The Path Forward: A Post-Omicron Strategy for the Global COVID-19 Response

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Executive Summary

At this pivotal moment, the world's response to the pandemic must shift from emergency crisis management to a sustainable control strategy. This strategy should help to build resilient health systems with capabilities to address potential future COVID-19 outbreaks and other public health threats.

Driving the urgent need for an updated strategy are important recent developments related to the SARS-CoV-2 virus, the impact of current vaccines, and the world's response to the pandemic.

The Omicron variant's high transmissibility and partial immune evasion have changed both the purpose and definition of vaccination. The primary purpose of vaccination with current vaccines is now to prevent severe disease, hospitalization, and death, not to prevent transmission or infection. There is also growing recognition that full vaccination for many current vaccines requires three doses, plus additional boosters over time. Moreover, there is increasing evidence that duration of protection from current vaccines and from infection is limited.

As a result, achieving the WHO goal of 70 percent population coverage with primary vaccination by mid-2022 seems no longer the best path to save the most lives with limited resources in most countries. Rather, countries should prioritize full vaccination and boosters for those at highest risk to minimize severe disease, hospitalization, and deaths – and thus protect health systems so they can meet other critical population health needs as well.

Promisingly, the ability to manage and contain COVID-19 outbreaks is improving. Vaccine supply is rising. Increased supply and development of effective countermeasures are expanding our arsenal. Low-cost rapid diagnostic tests and highly effective oral antiviral therapies can prevent surges in cases from turning into high rates of severe illness and deaths. Tests and therapies are playing an increasing role in containing COVID-19 in some high-income countries, and much work remains to ensure equitable access to these in most low- and middle-income countries. Improved access to oxygen and PPE can also help limit the impact of future case surges.

At the same time, two years into the pandemic, attention to other population health priorities can no longer be deferred. Many countries have lost substantial ground in providing routine immunizations, preventive services, and chronic disease management. Improvements in local manufacturing and distribution of vaccines and drugs, and in primary and community-based care, can help control COVID-19 and strengthen preparedness for the next variant or pandemic. With thoughtful planning, these steps could also help countries address their other population health priorities.

Unfortunately, the actions of high-income countries and multilateral organizations to address global COVID-19 needs has been far from sufficient to achieve an equitable emergency response. Now, transitioning to the next phase, the challenges to global equity in COVID-19 containment could worsen. High-income countries are eager to return to more normal activities, undermining current emergency response efforts. The worsening military and humanitarian crisis in Ukraine is consuming growing attention and resources, especially in Europe and North America, and threating food security in many countries, further straining the COVID-19 response.













In response to these factors, national leaders, donors, multilateral organizations, and global public health organizations must support the urgently needed shift in global strategy by implementing the following four actions:

- Support country-driven goals that reflect local realities and priorities;
- 2. Shift the immediate global vaccination goal from 70 percent population coverage to country-set targets that prioritize fully vaccinating (including boosters) high-risk populations and health and other essential workers, with the aim of quickly reaching 90 percent coverage of those most at-risk;
- Provide equitable access to oral antivirals through test-and-treat capabilities; and
- Increase manufacturing capabilities and production in low- and middle-income countries for vaccines, therapies, diagnostic tests, and other critical health products.

Timely reporting of high-quality data at national and sub-national levels is necessary to assess progress and strengthen accountability. Robust financing and improved governance are also critical to achieve these recommendations. G20 nations, multilateral development banks, and private donors should increase non-debt financing for COVID-19 control and future preparedness and link this financing directly to local health systems capabilities and resilience. Multilateral governance must be reformed to enable more inclusive decision-making and more effective use of resources, including the ability to redirect and reallocate funding across initiatives and organizations.

The US-hosted Global COVID-19 Leaders Summit, likely to be held in April, holds the potential to be the most consequential event since the pandemic began by redirecting the global response onto a more sustainable, effective, and equitable trajectory.

The State of the Pandemic

The pandemic is evolving but remains a global threat, particularly in low- and middle-income countries. COVID-19 has caused over 450 million reported infections and over 6 million reported deaths worldwide, with the actual numbers likely several-fold higher. A recent analysis by the COVID-19 Excess Mortality Collaborators estimated additional mortality due to COVID-19 during just 2020-2021 to be over 18 million people.

While the toll has been great, the world has also notched some unprecedented scientific achievements and significant progress toward global solidarity. Accompanying these successes, though, have been failures in political leadership and astonishing unfairness.

Despite 11 billion doses of vaccines administered around the world, staggering inequities <u>persist</u>. Only 14 percent of people in low-income countries have received even one dose of COVID-19 vaccine, compared with 79 percent in high-income countries and 81 percent in upper middle-income countries. The global community has not provided sufficient support for many low- and middle-income countries to overcome challenges of vaccine supply and capacity for vaccinations. As a result, over 90 countries did not reach the WHO-set target of 40 percent vaccination coverage by the end of 2021, and over 100 countries are likely to miss the WHO target of 70 percent vaccination coverage by mid-2022.

The world still has clearly not prioritized access to COVID-19 vaccines and other tools. Many of the barriers to getting vaccines, tests, treatments, oxygen, and other resources to those who need them most are as formidable today as they were at the start of the pandemic.

These shortfalls in global response combine with five major developments in the pandemic to require an immediate reset in the world's response to COVID-19.

First, Delta and now **Omicron's high transmissibility and partial immune evasion has changed the role and definition of vaccination.** Instead of fully preventing infections, vaccinations are now largely intended to reduce severe disease, hospitalization, and deaths. As a result, pushing for primary vaccination of large numbers of people at low risk for severe disease is no longer the most effective way to contain COVID-19.



There is growing recognition that full vaccination for many higher-risk populations should include not only an initial course but a subsequent booster, and likely future boosters to limit the impact of COVID-19 over time. Recent updates from the WHO Strategic Advisory Group of Experts (SAGE) on Immunization and the Africa CDC prioritize full vaccination, including an initial booster dose, for high-risk populations and health and frontline workers.

In many low- and middle-income countries with limited vaccinations to date, relatively high levels of immunity as measured by <u>seroprevalence</u> are <u>mainly</u> the result of COVID-19 infections from successively more contagious variants. In addition, there is growing <u>evidence</u> that immunity from prior infection is less protective over time than immunity from vaccination, especially for other variants.

Second, increased global vaccine supply and development of additional effective countermeasures are expanding our arsenal, making it more possible to contain COVID-19. Global vaccine supply, which has been a key constraint over the past 15 months, continues to improve in quantity and diversity, with manufacturing capacity exceeding one billion vaccine doses monthly and new vaccine platforms coming online, such as protein subunit vaccines. Gaps remain at national and sub-national levels in capacity for distribution, delivery, and demand generation in many low- and middle-income countries, as evidenced by low daily vaccination rates.

New promising oral antivirals are becoming available that can significantly reduce severe disease, hospitalizations, and death, and could play an increasing role in containing COVID-19. Nirmatrelvir/ritonavir reduced risk of hospitalization and death in high-risk unvaccinated adults by almost 90 percent, while molnupiravir has shown more modest efficacy and carries some safety risks. More oral antivirals are in advanced development. Global access for these drugs remains limited due to constrained supply, delivery, and financing for treatments and timely testing in many countries.

Third, pandemic fatigue and complacency is a growing problem. Many leaders in high-income countries around the world are moving quickly to relax public health measures like mandatory masking and vaccine mandates. To support these steps while the Omicron BA.2 variant continues to circulate, and other variants may emerge, they

are prioritizing booster doses and access to oral antivirals intended to protect high-risk populations, limit severe cases, and mitigate impacts on health systems.

This inward focus in moving forward has led to a steep drop-off in investments and donations to support global COVID-19 response. For 2021-22, the Access to COVID-19 Tools Accelerator (ACT-A) has received commitments of only \$1.6 billion, leaving a gaping hole of \$15.2 billion in its grant funding request. The United States Congress has to date declined to support the Biden Administration's request for \$15.6 billion for continued COVID-19 response in the absence of offsetting government savings. This includes approximately \$5 billion to support the global response, which itself was pared back from estimated needs of over \$10 billion.

Fourth, Russia's horrific invasion of Ukraine has co-opted the already limited attention and resources from the global COVID-19 response. The worsening military, diplomatic, and humanitarian crisis is consuming growing attention and resources, especially from countries and donors in Europe and North America, while causing soaring food costs for many low- and middle-income countries, further straining the COVID-19 response.

Fifth, other population health priorities can no longer be deferred. The global pandemic has set back progress on other health needs and anti-poverty efforts, forcing many countries to reduce support for health programs addressing malaria, HIV/AIDS, TB, essential health services, routine immunizations, and more. An emergency response is hard to sustain over a period of years, and many countries are experiencing "a shortfall of health system resilience." This shortfall requires improvements in primary and community-based care – reforms that could also create a more sustainable foundation for managing COVID-19 over the coming years and for future pandemic preparedness.



The Path Forward

While it is not possible to predict the future with certainty, COVID-19 will almost certainly be circulating for years longer, with new variants emerging that create crests of infections, deaths, and economic disruptions. A revised global strategy should reflect the post-Omicron state of the pandemic, while preparing responsibly for potential scenarios in the coming months and years based on priorities and guidance of leaders and experts in low- and middle-income countries that continue to face critical challenges from COVID-19 and other public health threats. Without such an updated approach, failures in response to the last battle will undermine fighting the coming one.

Over the past two years, the COVID-19 emergency response has provided global coordination and development of multiple effective COVID-19 countermeasures. Building from those accomplishments, and recognizing the five key developments cited above, the COVID-19 response must shift from emergency crisis management to a sustainable strategy for COVID-19 control that supports resilient health systems and pandemic preparedness, and adapts to ongoing changes on the ground.

Progress with vaccines, testing, surveillance, therapies, and other areas provides more tools than were available earlier in the pandemic, increasing confidence in the ability of resilient health systems to manage COVID-19 as an endemic disease in the future.

While the arsenal to fight COVID-19 is growing, the global resources to support their use are not. To use limited resources effectively, efficiently, and equitably, efforts to address the pandemic must also support other health needs at national and regional levels. Working with local and regional public and private sector organizations, global efforts should strengthen health system capabilities in a sustainable manner, including primary care, routine immunizations, surveillance for infectious diseases, supply chain management, and a well-supported health workforce. A more robust and effective current pandemic response should help build these capabilities and increase future preparedness for health security threats.

Equity must serve as a lodestar principle driving actions. Goals and measures of equity should be responsive to the evolving nature of COVID-19 and its broader health and economic implications, as well as the availability and potential impact of a growing arsenal of tools to fight it. An equitable response should prioritize the protection of the most vulnerable and high-risk populations as well as health and other essential workers. Protecting these populations will also best prevent severe disease, hospitalizations, and death, thereby protecting vulnerable health systems and increasing capacity to address other critical health challenges. At a global level, an equitable response should focus resources and support to those countries with the highest need and burden.

A successful transition to a sustainable, equitable COVID-19 control program that supports resilient health systems and preparedness requires four high-priority actions:

- **1.** Support country-driven goals that reflect local realities and priorities;
- 2. Shift the immediate global vaccination goal from 70 percent population coverage to country-set targets that prioritize fully vaccinating (including boosters) high-risk populations and health and other essential workers, with the aim of quickly reaching 90 percent coverage of those most at-risk;
- **3.** Provide equitable access to oral antivirals through test-and-treat capabilities; and
- Increase manufacturing capabilities and production in low- and middle-income countries for vaccines, therapies, diagnostic tests, and other critical health products.



1. Support country-driven goals that reflect local realities and priorities.

The pre-Omicron global response prioritized uniform, global goals, such as 70 percent vaccination coverage in every country, rather than locally-determined national and subnational targets. This has resulted in mismatches in aspiration and priorities that have contributed to tension and lack of uniform progress. National leaders, often in collaboration or consultation with local and regional stakeholders, have set targets and timelines that recognize their challenges related to COVID-19 and other diseases, as well as differences in local capacity and resources. Global efforts should support country-led goals that reflect local context and priorities and ensure an equitable and effective response that maximizes local public trust.

Such "bottom up" approaches to setting goals should accelerate progress toward prioritized, achievable, country-based targets and milestones. To strengthen accountability and assure that support achieves maximum impact, global efforts should follow the lead of countries, deploying resources and support toward highest-priority needs, as countries work to build health systems that can more sustainably achieve progress in controlling COVID-19 and address other population health priorities.

2. Shift the immediate global vaccination goal from 70 percent population coverage to country-set targets that prioritize fully vaccinating (including boosters) high-risk populations and health and other essential workers, with the aim of quickly reaching 90 percent coverage of those most at-risk.

Vaccination remains a critical component of pandemic response. The global response should continue to accelerate predictable vaccine supply, allocation, distribution, delivery, and demand generation. But given the way in which Omicron has changed the purpose of vaccination, national vaccination coverage is no longer the preferred public health response. Rather, to save the most lives as quickly as possible, vaccination efforts should prioritize fully vaccinating (including boosters) vulnerable populations along with health and other essential workers.

The WHO global target of 70 percent primary vaccination coverage for every country by mid-2022 can thus no longer be the primary goal for COVID-19

vaccination efforts. This target and timeframe, while well intentioned and appropriate when first introduced, no longer reflects the highest priorities for the global response. As noted in the latest WHO Strategic Advisory Group of Experts on Immunization (SAGE) Roadmap for prioritizing uses of COVID-19 vaccines, "increasing the booster dose coverage rate for higher priority-use groups will usually yield greater reductions in severe disease and death than use of equivalent vaccine supply to increase primary vaccination series coverage rates of lower priority-use groups."

To inform decision-making, guide financing, and promote accountability for an equitable response, countries should set and track clear interim milestones and timelines linked to fully vaccinating and boosting vulnerable populations and health and other essential workers. Each country's targets for national vaccination coverage should be robustly supported, while ensuring that fully vaccinating the most vulnerable remains a top priority.

3. Provide equitable access to oral antivirals through test-and-treat capabilities.

Vaccination priorities and implementation plans should be part of coordinated, country-level "vaccination plus" strategies that integrate access to testing, treatments, oxygen, and other COVID-19 counter-measures, while balancing the COVID-19 response with other priorities, including routine immunization and access to essential health services.

Oral antivirals can significantly reduce hospitalizations and deaths, and thereby also help protect fragile health systems. Providing access to oral antivirals requires implementation of test-and-treat strategies with rapid testing linked to access to therapies. Swift action to address gaps in supply, delivery, demand, and funding for testing and treatments is needed to avoid the same global inequities that have emerged in access to vaccines. In particular, significant supplies of qualityassured generic nirmatrelvir/ritonavir, the most promising currently available oral antiviral, will likely not be available until the second half of 2023, unless urgent steps are taken by Pfizer, the US government, and the World Health Organization, as detailed in the recent COVID GAP report, "Pills to People: Accelerating Equitable Global Access to Oral Therapeutics for COVID-19."

Many low- and middle-income countries already successfully deploy test-and-treat strategies for other health threats, including malaria and HIV, coupled with



access to oral therapies, in programs supported by The Global Fund, PEPFAR, and PMI. In 2019, for example, PMI distributed 77 million malaria rapid-diagnostic tests, while The Global Fund tested 243 million suspected cases leading to treatment for 124 million cases of malaria; PEPFAR supported HIV testing services for 79.6 million people while providing anti-retroviral therapy to 15.7 million people. These capabilities should be further leveraged to support the COVID-19 response quickly without disrupting other critical health programs. There should be no doubt that low-income countries can safely and reliably provide treatment with the available antiviral drugs.

This shift to a multipronged strategy means that multilateral and bilateral efforts should focus on supporting country efforts to strengthen integrated distribution and delivery capacities and capabilities for testing, treatments, and vaccines in those countries with the highest need. The redesigned COVID-19 Vaccine Delivery Partnership is focusing on 34 countries with greatest need, while the US Global Initiative for Vaccine Access (Global VAX) is initially focusing on 11 countries based on need, US country-level resources, and potential for significant short-term progress. These and similar efforts should extend beyond vaccinations to ensure that delivery capacity for oxygen, testing, treatments, and other resources is strengthened in integrated approaches.

4. Increase manufacturing capabilities and production in low- and middle-income countries for vaccines, therapies, diagnostic tests, and other critical health products.

The development of local and regional manufacturing capacity will strengthen global equity and sustainability over time, increasing self-reliance and facilitating earlier access to critical tools such as vaccines, diagnostics, and therapies.

High-income countries, regional efforts, private sector, and multilateral agencies should build upon recent progress to increase manufacturing capabilities and production in low- and middle-income countries, especially in Africa, for vaccines, therapies, tests, and other health products. Significant investments have been announced to support such local manufacturing capacity, and promising public-private collaborations are underway, such as the Partnership for African Vaccine Manufacturing. Additional investments should prioritize such collaborative efforts.

Sustainable, high-quality manufacturing capabilities will require significant long-term commitment and resources, including access to intellectual property, technology and knowledge, human resources, robust supply chains, and financial capital. Strong and timely regulatory assessments and oversight are critical to support high-quality local manufacturing, and should be established through efforts such as the African Medicines Agency, in collaboration with global product regulatory agencies such as the US Food and Drug Administration and the European Medicines Agency.

These four priority actions must be supported by crosscutting enablers of success. Timely reporting of high-quality data at national and sub-national levels is necessary to assess progress and strengthen accountability. Robust financing and improved governance are also critical to achieve these recommendations.

Data and Accountability

National leaders should commit to the collection and public reporting of timely, high-quality data at national and sub-national levels across the four actions noted above, in order to analyze evolving needs and gaps, provide the right resources and support to address them, assess overall progress toward country-set targets, and strengthen accountability.

Key measures of access and outcomes for different subgroups, such as by age, gender, geography, and important risk factors, will strengthen efforts to design and implement equitable programs to increase access to immunization, test-and-treat, oxygen, and other tools for pandemic response. Dynamic "country dashboards" that track progress toward country-led targets and milestones would provide valuable information to guide national, regional, and global policy-making and resource-allocation decisions as well as accountability for timely progress.

These efforts should also enable the identification and sharing of best practices to address various challenges, enabling a robust peer learning network among public and private sector organizations that improves the effectiveness and efficiency of response and preparedness.

The following table includes indicative metrics that could be tracked in order to assess progress towards each of the four priority actions noted above. COVID GAP



will continue to capture and analyze data on important aspects of pandemic response, preparedness, and health systems resilience over the coming months, and will regularly publish Accountability Reports providing key insights and recommendations to strengthen actions and outcomes at all levels.

High-Priority Action	Indicative Metrics (Not Exhaustive)
Support country-driven goals that reflect local realities and priorities;	 Progress toward country-set COVID-19 targets and milestones Health systems capabilities (e.g., primary and community care) Local public trust
2. Shift the immediate global vaccination goal from 70 percent population coverage to country-set targets that prioritize fully vaccinating (including boosters) high-risk populations and health and other essential workers, with the aim of quickly reaching 90 percent coverage of those most at-risk;	 Daily vaccination rates Vaccination coverage by dose for sub-populations Progress toward 90 percent full vaccination coverage of those most at-risk
3. Provide equitable access to oral antivirals through test-and-treat capabilities;	 Daily testing capacity, especially for high-risk populations Access to treatments through test-and-treat capabilities, especially for high-risk populations Increases in test-and-treat capacity during case surges
 Increase manufacturing capabilities and production in low- and middle-income countries for vaccines, therapies, diagnostic tests, and other critical health products. 	 Investments and partnerships for local manufacturing by region Local production of various high-quality products over time, including vaccines, treatments, diagnostics

Financing and Governance

Financing for the multilateral global response and pandemic preparedness has been woefully inadequate. While high-income and some middle-income countries quickly mobilized trillions of dollars to address their own COVID-19 related health and economic needs, donors committed only \$18.7 billion for ACT-A in 2020-21, leaving a funding gap of \$14.5 billion. Less than \$2 billion has been committed toward the 2021-22 ACT-A grant request of \$16.8 billion. There remains a gaping need for almost \$50 billion for a comprehensive global response.

G20 nations, multilateral development banks, and private donors should increase non-debt financing for pandemic response and preparedness while linking that

financing more directly to local health systems resilience, recognizing synergies between COVID-19 control and addressing other population health shortfalls. The multilateral response should implement mechanisms to prioritize use of limited resources to address the highest-priority needs aligned with the four priority actions noted above, including the ability to redirect or reallocate funding across initiatives and organizations. The 2021-22 ACT-A investment case does not include mechanisms for such redirection or reallocation based on priorities, and also does not identify clear priorities for funding between categories of interventions.



Commitments to date, while inadequate across all fronts, have prioritized vaccine purchases, leaving distribution and delivery efforts struggling for more support, with little funding available to procure diagnostics and therapeutics and implement test-and-treat capabilities. According to the ACT-A funding commitment tracker, of the funding commitments toward ACT-A in 2020-21, \$12.8 billion was directed toward vaccines (with a goal of \$11.7 billion); \$1.6 billion toward therapeutics (with a goal of \$3.9 billion); \$1.4 billion toward diagnostics (with a goal of \$9.7 billion); and \$1.8 billion toward health systems (with a goal of \$7.9 billion). In its current approach, prioritization appears to be largely a function of which agency is better able to fund-raise, or the preferences of specific donors, rather than disciplined analyses of relative effectiveness, efficiency, and equity.

Future COVID-19 response and preparedness financing should prioritize activities that build local and national capacity and capabilities for resilient health systems, sustainable health workforce, and pandemic preparedness. Only by leveraging investments to address multiple health needs will the global response be able to make significant progress. Such efforts must take into account the heavy and unsustainable debt burden many countries already face due to the impact of the pandemic.

Multilateral governance must be reformed to empower more inclusive decision-making and more effective use of resources. Independent analyses of ACT-A have identified challenges in inclusivity, governance, and financing reflecting its development in the midst of a crisis. Improvements should include more leadership from and representation by low- and middle-income country leaders and stakeholders, a necessary step to ensure a more inclusive and equitable model for decision-making over time. A more cohesive, unified decision-making structure with the mandate to prioritize and allocate funding would also enable effectiveness and efficiency.

A revised strategy, reflecting the key priorities outlined in this document, should include clearly articulated goals, priorities, interim milestones, and funding needs. A revised path forward should acknowledge the evolving reality and plan for the best use of available resources. A transparent and inclusive approach to adapting strategy will help to establish and grow public trust and enable stronger accountability, which is critical to continued support for pandemic response and preparedness.

Moving Ahead

The global strategy for supporting COVID-19 response and containment needs to shift urgently. The US-hosted Global COVID-19 Leaders Summit, likely to be held in April, holds the potential to be the most consequential event since the pandemic began by redirecting the global response onto a more sustainable, effective, and equitable trajectory.

Additional convenings over the coming months, including G7 and G20 ministerial and leader meetings, the World Health Assembly, and ongoing ACT-A governance meetings, must be better integrated to enable a sustained, longitudinal effort that makes consistent progress and provides sustained momentum and accountability over the coming months.

In addition to these official channels, there remains a sustained need for external, independent accountability measures, a role that COVID GAP will continue to address along with collaborators around the world.

A post-Omicron global strategy should build on the world's successes, learn from its failures, and respond to dynamic conditions on the ground. The greater the delay in adapting to new realities, the higher the cost in lives, health, and economic prosperity.



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About COVID GAP

The COVID Global Accountability Platform (COVID GAP), led by Duke University and COVID Collaborative, aims to improve and accelerate global pandemic response by serving as an independent source of insights and actionable recommendations, convening key stakeholders to galvanize actions and collaborations, and strengthening transparency and accountability. Find out more: https://covid19gap.org/.

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