

House Select Subcommittee on the Coronavirus Crisis

**“A Global Crisis Needs a Global Solution:
The Urgent Need to Accelerate Vaccinations Around the World.”
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Witness Statement of Krishna Udayakumar, MD, MBA

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Introduction

Chairman Clyburn, Ranking Member Scalise, and Members of the House Select Subcommittee on the Coronavirus Crisis:

It is an honor to be with you today.

My name is Krishna Udayakumar, and I am an internal medicine physician and global health and policy researcher at Duke University. Over the past 18 months my work, along with many colleagues and collaborators, has focused on analyzing and providing evidence-based recommendations to strengthen the global COVID-19 response, especially in relation to global equitable access to life-saving interventions. Through the Launch and Scale Speedometer we have tracked and analyzed COVID-19 vaccine purchases, manufacturing, and donations over the past year, providing insights and recommendations to address glaring global gaps.

Through the nonpartisan COVID Global Accountability Platform (COVID GAP), led by Duke University and COVID Collaborative, we are generating actionable insights to bring transparency and accountability, and creating platforms and convenings to engage global leaders for learning and sharing, with the ultimate goal of accelerating an effective, equitable global pandemic response.

I am proud to co-lead the COVID GAP initiative alongside Dr. Mark McClellan, Founding Director of the Duke-Margolis Center for Health Policy and former Commissioner of the US Food and Drug Administration; Mr. Gary Edson, President of COVID Collaborative and former Deputy National Security Advisor and Deputy National Economic Advisor, who co-led the launch of the PEPFAR program; and Dr. Michael Merson, Professor of Global Health at Duke University, Founding Director of the Duke Global Health Institute, and former Director of the WHO Global Program on AIDS.

Current Situation Demonstrates Global Inequities and Consequences of Failed Global Response

The COVID-19 pandemic continues to evolve in a highly dynamic manner around the world. There are now almost 270 million reported cases, and over 5.3 million reported deaths globally, along with trillions of dollars in lost economic activity. These numbers climb higher each day.

We are in a global war against a virus that doesn't respect borders and rapidly advances across continents, but global leaders have yet to use the full arsenal of tools available to fight this war.

As we noted in a recent COVID GAP [report](#), unprecedented scientific achievements – begun during the Trump Administration and continued under President Biden – have led to the development of highly effective and safe vaccines, promising therapies, and other critical interventions such as diagnostics. But the world has been unable to marshal a coordinated, effective, and equitable response. The widening gap between vaccine haves and have-nots around the world has prolonged the pandemic, worsened global inequity, and increased the risk of the emergence of additional variants that could pierce vaccine immunity.

Indeed, we are witnessing the consequences of a failed global response, with Delta-variant driven surges in many parts of the world, including the US, while the Omicron variant spreads rapidly with worrying signs of increased transmissibility and immune evasion. Both of these variants were first observed in

low- and middle-income countries with uncontrolled spread of COVID-19 and inadequate vaccination rates, and have caused massive health and economic damage around the world, including here at home.

The global vaccination [situation](#) demonstrates stark inequities that will continue to lead to worse outcomes for everyone globally. Over 8.4 billion doses have been [administered](#), yet only 7.1% of people in low-income countries have received even one dose. Across North America, Europe, and South America, at least 56% of these populations are fully vaccinated, and at least 64% have received at least one vaccine dose. Across Africa, however, only 8% are fully vaccinated, and only 12% have received at least one dose.

Ongoing Challenges for Global Vaccine Supply, Allocation, Distribution, Delivery, and Demand Generation

Based on current vaccination rates, nearly all low-income countries, including most African countries, are not on track to reach the globally-agreed-upon 40 percent vaccination [target](#) by the end of 2021. In contrast, almost all (96 percent) high-income countries already have surpassed 40 percent vaccination coverage, most by wide margins.

Further, among the 92 countries covered by the COVAX Advance Market Commitment (AMC 92), the [median](#) vaccination coverage is just 14 percent. With less than three weeks left in 2021, the outlook for these countries is grim. The 40 percent vaccination target will not be reached during 2021 or even by early 2022 without a clear action plan at local, regional, and global levels, significant increases in vaccine supplies, and the resources and capabilities to distribute and use them.

Our recent COVID GAP analysis identified three urgent actions to accelerate global vaccination:

1. Improve transparency of vaccine production, supply, and allocation to drive stronger accountability and more effective vaccination planning and implementation;
2. Allocate rapidly increasing supply of vaccines more equitably and urgently; and
3. Strengthen country-level capabilities and capacity to ensure effective, efficient vaccination.

As overall global vaccine supply continues to increase significantly, with over 1 billion doses produced monthly, challenges in allocation, distribution, and delivery in low- and middle-income countries are becoming more urgent. To highlight progress and critical bottlenecks toward 40% vaccination targets at the country-level, and to develop and prioritize actionable recommendations to address these bottlenecks aimed at specific stakeholders, with metrics of progress, we are collaborating with the World Health Organization (WHO), UNICEF, Africa CDC, Bill & Melinda Gates Foundation, and The Rockefeller Foundation.

This consortium co-hosted a convening of over 80 leading technical experts and global leaders on Monday, December 13, to develop and prioritize needed solutions for vaccination bottlenecks. Analysis to date has focused on addressing six critical area of bottlenecks:

- Political Context and In-Country Planning Mechanisms;
- Country-Level Financing;
- Vaccine Demand: Increasing Confidence and Uptake;
- Health Workforce: Capabilities, Capacity, and Training;
- In-Country Supply Chains, including Cold Chain; and
- Utilizing Data Systems for Vaccination and Event Tracking.

From this collaboration and convening we will release on December 17 a set of insights and recommendations for high-priority actions to address vaccination bottlenecks. We are also hosting a session at the First International Conference on Public Health in Africa (CPHIA 2021) on December 15 to discuss insights and recommendations to accelerate vaccinations globally.

Strong US Leadership is Critical for Global Pandemic Response

Strong, bipartisan American leadership has been critical to address major global health crises over decades, from the eradication of smallpox, to increasing global access to treatments for HIV/AIDS, to managing recent Ebola outbreaks. Such bold American leadership is needed again to effectively address the COVID-19 pandemic.

The best way to prevent further domestic and global catastrophe is to dramatically decrease cases and slow transmission of the virus through widespread global vaccination, combined with other public health measures. Continued inequitable access to high-quality vaccines risks destabilizing economies and societies around the world.

Thankfully, there is significant progress and US leadership from which to build, including the rapid development and availability of highly effective vaccines and unprecedented manufacturing scale-up. The US and G7 allies have taken important but still modest steps to close the global vaccine gap, including by accelerating large-scale production and delivery of high-quality vaccines, increasing financial support to COVAX, and committing to share roughly 1.6 billion doses. The US has to date [donated](#) over 317 million vaccine doses, more than every other country combined.

As we [called](#) for, with the endorsement of over 100 global leaders, experts, and organizations, President Biden [hosted](#) a Global COVID-19 Summit in September, followed by a Foreign Ministerial [hosted](#) by Secretary Blinken in November and a Development Ministerial [hosted](#) by Administrator Power in December. This US leadership has helped to further align global actors to common commitments and targets, including 40% vaccination coverage in all countries by the end of 2021, and 70% coverage by mid-2022. The recently-announced Initiative for Global Vaccine Access ([Global VAX](#)) is also a step in the right direction.

While commendable, these actions still fall far short of the true scale and urgency required. Much more needs to be done to provide high-quality vaccines more quickly, and to build countries' vaccine distribution and delivery capacity, which is rapidly becoming the key constraint in the race between vaccines and variants. The \$315 million allocated to support vaccine delivery in Global VAX is substantially inadequate in the context of the billions of dollars that will be needed to support successful vaccination in LMICs.

Over 70 countries remain at risk of not reaching the agreed-upon target of 40% vaccination by the end of this month. The Access to COVID-19 Tools Accelerator (ACT-A) effort [remains](#) significantly under-resourced and has [met](#) with internal and external challenges to effective implementation. COVAX, the vaccines pillar of ACT-A, has delivered over 610 million vaccine [doses](#), significantly [below](#) prior projections.

US Emergency Plan for Global COVID-19 Relief: Urgent Action to End the Pandemic Globally and Accelerate US Recovery and Security

The Global VAX initiative, with strong leadership and significant increase in resources, could catalyze the whole-of-government response that is required. We have [proposed](#), with endorsement by a bipartisan group of experts, a bold US Emergency Plan for Global COVID-19 Relief. This plan recommends the appointment of a Global COVID-19 Emergency Response Coordinator reporting to the President and supported by a special inter-agency task force, with the following objectives:

1. Strengthen global coordination of vaccine supply chains and manufacturing;
2. Increase and accelerate US dose donations and queue-shifting of future deliveries;
3. Accelerate globally distributed manufacturing capacity for vaccines and vaccine inputs by providing financial and technical assistance, and facilitating private sector licensing and knowledge transfer, including for mRNA platform vaccines, to ramp up vaccine manufacturing capabilities in Africa, Latin America, and Asia; and
4. Most critically, ensure that doses are translated into vaccinations, and strengthen health systems and preparedness for future pandemics, by accelerating a US-led effort to increase vaccine distribution and delivery capacity, and increase vaccine confidence and demand, in countries with the highest burden of disease, lowest vaccination rates, and least resources, augmenting and complementing multilateral efforts by multilateral development banks, Access to COVID-19 Tools Accelerator and COVAX, Africa Centers for Disease Control, and others.

Framework for a Global Action Plan for COVID-19 Response

In addition to vaccines and vaccinations, the global pandemic requires a comprehensive, global plan of attack. For example, as noted in our recent [analysis](#), the need to ensure timely and equitable global access of promising new oral antiviral therapies is urgent. Multiple therapies for early treatment of COVID-19 disease are expected to be available in the near future and hold promise to prevent severe disease and death. These drugs have the potential to be game-changers in the management of COVID-19, particularly in LMICs where there is limited capacity for using infused treatments, such as monoclonal antibodies. The likely broad indication for use, and the potential to prevent severe disease, will translate to a substantial public health need for these therapies. At some point, they may be recommended for prophylaxis of high-risk contacts of COVID-19 cases. Given the lifesaving potential of these therapeutics, it is critical that the same mistakes made with the global distribution of COVID-19 vaccines are not repeated.

In August 2021, we released a common [framework](#) for a global action plan for COVID-19 response, with endorsement from 20 leading experts and bipartisan leaders and over 60 leading American and global organizations.

As we note in the framework, an “all hands on deck” crisis response must deploy all available resources and capabilities – multilateral and bilateral, public and private sector. A robust and effective response to the current crisis is also the best foundation for health systems strengthening and future pandemic preparedness. We have recommended that leaders should commit to the following urgent actions:

- **Strengthen global leadership and accountability:** strong, sustained political leadership and accountability is needed to coordinate and galvanize the many existing multilateral and bilateral responses;

- **Develop and implement a Global COVID-19 Response Roadmap:** leaders should agree to an end-to-end, fully costed roadmap to end the acute phase of the COVID-19 pandemic, which should include specific, time-bound commitments and steps;
- **Empower a Global Task Force for Supply Chain and Manufacturing:** this Task Force should be part of the global leadership framework and should expand production of vaccine inputs, vaccines, diagnostics, therapeutics, and other life-saving interventions;
- **Accelerate sharing of vaccines and other life-saving intervention:** G7/EU and G20 members should lead this effort;
- **Prioritize strengthening country-level distribution and delivery capabilities:** recognizing that country-level distribution, delivery, and demand-generation are quickly becoming the key constraints in the race between vaccines and variants; and
- **Increase multi-year financing for the pandemic response in LMICs:** in line with the end-to-end costing undertaken as part of the Global COVID-19 Response Roadmap, immediate and multi-year funding commitments must match the scope and urgency of the need.

Conclusion

Mr. Chairman and Members of the Subcommittee,

The global COVID-19 pandemic is both an international humanitarian crisis and also a threat to our own nation's security, health, and economic interests. We can impose travel restrictions, promote vaccines and boosters, and recommend masking and distancing. But these steps will not keep Americans completely safe, because we cannot stay isolated from the rest of the world.

Building from significant efforts to date, we must further unleash unparalleled American resources and capabilities and provide bold American leadership to address the global pandemic. Such an effort will reflect both our ideals as a people and our interests as a nation. By galvanizing global efforts to vaccinate the populations of the world's poorest, most afflicted countries, we can accelerate the end of the pandemic – here and everywhere.

Through the COVID Global Accountability Platform (COVID GAP), we seek to serve as an independent, non-partisan source of insights and actionable recommendations to strengthen pandemic response and preparedness, providing needed transparency and mechanisms for accountability that ultimately accelerate the end of the COVID-19 pandemic.

Thank you for the opportunity to testify.

Biography

Dr. Krishna Udayakumar is the founding Director of the Duke Global Health Innovation Center, focused on generating deeper evidence and support for the study, scaling, and adaptation of health innovations and policy reforms globally. He is also Executive Director of Innovations in Healthcare, a non-profit co-founded by Duke, McKinsey & Company, and the World Economic Forum to curate and scale the impact of transformative health solutions globally.

At Duke University, Dr. Udayakumar holds the rank of Associate Professor of Global Health and Medicine, and is a core faculty member of the Duke-Margolis Center for Health Policy. He also serves as Associate Director for Innovation of the Duke Global Health Institute. His work has been published in leading academic journals such as the *New England Journal of Medicine*, *Health Affairs*, and *Academic Medicine*, and he has been interviewed or quoted in media outlets around the world, including *CNN*, *BBC*, *NPR*, *Al Jazeera*, *New York Times*, *Washington Post*, and *Politico*.

Born in Bangalore, India, Dr. Udayakumar spent his childhood in Virginia, and is a Phi Beta Kappa graduate of the University of Virginia, with a bachelor's degree in interdisciplinary studies with distinction. He received both an MD and an MBA (with a concentration in Health Sector Management) from Duke University, where he was a Fuqua Scholar. Dr. Udayakumar completed his residency training in internal medicine at Duke and served as Assistant Chief Resident at the Durham VA Medical Center before joining the faculty of Duke University.

Disclosures

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