



Improving global pandemic preparedness by 2025

Policy paper

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Summary

A series of expert panel reports published in the last six months have explored in detail how the world can be better prepared for future pandemics. Wellcome's view is that the biggest impact on future global preparedness can be achieved by ensuring that recommendations are taken forward in three key areas:

- Improving global coordination and leadership;
- Providing a sound financial footing for pandemic preparedness and response; and
- Investing in the gaps in infrastructure to monitor and respond to threats.

Without progress on these most important areas it will be harder to ensure that the world is ready for the next major global health threat. There are no panaceas, but targeted interventions in these areas will help address the weaknesses that Covid-19 has exposed. These interventions must be integrated into the existing global health architecture and be useful all the time, not only in a pandemic response.

Meanwhile, the Covid-19 pandemic has also resurfaced questions about how the architecture for global health can best serve the world's needs in broader contexts. Leaders will need to address these questions in the longer term, and in the meantime ensure that the essential work of key organisations is fully supported.

Background

The world was not ready for Covid-19. Despite the repeated warnings over the last 20 years offered by SARS, H1N1, Ebola, Zika, MERS and others, global prevention and preparedness for a pandemic was not strong enough. The necessary global structures to support the world to respond to this crisis were not in place, leading to a patchwork of ad hoc solutions and an absence of global leadership. In short, the world should have been better prepared, and must be more ready for next time. The political focus that Covid-19 has provided presents an opportunity to dramatically improve preparedness, but progress must be made on the most important areas.

The current Covid-19 pandemic is far from over, and the global focus on responding to it must not be lost. We have produced a second policy paper on navigating the current pandemic during 2021 and 2022, including through equitable vaccine dose sharing, which should be read alongside this document.

But even as the world continues its battle with the current pandemic, leaders must now look ahead to how the world can be better prepared in the future. SARS-CoV-2 was not the first virus to create a global health emergency, and it will not be the last. Next time, we must be better prepared.

Four major expert reviews on pandemic preparedness were published in 2021:

- The Independent Panel for Pandemic Preparedness and Response (IPPPR) – [“Covid-19: Make it the last pandemic”](#) (May 2021)
- Pandemic Preparedness Partnership report to the G7 (PPP) – [“100 days Mission to respond to future pandemic threats”](#) (June 2021)
- G20 High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response (HLIP)¹ – [“A Global Deal for our Pandemic Age”](#) (July 2021)
- Pan-European Commission on Health and Sustainable Development (**Pan-European Commission**) – [“Drawing light from the pandemic: a strategy for health and sustainable development”](#) (September 2021)

Each of these panel reports provides a wealth of analysis and information, and we have included a summary table that compares their recommendations in more detail as an annex.

In this paper we have selected the biggest themes from those reports and provide some commentary and advice as the recommendations from them are taken forward. National health systems, policies and decisions remain the foundation of responding to outbreaks and form a crucial part of ensuring that the world is fully prepared. Our focus here, however, is on issues that can be tackled through international collaboration, reflecting the momentum on this that the Covid-19 pandemic has brought.

1. Improving global coordination and leadership

The problem

Until Covid-19 forced the issue, **pandemic preparedness was not a priority** for too many nations, especially high-income countries. This is a root problem that has held back international collaboration on preparedness in the past and during the current crisis.

The structures needed to coordinate the global response were not in place. Meanwhile, the global health organisations and structures that do exist—such as the WHO— did not have the mandate, funding, or political support to act quickly and at scale.

While pandemics are cross-border events that inherently require collaboration between countries, the actions of many countries in the current pandemic have been driven by what they see as their **national self-interest**. Leaders have struggled to tackle the global response to Covid-19 while simultaneously trying to protect their own countries, which has created **a vacuum of global leadership and strategy**. Many high-income countries supported international efforts to procure Covid-19 vaccines, and yet still bought up large proportions of the global supply for themselves well into 2022.

¹ Wellcome provided the secretariat for the HLIP, working with the US National Academy of Medicine. Wellcome’s Director Jeremy Farrar was an Advisor to the Panel.

Ultimately, the politics of pandemic preparedness is much harder than the science. **The dominant force in global politics remains the agenda of high-income countries**, many of whom had been spared from the impacts of Ebola, SARS and MERS.

Priorities for progress

Pandemic preparedness and response must retain its elevated place on the political agenda. Given the cross-border nature of pandemics, new structures must be created to fill the gaps in multilateral coordination and provide a focus for countries to look beyond their immediate domestic interests.

There is a strong consensus from the four recent panel reports that new structures are needed to ensure the global coordination of pandemic response:²

- The IPPPR report recommended the creation of a **Global Health Threats Council**, established by a UN resolution, led at a Head of State level, and with broad representation from state and non-state actors as members.
- The PPP, HLIP and Pan-European Commission reports all include proposals for a **Global Health Board**, operating at a lower level than the IPPPR's Council and potentially working alongside it. The PPP report recommended that a Board be set up under the G20 and report annually to health and finance ministers. It would be responsible for coordinating an international response when a public health emergency is declared. Meanwhile the HLIP report recommended that a Board at Ministerial level should provide financial oversight, ensuring enhanced financing and effective use of funds. The Pan-European Commission report concluded that a Board with a broader scope should be established to provide a better assessment of the social, economic, and financial consequences of health-related risks, and to scale up private finance for health.

Wellcome's advice

As leaders consider the detail of proposals for a Global Health Threats Council and Board, we offer the following advice:

- While governments consider the options proposed, this must lead to progress rather than paralysis – steps to achieving improved global coordination is better than no progress at all.
- The work of the Council and Board must be focused rather than all-encompassing, recognising where others are best placed to lead. For example, they should not duplicate WHO's normative, standard-setting and regulatory functions for global health.
 - A Council would provide the peer recognition and scrutiny to hold actors accountable for progress towards the preparedness and response targets set by WHO and to maintain political commitments.
 - A Board would provide systematic financial oversight for the effective use of funds and enhanced global financing for pandemic preparedness and response.

² For further details see the accompanying summary table of panel recommendations in the Annex

- There should be a strong role for low- and middle-income (LMIC) governments in any new structures, to bring legitimacy and experience and expertise of tackling epidemics, and to ensure that decisions made improve preparedness across different contexts.
- The new structures require an independent monitoring body and access to independent expert advice on scientific, public health and economic issues. A Council or Board should also commit to act on assessments and expert advice it receives.
- A Council or Board should work through the existing global health architecture, such as WHO, the Global Fund, Gavi, CEPI, and not duplicate their work or activities.
- Progress on establishing a Global Health Threats Council and/or Board should go hand-in-hand with establishing a new financing mechanism (see below) as improved governance is necessary but not sufficient to solve this problem.

2. Providing a sound financial footing

The problem

Political priorities and reliable funding streams go hand in hand. Much as there has been insufficient political momentum in the past, the system for financing global preparedness and response is fragmented, overly-reliant on Official Development Assistance (ODA) funding streams, and not able to move quickly in a global crisis, despite this being in the interest of all countries to stop a pandemic. This **fragmented system** is not conducive to decisive action at the scale required to keep pace with the threat of emerging viruses.

Structures for mobilising pooled funds for global public goods for preparedness and response were not in place for Covid-19. Instead, the response relied on **assembling small amounts of money from a large number of sources**, which is inefficient and slow. There are no reliable financing mechanisms for funding global public goods for pandemic preparedness and response, such as the development of vaccines on an international scale.

During the current pandemic, over \$18 billion was raised through the ACT-Accelerator,³ a partnership of global health organisations to accelerate access to the Covid-19 countermeasures needed to end the pandemic everywhere. Establishing ACT-A in just a few months was a significant achievement, but the need to design a solution at such pace highlights **the lack of long term solutions that are fully functional before crises hit**.

Assembling financing during a crisis also means that **money is directed to the immediate response rather than longer term investment in prevention**. As a result, the costs of responses are orders of magnitude higher than adequately funding preparedness. By the end of 2021, Covid-19 will have cost governments an estimated US\$11 trillion.

³ As of 15 October 2021

Priorities for progress

It is crucial that financing for pandemic preparedness and response is put on a secure footing for the future.

In September 2021, the US announced \$250 million of seed funding to establish a new financing mechanism, a Financial Intermediary Fund (FIF), for pandemic preparedness. This followed calls for new financing mechanisms for preparedness in the panel reports:

- The IPPPR report proposed an **international pandemic financing facility** to raise additional reliable funding for preparedness and for rapid surge financing, raising contributions of US\$5–10 billion annually through contributions based on an ability-to-pay formula. The proposed Global Health Threats Council and/or Board would then allocate funding from this facility to existing regional and global institutions.
- The HLIP report focused specifically on pandemic financing. It recommended a new **Global Health Threats Fund** to mobilise an additional US\$10 billion per year and structured as a FIF with the World Bank acting as treasury. Crucially, contributions from countries should go beyond their ODA budgets, and not divert funds from other health and development priorities. It would be governed independently of the World Bank by an Investment Board, with members drawn from the fund's contributors. The Fund would distribute funding to global and regional organisations and networks and would not be an implementing organisation or only work bilaterally with countries. The HLIP report also recommended making financing of global public goods part of the core mandates of the World Bank and other multilateral development banks (MDBs), which would increase the range of sources to support this important gap.

Wellcome's advice

There is a strong case for pooled investment because all countries will benefit from global public goods for preparedness and there is an advantage in working together to create them. This would support key gaps in infrastructure for global preparedness and response, such as expanded global surveillance, and research into medical countermeasures, their supply and delivery.

As leaders consider how best to put pandemic preparedness on a firm financial footing, we offer the following advice:

- The creation of the new FIF must not come at the expense of their commitment to key parts of the global health architecture such as WHO, Gavi, the Global Fund, and CEPI. These organisations provide critical services in global health and must be fully financed and sustained. CEPI's replenishment target for their next five-year strategy is \$3.5 billion. Governments, industry and funders must deliver on this replenishment, while also building a more solid financial footing for preparedness over the longer-term.
- Contributions should be additional to existing commitments for health through ODA, and come from outside of ODA budgets, so not to compete with other critical health and development priorities.
- Contributions should be made in proportion with ability to pay, and proposals should be developed alongside plans for strengthening political decision-making and accountability, such as the GHTC (see above).

- The FIF's scope should remain focused on addressing critical gaps in the financing of pandemic preparedness, including research and development (R&D), and not duplicate the functions of other initiatives.
- The World Bank and other MDBs have a unique role in supporting countries to invest in global public goods for preparedness, as well as leverage private sector investment. This could be achieved through increased grant and concessional financing, as recommended by the HLIP report, alongside the accompanying technical assistance to countries. The IMF and World Bank are also well-placed to provide rapid financial support to countries in the event of health crises. As recommended by the HLIP report, country and regional investments in global public goods for preparedness should become part of the IFIs' core mandates, as well as pandemic response windows to allow fast-tracked financing. To ensure this increased focus does not come at the expense of other development priorities, the shareholders should replenish IFIs as needed.

3. Investing in the infrastructure to monitor and respond to threats

The problem

When the Covid-19 pandemic arrived, **the world did not have the right infrastructure in place to respond.** Speed matters during an outbreak and we must ensure everything that can be done in advance, has been done. Without infrastructure that was 'ready to go' it was impossible to stop the initial outbreak from becoming a pandemic.

The earliest possible recognition of a novel pathogen is critical to containing it. There are currently too many **global 'dark spots'** where new viruses cannot be identified and there is a lack of real-time data sharing on emerging threats. **Inadequate global surveillance** was exacerbated during the Covid-19 pandemic by insufficient information and data sharing, hindering the global response in the face of new variants.

At the start of the Covid-19 pandemic, very little was known about the virus, even less how to diagnose, treat and prevent it. However, the global community was 'lucky' in many aspects, as scientists were able to build on substantial existing research on coronaviruses, such as vaccines for MERS and new mRNA platforms. As a result, multiple vaccines were developed, approved and manufactured in record time. **Next time, the world may not be so lucky, and we must be prepared for all plausible scenarios.** For example, there are no WHO-approved diagnostic tests for 6 out of the WHO's 10 priority diseases. Much more work is needed to ensure the global R&D base is ready for future outbreaks.

The concentration of knowledge and manufacturing capacity in a small number of countries was also a major contributing factor to the slow and inequitable global response to the Covid-19 pandemic. Six months into the Covid-19 pandemic, global demand for ventilators and face masks was ten times higher than supply. Even 21 months on, PPE and oxygen cylinders and concentrators remain in grossly short supply. The global distribution of vaccines has shown both a lack of global manufacturing capacity but also that existing capacity is concentrated in a small number of countries

with large populations. This has contributed to an extremely uneven and inequitable distribution of vaccines globally.

Covid-19 also underlined the importance of collaboration for the R&D, procurement and delivery of vital countermeasures such as vaccines, diagnostics and therapeutics. The inequity caused by vaccine nationalism is politically inevitable without a system for radically scaling up manufacturing capacity, production, procurement, delivery and coordinating R&D efforts.

Priorities for progress

The necessary infrastructure includes **global surveillance, R&D in infectious diseases, manufacturing for countermeasures, strong immunisation systems, and an ecosystem of people and knowledge needed to make it work.**

- The panel reports agree on the need for a **global surveillance and alert system**, and the central role the WHO should play in overseeing such a system. The IPPPR report highlighted the importance of speed and incentivising ‘precautionary action’ over the current bias towards inaction. Both the IPPPR and PPP reports stress the need for transparent, unhindered information sharing, and the role ‘state-of-the-art digital tools’ can play in speeding up the global distribution of information. Meanwhile, the WHO is leading a process to turn the global pandemic radar proposal supported by the G7 into reality — the International Pathogen Surveillance Network.
- Commitments are needed to transparency and data sharing to make this work. It is only through a network of global collaboration and infrastructure that the international community will be able to identify and contain emerging pathogens, treat people and ultimately prevent the next pandemic. A global surveillance network will spot potentially dangerous infections and act as a pandemic early warning system, bringing together relevant data from many different sources around the world and with WHO at the centre. This real-time information will also be an invaluable resource to speed up the development of tools like vaccines and diagnostics.
- The panel reports also highlight the need for **greater and longer-term investment in R&D**. The IPPPR report recommended focusing on the WHO’s R&D blueprint priority disease list, with further prioritisation of diseases with the greatest epidemic potential. ‘Libraries’ could then be created of diagnostics, therapeutics, and vaccines (DTVs) for the pathogens most likely to cause future pandemics. The PPP report outlined a mission to have safe and effective DTVs available globally in the first 100 days of a pandemic. They also recommended expanding CEPI, which focuses on vaccines, to also provide and coordinate global R&D funding for therapeutics and diagnostics for diseases with pandemic potential.
- There is agreement across the IPPPR, PPP and HLIP reports that the role played by the ACT-Accelerator in **scaling up end-to-end global supply chains for countermeasures is important and needed in a pandemic**. The IPPPR recommended transforming the current ACT-A into a truly end-to-end platform for DTVs and other essential supplies. Meanwhile the PPP report calls for a mechanism to procure and distribute DTVs but advises against making ACT-A permanent. The HLIP report suggests a new structure should build on the lessons learned from ACT-A.
- The PPP and HLIP reports highlight the need for **geographically diverse ‘ever-warm’ manufacturing capacity** and suggest this is funded via a risk-sharing model including public, philanthropic and private participation. The IPPPR report recommended establishing strong

regional capacities for manufacturing as part of a coordinated global network. The IPPPR report specifically calls for manufacturing capacity of mRNA and other vaccines to be built in Africa, Latin America and other low- and middle-income regions.

Wellcome's advice

As leaders look to fix the gaps in the key infrastructure, our advice on R&D is that:

- To guarantee that surveillance, R&D and manufacturing infrastructure is maintained, it must be useful and used between pandemics. This kind of infrastructure needs to be working all the time – not just reactively after a crisis has erupted – and to monitor and respond to outbreaks of endemic diseases. It will only work if national leaders have ownership of it and are committed to the transparency and openness in sharing the information they collect with the world.
- There is a need for a body focused on equitable and collaborative R&D programmes to deliver a full range of countermeasures, such as DTVs, available to respond to a pandemic. It would need to work with industry as well as global health organisations and have equitable access to its products at its heart. CEPI has led to huge advances for vaccines R&D, and this approach could be expanded within CEPI into other countermeasures, diseases and platforms. A number of organisations in the current global health system have relevant capabilities, but they are not easily brought together. Our experience with Covid-19 has shown the weakness of these capabilities being dispersed across organisations who compete for funding.
- In addition to specific R&D for the development of countermeasures, we also need more social science and ethics research on best practice for preparing for and responding to pandemics. This includes behavioural research to improve communication and testing and rollout of countermeasures and other essential pandemic public health interventions. This has been a big gap in the past.
- There is potential to build commitments on manufacturing into the potential pandemic treaty and/or future international legal frameworks, such as attaching conditions for licensing and technology transfer to public funding of R&D and supporting the WHO's regional hubs for vaccines. These hubs could be established in countries with small populations so that politically inevitable national demand could be met quickly, such as in Singapore, Rwanda, Senegal, Denmark, Switzerland and Costa Rica.

The future of global health architecture

The Covid-19 pandemic has resurfaced questions of how the architecture of global health can best be arranged to support the global response to a broad set of health threats.

Many of the key actors in the current global health ‘system’ are focused on tackling infectious disease, and this ‘vertical’ approach has led to outstanding success. In the last 20 years, disease or supply-specific programmes such as those for polio, Gavi, the vaccine alliance, and the Global Fund to Fight AIDS, Tuberculosis and Malaria, have saved millions of lives globally. The newer addition of CEPI is already creating impact as the only vaccine R&D funder which links its investments against emerging infectious diseases to equitable access. To increase the chance of successful Covid-19 vaccines, CEPI has built a deliberately diverse portfolio of candidates, of which two have WHO Emergency Use Listing.⁴

The existing ecosystem of global health bodies developed organically over many years, shaped by the legacies of 20th century challenges. There has been enormous progress in saving lives and increasing access to medical innovations, but inefficiencies, complexity and fragmentation remain when the system is viewed as a whole. To be fit for the future, we will need a more coordinated and integrated approach to improving people’s health where the actors and components — political will, funding, and infrastructure — work together as a system.

There are many important questions to consider as we look to the future:

- How can we ensure low- and middle-income country and regional leaders play a greater a role in the leadership and accountability mechanisms for global health?
- How can we maintain the outstanding success of the ‘vertical’ global health system, which focuses on tackling specific infectious diseases, while providing more coordination of a fragmented landscape?
- How can we ensure that there is sufficient investment across global health system overall, including WHO, with the flexibility to meet global needs while staying in touch with donor priorities?
- How can we ensure that the regular cycle of replenishment for key organisations such as Gavi, CEPI and the Global Fund appropriately balances the risk of ‘donor fatigue’ against the need to reflect political cycles?

Understandably, current action is focused on incremental reforms rather than an overhaul of the system. But in the longer term, attention must turn towards tackling these questions, and creating a more strategic alliance for global health that is dedicated to a stronger, faster, smarter and more equitable system to tackle the challenges we all face.

⁴ Vaccines developed by University of Oxford and AstraZeneca, and Moderna.

Annex - Panel Recommendations Comparison

This section compares the recommendations of the four main expert reviews on pandemic preparedness published in 2021: the Independent Panel for Pandemic Preparedness and Response (IPPPR); 100 Days Mission to response to future pandemic threat – a report to the G7 by the pandemic preparedness partnership; G20 High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response (HLIP); and, the Pan-European Commission on Health and Sustainable Development.

This table compares the recommendations over seven main themes: global architecture, pooled financing for global public goods (GPGs), International Financial Institutions (IFIs)/ Multilateral Development Banks (MDBs), medical countermeasures, surveillance, domestic financing and preparedness, and immediate asks. It is not an exhaustive list of all the recommendations and focuses on those that are aimed global systems and structures to improve pandemic preparedness and response.

Theme	Sub-theme / objective	IPPPR (May 2021)	UK G7 Pandemic Preparedness Partnership (June 2021)	G20 HLIP (July 2021)	Pan-European Commission (September 2021)
Global architecture	Building political will and accountability	<p>Global Health Threats Council led at a Head of State level and with membership of state and non-state actors. It will:</p> <ul style="list-style-type: none"> - Maintain political commitments - Monitor progress towards the goals and targets set by the WHO - Guide the allocation of resources by the proposed new finance facility - Hold actors accountable including through peer recognition and/or scrutiny <p>Adopt a political declaration by Heads of State at UNGA committing to transforming pandemic preparedness and response.</p>	<p>A Global Health Board should be set up under the G20 and report annually to health and finance ministers (propose discussion for purpose of Board for Oct 2021).</p> <p>Suggestion for set up: 3 CSAs and finance deputies of the incumbent, previous and successive G20 presidencies, One Health orgs, GF, Gavi, CEPI, IMF, WB. Independence within board to hold govts, industry and international orgs to account. Chaired by WHO.</p> <p>When a PHEIC⁵ is declared the Board would coordinate international response and take a decision on standing up a network of international orgs (similar to ACT-A).</p>	<p>Global Health Threats Board for systemic financial oversight, to ensure enhanced and predictable global financing for pandemic prevention, preparedness and response (PPR) and effective use of funds.</p> <p>Establish an independent scientific advisory panel, to provide system-wide analysis of emerging health threats and advice based on the best available science. Transform the GPMB into this independent advisory panel.</p> <p>This Board will complement the Heads of State level Global Health Threats Council that has been proposed by IPPPR. The Board will aim to match tightly networked global health governance with financing.</p>	<p>Establish a Global Health Board under the auspices of the G20, to promote a better assessment of the social, economic and financial consequences of health-related risks, and to scale up private finance for health. It should comprise representatives of finance and health ministries and should include countries from outside the G20. This Board will be compatible with Global Health Threats Council proposed by IPPPR.</p>

⁵ Public Health Emergency of International Concern. The IHR Review Committee did not recommend that an intermediate level of PHEIC is introduced.

Theme	Sub-theme / objective	IPPPR (May 2021)	UK G7 Pandemic Preparedness Partnership (June 2021)	G20 HLIP (July 2021)	Pan-European Commission (September 2021)
	Role of WHO and other agencies	<p>Focus and strengthen the independence, authority and financing of the WHO.</p> <ul style="list-style-type: none"> - More earmarked resources from member states, fees should account for 2/3 of WHO budget - Resource regional offices sufficiently for country support on PPR - Strengthen the governance and independence of the Director-General, including having a single term of office of seven years with no option for re-election, and the same rule for Regional Directors. 		<p>Strengthen financing for the WHO and One Health and put it on a more predictable footing.</p> <p>Agrees with IPPPR that assessed contributions should be increased to 2/3 of budget</p>	A reformed and strengthened WHO must remain the key pillar of global health governance. WHO must retain the ability to declare a public health emergency of international concern.
	Legal and regulatory issues and processes	<p>Future declarations of a PHEIC should be based on the precautionary principle.</p> <p>WHO to be given the explicit authority to publish information about outbreaks with pandemic potential, without the approval of national governments.</p> <p>Develop a Pandemic Framework convention to address gaps in the international response, clarify responsibilities and establish legal obligations and norms.</p>			A pandemic treaty is agreed that is truly global, enables compliance, has sufficient flexibility and entails inventive mechanisms that encourage governments to pool some sovereign decision making for policy making areas.
Pooled financing for global public goods		Create an international pandemic financing facility to raise additional reliable funding for pandemic preparedness and for rapid surge financing. Should mobilize long term (10-15yr) contributions of approx. US\$5-10bn annually , with	WHO, governments and INGOs should work to set the 'rules of the road' for pandemics including a DTV financing facility with pre-negotiated and advance commitments.	Establish a Global Health Threats Fund . Dedicated fund amounting to US\$10bn per year , based on pre-agreed contributions, to support and catalyse investments in GPGs for pandemic prevention and preparedness. Structured as a	Increase the share of development finance spent on GPGs and managing long standing cross border externalities.

Theme	Sub-theme / objective	IPPPR (May 2021)	UK G7 Pandemic Preparedness Partnership (June 2021)	G20 HLIP (July 2021)	Pan-European Commission (September 2021)
		<p>contributions based on ability to pay formula.</p> <p>The Global Health Threats Council will allocate and monitor funding from this facility. Funding will go to existing regional and global institutions, which can support the development of pandemic preparedness and response capacities.</p>		<p>Financial Intermediary Fund at the WB, which would provide treasury functions. Governance of the Fund will be independent of the WB, under an Investment Board, which could be also be constituted as a committee of the Global Health Threats Board.</p> <p>Serve to support a few major global actions:</p> <ol style="list-style-type: none"> 1. Building a transformed global network for surveillance 2. Providing stronger grant financing to country and regional investments in GPGs 3. Ensuring enhanced and reliable funding to enable public private partnership for development, manufacturing and delivery of countermeasures 4. Support research and breakthrough innovations 	
IFIs/MDB	Preparedness financing	IMF to include pandemic preparedness in Article IV assessments.	<p>IMF to explore expanding Article IV consultation with member countries to include a pandemic preparedness assessment. The assessment should draw on the analysis and expertise of others, including the Global Health Security Agenda and WHO.</p> <p>MDBs should continue to support investment to strengthen and prepare health systems as part of their core day-to-day business.</p>	<p>Make financing of GPGs part of the core mandates of WB and other MDBs.</p> <ol style="list-style-type: none"> 1. Revise mandates 2. WB to set IBRD lending and performance targets for pandemic prevention and preparedness 3. WB to establish dedicated pandemic prevention and preparedness window in expanded IDA 4. IDA support should seek in incentivise domestic investments through grant matching to LIC governments 	<p>Enhance the surveillance role of multilateral financial institutions to support investing in health. Includes adopting actions modelled on the IMF's Article IV consultations.</p> <p>Incorporate health related considerations into business strategies and risk management frameworks.**</p> <p>Strengthen surveillance powers of WHO, including assessment of preparedness. These assessments should feed into monitoring by IMF,</p>

Theme	Sub-theme / objective	IPPPR (May 2021)	UK G7 Pandemic Preparedness Partnership (June 2021)	G20 HLIP (July 2021)	Pan-European Commission (September 2021)
				<p>5. MDBs to explore greater leveraging of their shareholder capital, G20 to commission an independent review</p> <p>Preparedness should be reflected in IMF Article IV reports.</p>	<p>development banks, and other technical and financial institutions.</p> <p>Governments which are major shareholders in multilateral bodies to ensure both that the volume of lending from MDBs is expanded and that health issues are given high priority**.</p>
	Surge financing			<p>Enable fast-tracked surge financing from the IFIs in response to a pandemic.</p> <ol style="list-style-type: none"> 1. WB to continue to support countries to participate in pooled global procurement mechanisms 2. WB to scale up its capacity to help countries establish a safety net surge response 3. Access to MDB crisis response windows to be simplified and made more automatic 4. IMF to establish a pandemic response window 	
Domestic Financing and preparedness		WHO to set new and measurable targets and benchmarks for pandemic preparedness and response capacities.		<p>Develop resilient domestic finances for prevention and preparedness.</p> <ol style="list-style-type: none"> 1. Implement costed national action plans for health security 2. Ensure external financing complements domestic financing 3. Define and track expenditure on outbreak prevention and preparedness 	Change methods of capturing health expenditure data, to enable clearer distinctions between consumed health expenditure and investments, so that countries are incentivized to invest more in preventive services and emergency preparedness.

Theme	Sub-theme / objective	IPPPR (May 2021)	UK G7 Pandemic Preparedness Partnership (June 2021)	G20 HLIP (July 2021)	Pan-European Commission (September 2021)
				<p>Low- and middle-income countries to add 1% of GDP to public spending on health over the next five years.</p> <p>Establishing a new Health Security equivalent of the Financial Sector Assessment programme.</p>	
Medical Countermeasures	What global mechanism should be used for countermeasure development, procurement and delivery?	<p>Establish a pre-negotiated platform for tools and supplies:</p> <p>Transform the current ACT-A into a truly end to end platform for diagnostics, therapeutics and vaccines (DTVs) and essential supplies.</p> <p>Establish strong financial and regional capacities for manufacturing, regulation, and procurement of tools.</p>	<p>A PHEIC should trigger the activation of an automatic mechanism to procure and distribute DTVs. Further work is needed.</p> <p>Not making ACT-A permanent: such a large institution would bring added complexity and inefficiency in business as usual. Should keep oversight small with a potential for rapid upscaling.</p>	Scaling up end to end global supply chain for medical countermeasures and other critical supplies will require a new structure that builds on the lessons learned from the ACT-A coalition .	
	Timelines		Aim to have DTVs within 100 days of a pandemic threat being detected.	Agrees with the PPP for a 100 day target for development, production and deployment of DTVs.	Enhanced efforts to build up production capacity and R&D funding in the pan-European region , with the aim of speeding up the end to end vaccine development timelines to 3-5 months under pandemic circumstances.
	R&D		<p>Industry and academic should prioritise R&D into DTVs against WHO list of priority pathogens.</p> <p>Expanding CEPI's remit to cover therapeutics and diagnostics.</p>	<p>Global Health Threats Fund to support research and innovations to prevent and contain future pandemics, complementing existing R&D funding mechanisms like the Coalition for Epidemic Preparedness Innovations (CEPI).</p>	Conduct a strategic review of areas of unmet need for the innovations required to improve One Health in Europe.**

Theme	Sub-theme / objective	IPPPR (May 2021)	UK G7 Pandemic Preparedness Partnership (June 2021)	G20 HLIP (July 2021)	Pan-European Commission (September 2021)
	Clinical trials and regulation	Establish strong financial and regional capacities for manufacturing, regulation, and procurement of tools.	WHO and govts to scope an 'always active' international clinical trial network Stringent regulatory authorities and WHO should streamline, harmonise and simplify regulatory processes.	The public sector should grow partnerships with philanthropic foundations to substantially expand research on infectious disease threats and breakthrough countermeasures. This could include efforts to de-risk early-stage R&D and other high-risk investments, in order to attract private institutional investors	
	Manufacturing	Establish strong financial and regional capacities for manufacturing (as part of a global network), regulation, and procurement of tools . With tech transfer commitments and supported by public-private-philanthropic funding	Industry, govts, INGOS explore how to rapidly activate an ever-warm, modular vaccine manufacturing network (used to expand mass adult vaccinations campaigns for common diseases in non-pandemic times).	Substantially larger, geographically-diverse network of sustainably financed, ever-warm, modular manufacturing capacity – requires public, philanthropic and private participation and risk sharing, with push and pull incentives.	
	How to ensure equitable access	Ensure technology transfer and commitment to voluntary licensing are included in all agreements.	Governments should build in conditions into DTV funding contracts for LMIC access to access DTVs at not for profit and scale, which is enacted if a PHEIC is declared.	Government funding for research should attach clearer conditions if successful discoveries are made, e.g. commitments to provide affordable medical countermeasures with cost-plus pricing for LICs and LMICs, treatment of intellectual property and requirements for technology transfers to third party manufacturers.	A global pandemic vaccine policy is developed that sets out the rights and responsibilities of all concerned to ensure that availability and distribution of vaccines.

Theme	Sub-theme / objective	IPPPR (May 2021)	UK G7 Pandemic Preparedness Partnership (June 2021)	G20 HLIP (July 2021)	Pan-European Commission (September 2021)
Surveillance		WHO to establish a new global system for surveillance .	WHO should support an enhanced role for diagnostics in the surveillance of pandemic threats. Global Pandemic Radar launched at G7, to identify, track and share data on new coronavirus variants and monitor vaccine resistance in populations, is expected to be up and running with a network of surveillance hub before end 2021.	Funded by the Global Health Threats Fund: building a transformed global network for surveillance of infectious disease threats. Requires a major scale up, combining pre-existing and new nodes of expertise at the global, regional and country levels, with the WHO at the centre.	
Immediate asks		Dose sharing – at least 1bn doses by Sept 2021. Fund ACT-A – G7 countries to commit to providing 60% of the US\$19bn needed in 2021. WTO and WHO to convene meeting to get agreement on voluntary licensing and technology transfer for Covid-19 vaccines - if no action within 3 months then WTO TRIPS waiver enforced.		Fully fund ACT-A and Covax	

** Indicates where the recommendation is broader health and not specific to pandemics but similar levers or mechanisms are being recommended.

Wellcome supports science to solve the urgent health challenges facing everyone. We support discovery research into life, health and wellbeing, and we're taking on three worldwide health challenges: mental health, global heating and infectious diseases

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