availability, and access • Supply chain capacity and non-MCM consumables/supply availability • R&D progress • Response ecosystem and stakeholder characteristics • Response coordination structure and governance • Social, economic, political, and security context • The number of households/businesses requiring economic and social support
Medical Countermeasures (diagnostics, vaccines, therapeutics)	<p>Depending on the nature of the pandemic, significant financing may be needed to secure access to diagnostics, vaccines, therapeutics and other MCMs (protective equipment, oxygen, consumables, etc.). Additionally, the facilitation of equity through the deployment of non-financial support from bilateral donors may be needed.</p>	<ul style="list-style-type: none"> • Uncertain demand given unknown trajectory of outbreak and effectiveness of MCMs • Early access requires early commitment of financing, often at risk • Pooled procurement may be advantageous 	
Economic and social response	<p>The economic and social response is aimed at protecting livelihoods, jobs, and businesses including, but is not limited to, the scaling of social protection schemes, and the exceptional support to businesses to mitigate the impact of non-pharmaceutical interventions. Financing is also required to expand liquidity, preserve financial stability, and ensure external balancing.</p>	<ul style="list-style-type: none"> • Scalability of social protection programs • Long-term economic recovery planning • Equitable distribution of resources across different regions and demographic groups • Trade-offs of implementing new vs existing programmes, ensuring incentives are well aligned with policy focus and ensuring cost benefit perspective taken on short, medium and long term • Ensuring appropriate Public Financial Management 	

Whether and how to adjust response strategy components depends on ongoing and dynamic changes of the outbreak and wider context. While such adjustments should, appropriately, respond to the changing risk and impact of the pandemic, the multi-dimensional complexities of pandemic needs inhibit granular categorisations of epidemic phasing that inform exactly when and to what degree specific interventions should be implemented. Substantial uncertainties and knowledge gaps around the pathogen and disease, risk factors, effectiveness of interventions, and many other factors preclude the identification of distinct thresholds to change actions and resourcing. For instance, the need for initiating or scaling up processes to develop, approve, produce, and/or use MCMs depends on the existence and appropriateness of products or candidates, assessment of need, availability of supply, distribution capacity, and the role of different MCMs in the response strategy. Some of these actions may even already be financed before the outbreak, as part of investments in MCMs for preparedness. However, there is clear need to finance preparedness capacities before a pandemic to support a more rapid and effective response, and investment may benefit from a comprehensive approach. As such, the speed and resourcing availability for these steps may consequently be directly or indirectly related to formal declarations of health emergencies or pandemics at global, regional, and/or country level (see Box 1). Such declarations can act as proxies for the epidemic trajectory and situational context to signal increased substantial risk of the outbreak and needs.

Box 1. Declarations of Pandemics or Public Health Emergencies at Different Levels

[International] Public Health Emergency of International Concern (PHEIC):

A PHEIC is defined in the International Health Regulations (IHR 2005) as “an extraordinary event which is determined to constitute a public health risk to other States through the international spread of disease and to potentially require a coordinated international response.”

[International] Pandemic Emergency (PE)

As part of the 2024 Amendments to the IHR (2005), a PE was adopted and defined as “a PHEIC that is caused by a communicable disease and: 1) has, or is at high risk of having, wide geographical spread to and within multiple States; 2) is exceeding, or is at high risk of exceeding, the capacity of health systems to respond in those States; 3) is causing, or is at high risk of causing, substantial social and/or economic disruption, including disruption to international traffic and trade; and 4) requires rapid, equitable and enhanced coordinated international action, with whole-of-government and whole-of-society approaches.”

[Regional - Africa] Public Health Emergency of Continental Security (PHECS)

A PHECS is defined by Africa CDC as “a significant event posing a risk to other countries, requiring immediate continental-level action to prevent and mitigate disease spread.”



[Regional – Recognition of public health emergencies at Union level]

In cases of a serious cross-border risks that endangers public health in the European Union (including pandemic situations), the European Commission may recognize a public health emergency at the Union level.

Governance

The decision to declare any event a PHEIC or other formal classification is typically made by a technical health or public health agency using criteria for assessing risk. For instance, a PHEIC is declared by WHO Director-General, based on the advice of an Emergency Committee (EC) composed of international experts from the IHR Expert Roster. While the IHR 2005 do not set formal criteria, a PHEIC is defined in the IHR (2005) as “an extraordinary event which is determined to constitute a public health risk to other States through the international spread of disease and to potentially require a coordinated international response”.

Implications

The PHEIC declaration is of importance in pandemic response financing as it may serve as a trigger for activating various financial instruments. However, the ambiguity surrounding the definition of “pandemic” and other related terminology has led to challenges in the application of “PHEIC” as a primary trigger for financing, and also creating inconsistencies with the IHR. Recent amendments to the IHR addressed this by establishing the “pandemic emergency” as a specific kind of PHEIC, allowing the WHO Director-General to also declare a pandemic emergency when appropriate. However, this declaration does not explicitly result in any additional legislative or actionable triggers. Approaches at other levels include Africa CDC’s codification of their mandate under the Africa Union (AU) to address significant public health threats in the region with the PHECS term, established in 2017 and first triggered in August 2024 for mpox. Independent of which (if any) declaration is used as a trigger, additional governance considerations are raised.

The alignment – or lack thereof – of emergency declarations across different levels (global, regional, and national) significantly influences the effectiveness of these financing triggers and the subsequent allocation of resources. When there is an alignment between global PHEIC declarations, regional Public Health Emergencies of Concern (PHECs), and national emergency declarations, it creates a cohesive framework that ensures timely and efficient resource mobilization.

Conversely, misalignment between these levels can result in delays or failures in resource mobilization, compromising the overall response. If a PHEIC is declared globally but not acknowledged at other levels, coordinated efforts may be delayed, potentially exacerbating the situation. Few countries have national legislation that explicitly refers to a PHEIC – more common references include ‘pandemic’, ‘public health emergency’ (defined domestically), and ‘epidemic’. Establishing legal frameworks that codify relationships between these declarations and address both pre- and post-declaration needs is crucial for setting appropriate financing triggers and providing clear guidelines on when and how financial resources should be deployed. This approach helps minimize delays, avoid duplication of efforts, and ensure a unified and effective response across all levels of governance.

It is however important to recognize that while the declaration of a PHEIC or any other emergency classification may be an important consideration as a financing or other response trigger, this does not represent the start of the response. Pre-declaration actions outlined are equally critical in establishing the response framework and strategy and mitigating the ultimate pandemic impact and can be ongoing for months before any formal declaration.

Development of a coherent and well-resourced national outbreak response plan involves substantial coordination between government bodies – including the Ministry of Health and related bodies, Ministry of Finance, and other relevant institutions – as well as other key national and international stakeholders including development partners, implementing agencies, technical agencies, private sector, and, the domestic population and communities at large. Identifying response strategy components and associated resource needs often relies on key information which is unknown at the start of the pandemic. To account for this uncertainty, technical ministries may use planning strategies that incorporate ranges or scenarios to narrow financing estimates while remaining within the range of disease situational plausibility. However, the total cost of a pandemic response is often still extremely variable and highly specific to the pathogen, outbreak duration and trajectory, response strategy, social and economic context, and other factors. Moreover, robust approaches to costing and resourcing analyses are challenged by the difficulties of categorising and classifying resourcing used that is considered part of a pandemic response ‘cost’.

Categories of Response Financing⁹

According to the IHR Article 13, countries need to “maintain the capacity to respond promptly and effectively to public health risks and public health emergencies of international concern.”¹⁰ However, the approach to financing a pandemic response will need to be country specific, considering risks and financing needs and the ability to access different sources (including speed and scale).

Table 2 briefly describes the main financing categories and types of instruments, including both domestic and external sources. In doing so, it highlights the important role that domestic financing plays given the speed and flexibility it can afford countries if appropriate arrangements are in place. However, many countries, in particular LICs and LMICs, may be unable to mount an adequate response in the absence of external support. While there is a broad range of sources that countries can access, the multitude of actors, instruments, and processes can present challenges for countries, in particular in the context of an active health emergency response. Support to countries both in preparing plans as well as implementing and updating them will be critical and utilising existing coordination arrangements as well as identifying gaps and assessing whether rapidly putting in place new arrangements will be beneficial.

9. This section draws on the “Mapping Pandemic Response Financing Options and Gaps” paper, prepared by the WHO and the World Bank for the JFHTF meeting in August 2023, as well as the June 2024 paper, “Pandemic Response Financing Gaps and Issues: Towards a Playbook”.

10. WHO, 2005, International Health Regulations, [Accessed 8 June 2023: <https://apps.who.int/iris/bitstream/handle/10665/246107/9789241580496-eng.pdf>].

Table 2. Response Financing Categories¹¹

Categories of response financing	Description
Domestic emergency response financing	Domestic financing can offer speed and flexibility for financing of operational costs, procurement, and other activities. Domestic financing encompasses <i>pre-arranged financing</i> (reserve funds, contingency budget lines, and rapid outbreak financing, and insurance mechanisms), as well as <i>ex-post financing options</i> , such as emergency or contingency funding, budget reallocations or new appropriations, or issuance of new debt.
Non-contingent external financing	Existing projects and agreements with IFIs and Bilateral sources may include response activities as eligible expenditures. This would allow for immediate use of external resources to support response activities, although it may in some cases require re-allocations or revision of existing agreements.
Contingent external financing	Most MDBs have financing instruments with pre-arranged approaches to provide valuable quick-disbursing funds in the immediate aftermath of a crisis. Use of contingent grant or credit facilities requires that countries have made prior agreements, that the emergency meets agreed criteria, and that required processing steps are completed. Other contingent financing sources include grant-based facilities, such as the WHO Contingency Fund for Emergencies (CFE), which is supported by pre-committed grants and appeals.
New external financing	In the context of a large-scale outbreak, additional financing (credits and grants) may be required. In response to the Covid-19 pandemic, MDBs used existing windows and re-allocations to expand support, using a range of instruments and innovations. Through re-allocations and appeals, GHIs and bilateral donors also expanded support across the health response, MCM and the economic and social response.
Budget or balance of payment support (contingent or non-contingent)	Flexible financing is essential for deploying policy tools such as direct income support measures, debt moratoria, and asset purchase programs by central banks. In the context of COVID-19, key financing instruments included concessional IMF financing using the Rapid Credit Facility (RCF) and the Rapid Financing Instrument (RFI), as well as MDB budget support instruments (both contingent and non-contingent).
Credits, guarantees and other sources for the private sector	Development Finance Institutions (DFIs) can use a mix of long-term financing, technical assistance, risk or working capital, and advisory services to support the private sector in the context of a pandemic, including actors directly involved in the response.

The importance of domestic financing and the initial response

The COVID-19 pandemic revealed significant weaknesses in the capacity to mobilize and use domestic financing quickly, with many countries lacking adequate mechanisms to respond appropriately and effectively to outbreaks and insufficient preparedness. Hence, when the crisis hit, fiscal constraints, rigidities in access and utilization of funds, and insufficient guidance and protocols for reallocation and the use of contingency and emergency funds hampered the response. Although initial financing needs may be modest, these constraints are significant given the substantial potential value for initial investigation and response actions to control transmission and contain the outbreak.

This highlights the importance of countries developing guidance for transparently mobilizing and reprioritizing funding when responding to emergencies (see options in Table 3). This could include identifying areas of protected spending, priority sectors and non-essential budget items that can be cut during crises. Countries could also develop clear approaches and guidance on using emergency protocols or contingency reserves to reallocate or release funding, as well as on complementary use of a combination of financing mechanisms. This will require reviewing and adjusting public financial management mechanisms to support future emergency responses.

11. This section draws on the “Mapping Pandemic Response Financing Options and Gaps” paper, prepared by the WHO and the World Bank for the JFHTF meeting in August 2023, as well as the June 2024 paper, “Pandemic Response Financing Gaps and Issues: Towards a Playbook”.

Table 3. Domestic response financing options

Type	Mechanism	Requirements	Benefits	Trade-offs
Pre-arranged financing	Reserve fund	Available resources to put aside	Rapid access to resources	Opportunity cost of idle funds
	Contingency budget line	Allocation within the annual budget	Rapid access to resources	Financing and oversight will depend on the government
	Contingency credit	Access to credit line from MDB	A lot of money quickly; access to expanded IDA space	Ties down a lot of available IDA for countries when not used
	Rapid outbreak financing	Budget line with relevant ministry / agency for rapid outbreak investigation and mechanisms that allow rapid disbursement	Small rapid disbursements for outbreak investigation and early response	Opportunity cost of idle funds
	Regional insurance mechanism	Willingness for pooling amongst regional peers	Quick access to resources; appropriate costing	Higher potential cost
Ex-post financing	Reallocation of budget	Crisis-ready PFM systems that anticipate the need for disaster response and allow flexibility to reallocate resources	Access to resources without earmarked allocation or flexible budget rules and allocation	Opportunity cost of foregone expenditures
	Supplementary budget	Crisis-ready PFM systems that anticipate the need for disaster response and allow flexibility to reallocate resources	Access to resources with oversight, not constrained to the initial budget	Increase debt
	Issuance of new debt	Access to capital markets; favourable interest rates	No opportunity cost to park capital	Takes time; additional costs

Sources of external financing

As noted previously, domestic financing may not be sufficient to meet response financing needs in many contexts. This requires countries to seek to mobilize external financing from a range of sources with some forms of financing such as grants potentially providing differences in speed of commitment/ disbursement, compared to the management of loans. In addition countries might need to take into account resources donated in-kind. There are five principal sources of grants or loans to support a pandemic response:

- **Multilateral Development Banks (WB, ADB, AfDB, IADB, AIIB, IsDB)**
 - *Large-scale loans and grants from MDBs are critical during the preparedness and early response stages, ensuring that countries have the financial resources to scale up health infrastructure and purchase MCMs.*

- **Development Finance Institutions** (IFC, EIB, DFI, and others)
 - *DFIs typically operate alongside MDBs, focusing on mobilizing private sector investment, particularly for expanding healthcare capacity, manufacturing, and distribution of medical supplies. Their role is especially important during the response and recovery phases, where they help drive private sector-led economic recovery. DFIs can also be a source of bridge financing to provide rapid access to financing for urgent needs against commitments from donors or other entities.*
- **Global Health Initiatives** (Global Fund, Gavi, CEPI)
 - *GHIs play a critical role throughout the response phases, particularly in R&D, expanding manufacturing capacity, pooling resources for procurement, including the ability to finance at risk, leveraging capacity for diagnostics and rapidly redeploying existing programmes and ensuring equitable distribution and deployment of MCMs.*
- **UN Agencies** (WHO, UNICEF, UNDP, others)
 - *UN Agencies offer coordination, technical assistance, and direct support to countries, actively engaging at every stage of the pandemic.*
- **Bilateral donors**
 - *Bilateral donor funding which was the largest component of development assistance during the pandemic, is flexible and can be deployed at any stage, though it may be unpredictable, providing support that aligns with the specific needs of the recipient country.*

All these actors played a significant role in the COVID-19 response, mobilizing more than US\$91 billion (Table 4). The contributions peaked in 2021, reaching US\$ 39.5 billion, reflecting the intensified global efforts at the peak of the pandemic, including vaccine distribution. Bilateral donors provided extensive support to COVAX by donating vaccines doses, and have also contributed to Mpox and AVMA.

Table 4. Development assistance for health (COVID-19) during the pandemic, 2020-2023¹²

		2020	2021	2022	2023	Grand Total
UN agencies	PAHO	122,292	250,044	74,694	0	447,030
	UNAIDS	9,711	0	0	0	9,711
	UNFPA	109,282	28,181	7,541	0	145,004
	UNICEF	662,194	199,996	156,136	0	1,018,326
	WHO	1,318,499	1,265,464	861,201	135,505	3,580,669
MDBs	ADB	2,023,172	2,330,388	955,787	903,588	6,212,935
	AfDB	711,222	74,162	32,630	69,918	887,932
	IDB	406,835	222,430	221,032	203,397	1,053,694
	WB_IBRD	2,175,341	4,278,387	1,069,294	478,631	8,001,653
	WB_IDA	924,215	2,234,265	465,515	0	3,623,995
GHIs	CEPI	317,634	530,147	143,343	25,561	1,016,685
	GAVI	770,927	8,038,491	2,280,597	0	11,090,015
	Global Fund	975,089	5,461,119	504,618	698,399	7,639,225
	UNITAID	50,400	56,128	5,055	1,918	113,501
Foundations	BMGF	325,511	270,047	93,032	75,354	763,944
	Other	646,643	632,243	40,077	0	1,318,963
Bilateral	Bilateral	7,174,648	13,647,397	14,000,446	9,835,250	44,657,741
Grand Total (Thousand USD)		18,723,615	39,518,889	20,910,998	12,427,521	91,581,023

To complement this picture, **Annex II** provides an overview of key instruments used for COVID-19 response financing, deployed by MDBs, IOs, and GHIs to meet the diverse financing needs at the country-level. These instruments were specifically designed to offer rapid financial support for emergency response, vaccine procurement and distribution, and economic recovery. While developments may result in changes, this Annex II can be used as an initial reference tool for considering future courses of action.

Mobilizing Financing for Medical Countermeasures

COVID-19 was a stark reminder of the importance of enhancing timely and equitable access to medical countermeasures (MCMs), including diagnostics, therapeutics, and vaccines. Enhancing equitable access to MCMs depends on a well-coordinated ecosystem for research and development (R&D), manufacturing, regulation, financing, procurement, and distribution. The COVID-19 response leveraged existing platforms and instruments for coordination, while also triggering new ones, encountering some challenges due to financing, procurement, demand, and risk management.

In the context of the COVID-19 response, several global and regional efforts sought to improve equitable and timely access to COVID-19 vaccines. Much progress was made through

12. Source: Victoria Y. Fan, Sun Kim, Diego Pineda, and Stefano M. Bertozzi. 2024. "Financing the Pandemic Cycle: Prevention, Preparedness, Response, and Recovery and Reconstruction." CGD Policy Paper 334. Washington, DC: Center for Global Development. Based on data from Institute for Health Metrics and Evaluation. (2024). Development Assistance for Health on COVID-19 Database 2020-2023.

pooled procurement arrangements like COVAX, the vaccine pillar of the ACT-Accelerator¹³ and AVATT, the Africa Vaccine Acquisition Task Team. However, these platforms had to be established ex post, and experienced relative delays in funding flows for the necessary response. COVAX, coordinated and administered by Gavi and involving CEPI, WHO and UNICEF, aimed to accelerate the development and manufacturing of COVID-19 vaccines and enhance fair and equitable access for every country in the world. COVAX mobilized more than US\$ 12 billion in donor funding, which was used to negotiate Advance Purchase Agreements with vaccine manufacturers even before any vaccines received regulatory approval. COVAX ended up providing nearly 2 billion vaccine doses to LICs. However, it took time for COVAX to mobilize financing at scale.

Another important source of vaccine financing came from the World Bank's COVID-19 response. In October 2020, the World Bank made US \$12 billion available to help countries purchase and deploy vaccines through additional financing to the initial COVID-19 response projects, including through COVAX and the Africa Vaccine Acquisition Trust. Out of a total of US \$10.2 billion committed by the World Bank, nearly 70 percent of the funding was for the acquisition of vaccines. By May 2024, approximately 18 per cent of commitments had been cancelled due to changing country needs and circumstances.

Despite the rapid development of vaccines and global efforts to promote equity, the benefits of the vaccine roll-out were highly uneven. By mid-December 2021, LICs had administered less than 9 doses per 100 people, compared to 77, 152, and 160 for LMICs, MICs and HICs respectively. In addition to the lives that could have been saved, the world could have avoided an estimated US \$1.75 trillion of economic losses had global vaccination been accelerated by a year.¹⁴ Contributing factors included a wide variety of issues across national and international preparedness and response including lack of financing for LICs and LMICs, global supply chain disruptions, manufacturing supply constraints, lack of coordination around donations and delivery, insufficient logistical and deployment capacity, vaccine hesitancy and demand issues, and vaccine nationalism. Challenges included both delays in the mobilization of financing, in particular donations to COVAX, as well as in reaching agreements between MDBs and countries to acquire vaccines. These delays in mobilizing financing, partly reduced the ability for GHIs to use agreed at-risk financing mechanisms, such as joint financing for R&D and manufacturing capacity by CEPI/COVAX, and COVAX's ability to enter into at-risk contracts with manufacturers. Finally, in most instances, the coordinated capacities for pooled procurement (e.g., COVAX and AVAT) had to be established ex post. This has highlighted the importance of timely and scaled financing that can be used for at-risk advance market commitments, as well as related financing and coordination agendas aimed at accelerating R&D, regionally distributed manufacturing, and rollout of new vaccines.

13. ACT-A was established at the end of April 2020, bringing together a diverse group of stakeholders, including governments, philanthropists, the World Bank, and global health organizations such as Coalition for Epidemic Preparedness Innovations (CEPI), Gavi, and WHO.

14. Ruchir Agarwal, Tristan Reed, Financing vaccine equity: funding for day-zero of the next pandemic, Oxford Review of Economic Policy, Volume 38, Issue 4, Winter 2022, Pages 833–850, <https://doi.org/10.1093/oxrep/grac032>

Building on the identification of key response financing developments and considerations¹⁵, there have also been developments aimed at enhancing timely and equitable access to MCMs. While some of these initiatives are outside the participation of all members of the G20, given the scope to increase financing availability and timeliness, they are mentioned here for completeness. These examples are non-exhaustive and will be updated where relevant. For example, the DFI Collaborative to create Financing Solutions for MCMs in Health Emergencies, which aims to enable rapid surge financing for MCMs for LICs and LMICs on ‘Day Zero’ of a health emergency. IFC leads the initiative to create a joint DFI Facility for MCM manufacturers, which would enhance coordination and provide working capital to increase and diversify production of MCMs during peacetime while allowing production to be scaled during emergencies. Other initiatives (e.g., Gavi’s First Response Fund and the Africa Vaccine Manufacturing Accelerator (AVMA)) are underway¹⁶. Collectively, these efforts aim to strengthen coordination platforms for research, development, manufacturing, procurement, and financing for MCMs. These developments represent important progress towards the goals of the “100 Day Mission”¹⁷, endorsed by the G20, and will be important for addressing the bottlenecks identified during the COVID-19 pandemic.

With respect to mechanisms for at-risk financing and advance market commitments, options for how mobilization of financing, procurement, and risk sharing can be handled have been outlined.¹⁸ However, several important questions remain.

- **How to avoid that the possibility of external financing disincentivizes governments from taking timely domestic action?** This was a key challenge in some instances during the COVID pandemic. Creating the right incentives for domestic resources mobilization will be essential in the future.
- **Where would pre-committed financing for MCMs come from?** Equitable access to diagnostics, therapeutics, and vaccines in future outbreaks will require significant amounts of financing, with speed requiring pre-commitment of resources. Currently, there is no mechanism for mobilizing and coordinating funds of this nature. For LICs and LMICs to benefit fully, it will be important to signal a clear intention that a meaningful share of financing could be offered through grants or concessional terms. In the context of the COVID-19 pandemic, grant financing was complemented by financing from MDBs. This may be required in future outbreaks as well, and speed will depend on countries being able to pre-commit financing for MCMs, either by soft earmarking of contingent crisis response financing or a separate window. Commitments could include an agreement to participate in a pooled procurement arrangement.
- **How will procurement and distribution be coordinated?** Coordinated negotiations with manufacturers and pooled procurement of MCMs was an

15. Pandemic Response Financing Gaps and Issues: Towards a Playbook, June 2023, Table 1.

16. Including Team Europe Initiative.

17. The ‘100 days mission’, launched by CEPI in 2021, aims to cut vaccine development time for new pathogens to 100 days from the moment a pathogen is sequenced and/or needed to initial availability for use.

18. See, e.g., The University of Chicago Market Shaping Accelerator. June 2023. “Proposal for At-Risk Financing During Pandemics.”; Agarwal, Ruchir, and Tristan Reed. “Financing vaccine equity: funding for day-zero of the next pandemic.” *Oxford Review of Economic Policy* 38.4 (2022): 833-850.

important feature of the COVID-19 response, with COVAX, AVAT and PAHO, and Global Fund's Wambo being notable examples. There is likely to be a plurality of arrangements in a future outbreak as well, which will have important implications for financing flows and coordination platforms. Ex ante discussion and pre-agreement on key aspects of any one of these institutional arrangements and establishment of requisite capacities during peacetime will be critical.

- **Who will carry the risk?** Early commitment to financing MCMs comes with risks of product failure, non-delivery (counterpart risk), and potential lack of demand due to evolving epidemiological conditions. The use of bridge financing from potential future facilities or at-risk financing for MCM procurement via existing and to-be-enhanced facilities like the UNICEF Vaccine Independence Initiative (VII), and the provision of liquidity support for the COVAX AMC by the EIB and DFC¹⁹, would depend on ex ante donor or financing partner commitments and clarity on who carries the risks of advance commitments. The same holds for the willingness of countries to use pre-committed MDB financing for MCM acquisition.

Given these open questions, the mobilization and use of financing for MCMs is likely to be one of the most challenging agendas for countries in a future pandemic response. A future pandemic agreement would provide the framework for addressing some of these issues.

Triggers and Access to Response Financing

Access to most sources of response financing depends on pre-defined triggers being met. This typically includes both inherent (e.g., defined by the trajectory of the pathogen) and manual (e.g., defined and activated by stakeholders or institutions) triggers. Both inherent and manual triggers are interlinked, with inherent triggers providing the scientific basis for manual actions. A well-defined trigger should inherently lead to a corresponding manual action, ensuring that appropriate financing and resourcing are mobilized in a timely manner.

Table 5 below provides an overview of existing triggers for selected financing institutions and mechanisms. In the event of an outbreak, epidemic, or potential pandemic, the priority action would be to activate established triggers to initiate coordinated health and financial responses at national, regional, and international levels. This can present a challenge for countries due to the complexity and differences in triggers across institutions and financing instruments. This can therefore make it challenging for countries to enable to mobilise financing, send market signals, secure sustainable supplies, as well as a pre-defined process to mobilise and disburse funds until a health emergency has been declared.

19. Advancing DFI Financing for a More Equitable Response to Health Emergencies: options and next steps (2024). DFC and USAID. https://assets.bii.co.uk/wp-content/uploads/2023/09/21113020/DFI-Surge-Financing-for-MCM_Options-Report.pdf

Table 5. Overview of existing triggers and their challenges²⁰

Institution & Instrument	Objective	Countries & Diseases/Events covered	Trigger design	Potential issues/challenges
World Bank: Pandemic Emergency Financing Facility (PEF) <i>CLOSED</i>	To provide financing for financially costly, multi-country epidemics and pandemics (rather than single-country outbreaks)	Countries: IDA countries Diseases: - Pandemic influenza - Novel coronaviruses - Filoviruses - Lassa Fever - Rift Valley Fever - Crimean Congo Haemorrhagic fever	Inherent Triggers: Cumulative cases, geographic spread, growth rate, confirmation ratio for certain pathogens. Manual Triggers: Activated by stakeholders based on eligible event period day	- Complex trigger design - Did not pay out during some Ebola outbreaks
World Bank: Crisis Response Window (CRW)	To provide support for crisis risk management, emergency response, and recovery efforts in member countries.	Countries: IDA countries	Manual Triggers: Declaration of national public health emergency and WHO's declaration of PHEIC	
World Bank: Contingency Emergency Response Component (CERC)	To provide rapid financial support and enable quick reallocation of funds to emergency response activities from existing World Bank-funded projects.	Countries: IDA countries	Manual Triggers: Official declaration of emergency or equivalent as agreed with the Bank	Not all financing could be activated readily as some arrangements require countries to declare an emergency to make resources available, which can delay the disbursement of funds.
IADB: Contingent loan for Natural Disasters and Public Health Emergencies	To help cushion the impact that a severe or catastrophic natural disaster or a public health event could have on the country's public finances.	Countries: IADB member countries Events: Severe or catastrophic natural disasters or public health emergencies	Inherent Triggers: Type, location, and intensity of the disaster or health emergency. Manual Triggers: Country submits a request for verification of eligibility	- Potential delays in data collection and verification can slow down fund disbursement.
ADB: Asian Development Fund (ADF) – Crisis Response Window (formerly the Expanded Disaster and Pandemic Response Facility or DRF+)	To provide grant assistance for timely and predictable assistance to cover the costs of relief, early recovery, and reconstruction following disasters and emergencies	Countries: Group A developing member countries (DMCs) eligible for ADF grant country allocations. Events: The immediate aftermath of health emergencies (as well as disasters caused by natural hazards and/or large cross-border movements of displaced people)	Manual Triggers: For public health emergencies: declaration of (i) a public health emergency through the relevant government department (e.g., office of the President or Prime Minister); and (ii) a public health emergency of international concern (PHEIC) by the World Health Organization (WHO) under its global alert and response system in accordance with the International Health Regulations (2005).	Coverage limited to Group A DMCs with ADF grant country allocations



20. The table is based on the work of Nita Madhav and Ben Oppenheim (2024), "Parametric triggers for epidemic and pandemic financing solutions." Disease Control Priorities, 4th Edition, Volume 2: Pandemics.

This does not include the WHO Contingencies for Emergencies Fund that can release funding within 24 hours of an emergency request which sets it apart from other complementary financing.

This table demonstrated the issue with regards to triggers. It therefore is a complement to the JFHTF paper on response financing gaps and they will be consolidated in the update to the operational playbook.

ADB: Contingent Disaster Financing	To provide quick-disbursing and flexible financing to its DMCs impacted by health emergencies and disasters.	Countries: ADB DMCs Events: Health emergencies and disasters triggered by natural hazards	Manual Triggers: Country declaration of health emergency through relevant government department or WHO PHEIC (and/or DMC's declaration of a state of emergency, or its equivalent depending on the DMC's legislation or practice)	Coverage and disbursement: Available for all ADB DMCs, but with variations in pricing and terms depending on DMC eligibility for concessional and/or market-based financing. Pre-specified disbursement conditions are linked to health emergencies and disasters triggered by natural hazards.
AfDB: Crisis Response Budget Support (CRBS)	Financing pandemic response, including health services, social protection measures, and economic stabilization efforts.	Countries: African Development Fund (ADF) eligible countries		-Accountability and transparency in eligibility criteria -Scale of demand -Rapid disbursement -Coordination with other agencies -Flexibility of use
AfIB: COVID-19 Crisis Recovery Facility (CRF)	To provide financing that is flexible and adaptive to the diverse emergency healthcare and economic needs	Countries: AfIB members and clients	(broad) public and private sector entities facing (or at risk of facing) serious adverse impacts as a result of COVID-19	-Rapid deployment of funds -Aligning efforts and preventing overlap with initiatives from other financial institutions -Accurate resource allocation to the most impacted sectors -Ensuring the immediate financial aid provided does not compromise the long-term sustainability of funded projects or the bank.
EBRD: Coronavirus Solidarity Package	To help countries meet short-term liquidity and working capital needs	Private sector across 38 emerging economies		- Lack of clarity in the application of the eligibility criteria - Lack of feedback loop to assess needs and demands
NDB: COVID-19 Emergency Program Loans (CEPLs)	To finance direct expenses related to combating the COVID-19 outbreak or to support governmental measures contributing to economic recovery in the member countries	Countries: Brazil, China, India, Russia, and South Africa		Evaluability of the program and related loans.
Africa Epidemics Fund (AfEF)	To ensure sustainability and self-reliance in PPRR across the African continent.	Countries: AU member states		
African Risk Capacity Outbreaks & Epidemics policy	To provide rapid financing in the earliest stages of an epidemic	Countries: Senegal Diseases: - Filoviruses - Meningitis	Inherent Triggers: - Total laboratory confirmed cases (filoviruses) - Districts in alert and epidemic phase (meningitis)	- Uncertainty about case counts very early in an outbreak
UN Central Emergency Response Fund (CERF)	To allow responders to kick-start relief efforts immediately when a new crisis emerges and to scale up and sustain protracted relief operations to avoid critical gaps when no other funding is available.	UN agencies are eligible for funding.	Manual Triggers: Emergency Response Committee (ERC) dependent	



Gavi's First Response Fund	To provide upfront liquidity to secure immediate access to vaccines and to protect routine immunization programs	Countries: Gavi-eligible countries Diseases: - A disease or pathogen for which Gavi has no existing vaccine program in place	Manual Triggers: Emergencies must have been designated a PHEIC – or a grade 2 or 3 emergency – by the WHO	
<u>The Global Fund</u> C19RM / Grant financing or other additional donor contributions for pandemic/PHEIC response	To provide rapid financing in the earliest stages of an epidemic and protect other health programs (including for HIV, TB and malaria)	Countries: Global Fund-eligible countries Diseases: A disease or pathogen which presents co-infection or co-morbidity risk with HIV, TB or Malaria / response otherwise consistent with Board policy (examples: Covid-19, Mpox, Ebola)	Manual Triggers: Driven by country request in the event of an outbreak or PHEIC, subject to Global Fund policy compliance and Board Approval	
COVID-19 and other public health emergencies and emerging diseases ASEAN Response Fund	To serve as a pool of financial resources to provide support in responding to public health emergencies and emerging diseases.	Countries: ASEAN member states	Manual Triggers: Instances of immediate need (e.g., instances of procurement of medical supplies)	
Pathogen Rx	To provide liquidity for private sector firms facing cash flow and/or operational disruption during an epidemic	Countries: Worldwide and regional Diseases: Infectious disease outbreaks	Inherent Triggers: - Confirmed outbreak - Infections - Deaths Manual Triggers: - Sentiment Index - Proof of loss	- Coverage is limited depending on geographic characteristics - Hybrid trigger, including indemnity component: proof of loss required
Munich Re Epidemic Risk Transfer Solutions	To efficiently reallocate epidemic and pandemic risk across various stakeholders	Countries: Worldwide and regional Diseases: Viral epidemic and pandemic outbreaks	Manual Triggers: - PHEIC - Civil Authority Restriction - Proof of loss	- Reliance on subjective triggers - Proof of loss required

IV. KEY LESSONS FROM THE COVID-19 RESPONSE AND POTENTIAL ACTIONS FOR EFFECTIVE RESPONSE FINANCING

While the scale of resources mobilized in the context of the Covid-19 response was impressive, several challenges and issues were identified across the construction and realisation of the instruments applied. One way to get a sense of the volume of financing needed to respond to a disease outbreak is to look retrospectively at past large-scale outbreaks. For example, it has been estimated that a total of nearly US\$92 billion of external financing was mobilized for the Covid-19 health response, with vaccines accounting for nearly half of that amount (see Table 6, Table 4, and Figure 2). Alternatively, intensive predictive and counterfactual modelling that incorporates such assumptions can also be

applied, as exemplified by a comprehensive cost modelling study²¹ performed early on during the COVID-19 pandemic. This analysis projected that a full, nine-pillar response – including coordination, communication, surveillance, laboratory, and logistics – across 73 LMICs would require approximately US\$52 billion after just four weeks. If the response were delayed, costs were projected to triple to over US\$150 billion by 12 weeks, highlighting the enormous opportunity costs of delayed responses, particularly in resource-limited settings which are often at highest risk for emergence and spread of pandemic-prone pathogens. In reality, the US\$92 billion ultimately mobilized during the pandemic reflects in part the significant costs incurred due to delays in response and coordination, nearly doubling the initial projection of US\$52 billion.

At the country level, the 10th Ebola virus disease (EVD) outbreak in the Democratic Republic of the Congo (DRC) involved over US\$1 billion in investments from 2018 to 2020.²² Approximately 68% of this funding was dedicated to public health efforts such as coordination, clinical management, and surveillance, highlighting the need for adequate and well-targeted funding, local capacity building, and strategic planning. While this outbreak had substantial challenges, including occurring within a context of a complex humanitarian crisis with geographic access challenges to affected areas, the volume of financing needed to address a single high-threat pathogen outbreak with confirmed cases mostly limited to a single country demonstrates the substantial resourcing needs, especially of non-pharmaceutical interventions (NPIs), inherent in pandemic response.

Table 6. Spending on COVID-19 health response from external financing, 2020-2023²³

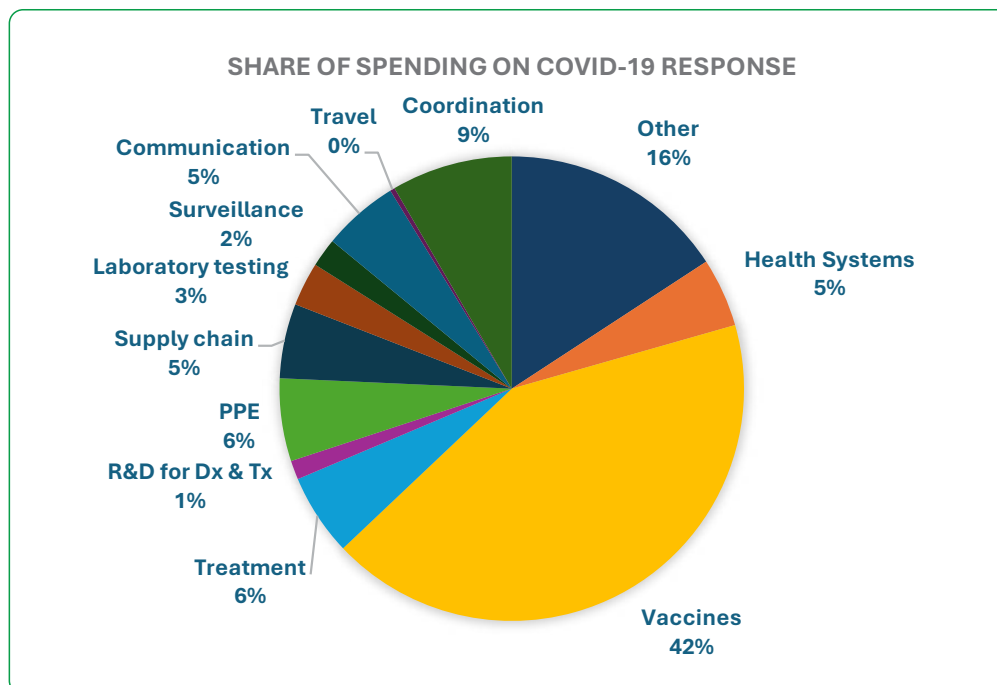
		2020	2021	2022	2023	Grand Total
	Annual total (US\$ billion)	18.7	39.5	20.9	12.3	91.6
Coordination	Country level coordination	3.15	2.45	1.14	0.98	7.72
Travel	Points of entry, international travel and transport	0.17	0.08	0.03	0.02	0.3
Communication	Risk communication, community engagement	1.39	1.27	1.2	0.99	4.85
Surveillance	Surveillance, rapid response teams, and case investigation	0.73	0.7	0.25	0.15	1.83
Laboratory	National labs and testing	1.26	1.2	0.16	0.17	2.79
Supply chain	Supply chain and logistics	1.63	2.41	0.42	0.3	4.76
MCM	Infection prevention and PPE	1.76	2.15	0.96	0.41	5.28
	R&D for diagnostics and therapeutics	0.31	0.39	0.25	0.26	1.21
	Treatment	1.72	2.69	0.52	0.29	5.22
	Vaccines	2.46	21.6	10.6	4.15	38.81
Health system	Maintaining other essential health services and systems	0.63	1.49	1.41	0.86	4.39
Other	Other	3.52	3.1	4.01	3.84	14.47

21. Tessa Tan-Torres Edejer, Odd Hanssen, Andrew Mirelman, Paul Verboom, Glenn Lolong, Oliver John Watson, Lucy Linda Boulanger, & Agnès Soucat. (2020). Projected health-care resource needs for an effective response to COVID-19 in 73 low-income and middle-income countries: a modelling study. *The Lancet Global Health*, 8(11), e1372-1379.

22. Zeng, W., Samaha, H., Yao, M., Ahuka-Mundeki, S., Wilkinson, T., Jombart, T., Baabo, D., Lokonga, J.-P., Yuma, S., & Mobula-Shufelt, L. (2023). The cost of public health interventions to respond to the 10th Ebola outbreak in the Democratic Republic of the Congo. *BMJ Global Health*, 8(10), e012660.

23. Data are analyzed by authors using IHME's Development Assistance for Health on COVID-19 Database 2020-2023, which are based on project databases, financial statements, annual reports, IRS 990s, and correspondence with agencies.

Figure 2. Covid-19 spending from external sources



While these past experiences can help illustrate the overall volume and key areas of financing needs, it is also important to recognize that during COVID-19 it was not necessarily the total final amount of response financing but rather the timely coordination and mobilisation. Therefore, in the short-term mobilized financing is often significantly below estimated needs, resulting in sub-optimal response and insufficient mitigation of the outbreak. It is also important to note that these estimates are focused on the health response; estimates of past financing (or financing needs) for the economic and social response are harder to come by.

Listed below are some lessons learned from the COVID-19 response which are a first step in considering potential actions to address the issues raised and development of guiding principles for effective response financing that can be further developed. This includes establishing clear roles and responsibilities for actors at each stage of a health emergency.

- **Alignment of domestic and international actions**
 - **Challenge:** Delay in domestic action awaiting external financing.
 - **Potential action:** Create relevant incentives in external financing to align domestic and external financing.
- **Speed of commitment and disbursement**
 - **Challenge:** Delays in disbursement due to complex trigger criteria, preconditions including the need for emergency declarations, and, in some cases country-level processes and approvals.

- **Potential actions:** Streamline and expedite disbursement processes, including simplifying trigger designs, to ensure timely access to funds and minimize dependence on prolonged bureaucratic procedures.
 - **Coordination and flexibility**
 - **Challenge:** Difficulties in coordinating multiple financing modalities and ensuring flexibility in fund reallocation, particularly when funds were tied to specific uses.
 - **Potential Actions:** Enhance coordination mechanisms among stakeholders (refer to the section on **Coordination** below) and design flexible funding structures that allow for reallocation based on emerging needs.
 - **Operational constraints**
 - **Challenge:** Limitations in the effective utilization of available financing instruments due to operational challenges, such as supply chain disruptions, insufficient funding, and misalignment of efforts among various stakeholders and initiatives.
 - **Potential actions:** Strengthen operational capacities and establish clearer lines of communication and collaboration among all entities involved in the response.
 - **Adequacy of financing**
 - **Challenge:** Funding gaps underscoring the need for more adaptive and scalable financing mechanisms to meet evolving demands.
 - **Potential Actions:** Provide efficient financing models for resources that are responsive and scalable to meet the evolving demands, ensuring funds are adequately and effectively allocated to meet on-the-ground needs.
 - **Grant vs. credit financing**
 - **Challenge:** Increased debt burdens from credit financing in LMICs, highlighting the need for more accessible grant-based funding to support sustainable recovery. Potential for grant financing may result in delays in countries accessing or using credit financing in a response context.
 - **Potential actions:** Prioritize grant-based funding, especially for LICs, to prevent increasing debt burdens and to support long-term economic stability. Enhance predictability of timing and volume of grant financing. Should be designed in a manner compatible with the necessary alignment of domestic and external financing (see above).
-

- **MCM agenda**
 - **Challenge:** *The coordination model should both build on the positive aspects of ACT-A and apply lessons learned.*
 - **Potential Actions:** *Streamline coordination for more rapid decision-making, improve accountability and inclusivity through stronger regional representation, and focus on coordinated resource mobilization (see sections on **Coordination** and **Governance** below)*

[NOTE: Challenges and opportunities to mitigate them can be expanded and developed further, including implication for different stakeholders]

Coordination

Coordination at both regional and global levels is crucial to ensure that countries have the necessary resources to respond effectively to a pandemic. This coordination should involve not only the providers of response financing but also the countries that rely on international financial support. For example, while strong domestic financing is vital for all countries, some will need to rely heavily on external funding, making access to relevant information essential. Effective coordination can help ensure that this access is timely. Thus, this section will discuss the coordination required for accessing information and facilitating collaboration among organizations, both regionally and internationally.

Coordination between IFIs, IOs:

- Evaluations of the IMF and MDB's response to COVID-19 highlighted the rapid scale-up efforts and the catalytic role played by the IMF and World Bank. While there was overall productive collaboration, sharing of information on the extent of financial support provided by various multilateral institutions would have been beneficial. The IMF evaluation recommended developing a toolkit of specialized policies and procedures to address the unique needs and circumstances of crises and taking steps to reinforce institutional preparedness.
- Further evaluations from COVAX identify the importance of clearly defining roles and responsibilities, particularly where coordination is needed. These evaluations also emphasize the need for discussions on governance, scope and financing arrangements.
- It is crucial to enhance coordination between IFIs, IOs, and other finance or GHA bodies. This effort should ensure the sharing of the necessary information and the development of effective coordination mechanisms at both regional and global levels, including access to information, finance and details on key products and policy measures related to cross border activities.

- Additionally, any existing gaps in coordination should be addressed, either by expanding current institutional mandates or creating additional mechanisms. These new mechanisms, along with their governance and representation, should be pre-agreed, with clear activation guidelines, potentially linked to an objective health declaration or other relevant triggers.
- Lastly, it is of need to identify relevant IFIs and IOs which may need to coordinate information including demand and supply for access to finance and sequencing of mechanisms and flows of finance, MCMs and other resources that will be essential for an effective response, while respecting governance structures of each institution. Areas of concern may include wider support for access and readiness for MCMs (e.g. R&D and procurement of MCMs, surveillance, health workforce, supply chain and logistics, global coordination, etc.) in each phase of the global response.

Governance for Sustainable and Effective Financing

Legal and institutional frameworks

- Supportive legislation: the importance of enacting and enforcing laws that facilitate rapid response and financing.
- Clear response governance: establishing unambiguous roles and responsibilities across agencies and ministries.
- Delegation of authority: effective delegation during emergencies to ensure swift decision making and resource allocation.

Transparency in epidemic response and financing

- Rapid fund disbursement systems: developing systems that balance the need for swift fund disbursement during initial outbreak investigations with the need for oversight.
- Impact on epidemic management: ensuring transparency mechanisms do not impede rapid and effective epidemic management.

Governance of external financing support

- Improving access to existing financing at both the domestic and international levels would be critical in reducing fragmentation and gaps in the current global health financing landscape.
-

Roles of IFIs and Regional/Global/International Organizations in policy co-ordination

Regional Organisations and institutions played an important role during the COVID-19 pandemic and some are putting in place coordination arrangements as well as financing mechanisms to support future coordination; ASEAN recently agreed to a ToR for health and finance coordination and the role of the COVID-19 ASEAN Response Fund (CARF) as a pooled resource to finance Pandemic PPR. Africa CDC and the Africa Union have strengthened regional capacities and coordination and are working with GAVI on the Africa Vaccines Manufacturing Accelerator (AVMA) and bilateral donors. These examples show that regional coordination includes finance, procurement, coordinating aggregate demand and supply for MCMs and other critical health products, and coordinating policies which have cross border implications. RO can also play a significant role in supporting access to finance and working with regional financial institutions.

IFIs such as the IMF and multilateral development banks, including the World Bank have a key role to play in their respective roles of fostering international global financial stability and supporting economic development in developing countries. Policy advice and technical assistance can support the identification of critical policy gaps and any further engagement by regional/global health organisations whose role is to coordinate on policy direction and operation, with WHO at the centre.

V. CONCLUSION AND NEXT STEPS

The Operational Playbook is intended to provide a comprehensive overview of response financing tools and instruments, describe how various tools complement one other in addressing critical needs under different scenarios, and propose key processes and platforms for ensuring timeliness and coordination, while recognizing that each country's needs and responses will differ and there is not a one size fits all approach.

The Playbook has been drafted in a dynamic context and is intended to be a non-exhaustive reference tool, that initially will be limited in scope with a focus on access to finance to support an iterative process. The technical insights so far have highlighted some areas of focus that could support an improvement in effective and efficient response financing to a pandemic. Given the complexity of the ecosystem for response financing, some of the gaps and issues identified relate to a range of stakeholders, co-ordination and governance processes. This version of the Playbook can be used by stakeholders to help support early engagement and initial discussions. The urgency of the need for action is highlighted by the recent declaration of a Public Health Emergency of Continental Security by Africa CDC and the declaration of a Public Health Emergency of International Concern by WHO.

This version of the Playbook builds on prior technical work of the JFHTF as well as input from a broad set of stakeholders. Subject to agreement with the future Presidency, further work could include the following steps.

1. The use of the Playbook as a basis for a tabletop simulation exercise could also be considered. It could be reviewed and updated periodically to reflect developments, lessons learned, and feedback received.
2. The broad structure and approach of the Playbook could be revised to enhance the focus on practical usability and provide clearer guidance to different actors. This could include highlighting the link between preparedness and response, including preparatory activities or investments that are critical for enabling a rapid and effective response.
3. The Playbook content and guidance could be supported by using pandemic scenarios and assessing how they differ in terms of financing and coordination needs and the role of different actors.
4. The Playbook could also include updated information as needed about different financing sources, specific instruments of different actors, procedures and protocols including the impact of efficiently financing the identified needs at global, regional and country level.
5. Further development could include MCM needs under different pandemic scenarios, as well as coordination and governance, including the agreed roles and responsibilities of all relevant stakeholders at each stage of a pandemic, which could lead to any remaining gaps being identified.

Table 6. Response financing sources, needs and challenges

Financing source and needs	Why needed / important	Key sources / actors	Triggers	Coordination platforms	Key challenges (scale, speed, coordination)
Domestic government financing for health and econ/social response	Can enable early, initial response. Ensures sustainability, flexibility, and accountability.	National and local governments. Arrangements for contingent financing vary. Potential mobilization from the private sector & civil society.	Varies but typically declaration of a state of emergency. Parliamentary or other approval processes may be required.		<ul style="list-style-type: none"> Many countries do not have effective arrangements for domestic contingency financing – e.g. complex approval arrangements or rigid PFM systems. Scale of domestic financing may be limited in LICs and LMICs.
International financing for health response & MCM	Pre-positioned, contingent financing can be fast-disbursing in support of country response plans (e.g. WHO CFE, MDB crisis response financing) Key for ensuring scale and equity in response.	MDBs, regional development banks, UN agencies, GHIs, philanthropies	Varies but typically requires PHEIC or national declaration of emergency.	Ad hoc, but increasingly institutionalized post-COVID. Future platforms may be	<ul style="list-style-type: none"> Volume of grant and loan financing is uncertain. Delays in processing in many cases due to triggers, internal approvals, required plans and processes, etc. Differences in triggers, policies and procedures across financing sources. Some sources are earmarked (or in-kind) or come with important restrictions.
MCM R&D and at-risk financing for R&D, manufacturing and procurement	Enable immediate deployment upon emergency use authorization by allowing MCMs to be stockpiled ahead of full licensing,	Pharmaceutical companies, BARDA, NIH, CEPI Gavi, UNICEF, MDBs, GHIs, regional organizations (PAHO, ACDC, ...			<ul style="list-style-type: none"> Limited capacity for at-risk procurement; lack of clarity on arrangements (global or regional) for coordination and pooled procurement. Uncertain volumes of grant vs. credit financing for MCMs can result in delays Lack of peace time investment can delay speed of end to end entire value chain—from product development to manufacturing, procurement and distribution of vaccines, therapeutics, and diagnostics.
International financing for econ/social response	Mitigate economic impact particularly for the vulnerable	IMF, WB, regional development Banks			

Table 7. Key actions for countries and other stakeholders to enhance response financing

Financing needs	Key actions: Countries	Key actions: IFIs, GHIs, UN, donor countries
Domestic government financing for health and econ/social response	<ul style="list-style-type: none"> Assess PFM and legal arrangements for crisis response financing and implement reforms / system strengthening as needed. Develop and stress-test response plans for relevant scenarios. 	<ul style="list-style-type: none"> Support PFM diagnostics and capacity building. Support strengthening of the capacity of national institutions involved in emergency response.
International financing for health response	<ul style="list-style-type: none"> Put in place arrangements for contingent financing with MDBs and other entities as appropriate. Develop and update plans and institutional arrangements for access and use of contingent financing, including national procedures for emergency declaration. 	<ul style="list-style-type: none"> Consolidate information about financing triggers and align and simplify where possible. Establish platforms to facilitate coordination of support of national plans and alignment of processes and procedures.
MCM R&D, procurement & deployment	<ul style="list-style-type: none"> Coordinate with WHO, GHIs, MDBs, and regional bodies regarding potential financing sources and preferred arrangements for pooled procurement of MCMs. Continually assess stocks and needs for priority MCMs and associated financing needs. Establish a supportive legal and regulatory framework for new MCMs in an emergency context. Identify and address key health systems and other deployment bottlenecks. Establish effective mechanisms and channels for communication and community engagement. 	<ul style="list-style-type: none"> Coordinate across IFIs, DFIs, GHIs and others to develop an approach to provide aligned at-risk financing for MCM R&D, manufacturing, and procurement that meets the needs and preferences of LICs and LMICs. Support capacity of in-country institutions responsible for regulation, procurement and deployment of MCMs and community engagement Support enhanced emergency readiness of health systems
International financing for econ/social response	<ul style="list-style-type: none"> Identify mechanisms for supporting communities, businesses and vulnerable populations and associated financing needs for different crisis scenarios. Establish and test cross-sectoral coordination platforms to support economics and social response. 	

Annex I: Summary of Evaluation findings for IFIs and IOs relating to of C-19 Pandemic Response and related Mechanisms (non-exhaustive)

C19 Response Mechanism/Facility	Summary	Relevant Evaluation findings
The Access to COVID-19 Tools Accelerator (ACT-A)	<p>The first global initiative of its kind, responding to the need for unprecedented global collaboration to respond to the COVID-19 pandemic.</p> <p>ACT-A comprises three vertical pillars of Diagnostics, Therapeutics, and Vaccines (COVAX), as well as a fourth cross-cutting pillar – the Health Systems and Response Connector (HSRC). The COVID-19 Vaccine Delivery Partnership (CoVDP) was established in January 2022 to support vaccine delivery, with a focus on 34 countries.</p>	<ul style="list-style-type: none"> - A Mandate and scope - ACT-A's mandate was very relevant. - The global scope of the Vaccines Pillar (COVAX) was too ambitious. - ACT-A facilitated an unprecedented level of coordination and collaboration between global health agencies, enabling a rapid response to address the COVID-19 pandemic. - ACT-A's informal coordination model is insufficient for future pandemic response - Principal Group meetings were useful but overall cross-pillar coordination was perceived as too limited. - Coordination within the pillars worked best for the Vaccines pillar due to longstanding working relationships between the actors involved. - Accountability and transparency were not sufficiently promoted by the ACT-A model- - LIC and LMIC governments were insufficiently included in ACT-A's model - Regional platforms played an important role in the response to the pandemic. - The ACT-A agencies raised substantial funding yet also faced a large funding gap across the entire implementation period. - Funding was not mobilized at sufficient speed. - The majority of stakeholders was satisfied with ACT-A. - The Vaccines pillar is considered as the most successful ACT-A pillar, while the Therapeutics and Diagnostics pillars also made important contributions. - CoVDP has effectively contributed to vaccine delivery. <p>Ref: External Evaluation, Oct 2022. https://www.who.int/publications/m/item/external-evaluation-of-the-access-to-covid-19-tools-accelerator-(act-a)#:~:text=This%20external%20evaluation%20was%20a,future%20pandemic%20preparedness%20and%20response</p>
The COVID-19 Vaccine Global Access Facility COVAX	<p>Initiated in 2020, the vaccines pillar was co-led by the Coalition for Epidemic Preparedness Innovations (CEPI), the World Health Organization (WHO), and Gavi, the Vaccine Alliance (Gavi). UNICEF joined in 2021 as a</p>	<ul style="list-style-type: none"> - The design is coherent, ambitious, and has responded to a rapidly evolving context, but suffered from too little engagement of LICs and LMICs and assumed an unrealistic degree of global solidarity.



(Vaccine Pillar of Act-A)	formal COVAX partner. COVAX had the specific aim of enabling equitable global access to COVID-19 vaccines. Gavi is the legal administrator of the COVAX Facility.	<ul style="list-style-type: none"> - Vaccine nationalism, vaccine diplomacy and commercial interests undermined the potential of market-based solutions to global vaccine equity challenges in a public health emergency context. - COVAX was unable to play the market shaping role it first envisioned. - the governance and management of the COVAX Facility and AMC has been challenging with a lack of clarity over roles and responsibilities between governance bodies and implementing partners. - Strengthen coordination among global partners (donors, MDBs, multilateral agencies, TA providers) to ensure the timely availability of finance and technical support for vaccine rollout <p>Ref: Itad Final Report, March 2023</p>
The Global Fund	In 2020, the GF created the COVID-19 Response Mechanism (C19RM) to fight COVID-19 with funding close to \$4bn in addition to grant flexibilities.	<p>Despite the global supply issues such as the lack of stockpiles of PPE, the Global Fund managed to deliver PPEs ahead of C19 variants peaks. Evaluations suggest that the Global Fund did a commendable job on procuring COVID-19 tests and on volume commitments.</p> <p>Despite the global supply issues such as the lack of stockpiles of PPE, the Global Fund managed to deliver PPEs ahead of C19 variants peaks. Evaluations suggest that the Global Fund did a commendable job on procuring COVID-19 tests and on volume commitments.</p> <ul style="list-style-type: none"> - Ref: Technical Evaluation Reference Group, June 2023
World Bank	<ul style="list-style-type: none"> - In a context of high uncertainty, the World Bank delivered a response of unprecedented scale and speed. The immediate support was particularly swift in the most vulnerable countries. In the first 15 months, the World Bank provided financing of an estimated \$30 billion for the health and social response in 106 countries with high or medium vulnerability to human capital and development losses. Support to small states, less-prepared countries, and fragile and conflict-affected situations was emphasized. About 20 percent of financing was disbursed in the first months of 2020, and 40 percent was disbursed by April 2021. Staff and clients worked long hours to deliver new and repurposed operations, all while learning to use remote connectivity tools and adapting to home-based work and personal stresses - World Bank support addressed country needs most comprehensively where earlier work on human capital had built preparedness and where cross-sectoral coordination among 	<ul style="list-style-type: none"> - Early Evaluation - Recommendations: <ol style="list-style-type: none"> 1. Use the World Bank's crisis recovery efforts to strengthen the resilience of essential health and education services to ensure that human capital is protected in a crisis. 2. Apply a gender equality lens to health and social crisis response actions across sectors. 3. Help countries strengthen regional cooperation and crisis response capacities for public health preparedness. 4. Build on the COVID-19 experience to strengthen the World Bank's internal crisis preparedness so that it has the tools and procedures ready to respond to future emergencies. <p>Ref: https://ieg.worldbankgroup.org/sites/default/files/Data/Evaluation/files/Covid-19-health-and-social-response.pdf</p>



	Global Practices (GPs) and sectors in countries was stronger	
The IMF's Emergency Response to the COVID-19 Pandemic	<p>The Fund adopted, and adapted over time, a pragmatic strategy to provide support through its existing emergency financing (EF) instruments, while also urging the use of precautionary instruments, including a newly introduced short-term liquidity line. A record 62 countries received support within the first three months of the onset of the pandemic, two-thirds of them on concessional terms. The Fund's early disbursement of financial support at a time of urgent need and high uncertainty was deeply appreciated by country authorities. Our evidence suggests that financing needs were broadly in line with and sometimes below ex ante projections, implying that Fund financing ended up playing, at least on average, its envisaged role in filling BOP gaps. For EMs, and for LICs receiving EF, the Fund provided the expected 10–15 percent of the financing gap; for LICs receiving UCT financing or both emergency and UCT financing, the Fund's share ended up larger, 25–35 percent on average. However, for small developing states facing large shocks, the share was lower.</p> <p>Evidence from country cases suggests that in virtually every case the authorities felt that Fund support had a catalytic effect on other official financing. However, some broader concerns about the lack of a common platform that could be used to share information on how much financial support was being provided across multilateral institutions.</p>	<p>-Speed and catalytic role in filling BoP gaps -Positive collaboration with WB could be planned in more detail for future emergencies</p> <p>Key recommendations: Recommendation 1: Develop a toolkit of special policies and procedures that could be quickly activated to address the particular needs and circumstances of a global crisis. Recommendation 2: Take steps to reinforce institutional preparedness to deal with global crises and other large shocks</p> <p>Table-top exercises and a crisis playbook. The Fund could play out how the institution would respond to a developing global crisis, with participants from management, staff, the Board and key partners such as the World Bank, contributing to developing a crisis "playbook" of issues to be taken into account and steps to be considered when a global crisis occurs.</p> <p>Ref: IEO, 2023</p>
The African Development Bank (AfDB)	<p>AfDB is a multilateral institution whose objective is to contribute to the sustainable economic development and social progress of the African countries that make up the AfDB's Regional Member Countries (RMCs).</p> <p>The Bank's support package comprised of lending and non-lending activities to help Regional Member Countries and regional organizations to mitigate the consequences of the COVID-19 pandemic over the period from March 1 to December 31, 2020.</p> <p>The support aimed at providing fast and flexible support to RMCs through sovereign and non-sovereign operations.</p>	<p>While the Bank was not well prepared to deal with a crisis of unprecedented magnitude, its response was quickly and well aligned with Regional Member Countries' national COVID-19 response programs.</p> <ul style="list-style-type: none"> - The Bank's contribution to results was limited by the modest resource envelope which fell short of its initial ambitions and only supported sovereign operations. - In a crisis situation where the Bank lacks comparative advantage, such as the area of health service delivery, it can intervene via collaboration with specialized agencies such as the CDC and the WHO. - The Bank's response was complementary with the overall larger response financed by other development partners. The Bank's assistance was found to be aligned with national COVID-19 response programs and was also coherent with interventions of major development partners (IMF and WB) and the WHO. <p>Ref: IDEV Report, Nov 2022</p>
ADB	<p>In December 2020, The Asian Development Bank (ADB) approved the Asia Pacific Vaccine Access Facility (APVAX), to provide a resource envelope of \$9 billion and a framework to</p>	<p>This early evaluation (2021) highlighted the importance of clear communication, effective partnerships that capitalise on the expertise of technical agencies and the importance of integration and understanding of national</p>



support fast, high quality, safe, and equitable vaccine access by its developing member countries (DMCs). ADB also emphasizes the importance of working in congruence with routine vaccination and other related health services.

budgeting and PFM systems. In purchasing, transparency and carefully planned pooled procurement systems are essential to deliver on time. Deployment must be supported by proactive comms to address vaccine hesitancy and infrastructure and labour with capacity for deployment.

Ref: <https://www.covid19-evaluation-coalition.org/documents/ll-corona-vaccine.pdf>

Annex II: Overview of COVID-19 Response Financing (Health Response)

Note: This table summarizes information presented in the Aug 2023 Gaps and Needs paper with some updates. It is included as reference.

Organization / institution	Key instruments for response financing / support	Key areas of support	Key issues / challenges
World Bank (IDA/IBRD)	Crisis Response Window	The CRW provided support for crisis risk management, emergency response, and recovery efforts in member countries. - CRW supported the waiver of commitment fees for IBRD loans and the commitment charge for IDA non-concessional credits for first year of relevant operations -Support of additional financing to the COVID-19 SPRP	
	CERCs	Provide rapid financial support during a crisis. It is specifically designed to enable quick reallocation of funds to emergency response activities from existing World Bank-funded projects. -Immediate Response to disasters or health emergencies -Health Systems Strengthening -Support across various sectors	-Not all financing could be activated readily as some arrangements require countries to declare an emergency to make resources available, which can delay the disbursement of funds. -While CERCs allow for the reallocation of funds, the restrictions on how these funds can be spent can limit their effectiveness.
	MPA	Supports extensive and phased response activities over a longer duration and allows for adjustments in the project's scope and funding based on evolving needs during an ongoing crisis.	The multiple phases and components of the MPA structure, led to challenges in coordination and management across different stages and sectors of certain projects. About a third of MPA projects collaborated with another global practice.
	Development Policy Financing (DPF) with Cat DDO	-Provides countries with financial protection against natural disasters and public health emergencies. -Ensures funds are available immediately after a disaster or during an emergency without the need for lengthy approval processes.	Activation involved complex criteria and preconditions, which slowed down the disbursement process.
International Finance Corporation (IFC), World Bank Group	Global Health Platform (US\$4 billion)	On July 29, 2020, IFC provided \$4 billion through the Global Health Resilience platform. The platform provided support to: financial support to private sector providers; capacity strengthening for manufacturing supplies; infrastructure upgrades; support to pharmaceutical companies and manufacturers to support expansion of manufacturing capacity, procure raw materials and scale up production of healthcare products	



Organization / institution	Key instruments for response financing / support	Key areas of support	Key issues / challenges
Multilateral Investment Guarantee Agency (World Bank Group)	Guarantees to mitigate risk (Credit enhancement, capital optimization and trade finance)	On April 7, 2020, MIGA launched a US\$6.5 billion fast-track facility to help investors and lenders for the health response and economic recovery. MIGA underwrites guarantees to increase the confidence of lenders and private investors, while increasing access to finance (on more favorable terms) for governments. This included three pillars: 1) procurement of urgent medical supplies/services; 2) countering adverse economic impacts during the crisis (credit enhancement program for \$2.5 billion; capital optimization for \$2.5 billion); 3) trade finance to complement IFC, during the recovery phase (\$0.51-1 billion)	<ul style="list-style-type: none"> - MIGA guarantees were issued to several countries, including Botswana, Eswatini, Ghana, Lesotho, Mozambique, Nigeria, Zambia, Albania, Argentina, Colombia, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, Serbia, and Panama. - Issues surrounding credit threshold for country eligibility (currently internal credit ratings of BB- or above)
ADB	Dedicated Countercyclical Support Facility (CPRO)	<ul style="list-style-type: none"> - health care capacities, including the procurement of medical supplies and equipment, strengthening of hospital and healthcare facilities, and support for frontline healthcare workers. - Budget support to governments to help manage the economic shocks of the pandemic. -Expansion of social protection measures, including direct cash transfers and subsidies to vulnerable populations affected by the pandemic. 	<ul style="list-style-type: none"> -Speed of disbursement -Adequacy of funding -Coordination and Flexibility of the mechanisms
	Contingency Disaster Financing	<ul style="list-style-type: none"> -Emergency healthcare services -Quickly implement initial health response measures such as detection, surveillance and containment efforts 	
	Policy-based lending (to support fiscal sustainability and economic recovery)	Budget support to governments to help manage the economic shocks of the pandemic	Balancing financing needs with absorptive capacities and/or debt headroom
	Asia Pacific Disaster Response Fund (APDRF)	Provides quick disbursing grants to assist DMCs meet immediate expenses to restore life-saving services to affected populations and to augment aid provided by other partners in times of crisis (including during the early stages of the pandemic)	Volume of grant support relatively limited (capped at \$3 million per event)
AfDB	COVID-19 Crisis Response Facility (incl. Crisis Response Budget Support)	Financing pandemic response, including health services, social protection measures, and economic stabilization efforts.	<ul style="list-style-type: none"> -Scale of demand -Rapid disbursement -Coordination with other agencies -Flexibility of use -Accountability and transparency
IADB	CCF (Contingent Credit Facility)	Help countries develop effective strategies for natural disaster financial risk management. This was temporarily extended to COVID-19. The instrument was also expanded permanently to	



Organization / institution	Key instruments for response financing / support	Key areas of support	Key issues / challenges
		include coverage for Public Health Emergencies.	
	Policy Based Lending (PBL) to support Fiscal relief packages	Fiscal resources to address the health crisis and provide economic relief. The aim of the projects included: (i) to promote the availability and timely execution of public resources to respond to the health crisis caused by COVID 19; (ii) to strengthen the countercyclical effect of fiscal policy through the temporary introduction of measures to protect the income of vulnerable households and increase liquidity for businesses during the health and economic crisis; (iii) to support the effective and continuous provision of essential goods and services through public policy and management measures; and (iv) to promote economic and fiscal recovery during the post pandemic period.	
	Special Development Lending (SDL)	Supported governments to implement policies that seek to preserve macroeconomic stability and fiscal sustainability.	
	Investment based financing	<p>Instrument: Loans for Specific projects (ESP) for health and vulnerable populations. Health loans aimed to: (i) strengthen response leadership at the country level; (ii) improve case detection and monitoring; (iii) support initiatives to break the chain of transmission of the illness (including vaccines); and (iv) improve service delivery capacity. Loans to support vulnerable population contributed to ensure minimum levels of quality of life for vulnerable persons by providing support to minimum income and employment levels for those affected by covid in the immediate period and during recovery as well as preserving human capital of those affected by covid.</p> <p>Instrument: Global credit lines to support the sustainability of micro, small, and medium-sized enterprises (MSMEs) as employment providers amid the COVID-19 crisis by supporting them to overcome temporary liquidity problems and meet their financial obligations (working capital, refinancing loans, guarantees for working capital loans to cover lender risk). The loans aimed to: (i) to support the short-term financial sustainability of MSMEs; and (ii) to promote the economic recovery of MSMEs through access to production-oriented finance.</p>	



Organization / institution	Key instruments for response financing / support	Key areas of support	Key issues / challenges
	Guarantees	Used to support Advance Market commitments through COVAX in countries with lower credit rating, to provide access for vaccines (allowed for downpayments to COVAX before vaccines were authorized).	
EIB	Project-based financing (loans, equity, frontloaded)	<ul style="list-style-type: none"> -Financing for healthcare infrastructure, including hospitals and other medical facilities. -Investment in the research, development, and production of COVID-19 vaccines and therapeutics. 	<ul style="list-style-type: none"> -Speed and agility of response -Balancing speed with due diligence -Coordination with other financial institutions and governments -Sustainability and long-term viability -Monitoring and Impact Evaluation
AiIB	COVID-19 Crisis Recovery Facility	<ul style="list-style-type: none"> -Improving healthcare services and facilities, existing healthcare infrastructure, and purchasing essential medical equipment and supplies. - Help maintain operations, preserve employment, and stabilize income for SMEs -Investments in sectors critical for pandemic response and recovery, including digital infrastructure to support remote working and education, as well as transport and logistics enhancements to ensure continued movement of goods and services. 	<ul style="list-style-type: none"> -Rapid deployment of funds -Aligning efforts and preventing overlap with initiatives from other financial institutions -Accurate resource allocation to the most impacted sectors -Ensuring the immediate financial aid provided does not compromise the long-term sustainability of funded projects or the bank.
The Global Fund	Balance sheet flexibility (US \$500 million made available)	-Possibility to quickly redirect existing financial resources to critical areas of need such as purchasing essential medical supplies to strengthening health systems to cope with the pandemic.	Potential underfunding of other critical health initiatives (HIV, TB, Malaria). The sustainability of long-term health programs could have been affected by the diversion of funds to immediate pandemic response needs.
	C19RM (COVID-19 Response Mechanism, US \$ 5 billion awarded)	Funding for procurement and Technical Assistance in the following areas <ul style="list-style-type: none"> - Testing and treatment (including Oxygen) - Personal protective equipment - Health system strengthening (including laboratory systems, supply chain and waste management, early warning surveillance and response, community systems, oxygen and respiratory care systems) 	There were some issues with coordination across different financing modalities and the predictability of funds, which affected the implementation of funding in country.



Organization / institution	Key instruments for response financing / support	Key areas of support	Key issues / challenges
	Pooled procurement mechanism	-Diagnostics, pharmaceuticals, lab equipment -Efficient distribution and delivery of supplies	There were challenges in managing complex supply chains and ensuring rapid deployment of supplies, given disrupted usual logistical routes and manufacturing processes.
Gavi	COVAX	Approx. US\$10 billion Rapid access to vaccines Supporting vaccines R&D Strengthening health systems Procurement and delivery of medical supplies	lack of timely cash flow Misalignment of donors commitment with global and national response plans There were significant communication and coordination challenges that prevented the financing from being allocated for its intended uses. Implementation delays Limited capacity for implementation
CEPI	At-risk Financing	Approx. US\$2.1 billion investment in vaccine R&D to ensure that potential vaccines are developed quickly and are ready to undergo regulatory review and mass production as soon as possible after a pandemic emerges.	Challenges include readiness regarding assays, inputs into manufacturing and ecosystem readiness in general.
UNICEF	Balance Sheet Flexibility	Supports rapid reallocation of resources to address immediate and emerging needs during a crisis in health and nutrition sectors for children	Funding constraints during prolonged crises.
	Vaccine Independence Initiative (VII)	Supports access to vaccines to maintain routine immunization programs during health emergencies. It was used to bridge finance domestic budgets, grants, and uniquely also to do at-risk bulk purchasing of all MCMs (diagnostics, treatments, vaccines, and oxygen)	Dependency of external donors / financing partners
	Humanitarian Action for Children (HAC) appeals	Mobilizing resources to support children affected by emergencies (health, nutrition, education)	Volatility in funding which could affect the planning and implementation of long-term projects
	ACT-A Supplies Financing Facility (SFF)	Coordinating and financing the procurement and distribution of COVID-19 essential supplies, including diagnostics, therapeutics, and vaccines with dedicated windows and allowing country-choice and ownership of MCM selection	Coordination challenges among stakeholders, affecting timely procurement and distribution of supplies.
WHO	CFE	Allows WHO to allocate funds where they are most needed at the onset of a crisis, addressing critical gaps in response capabilities and providing immediate financial resources to respond quickly to disease outbreaks and health emergencies.	Insufficient funding levels, which can hamper its capacity to respond adequately to large-scale emergencies or simultaneous events



Organization / institution	Key instruments for response financing / support	Key areas of support	Key issues / challenges
	Revolving Fund for Procurement	Ensure the pooled procurement of vaccines, medicines, and other health products.	Efficient supply chain management was complicated by global emergencies that disrupted usual logistical routes and manufacturing processes. Also, financial stability of the fund proved challenging, particularly in maintaining sustained funding and managing cash flows effectively

Annex III: Overview of Selected Global Coordination Platforms noting many networks exist and can play a contributory role.

Capacity / theme	Coordination platform	Governance	Financing	Advantages/Disadvantages
Response coordination	Partners Platform	WHO, UNDCO	WHO	<ul style="list-style-type: none"> - Near real-time access to response updates and planning across countries, partners, and donors - Currently limited to specific diseases and hazards
	UN Inter-Agency Standing Committee (IASC)	UNSG, OCHA	UN agencies, UN CERF	<ul style="list-style-type: none"> - Cross-agency coordination of humanitarian action within the UN network - Established mechanisms for response activation, expansion, and deactivation: Scale-Up Protocols for the Control of Infectious Disease Events (adapted for COVID-19), active for 6-9mos and in humanitarian settings (Global IASC Scale-Up with a specific focus on all Global Humanitarian Response Plan (GHRP) countries)
	Global Health Cluster	WHO, UN IASC	WHO	<ul style="list-style-type: none"> - Regularly active during inter-crisis periods, but in humanitarian / FCV contexts only - Inter-cluster collaboration and coordination challenges, limited vertical technical expertise
Surge workforce	Global Outbreak and Response Network (GOARN)	WHO	WHO, GOARN partners	<ul style="list-style-type: none"> - Wide range of deep technical specialties, provides support through different modalities - International deployment activation can take time
	EMT (Emergency Medical Teams) Initiative	WHO, UNOCHA	WHO, EMT partners	<ul style="list-style-type: none"> - Rapid scale-up to coordinate health service delivery and case management - In-country accountability and governance can be challenging
	Standby Partnership Programme (SBP)	UN, individual agencies	Individual network partners (UN agencies, standby partners)	<ul style="list-style-type: none"> - Requires individual bilateral agreements between each agency and standby partner - Fewer deployments for technical roles, dependent on roster strength and agency
MCMs / R&D&M, research and innovation ¹⁷	R&D Blueprint for Epidemics	WHO, independent Technical Advisory Group	WHO	<ul style="list-style-type: none"> - Enables rapid strategic R&D activation for priority pathogens with a consensus research agenda - Limited convening power

24. There are a significant number of networks that support better coordination including e.g. CEPI's R&D Network, Gavi's immunization network (non-exhaustive).



	Global Research Collaboration for Infectious Disease Preparedness (GloPID-R)	Independent executive leadership team (international research funders)	EU (Horizon Europe)	<ul style="list-style-type: none"> - Coordinated clinical trial strategies and research funding mechanisms, can be activated for rapid research response during outbreaks - Value is limited for smaller-scale epidemics
	Global Vaccine Data Network (GVDN)	Independent coordinating centre and scientific advisory committee	University of Auckland, US-CDC, New Zealand MoH	<ul style="list-style-type: none"> - Large global coverage for vaccine safety and effectiveness across a diversity of populations, including pharmacovigilance after vaccine introduction - Emerging initiative, focused on COVID-19
	The Developing Countries Vaccine Manufacturers Network (DCVMN)	DCVMN Board composed of seven elected members	Donors Advisory Committee (DAC) advises DCVMN on donor-funded activities and has no executive role	<ul style="list-style-type: none"> - Voluntary alliance of 43 Manufacturers from 15 territories - encourages technology transfer initiatives
Surveillance and epidemic / public health intelligence	GLEWS/GLEWS+ (Global Early Warning System for Major Animal Diseases and Zoonoses)	FAO / WHO / WOAH (OIE)	Individual agencies	- Specific to high-threat zoonotic pathogens, cross-sectoral One Health approach
	GOARN	WHO	WHO	<ul style="list-style-type: none"> - Informal intelligence, coordinated with WHO global surveillance teams and GOARN primary rapid response activities
	IPSN (International Pathogen Surveillance Network)	WHO Pandemic Hub	GIZ	<ul style="list-style-type: none"> - Coordinated pathogen genomic sharing and analysis - Early-stage initiative
	Epidemic Intelligence from Open Sources (EIOS)	WHO (Pandemic Hub)	WHO	<ul style="list-style-type: none"> - Global all-hazards monitoring through innovative data and technology approaches - Dependent on individual member and partner engagement
RCCE and infodemic management	Collective Service	IFRC, UNICEF, WHO, GOARN	IFRC, individual agencies	<ul style="list-style-type: none"> - Strong presence before and during emergencies to inform and support community-led response - Limited geographical scope and presence
	Information Network for Epidemics (EPI-WIN)	WHO	WHO	<ul style="list-style-type: none"> - Direct collaboration with global community networks - Primarily focused on information sharing and messaging

