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What policy options arise from the independent panel reports?

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Financing collective global functions for pandemic preparedness and response following COVID-19: What policy options arise from the independent panel reports?

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Executive summary

COVID-19 has exposed significant gaps in the pandemic preparedness and response system, from leadership and accountability to the collective financing of global public goods. Policy proposals to address these gaps have recently been put forward by both the Independent Panel for Pandemic Preparedness and Response (IPPPR, commissioned by the World Health Organization) and the High-Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response (HLIP, commissioned by the G20). This paper seeks to compare and critically analyse the financing proposals put forward by the panels and discuss the implications of the various policy recommendations that arise.

In summary, the proposals from the IPPPR and HLIP report converge towards three core aims:

1. Strengthening the World Health Organization, both financially and as the central normative leader of the global health security system.
2. Increasing the finances available to fund global public goods for pandemic preparedness and response, at national, regional, and global levels.
3. Improving oversight and accountability of preparedness for and response to global health threats at an international level.

To these ends, the panels propose organisational and financial reforms to the WHO, a novel pooled financing mechanism to support collective functions for global health security that goes beyond official development aid, and a high-level, multilateral council or board to provide independent oversight, monitoring and accountability of the system and complementary to WHO. Together, these proposals would provide a framework for operationalisation, financing, and oversight of a variety of essential global health security functions including surveillance and alert; development, procurement and rollout of tools and technologies; health systems strengthening; and emergency response. This paper provides an in-depth analysis of the IPPPR and HLIP proposals pertaining specifically to eight collective global functions, a summary of which is highlighted in **Summary Table 1**. Core questions remain on which collective functions novel pooled finances should be mobilised towards, how pooled finances would be allocated, and which stakeholders from within the complex global health ecosystem should be involved in or lead the proposed mechanisms for operationalisation, governance, and accountability.

Table of abbreviations

Abbreviation	Meaning
ACT-A	Access to COVID-19 Tools Accelerator
CEPI	Coalition for Epidemic Preparedness Innovations
ERC	Emergency Response Coordination
GPG	Global Public Good
HIC	High Income Country
HLIP	High Level Independent Panel
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IFI	International Financial Institution
IMF	International Monetary Fund
IPPPR	Independent Panel for Pandemic Preparedness and Response
LMIC	Low- to Middle-Income Country
MDB	Multilateral Development Bank
PPR	Pandemic Preparedness and Response
R&D	Research & Development
RDB	Regional Development Bank
UN	United Nations
WHA	World Health Assembly
WHO	World Health Organization

Summary Table 1: Recommendations* arising from the IPPPR & HLIP reports

Function	Operational	Fiscal	Accountability
Norms & standards	Leadership by WHO & One Health partners	Unearmarked funding generated through increased member state contributions	WHO and Global Health Threats Council/Board
Surveillance and alert	Globally networked system led by WHO & One Health Partners	WHO core funding **AND/OR** earmarked funding generated from novel pooled resources	WHO & Global Health Threats Council/Board
Tools & technologies	Globally networked system led by WHO or CEPI **OR** Reinforced version of the existing R&D ecosystem	Private/public/philanthropic partnerships **AND/OR** novel pooled finances	**TBD**
Resilient national systems	National governments & regional actors supported by MDBs, IFIs, RDBs, etc.	Pooled finances **AND/OR** MDBs and IFIs (Directly or via grants managed by Global Fund or World Bank)	WHO **+/-** World Bank, IMF, **and/or** Global Health Threats Council/Board
Emergency response coordination	WHO	WHO core funding (**PLUS/MINUS** earmarked funds from pooled finance)	WHO
Surge financing for response	National governments & regional actors supported by MDBs, IFIs, RDBs, etc.	Pooled finance **OR** IFIs/MDBs	Global Health Threats Council/Board **OR** IMF
Surge finance for medical countermeasures	Pre-negotiated platform led by WHO, CEPI, or others	Private/public/philanthropic partnerships **AND/OR** Novel pooled finances	**TBD**
Independent oversight, monitoring and assessment	Global Health Threats Council **PLUS/MINUS** Global Health Threats Board **PLUS/MINUS** Independent Secretariat and Scientific Advisory Panel	**TBD**	Reports to UNGA **AND i**nternational community **PLUS/MINUS** G20

* **Grey areas** = Significant policy choices remain

Introduction

At the time of writing, COVID-19 has claimed 4.4 million lives and USD $11 trillion in response costs [1]. These devastating consequences have made it clear that there are significant and costly gaps in the global health security system, including chronic underfunding of pandemic preparedness and response (PPR). Many would argue that this picture was equally clear before COVID-19, however, with urgent calls for systematic overhauls to the global health system and its financing published following international epidemics of SARS (2003), MERS (2015) and Ebola (2014-2016) [2-5].

Amid a range of predictions that the frequency and severity of pandemic threats are due to increase in coming years [6], the remainder of 2021 provides a fleeting window for policymakers to enact change towards transforming the system. This report seeks to describe, compare, and critically analyse the different financing proposals put forward for this purpose by the Independent Panel for Pandemic Preparedness and Response (IPPPR) and the Report of the G20 High Level Independent Panel (HLIP) on Financing the Global Commons for Pandemic Preparedness and Response.

The IPPPR report, titled "COVID-19: Make it the Last Pandemic," was commissioned by the Director-General of the WHO in May 2020 and intended to provide "an impartial, independent, and comprehensive review of the international health response to COVID-19" as well as to "make recommendations to improve capacities for the future" [7]. Chaired by H.E. Ellen Johnson Sirleaf and the Rt Hon. Helen Clark, the report's scope was relatively broad and covered not only recommendations for financing (elaborated upon in a background paper authored by Elizabeth Radin and Chris Eleftheriades) but also elevated global health leadership, World Health Organization (WHO) strengthening, new systems of surveillance, pre-negotiated platforms for tools and supplies, and effective national coordination [8].

The HLIP report, titled "A Global Deal for Our Pandemic Age," was commissioned by the G20 in January 2021 to make specific recommendations for how "finance can be organised, systematically and sustainably, to reduce the world's vulnerability to future pandemics" [9]. Chaired by Tharman Shanmugaratnam, Lawrence Summers and Ngozi Okonjo-Iweala, the report covers finance-focused recommendations spanning global governance and pooled multilateral resources, resilient domestic financing for PPR, strengthening the WHO, financing of Global Public Goods (GPGs) and surge financing as core functions of the International Financial Institutions (IFIs), leveraging resources from all sectors and ensuring complementarity between them, and developing insurance solutions for adverse events caused by medical countermeasures.

Methods

This paper seeks to contribute to the academic and professional discourse around pandemic preparedness and response reforms in the pandemic preparedness and response system following COVID-19, by comparing and critically analysing the findings from two of the pre-eminent reports guiding public policy discourse. The IPPPR and HLIP reports were chosen for this analysis because 1) they devote significant attention to the issue of finance and 2) they were commissioned by two major stakeholders in global health (the WHO and the G20). These recommendations are therefore likely to be highly relevant in both in academic discourses and in policy making. We note that there are a number of other relevant reports in this area, but it went beyond the scope of this analysis to include these.

The analysis section of this report focuses specifically on finance recommendations that aim to prepare for and respond to future pandemic threats. We classified the financing recommendations from each report according to eight collective global functions, with the aim to link the reports' pandemic-focused proposals to broader essential functions a comprehensive system for global health security ought to achieve [10-12]. These functions, which also broadly align with the "Key Capacities and Functions of Preparedness and Response" identified by the Global Preparedness Monitoring Board (GPMB) [9], are named and defined in **Table 1.**

For each function, recommendations put forward by the IPPPR and HLIP reports are then further classified by mechanism using an adapted version of the framework proposed by Chang, Rottingen, Hoffman and Moon [13]. Out of 15 mechanisms put forward by Chang et. al, the proposals outlined in the two reports are classified using eight mechanisms, which are described in **Table 2**. The proposals were originally classified using all 15 mechanisms, and those mechanisms where there was redundancy between the classification of proposals, or no proposals could be classified, were removed for simplicity. An exploration of the legal and ethical implications of the panels' recommendations is also considered outside the scope of this analysis.

Table 1: Eight collective global functions of the global health system

Function		Definition
Norms & standards		Creation and enforcement of harmonised principles for the global health system that organisations, nations and other actors aim to follow.
PREPAREDNESS	**Surveillance & alert**	Development and utilisation of pathogen surveillance at scale and its real-time integration with public health, epidemiology, genomics, research, and clinical medicine in order to quickly and effectively alert relevant actors.
	Technologies and tools	Research and development of medical countermeasures and processes to facilitate their manufacture, regional scale-up and market-shaping.
	Resilient national systems	Implementation of health, social, and economic measures that bolster long-term pandemic preparedness at the regional and national systems level.
RESPONSE	**Emergency response coordination**	Systems to rapidly detect, respond to, and recover from emergency health threats, including detection, assessment, and response coordination.
	Surge finance for response	Rapidly deployable technical and financial support to allow regional and national bodies to respond to global health threats at the local level.
	Surge finance for medical countermeasures	Mechanisms aiming to facilitate rapid, effective, and equitable procurement and rollout of medical countermeasures at scale in an emergency situation.
Independent oversight, monitoring & assessment		Governance of the global health ecosystem through independent leadership, transparency and accountability between stakeholders, and assessment of outcomes against pre-specified goals and aims.

Table 2: Eight mechanisms to support the implementation of financing proposals for collective global functions

Operational Mechanisms	Fiscal Mechanisms	Accountability Mechanisms
Normative (referred to here as **Goals and Aims**): What are the aims of the proposed finance? Against which goals can the proposal be deemed to succeed or fail?	**Financing:** How are funds generated and mobilised?	**Accountability & Learning:** Because descriptions of accountability mechanisms are relatively limited in both the IPPPR and HLIP reports, all mechanisms pertaining to commitment, compliance, transparency, oversight, appeals, and organisational learning were classified as Accountability and Learning mechanisms.
Advisory: What information feeds into the decision-making process to operationalise the financing proposals?	**Financial** (referred to here as **Financial Governance**): how are the funds managed, organised, and governed?	
Administration: Where, how, and by whom should the administration activities required for the proposal be carried out?	**Funding** (referred to here as the **Allocation of Funds**): How are the funds allocated to different functions?	
Decision-making: Which bodies and procedures will be used to make future decisions for the proposal's operation?		

Once the recommendations from each report were categorised by collective global function, the proposals pertaining to each implementation mechanism of the above framework were directly compared. Similarities and differences between the IPPPR and HLIP reports were noted, as well of areas where the detail provided by one report was substantially greater than the other. Mechanisms that were not described at all by either or both reports were also noted, and policy recommendations derived from our analysis of the two reports are put forward to address areas of disagreement or missing mechanisms,

with a discussion of their potential implications. The recommendations put forward are not mutually exclusive, nor do they represent the full range of available policy options.

Analysis and results

FUNCTION 1: NORMS AND STANDARDS

Table 3: Summary of implementation mechanisms for norms and standards

Mechanism	HLIP & IPPPR Recommendations
Goals & aims	The reports agree that the WHO needs to be strengthened financially to carry out its core functions, and the WHO's mandate should focus on normative, policy and technical guidance in supporting countries to build capacity for PPR.
Advisory	Not discussed; will likely follow normal WHO policies and practices.
Administration	IPPPR goes into greater depth about WHO governance and structural reforms, as well as reforming the WHO mandate to focus on normative, policy and technical guidance. Footnotes of the HLIP report, however, indicate support for these reforms.
Decision-making	The IPPPR report covers significantly more depth and detail about the operational governance of finances and normative guidance within the WHO.
Financing	The reports contain significant agreement that increased financial independence for the WHO should come from fully unearmarked resources and an increase of Member State contributions to 2/3 of the WHO base programme with an organised replenishment process for the remainder of the budget. The HLIP report suggests that some of the novel multilateral financing raised for PPR (not allocated to a novel Fund/Facility) should also be used for this purpose.
Financial governance	Not discussed, will follow normal WHO policies and practices.
Allocation of funds	Not discussed, will follow normal WHO policies and practices.
Accountability	IPPPR suggests a Pandemic Framework Convention to be adopted within 6 months, to be facilitated by the WHO as a commitment and accountability mechanism.

Analysis

- **What is agreed?** Administration and decision-making on norms and standards should be tasked to the WHO. The WHO should be strengthened, both through structural reforms to its governance and mandate and through greater financial independence. Fully unearmarked resources should be financed through increased Member State contributions.
- **Where is there divergence?** The HLIP report supports many of the reforms suggested by the IPPPR but adds that novel pooled PPR financing could also be directed towards WHO strengthening. The IPPPR suggests a Pandemic Framework Convention as a novel mechanism for accountability that could be used to increase the power of the WHO in this role.
- **What's missing?** Absent from both reports is a discussion of financial governance and allocation of funding mechanisms related to the development of norms and standards as GPGs. However, it can largely be extrapolated from other proposals in the reports that it would be the responsibility of the WHO, supported by the WHA, to govern and allocate these funds.

Policy recommendations

1. Operational: Operational aspects of norms and standard setting would be delegated almost entirely to the WHO, who would be responsible for enacting the governance reforms outlined in the IPPPR report. This would include, among other reforms, streamlining the WHO's mandate to focus on normative, technical and policy guidance. It is noteworthy that both reports indicate that their funding proposals do *not* include the funding required for investments in One Health, especially at the country level. However, increased WHO funding could be used to at least prepare a joint work plan on One Health (as in World Health Assembly resolution WHA74.7 [14]) and to support the development by the WHO and its partners of a common One Health strategy [15].
2. Fiscal: The main policy option advocated by the reports is to increase WHO member state contributions to 2/3 of the WHO base programme, with a plan in place for replenishment of the remainder of the budget. This would involve increasing total member state mandated assessed contributions by a factor of approximately 2.5 over a defined period of time. The WHO would oversee the financial governance and allocation of these funds in order to pursue its mandate. Additionally, the HLIP report recommends that additional pooled global finance that does not go towards a novel Fund could contribute to WHO strengthening through a role in budget replenishment.
3. Accountability: One of the key mechanisms proposed to hold the WHO accountable for its role as the central normative body in PPR is a Pandemic Framework Convention, as outlined in the IPPPR report. This would increase the WHO's power to set standards on pandemic policy in particular, while acting as a compliance measure for member states and other actors.

Next steps

There is strong agreement between the IPPPR and HLIP reports around the operational and fiscal aspects of WHO strengthening to deliver on global norms and standards, which are echoed by other calls to use COVID-19 as an opportunity for WHO reforms [16]. As a result, actors in the global health system could reasonably act on these items in the imminent future. While mechanisms to hold actors in the system accountable to norms established by the WHO are largely covered under Function 8 of this report, it is notable that only the IPPPR calls for a Pandemic Framework Convention under the WHO. Future processes seeking to implement WHO reforms on norms and standards may need to further explore support for and resistance to a Pandemic Framework Convention in the international community and how its implementation would relate to other functions of the WHO and global health system.

FUNCTION 2: SURVEILLANCE AND ALERT

Table 4: Summary of implementation mechanisms for surveillance and alert

Mechanism	HLIP & IPPPR Recommendations
Goals & aims	There is strong agreement between the reports about the need for improved and globally-networked systems for surveillance of and early alerts for infectious threats with pandemic potential – with an emphasis on the role of the WHO and One Health organisations as leaders. Both reports also identify crucial roles for national and regional actors.
Advisory	The IPPPR also elaborates further on the WHO's advisory role pertaining to investigating emerging pathogens, publishing information, and declaring Public Health Emergencies of International Concern (PHEICs). The HLIP report contains less detail on these domains but does not put forward divergent or alternative recommendations.
Administration	The IPPPR report offers significantly greater depth about administration and decision making of such a system at the WHO level, detailing a new global system for surveillance based on full transparency, using state-of-the-art digital tools, and with appropriate protections of people's rights. The HLIP also outlines more explicitly the different non-WHO stakeholders and processes that would contribute to this networked system, referencing the G7 Pandemic Radar Report as a useful blueprint for administration.
Decision-making	
Financing	While the IPPPR background paper on finance explains that funds from novel pooled finance could be used towards surveillance capacities at domestic, regional, and global levels, there is a stronger focus on financing other aspects of preparedness. By contrast, the HLIP report emphasises global surveillance as one of the core public goods that novel pooled finances can and should be mobilised towards. Despite these differences, both reports agree that the WHO should govern the surveillance system itself, while financial governance could be overseen by a novel Council or Board tasked with managing pooled finances.
Financial governance	
Allocation of funds	Both reports indicate some role for WHO in allocating funds, as well as a newly-established multilateral Council or Board. Neither report gives extensive detail or direction on which actors funding for surveillance and alert would be allocated to, but several options across national, regional, and global levels are alluded to.
Accountability	Proposed mechanisms are largely covered under Function 8 – Independent Oversight, Monitoring and Accountability.

Analysis

- **What is agreed?** Both reports acknowledge that globally networked systems of surveillance and alert for infectious pathogens of pandemic potential are one of the key holes in the global system that needs to be plugged, with the WHO and One Health organisations as central actors. The IPPPR presents more detail on the administration, advisory and decision-making mechanisms that would operationalise this system at the WHO level, and the HLIP provides more detail about non-WHO actors that might be part of such a networked system.
- **Where is there divergence?** The key areas of divergence between the two reports are in the financing and financial governance of this function. The IPPPR suggests that pooled resources be directed primarily towards national and regional bodies, with some contributions to more global capacities that would otherwise be funded by the WHO. The HLIP suggests that funding for the globally networked system could be a core function of a novel pooled Facility, with contributions

to domestic surveillance funded through additional involvement of global health intermediaries, Multilateral Development Banks (MDBs) and IFIs.

- **What is missing?** How funds would be allocated from a pooled financing mechanism to implementing actors within the network is not addressed in either report. It could be that this function is delegated to another institution, such as the World Bank or the Global Fund to Fight AIDs, Malaria and Tuberculosis (referred to in this report as the Global Fund), but neither report takes a decisive stance on this.

Policy recommendations

1. Operational: The WHO and its One Health partners should lead the development (administration & decision-making) of a new and improved globally networked system of pandemic surveillance and early alert. The operational recommendations put forward by both reports are broadly aligned with the report commissioned by the UK presidency of the G7 [17], which calls for an "equitable global pathogen surveillance network… that can prevent and respond to emerging and endemic infectious diseases at speed and at scale." The G7 report, which could also act as a useful blueprint for implementation of the network, similarly recognises the WHO and its One Health partners as key stakeholders who can "enable the technical and other conditions for national participation to support coordination across the network and to ensure that its findings can be quickly incorporated into a coordinated global emergency response."
2. Fiscal – two options:
    a. Centralised global surveillance capacities should be financed by unearmarked funding provided to the WHO via increased Member State contributions, with domestic and regional capacities supported through novel pooled finance.
        i. **Advantages:** Well-established advantages of unearmarked WHO core funding could allow the WHO the independence and flexibility to follow its mandate and respond to the WHA, while remaining a central actor in the system [18].
        ii. **Disadvantages:** The use of unearmarked WHO finances could risk this GPG not being financed or weaken opportunities for accountability.
        iii. **Implications:** This option maintains the central leadership of the WHO in surveillance and alert, but risks these capacities not being actualised at the global level. Additional pooled financing is a good option for strengthening domestic/regional surveillance but would depend upon the priorities and capacities of the fund/facility managing pooled resources.

b. A transformed system of global surveillance should be financed largely by novel multilateral finance. Domestic surveillance in LMICs should be bolstered with additional multilateral support from MDBs, IFIs and global health intermediaries.
    i. **Advantages:** Earmarked funds from novel pooled finance can help ensure this GPG is financed, with the potential to provide an extra layer of accountability. Surveillance is also a compelling GPG to finance using global resources, because it is a "weakest link" good that requires cooperation from every single country for all to benefit [19].
    ii. **Disadvantages:** Earmarked funding from novel pooled finance risks eroding the WHO's central leadership role in surveillance and alert. The earmarked funding trend in global health finance might also weaken non-earmarked functions more generally [20].
    iii. **Implications:** This option provides purposeful funding and accountability for surveillance and alert. There might also be greater political will to support pooled funding for this function because of its "weakest link" nature.
c. Global and Regional Networks beyond national and WHO-level surveillance capacities can be independently financed, strengthened, and made part of a core WHO-led network.
    i. **Implications:** Some level of regional decentralisation might allow for innovative and diverse sources of financing to emerge, but the questions that would remain include: who would fund these, and what operational, governance and accountability mechanisms could be used to ensure coordination among different networks and sustainable funding? For example, it could be argued that the private sector can play a role in supporting LMIC capacity, but this makes sustainability a risk during periods when interest in pandemics is lower.

3. <u>Accountability:</u> Novel mechanisms (described under Function 8 of this report) to be incorporated into administrative and governance aspects of the global surveillance and alert system.

Next steps

The IPPPR's suggestions for operational changes at the WHO level seem to be broadly echoed by the HLIP and other reports, and processes to initiate these reforms could be acted upon in the near future. In terms of transformations to the global system for surveillance and alert and domestic, regional, and global capacity strengthening beyond internal WHO reforms, new operational mechanisms will likely be required to coordinate a transformed global network and integrate the work of existing partners at all levels with

the WHO and its One Health leadership. The G7 Pandemic Radar report specifically suggests an Implementation Working Group to take the lead determining the optimal normative, advisory, decision-making, and administrative mechanisms, with the WHO-led Global Influenza Surveillance and Response Network (GISRS) as a helpful model [17]. Challenges in implementation might arise from the need to harmonise operational mechanisms between organisations and partners enmeshed in the network, and next steps should include gathering relevant stakeholders in an Implementation Working Group to commence discussions around mechanisms that are feasible, actionable, and widely supported. A key question for this group will be:

- How can stakeholders ensure global surveillance networks link effectively to national surveillance, and avoid politisation or perverse incentives in global health reporting [21]? How can accountability mechanisms be leveraged to ensure accuracy and transparency at these linkages?

In terms of fiscal recommendations, one of the key remaining questions will be:

- How will novel funding, regardless of its source, be allocated to different implementing bodies within new and existing surveillance and alert networks? Which organisations will be tasked with this allocation, and what priority setting procedures will be used to determine which recipient bodies receive this funding? Can different tools for allocation be used to catalyse investment from other actors [22]?

FUNCTION 3: TECHNOLOGIES AND TOOLS

Table 5: Summary of implementation mechanisms for technologies and tools

Mechanism	HLIP & IPPPR Recommendations
Goals & aims	Both panels agree upon the need for improved capacity to develop, scale up, manufacture, and deliver medical countermeasures. The recommendations of the IPPPR report focus heavily on a pre-negotiated delivery platform, however, and lack clear guidance on research and development. The HLIP report, by contrast, gives more detailed recommendations on downstream R&D as a preparedness measure, identifying this as a role for both novel pooled finance and collaborative efforts between the public, private and philanthropic sectors.
Advisory	Not covered.
Administration	Not covered.
Decision-making	The HLIP report identifies roles for the Global Health Threats Board, national governments, international organisations, and the private/philanthropic sectors.
Financing	The IPPPR background paper on finance explains that funds from novel pooled finance could be used for global R&D of tools and technologies, but this is not one of its core functions. By contrast, the HLIP report directly recommends that "supporting research and breakthrough innovations that can achieve transformational change in efforts to prevent and contain future pandemics, complementing existing R&D funding mechanisms like CEPI" be funded by novel pooled finance (and overseen by the Global Health Threats Board).
Financial governance	
Allocation of funds	Allocation of funds for these purposes would include a mixture of push and pull incentives for contracts, weighted towards push contracts, recognising the need for incentives that promote investment in these technologies in the "inter-pandemic years" (HLIP). The HLIP also suggests that the public sector take on some of the downstream R&D that has social returns far greater than their commercial value, as well as research on non-pharmaceutical interventions like mask wearing, lockdown policies, and ventilation. Neither report gives concrete recommendations on which recipient partners/implementers funds would be allocated to, nor a priority setting approach to guide this allocation.
Accountability	Not covered.

Analysis

- **What is agreed?** All levels of the ecosystem to create and produce medical countermeasures require strengthening, from preparedness research and development (R&D) through to manufacture and pre-negotiated platforms for procurement and delivery.
- **Where is there divergence?** The IPPPR report sees funding for the research and development of tools and technologies as generally outside the scope of a new multilateral financing mechanism, while the HLIP sees R&D as a global public good that should comprise one of the core functions of a novel fund or facility.
- **What is missing?** Both reports are relatively lacking on advisory, administration, decision-making, and accountability mechanisms for pandemic R&D as a preparedness function. The HLIP report offers significantly more detail than the IPPPR, but neither describe in detail which implementing bodies funding could be allocated to nor how this approach would be determined.

Policy recommendations

1. Operationalisation: Because both reports lack recommendations on decision-making, advisory and administration mechanisms for new collaborative global systems of pandemic R&D, the establishment of any new platform or funding mechanism should be accompanied by dialogues about how this would be operationalised. One of the first necessary decisions would be which institutions should provide such tools. The Coalition for Epidemic Preparedness Innovations (CEPI) provides one compelling option[23-26].

2. Fiscal – two options:
    a. International actors could leave preparedness R&D outside the scope of novel financing mechanisms, to be funded through similar mechanisms as before COVID-19 – a mixture of public, private, and philanthropic sectors, as well as international organisations.
        i. **Advantages:** Little administrative effort would be required to establish new financing mechanisms, and this avoids crowding out the landscape.
        ii. **Disadvantages:** This option lacks centralised financial leadership to ensure systemic changes are made between pandemics, and few new incentives for GPG investments.
        iii. **Implications:** This policy option would leave much of the financial system for global pandemic R&D "as is," delegating decisions for future investments up to individual actors in a complex system. This uncertainty could be mitigated by the addition of a new mechanism whereby actors report on R&D investments under a coordinated framework, in a similar manner to the Consultative Group for International Agricultural Research [27].
    b. Designate novel multilateral funding secured through a pooled multilateral mechanism to fund research and breakthrough innovations through complementary mechanisms or direct contributions to organisations like CEPI.
        i. **Advantages:** Centralised funding for this purpose could increase accountability and ensure that progress is made in the R&D ecosystem. Delegating allocation to an existing organisation avoids crowding.
        ii. **Disadvantages:** This approach could disincentivise investments from other sectors and would require the development of novel allocation mechanisms. There might also be fewer incentives for HICs to support funding this particular

GPG with pooled finance because COVID-19 has not necessitated global approaches to provide tools and technologies (i.e., vaccines) in HICs in the same way it has for LMICs [28, 29].

iii. **Implications:** If complementary to existing organisations like CEPI, novel pooled finance could catalyse investment in research with large social returns and improve accountability.

3. Accountability: Whether the R&D ecosystem is transformed into a global network or left as is, policymakers ought to consider centralised ways to hold actors to account when financing for GPGs is spread across a complex landscape. If existing implementing organisations like CEPI are used, their accountability mechanisms could be leveraged for this purpose. Involvement of novel pooled finance would also allow the relevant governing council/board to provide some oversight.

Next steps

Because there remains a significant policy gap in the area of operationalisation, several options could be considered. For example, global R&D on pandemic-related tools and technologies could follow a consortium model, with collaborating organisations engaging in close collaboration, knowledge sharing, and network building in a similar way to the Consultative Group on International Agricultural Research [13]. Such decisions around normative, decision-making, administrative and advisory mechanisms will ultimately require an initial choice about which organisation(s) are best placed to take the lead coordinating reforms to the global system of pandemic preparedness R&D. It is also worth considering whether there is a role for an overarching blueprint, like that developed by the WHO for Pandemic R&D in 2016 [30]. This function could possibly be met by the Pandemic Preparedness Partnership from the G7 100 Days Mission Report [31]. Once this is established, sources of funding could be aligned with the level of coordination achieved. If equitable distribution of outputs is intended, pooled finance might be an appropriate source.

FUNCTION 4: RESILIENT NATIONAL SYSTEMS

Table 6: Summary of implementation mechanisms for resilient national systems

Mechanism	HLIP & IPPPR Recommendations
Goals & aims	The IPPPR recommendations for domestic health systems are slightly more holistic, touching on primary and community health services, social protection systems, and building trust with marginalised communities. The HLIP report is more focused on investments in global public goods, health security plans in line with the IHR, and the specific need for a focus on LMICs. There is strong agreement about the need for countries to scale up pandemic preparedness plans as a priority for strengthened domestic finance.
Advisory	The IPPPR report outlines that national and subnational decision making should be evidence-based and draw upon inputs from across society, while the HLIP report points more specifically to findings from the HSAP, JEE, SPAR, and GHS* Index to guide health security finance.
Administration	Not covered, but largely implied to be a role for national governments.
Decision-making	There is strong agreement between the panels that a whole-of-government approach is necessary, and decision-making on pandemic preparedness should be elevated to the highest level of government through designated coordinators.
Financing	When it comes to pandemic preparedness in LMICs, the reports differ quite substantially on the recommended source of funding. The IPPPR suggests that pooled multilateral funding could be used for this purpose, naming a novel Facility's Preparedness Window as a key opportunity. The HLIP report, by contrast, suggests that domestic financing by national authorities must remain the primary source of funds for domestic systems strengthening, augmented by external financing support from IFIs and MDBs. Grant financing from novel pooled finance could provide additional external support, and the Global Health Threats Board would be tasked with incentivising joined-up actions. The HLIP notes that MDBs and IFIs have existing mechanisms to support funding allocation, but neither report discusses how funds from novel pooled finance would be allocated.
Financial governance	
Allocation of funds	
Accountability	The IPPPR report proposes that the Global Health Threats Council would be responsible for country-level accountability, and the HLIP report notes that any funding used must drive progress on accountability for global health outcomes while not creating duplicative or onerous structures for reporting. Governments should clearly define and track budgetary expenditures on outbreak preparedness and progress towards IHR targets.

*Health Security Assessment Program, Joint External Evaluation, Service Provision Assessment Survey, Global Health Security

Analysis

- **What is agreed?** Both reports are strongly aligned in their goals and aims, as well as in some of the core principles underpinning operationalisation for this function. For example, the reports agree that there is a need for elevated leadership and whole-of-government approaches to strengthen pandemic preparedness systems at the domestic level.
- **Where is there divergence?** The HLIP report gives more detailed advisory mechanisms, outlining specifically which reporting mechanisms should guide decision-making. There is also significant divergence around fiscal mechanisms, with the IPPPR report suggesting a significant role for pooled multilateral finance and the HLIP suggesting complementary roles shared between grants from pooled funding and significant input from IFIs in LMICs.
- **What's Missing?** With the exception of administration, all eight mechanisms are detailed to some extent in both reports, and there is more written about accountability for this function than others. A possible explanation for this is the established need for accountability between

multilateral financing bodies and recipient national governments in the global health and development space [32].

Policy recommendations

1. Operational: Countries around the world should respond to the call for whole-of-government PPR approaches at the domestic level, with elevated leadership ensured through the appointment of national coordinators and collaboration between health and finance ministries. Health security decision-making at this level should be guided by inputs from international health systems metrics as well as the active stress testing of preparedness systems. Where the MDBs, IFIs, or a novel international facility are involved in financing, the operational mechanisms of those institutions can also play a role in operationalisation.
2. Fiscal – three options:
    a. Use novel pooled resources as a primary tool for scaling up investments in preparedness at the country level.
        i. **Advantages:** The use of a pooled fund financed through fair burden-sharing to strengthen health systems in LMICs would be a progressive way to promote equitable global PPR outcomes [33]. The use of a novel fund, instead of IFIs, might also benefit a broader range of recipient countries [34], and a single stakeholder approach to financial governance could streamline operationalisation.
        ii. **Disadvantages:** The use of novel pooled finances might disincentivise other stakeholders – including national governments and the private sector – from investing in domestic preparedness. There could also be start-up costs and delays involved in establishing a new fund, as compared to leveraging existing mechanisms through MDBs. Domestic support might also be one of the least attractive GPGs for HICs to consider funding through pooled finance, because direct benefits to recipient countries make it a "best effort" GPG for which the benefits to one country could actually exceed the costs of provision [19].
        iii. **Implications:** This is an attractive approach for its relatively simple financial governance and progressive nature but could lack political incentives. The resources for operationalisation might also be better provided by existing institutions.

b. Reform MDB and IFI mandates to include pandemic preparedness through International Bank for Reconstruction and Development (IBRD) lending, dedicated pandemic windows in IDA, and other innovative financing mechanisms.
    i. **Advantages:** Making use of existing operational mechanisms through MDBs could mitigate delays in implementation [35]. These institutions are also well placed to raise capital on global markets and incentivise member country investments [36].
    ii. **Disadvantages:** Relying on MDBs and IFIs will limit the influence of new governance bodies on the funding of domestic preparedness, and might mirror more traditional development aid instead of a solidarity-centred GPG financing effort [37]. Calling on MDBs to expand their mandate could also draw funding away from other crucial development functions.
    iii. **Implications:** This proposal would draw upon strengths of existing organisations, but risks neglecting domestic preparedness if MDB and IFI mandate reform isn't achieved.
c. Use novel pooled finances to support complementary grants to the work of MDBs, administered by existing organisations and coordinated by a global Council/Board.
    i. **Advantages:** Making use of existing financing mechanisms to deliver grants through organisations like the Global Fund or World Bank could also mitigate delays and contribute considerable expertise and operational mechanisms [38-40].
    ii. **Disadvantages:** Delegating too much responsibility to other actors could risk a centralised Council or Board losing oversight and priority setting power in the global system. This might also result in task overlapping or inter-agency tension.
    iii. **Implications:** This recommendation could draw upon the strengths of existing organisations while adding complementary pooled financing dedicated to country-level preparedness. A challenge will be actualising strong inter-agency coordination.

3. <u>Accountability – several options:</u>
    a. Accountability mechanisms to be determined and implemented by a Global Health Threats Council.

b. Clearly defined and tracked budgetary expenditures for pandemic preparedness to be reported to the Organisation for Cooperation and Development (OECD) and WHO.
c. International Monetary Fund (IMF) to undertake regular reviews of economic resilience for PPR as part of Article IV.
d. Establish a Health Security Assessment Program (HSAP) through the World Bank and WHO that can help reinforce domestic actions toward national preparedness systems.
e. Have Regional Development Bank (RDB) Boards ask for each implementing institution's strategy to support pandemic preparedness and reduce risks.

For any of the above options, decision-makers should consider whether any of these mechanisms alone are enough to ensure national commitment in PPR investment, or if multiple mechanisms will be necessary. It will be important to make these metrics relevant to stakeholders and avoid redundancy.

Next steps

Recognising the large scope of increasing domestic preparedness capacities at a global scale, policymakers will need to consider the amount of funding required when determining the roles of novel pooled finance and the IFIs. For any of the above options, it will also be necessary to consider how novel funds will feed into or complement domestic funding streams and what priority-setting mechanisms will be used to allocate them (either directly or through grant administration partners like the Global Fund or World Bank). This process will also require clarity around which countries, at which income levels, the funding will be used for. Other questions that remain to be explored are:

- What is the role of matching mechanisms to incentivise investment from national budgets? Will external funding or matching funds crowd out national budgets for health (with negative impacts on other health investments)?
- How can external investments be linked to ongoing national priority setting processes?
- Are there any ways to use global funding mechanisms to incentivise private financing at the national level?

FUNCTION 5: EMERGENCY RESPONSE COORDINATION

Table 7: Summary of implementation mechanisms for emergency response coordination

Mechanism	HLIP & IPPPR Recommendations
Goals & aims	While the HLIP does not provide significant detail on mechanisms for Emergency Response Coordination (ERC) as a global collective function towards which funding should be directed, the report expresses agreement with the IPPPR's recommendations for WHO reforms, which do cover ERC. In particular, the IPPPR report recommends that the international community "empower WHO to take a leading, convening, and coordinating role in operational aspects of an emergency response to a pandemic… while also ensuring other key functions of WHO do not suffer including providing technical advice and support in operational settings."
Advisory	As above, this would likely fall to the WHO, potentially through the Health Emergencies Programme and its existing operational structures.
Administration	
Decision-making	
Financing	This would likely be financed directly through the WHO's budget. The HLIP's estimates on financial resources needed by the WHO includes replenishment of the Contingency Fund for Emergencies (CFE).
Financial governance	As above, this would likely fall to the WHO.
Allocation of funds	As above, this would likely fall to the WHO.
Accountability	Not described.

Analysis

- **What is agreed?** While many mechanisms are not explicitly mentioned for Emergency Response Coordination (ERC) in either report, this function is clearly delegated to the WHO in the IPPPR report's recommendations and the HLIP indicates support for these recommendations.
- **What is missing?** There is very little mention in either report of how the international community might hold the WHO to account for its ERC capacities.

Policy recommendations

1. Operational: Include in any structural & governance reforms of the WHO a clarified mandate for the Health Emergencies Programme including both what its responsibilities include – leadership, coordination, and technical advice – and what they don't (procurement, surge finance, etc.).
2. Fiscal: Financing to come from the WHO core budget, likely through unearmarked replenishment of the WHO's Contingency Fund for Emergencies. Additional financing could potentially come from novel pooled resources for institutional strengthening that are not dedicated to a multilateral fund, in order to finance this as a GPG. Either way, the WHO would be at the centre of both financial governance and the allocation of funds.
3. Accountability: There is likely scope here to recommend, alongside other structural and governance reforms of the WHO, novel accountability mechanisms and processes to ensure this particular function is sustainably financed and achieving its goals and aims. This could include a dedicated body for fiscal audits, mandated outcomes reporting, or peer and civil society reviews.

Next steps

WHO decision-makers working on organisational reforms resulting from the IPPPR report recommendations should carefully consider the WHO's role in ERC when revising and streamlining the organisation's mandate, with a specific focus on functions the ERC program should *not* be expected to carry out because they can be met by other actors and organisations in the global health system. Actors considering novel funding sources for both the WHO and Global Health Threats more generally ought to consider whether the WHO's ERC capacities need more funding than the core WHO budget can provide, and where any additional finances should come from. Both mandate and financial reforms should be accompanied by considerations of accountability, likely as part of broader discussions around Function 8 from this report. The WHO should be the leader of these conversations and primary implementer.

FUNCTION 6: COUNTRY-LEVEL SURGE FINANCING FOR RESPONSE

Table 8: Summary of implementation mechanisms on surge finance for response

Mechanism	HLIP & IPPPR recommendations
Goals & aims	Both panels provide recommendations for improved, at-ready surge financing mechanisms that would allow countries to rapidly respond to future pandemics.
Advisory	Anticipated to happen at the level of national governments.
Administration	Not Covered.
Decision-making	See Financial Governance & Allocation of Funds.
Financing	The financing recommendations from the IPPPR report, and its background paper on Financing in particular, proposes that surge financing for future pandemics would come from new international pooled finance. This would be a single instrument with two funding windows, of which one would be dedicated to rapid response financing for which funds could be borrowed against future years' contributions. By contrast, the HLIP report does not recommend that surge financing be derived from pooled multilateral funding, but instead be placed under the mandate of the World Bank and IMF whose capacity for rapid market borrowing would be better suited for this function.
Financial governance	As a result of the divergent recommendations on where surge financing should come from, the recommendations on governance and allocation also differ significantly. The HLIP report recommends delegating these functions to the World Bank and the IMF. For example, it would be the World Bank's responsibility to support countries to participate in pooled procurement systems for medical countermeasures through guaranteed access to simplified lending programs. The IPPPR background paper on finance, by contrast, suggests that surge financing and its allocation be governed by the proposed multilateral Global Health Threats Council, assisted by prearranged response plans for most likely scenarios and triggered by a PHEIC. The money would be delegated to existing institutions working in specific response capacities.
Allocation of funds	
Accountability	See Function 8.

Analysis

- **What is agreed?** There is a need for new mechanisms to provide large-scale surge finance for rapid response in the event of future pandemics.
- **Where is there divergence?** The IPPPR report sees surge finance as a role for new pooled PPR finances. The HLIP sees this instead as a role for IFIs like the World Bank and the IMF. This has implications for financial governance and the allocation of funds, with the IPPPR suggesting the Global Health Threats Council be responsible for governance, allocation, and accountability, and the HLIP delegating some of these functions to existing MDBs and IFIs.
- **What is missing?** There is very little written in either report about administration and advisory functions, and the HLIP report lacks some clarity on accountability mechanisms for IFIs.

Policy recommendations

1. Operational: Call for whole-of-government response approaches at the domestic level, with elevated leadership via national coordinators and collaboration between health and finance

ministers. Where IFIs or novel pooled resources are involved in financing, their institutional mechanisms will also play a role in the operationalisation of the surge financing function.

2. Fiscal – two options:
    a. Use novel pooled multilateral resources to finance surge response to pandemic threats at the country level. This could be done using a single instrument with two funding windows (one each for preparedness and response).
        i. **Advantages:** The advantages of using pooled funding for surge response are largely the same as for domestic preparedness: it's a globally progressive approach, support can go to a broader range of countries than traditional MDB recipients, and a single primary funding source streamlines operationalisation. Moreover, the fund's dedicated PPR focus could help ensure this function is not sidelined by other IFI priorities.
        ii. **Disadvantages:** Especially in the early years of its implementation, a novel fund for global health threats might not have the same capacity as the IFIs to mobilise rapid, automatic, and siseable funding, especially under circumstances of uncertainty. There is also a risk that using pooled finance for this purpose could duplicate some functions IFIs already aim to provide. Finally, as with domestic preparedness, this could be a challenging GPG to rally support for through pooled finance because the benefits to any one recipient country could exceed the costs of providing the good [19].
        iii. **Implications:** This is an attractive opportunity to leverage collective, dedicated PPR funding in times of crisis, but might be a challenging sell to decision-makers that this GPG should be collectively funded.
    b. Enable fast-tracked surge financing by the IFIs in response to a pandemic, including the relaxation of lending limits and IDA allocation ceilings, simplified crisis windows, and support for safety net responses during periods of lockdown. This could also allow countries to participate in pooled procurement mechanisms for countermeasures.
        i. **Advantages:** Use of existing IFI financing mechanisms could mitigate delays in actualising these recommendations and rapidly raise capital for this function [36]. Use of established institutions will also streamline operationalisation and accountability.
        ii. **Disadvantages:** Relying on IFIs could limit the influence of new governance and oversight bodies on the funding of domestic response and might function

as more of a traditional aid model. Existing limitations of IFIs, generally and in response to COVID-19, also ought to be considered [41].

iii. **Implications:** This proposal could utilise strengths and resources of existing organisations and be implemented quickly, without the administrative burden of new finance.

3. Accountability – two options:
    a. Delegate accountability to the Global Health Threats Council or Board, especially if funding comes from a novel pooled funding Facility.
    b. Use IMF assessments and existing mechanisms employed by IFIs for accountability and advisory functions.

Next steps:

The primary area of divergence on implementation for surge response lies in the area of fiscal mechanisms. With regards to international sources of additional surge financing to support LMICs in particular, the primary policy choice that must be made is whether surge finance for country responses ought to be a role for novel pooled finance or existing organisations like the IMF. The decision on this issue will influence which stakeholders take responsibility for operationalisation, financial governance, allocation of funds, and accountability. Either way, implementers will also need to ask how these funds will feed into and complement domestically financed funds for response as well as specific surge financing streams for regional or global responses like procurement and rollout of medical countermeasures.

FUNCTION 7: SURGE FINANCE FOR GLOBAL PIPELINES OF MEDICAL COUNTERMEASURES

Table 9: Summary of implementation mechanisms on surge finance for medical countermeasures

Mechanism	HLIP & IPPPR Recommendations
Goals & aims	Both panels agree on the need to learn from the experiences of ACT-A and establish pre-negotiated platforms for the rapid and equitable delivery of medical countermeasures. The IPPPR proposes transforming ACT-A into a truly global end-to-end platform for vaccines, diagnostics, therapeutics, and essential supplies. The HLIP report calls for a 100-day goal for the development, production, and deployment of effective countermeasures for future pathogens and ever-warm and sustainably financed manufacturing capacity and includes this goal as both a function of novel pooled finance and a role for partnerships between the private and philanthropic sectors.
Advisory	Not covered.
Administration	This part of both reports is relatively lacking. Both reports broadly outline lessons learned from COVID-19 and the current gaps that exist in the system, describing principals and goals that ought to guide operationalisation of a transformed ACT-A to fill them. The HLIP report is slightly more specific on this front, outlining guidance for how contracting could be undertaken (through bidding) and a pooled financing program for insurance against adverse events (administered through MDBs). Otherwise, advisory, administration and governance mechanisms for a future version of ACT-A are not discussed.
Decision-making	Not covered and would likely depend on which implementing organisations assume a leadership role over new and transformed systems.
Financing	The IPPPR report calls for strong financing to come from IFIs, RDBs, and other public and private financing organisations. The panel's background paper on Finance does suggest that a new financing Facility *could* contribute to tools and technologies (including procurement and R&D), but this is not recognised as a core function. By contrast, the HLIP report directly recommends that improvements to the supply ecosystem be funded by novel pooled finance.
Financial governance	The HLIP recommendations are that financing from novel multilateral sources, and its allocation, will be overseen by the Global Health Threats Board. IPPPR does not suggest mechanisms for financial governance beyond the broader PPR oversight of the Global Health Threats Council.
Allocation of funds	Not covered but will likely involve a policy choice between the Global Health Threats Board/Council or a second level allocation structure within the countermeasure network. Allocation can include both push and pull contracts.
Accountability	The HLIP report notes a critical need for transparency of contracts and in particular, with regard to pricing. Otherwise, mechanisms to ensure accountability across a transformed network or future ACT-A are not described in depth in either report.

Analysis

- **What is agreed?** It is agreed that all levels of the ecosystem for countermeasures require strengthening, from R&D through to manufacture and pre-negotiated platforms for procurement and delivery. This is aligned with the G7's 100 Days Mission for pandemic response [31].
- **Where is there divergence?** The IPPPR report seems to see funding of future mechanisms for the procurement and rollout of medical countermeasures as generally outside the scope of a new multilateral financing mechanism, while the HLIP sees this as one of the core functions of novel pooled finance in collaboration with the public, private, and philanthropic sectors.
- **What is missing?** Both reports are relatively lacking on advisory, administration, decision-making, and accountability mechanisms for new pre-negotiated platforms for procurement and rollout.

Policy recommendations

1. Operational: Both panels agree broadly upon the need to build a future version of ACT-A that is supported by an ever warm, end-to-end ecosystem for the 100-day process of developing, manufacturing, and delivering effective countermeasures for future pandemics. One of the first steps in operationalisation would require agreement upon a coordinator, both for initial implementation dialogues and for the eventual establishment of the platform. This decision would then guide which agencies become responsible for the administrative, advisory, and decision-making mechanisms for operationalisation and building necessary multistakeholder relationships across public, private, and philanthropic sectors. Coordinating agencies should also ask: what operational characteristics, based on the lessons learned from ACT-A, will be essential to ensure a new platform succeeds in delivering countermeasures against future pathogens faster and at scale? This should involve a consideration of the existing structure of ACT-A and its strengths and weaknesses [42, 43], as well as the Strategic Review of ACT-A expected later in 2021. Other relevant questions include: Is there a role for WHO to convene, as it did for ACT-A, supported by different agencies for each of its sub-functions? Or is this a leadership role better suited for an organisation with more implementation capacities, like CEPI? The advantages of expanding CEPI's mandate to act in this role are previously outlined under Function 3.
2. Fiscal – Two Options:
    a. Leverage funds from national and regional surge finance, IFIs, RDBs, and other public, private, and philanthropic financing to support a future version of ACT-A. To act upon this recommendation, more concrete responsibilities for the multitude of collaborating stakeholders would need to be agreed upon. This would require, first and foremost, designated stakeholders to oversee financing, financial governance, and funding allocation.
        i. **Advantages:** This recommendation would require future dialogues and negotiations to establish multi-stakeholder fiscal mechanisms under a coordinated network model in line with goals for operationalisation. The relative flexibility of this option will enable stakeholders to take onboard future lessons learned as ACT-A continues its work [44].
        ii. **Disadvantages:** The need for further dialogues to generate and mobilise funds for a future ACT-A risks delaying action when the next pandemic arises. Multi-

stakeholder finance can also make operationalisation, cooperation and oversight difficult [45].

iii. **Implications:** This proposal would require significant future decision-making and could present fiscal challenges if financing is not well-networked.

b. Mobilise pooled financing to provide a critical layer of multilateral support for a new, permanent, end-to-end supply ecosystem delivered through a global network of public-private-philanthropic partnerships. Financial governance and allocation of multilateral funding would then fall largely under the mandate of the Global Health Threats Board/Council.

i. **Advantages:** This option provides centralised financing that would likely be more straightforward to operationalise and hold accountable than a networked multi-stakeholder approach like ACT-A. This option also allows for burden-sharing that could address some of the global equity concerns arising during COVID-19 [33].

ii. **Disadvantages:** This option might disincentivise investments from other sectors and would require upfront administrative effort, especially if political will among HICs is low.

iii. **Implications:** Would provide streamlined collective financing mechanisms and ensure this function is actualised, while promoting global solidarity and accountability. Pooled funding would also align with the joint multilateral nature of a collaborative platform.

Next steps

The recommendations put forth will likely require future processes that bring together relevant stakeholders and make a series of key policy decisions, including which actors will lead implementation and what operational mechanisms will allow this collective effort to succeed, what level of financial cooperation will match the level of organisational collaboration achieved, and what accountability mechanisms are suitable for a such a complex, multistakeholder process. Beyond operational and fiscal cooperation, coordinated procurement and allocation will be essential drivers of equitable delivery in future versions of ACT-A.

FUNCTION 8: INDEPENDENT OVERSIGHT, MONITORING AND ASSESSMENT

Table 10: Summary of mechanisms for independent oversight, monitoring and accountability

Mechanism	HLIP & IPPPR Recommendations
Goals & aims	Both panels call for the establishment of new bodies charged with independent oversight, accountability, and monitoring of the global health security ecosystem. The HLIP echoes the IPPPR call for a Global Health Threats Council to be established by the UNGA but supplemented by a finance-focused Global Health Threats Board (G20+) and an independent secretariat.
Advisory	According to the IPPPR report the GHTC would carry out several advisory functions, monitoring progress towards the goals and targets set by WHO as well as against new scientific evidence and international legal frameworks. The GHTC would then report on a regular basis to the United Nations General Assembly and the World Health Assembly. The HLIP report gives complementary advisory functions to the Global Health Threats Board, which would be tasked with identifying key financing priorities to be addressed by the Global Health Threats Fund, using findings from scientific assessments, country-level PPR scores and a global health risk map.
Administration	The IPPPR report describes a system of leadership operationalised through the adoption of a Pandemic Framework Convention within the next 6 months, using the powers under Article 19 of the WHO Constitution and complementary to the IHR. The panel also calls for a political declaration by Heads of State and Government under the auspices of the United Nations General Assembly and the creation of a Global Health Threats Council (GHTC). The HLIP report agrees with this recommendation and proposes a Global Health Threats Board to match the tightly networked global governance of the GHTC with financial governance. The Board would oversee the Global Health Threats Fund, which would be established as a Financial Intermediary Fund (FIF) at the World Bank. The World Bank would perform treasury functions and could also leverage contributions on the market.
Decision-making	As outlined in the IPPPR report, the GHTC membership would be endorsed by a UNGA resolution and be led at the Head of State and Government level with other relevant non-state actors to ensure equitable gender, regional and generational representation. The Global Health Threats Board, outlined by the HLIP, will comprise a G20+ group of countries and major regional organisations, with participation from both health and finance ministers. The Board should be supported by a permanent, independent Secretariat, drawing on WHO resources and other multilateral organisations. While these actors are designated as decision-makers for oversight and accountability, no procedures for priority-setting are outlined.
Financing **Financial governance** **Allocation of funds**	Little is described in either report about how the oversight mechanisms themselves (the GHTC and the Global Health Threats Board) would be financed.
Accountability	The IPPPR report indicates it would fall to the GHTC to hold actors accountable for pandemic preparedness and response efforts, including through peer recognition or scrutiny and the publishing of analytical progress status reports. To monitor domestic preparedness in particular, the IPPPR report suggests that the WHO formalise universal periodic peer reviews on national PPR against IHR targets, and the HLIP report calls for the establishment of a new Health Security Assessment Program (HSAP) that could be led and coordinated by the WHO and World Bank for the same purpose. The IPPPR report also calls for multisectoral active simulation exercises on a yearly basis as a means of ensuring independent and regular evaluation. The HLIP adds that the Global Health Threats Board will ensure coordination and joint accountability of the key organisations involved in PPR from a financial perspective and make available progress reports to G20 leaders as well as to the UN General Assembly. These reports should include the allocation and usage of funds by the Global Health Threats Fund, as well as reliable and transparent reporting of investment outcomes. The Board should also promote post-crisis reviews of responses, especially at the national level, to inform PPR plans.

Analysis

- **What is agreed?** Goals and aims are closely aligned between the two reports: both panels call for the establishment of new bodies for independent oversight, accountability, and monitoring of the

global health security ecosystem. The HLIP echoes the IPPPR call for a Global Health Threats Council to be established by the United Nations (UN) General Assembly.

- **Where is there divergence?** The IPPPR calls for a Pandemic Framework Convention and designates financial governance of a new pooled funding mechanism to the Global Health Threats Council (GHTC). The HLIP does not echo a call for a Framework Convention and calls for the creation of both a GHTC and a complementary but distinct Global Health Threats Board for financial governance at the G20+ level. The HLIP report also calls for the creation of an Investment Board based within the World Bank to oversee the Global Health Threats Fund (pooled multilateral financing mechanism) and gives more concrete recommendations on how the global health system and domestic systems strengthening efforts can be monitored.

Policy recommendations

1. <u>Operational – Two options:</u>
    a. Financial oversight to be tasked to the Global Health Threats Board at the level of G20, working in close collaboration with the Global Health Threats Council.
        i. **Advantages:** This would create a dedicated body for financial governance, working closely with the GHTC to align financial priorities with strategic aims. It would bring together health and financial expertise and major G20 funders [33].
        ii. **Disadvantages:** The creation of a Board for finance could risk duplicating functions and crowding a policy space the Council is fit to manage alone. A G20 focus might also exclude important LMIC voices from financial leadership [46].
        iii. **Implications:** A dedicated body for coordinated financial oversight could have significant benefits, but also runs the risk of crowding the space.
    b. Global Health Threats Council established at the UN level, comprising heads of government, to be the sole oversight body for both political and financial governance.
        i. **Advantages:** This elevates the issue of PPR financing to the highest level of government and should allow for alignment of financial goals with other strategic aims. Establishment through the UN could help ensure representativeness.
        ii. **Disadvantages**: If the council is too large and over-stretched with responsibilities, financial governance could suffer.
        iii. **Implications:** This would be a streamlined global governance mechanism, but risks overburdening one group to the detriment of financial oversight.

2. Fiscal: The operationalisation of either of the above two options will require a discussion of how the basic administrative functions and human resources of these bodies will be financed, including start up costs. One suggestion is that start-up costs be largely financed by the G20.
3. Accountability: Whichever type of oversight body is ultimately implemented, accountability mechanisms should include the publishing of analytical progress reports and their presentation to the UN General Assembly (+/- the G20). To assess the global system, the IPPPR suggests that the WHO instate multisectoral active simulation exercises on a yearly basis as a means of ensuring continuous risk assessment and follow-up action to mitigate risks, cross-country learning and accountability and establish independent, impartial, and regular evaluation mechanisms. This could feed forward into decision-making as an advisory mechanism. At the individual country-level, two options for transparency and monitoring of progress towards IHR standards arise from the reports:
    a. WHO to formalise universal periodic peer reviews on national PPR against WHO targets.
        i. **Advantages:** Maintains independent authority of the WHO, and single-stakeholder oversight could be more efficient.
        ii. **Disadvantages:** Adds more burdensome work to an already under-funded and overstretched WHO [47].
        iii. **Implications:** Achieves an important function if done well but could be problematic if under-resourced. There also remains scope to add compliance measures and opportunities for appeal within WHO processes. For example, a Director General with more authority and independence (as the panels call for), could use public 'call outs' of non-adherent countries as political pressure (guided by additional civil society reporting), or assign institutional consequences such as the suspension of WHA voting rights [16]. Finally, appeal and dispute resolution mechanisms could be put in place to allow relevant stakeholders to request further information on WHO oversight.
    b. Establish a new Health Security Assessment Program (HSAP) that could be led and coordinated by the WHO and World Bank with its findings in the public domain, seeking to assess preparedness under IHR (WHO) norms and standards.
        i. **Advantages:** Adds World Bank resources and expertise to the project (which could be synergistic with other assessments carried out by the World Bank), while maintaining a central role for the WHO.

ii. **Disadvantages:** Could potentially threaten the perception of the WHO as the central authority on norms and standards and lead to task-overlapping or inter-institutional tension regarding role sharing.
iii. **Implications:** Could provide important support from the World Bank to assessments against WHO standards, but stakeholders should be careful to reinforce central role of the WHO.

Next steps

There is strong agreement between the panels about the need for a dedicated, independent body to ensure oversight and accountability across the global health system. Its operationalisation will necessitate answering the central policy question of whether a single, UN-based Council is sufficient for this function, or if an additional G20+ Board for financial governance is necessary. A later policy question will involve how the work of these bodies ought to be funded, and which specific accountability mechanisms can best achieve sound monitoring and oversight at the domestic and global levels. The framework proposed by Chang, Rottingen, Hoffman and Moon subdivides accountability mechanisms into five categories: commitment, compliance, transparency, oversight, and appeal mechanisms [13]. The IPPPR and HLIP reports both briefly mention commitment mechanisms when considering the engagement of countries with their proposed oversight bodies (the GHTC and the Board), and the IPPPR mentions compliance in reference to the more binding elements of the proposed Pandemic Treaty. Both call for increased transparency and oversight through monitoring and reporting to different levels of governance, but neither mention in any capacity appeal mechanisms by which members of international bodies can request formal explanations or second opinions of decisions made.

Other relevant questions to be asked of a novel governance body will include:

- Will these bodies deal only with pandemics, or other global health threats more broadly? Should One Health oversight fall under their mandate?
- What are the impacts of introducing a new Council and/or Board for the broader global health and UN systems? What are the risks of duplication, fragmentation, and tension?
- What operational mechanisms will support the WHO's role in and relationship to the Council or Board, either through an independent Secretariat or otherwise?
- Should this new body be tasked with assessing existing financing options for PPR before looking to the creation of a dedicated Fund/Facility?

Conclusion

This report sought to compare and critically analyse the IPPPR and HLIP report proposals on PPR financing. The analysis has highlighted areas of agreement and explored different advantages, disadvantages, and implications that could frame decision-making where there is divergence. A summary of the key findings and recommendations is presented in **Table 11** and **Figure 2**.

While decision-making around processes for each function must consider the relative need for cooperation and the nature of different GPGs, their implementation in the real-world will also demand contextual analysis of challenges to feasibility and actualisation. This could include challenges garnering political buy-in from a heterogenous group of countries that have had vastly different experiences with COVID-19, or the politicisation of discourse around global health security. A related question to this would involve asking which countries are most likely to buy-in, and what the implications would be for the identity, effectiveness, and accountability of a given mechanism if only a small subset of global players take part. Considering these and other challenges, policy makers should prioritise the functions that most urgently require global cooperation and that can provide the backbone upon which all of the other functions will be built: financing (both domestic and multilateral), norms and standards (through strengthened WHO finance), and independent oversight, monitoring, and assessment (through a multilateral governance body). Strengthening the WHO by increasing assessed contributions to the organisation's core budget in particular is an area where there is strong agreement between the panels and genuine potential for efforts that are truly multilateral within a UN-based forum. As a result, capitalising on the political moment of COVID-19 to move this recommendation forward is particularly crucial. These functions would then provide a scaffold of norms, standards, governance, and accountability to support a novel financing mechanism capable of funding GPGs across the preparedness and response spectrum.

Several central questions are visible in both the two reports and span across recommendations for various PPR functions. These include, for example, a discussion of whether mechanisms for operationalisation, financing, or accountability of any given function ought to be carried out by a new organisation/mechanism or added to the re-enforced or expanded mandate of an existing body. Another is the question of whether any given GPG would be more effectively financed by novel pooled finances, existing financing mechanisms like MDB lending, or a combination. Yet another question is whether central oversight of a given function by one stakeholder is preferable to a partnership or consortium model, and the relative decision-making power of national governments versus international organisations, global health intermediaries, and the private and philanthropic sectors. Finally, a question

that arises for nearly all of the collective global functions asks what priority-setting mechanisms could be used to guide allocation of either novel or existing finances to advance global health security. Establishing ways to consider and address these broader, cross-cutting questions among global health policymakers (institutions and countries) will be important in allowing progress on several collective global functions to move forward.

While some divergence and uncertainty remain when considering fiscal options arising from the IPPPR and HLIP reports, significant agreement on both underlying principles and concrete policy solutions across a range of crucial global functions provides an optimistic starting point for transformations to the global health security system. The IPPPR and HLIP reports agree in no uncertain terms, for example, that the time to act is now, the collective global functions we need are known, and a recognition of our mutual interdependence is critical to better preparing for and responding to future pandemic threats.

Table 11: Recommendations* arising from the IPPPR & HLIP reports

Function	Operational	Fiscal	Accountability
Norms & standards	Leadership by WHO & One Health partners	Unearmarked funding generated through increased member state contributions	WHO and Global Health Threats Council/Board
Surveillance and alert	Globally networked system led by WHO & One Health Partners	WHO core funding **AND/OR** earmarked funding generated from novel pooled resources	WHO & Global Health Threats Council/Board
Tools & technologies	Globally networked system led by WHO or CEPI **OR** Reinforced version of the existing R&D ecosystem	Private/public/philanthropic partnerships **AND/OR** novel pooled finances	**TBD**
Resilient national systems	National governments & regional actors supported by MDBs, IFIs, RDBs, etc.	Pooled finances **AND/OR** MDBs and IFIs (Directly or via grants managed by Global Fund or World Bank)	WHO **+/-** World Bank, IMF, **and/or** Global Health Threats Council/Board
Emergency response coordination	WHO	WHO core funding (**PLUS/MINUS** earmarked funds from pooled finance)	WHO
Surge financing for response	National governments & regional actors supported by MDBs, IFIs, RDBs, etc.	Pooled finance **OR** IFIs/MDBs	Global Health Threats Council/Board **OR** IMF
Surge finance for medical countermeasures	Pre-negotiated platform led by WHO, CEPI, or others	Private/public/philanthropic partnerships **AND/OR** Novel pooled finances	**TBD**
Independent oversight, monitoring and assessment	Global Health Threats Council **PLUS/MINUS** Global Health Threats Board **PLUS/MINUS** Independent Secretariat and Scientific Advisory Panel	**TBD**	Reports to UNGA **AND i**nternational community **PLUS/MINUS** G20

* **Grey areas** = Significant policy choices remain

Figure 2: Financing global public goods

Green = Global governance functions, Blue = Preparedness functions, Orange = Response functions

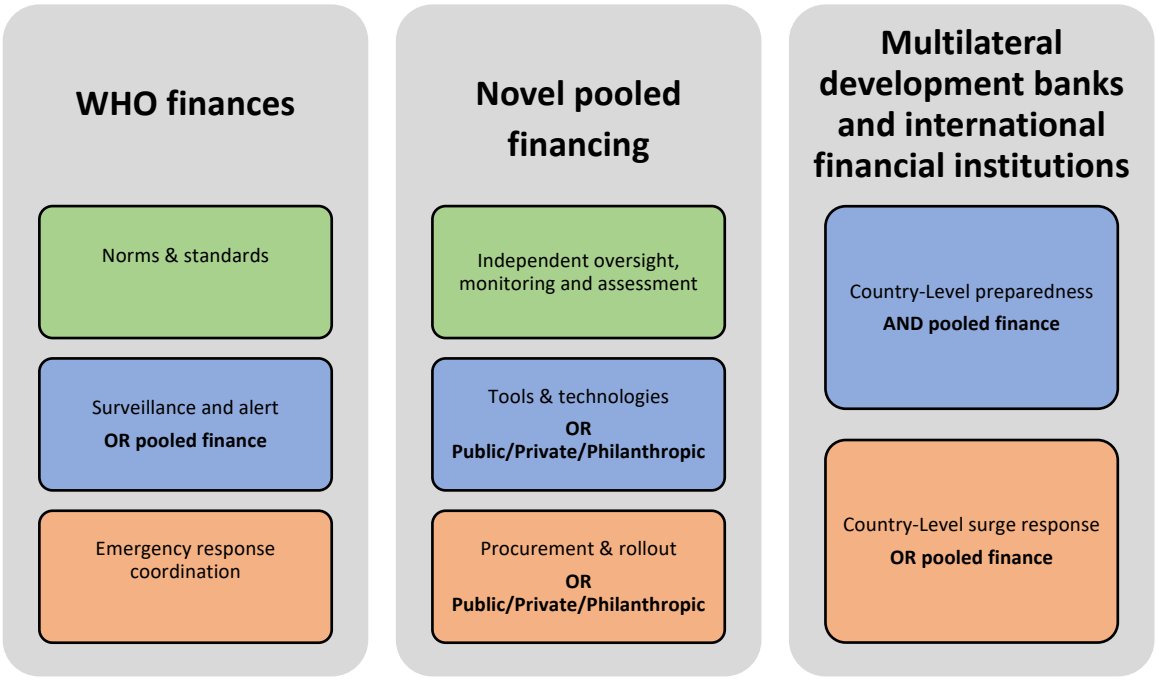

Figure 2 – Funding sources for global public goods. This graphic depicts the eight collective global functions for PPR discussed in this brief, grouped vertically by primary source of funding.

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