# **COVID-19 Supplemental Recommendations**

Topline asks and supporting details

### **Topline Asks**

- **\$200 million contribution to CEPI**, the Coalition for Epidemic Preparedness Initiatives, to advance vaccine candidates for SARS-CoV-2. CEPI is advancing eight vaccine candidates and has put forward a \$2 billion global ask to advance this portfolio. Support for CEPI will help ensure that vaccines developed will be deployed effectively worldwide to help those most in need.
- \$200 million for Global Health Programs at USAID to advance and deliver innovations to help low- and middle-income countries prevent, prepare for, and respond to COVID-19 and other pandemic threats. Products well suited for delivery in very low-resource settings—where health systems are weak and where COVID-19 has the greatest potential to evade containment and cause tremendous suffering—are urgently required if we are to end this pandemic globally. Innovation needs include medical countermeasures such as diagnostics, therapeutics, and vaccines; medical devices and health technologies; personal protective equipment for frontline health workers and health facility innovations; and the financing, manufacturing, and delivery systems these essential resources require—tailored to the unique constraints of very lowresource settings.

## **Supporting Details**

#### **Tailoring Innovations for Low-Resource Settings**

 Innovation is our exit strategy to defeat COVID-19 globally, and we will need to develop and adapt health products for low-resource settings to defeat the pandemic. Some COVID-19 mitigation measures that have shown success in high-resource settings may not be appropriate or feasible globally. For example, frequent handwashing is challenging in communities without access to clean water and soap; social distancing may be impossible in densely populated urban areas; and isolating suspected cases and delivering supportive care to reduce the risk of death cannot be managed without adequate health facilities, devices, and personal protective equipment for frontline health workers. Innovation is urgently needed to develop and deliver products that will reduce the spread and fatality of COVID-19 in some of the world's most challenging environments.

- New or adapted products will be needed to address the unique needs of low-resource settings. Products to address COVID-19 must be accessible to those most in need around the world. That means they need to be: 1) offered at a price that is affordable for low-income settings; 2) appropriate for settings with limited resources such as electricity; and 3) available in sufficient supply.
- Specific COVID-19 innovation needs, including those that can be adapted and advanced for low-resource settings, include:
  - Medical countermeasures:
    - Diagnostics: rapid, point-of-care diagnostics that can be quickly deployed to increase testing capabilities globally
    - Therapeutics: drugs or drug combinations that are effective, safe, and affordable, in formulations that can be transported without a cold chain; are easily administered and do not require delivery by highly trained health care workers; and are suitable for all age groups, including geriatric and pediatric patients (e.g., liquid suspensions or rapidly dissolving granules; sub-lingual, fastdissolving tablets)
    - Vaccines: a safe, effective, and ideally single-dose vaccine that is affordable and can be rapidly deployed globally; manufacturing capacity needed for rapid production and distribution; and adequate supplies of delivery devices such as needles
  - <u>Medical devices and health technologies</u>, such as oxygen delivery devices, low-cost infusion pumps to deliver fluids in settings without electricity, and chlorine generation for infection prevention and control
  - <u>Personal protective equipment for frontline health workers and health facility</u> <u>innovations</u>, including reusable equipment for settings where disposable equipment is not practical or feasible, open source designs that can be produced through multiple manufacturing methods close to areas of need, and innovations to help existing health facilities triage potential and confirmed COVID-19 patients
  - <u>Manufacturing and delivery systems</u> to ensure that products can be manufactured at scale and delivered to health facilities in a variety of settings

# \$200 million contribution to CEPI to advance vaccines for COVID-19 and prepare for the next epidemic

- A safe and effective vaccine is how we prevent and end COVID-19, and to truly curb transmission, a vaccine will need to be available globally. CEPI is working to advance SARS-CoV-2 vaccines from early stage development through manufacturing and registration with a focus on global access.
- Due to the scope and scale of this global pandemic, the normal sequence of vaccine development will need to be greatly compressed and substantial investment will need to occur at risk, even before vaccines are proven safe and effective. Given these factors, successful vaccine development and rollout will require robust investment from the US government.

- An estimated \$2 billion will be needed to develop a vaccine ready for global deployment. As a global alliance to finance and coordinate the development of vaccines for emerging diseases, investment in CEPI will allow the United States to leverage funding from other global funders while not bearing the full cost of vaccine development. Strategically, it also ensures the United States is able to influence the impact and outcome of CEPI's work.
- As the only US agency with a mandate to develop and scale health innovations for low-resource settings, USAID is uniquely placed to contribute to CEPI.

#### \$200 million for Global Health Programs at USAID to Advance COVID-19 Innovations

- USAID has long played an essential role in supporting the development, introduction, and scaleup of urgently needed global health technologies. As the only US agency with a mission and vision focused exclusively on global development, USAID is uniquely positioned to support product development to address the critical shortfall of appropriate tools to advance health in low-resource settings. Its deep international footprint, combined with its in-depth understanding of community needs and culture, enables the agency to develop new health tools that are appropriate, affordable, and accessible for widespread uptake in very low-resource settings, including during health emergencies.
- Through its decades of research investments, **USAID has built robust scientific capacity and global research networks in partner countries**. These networks can and should be utilized to advance innovations needed for COVID-19. Previous investments in specific global health areas such as HIV/AIDS and malaria are also paying dividends now as products and platforms for those threats are being investigated as potential tools for this pandemic.
- USAID should be resourced to advance sorely needed innovations through a Grand Challenge for COVID-19. The Grand Challenge open innovation model was deployed to great effect during previous health emergencies including Ebola and Zika. In 2014, as the largest Ebola epidemic in history unfolded in West Africa, USAID, working with the White House Office of Science and Technology Policy (OSTP), the Centers for Disease Control and Prevention (CDC), and the US Department of Defense (DOD), issued the Fighting Ebola Grand Challenge to identify innovations to address barriers faced by health care workers in combating the epidemic. International experts reviewed more than 1,500 ideas and rapidly selected 14 promising innovations to support, including a low-cost battery-powered infusion monitor to deliver IV fluids in settings without reliable electricity. In 2016, faced with the growing threat of Zika virus across Latin America, USAID launched the Combating Zika and Future Threats Grand Challenge to crowdsource and advance innovative approaches to fight the outbreak and prevent other infectious disease outbreaks, including a multiplex point-of-care diagnostic test that uses Blu-ray technology to diagnose Zika and dengue from a single drop of blood.
- USAID should be supported to coordinate and collaborate with other agencies, such as CDC, DOD, OSTP, the National Institutes of Health (NIH), the Biomedical Advanced Research and Development Authority (BARDA) and the Development Finance Corporation (DFC), that are advancing COVID-19 innovations to assess whether and how such products might be adapted for use in low-resource settings.

• Flexible funding models—such as other transaction authority, fixed amount awards, innovator grants under contract, and first-loss capital for blended finance—should be used as needed to enable expedited partnerships and acquisition of essential technologies, and USAID should also be empowered to utilize innovative financing mechanisms and market-shaping approaches to advance innovation at the pace of this rapidly unfolding pandemic.

The Global Health Technologies Coalition (GHTC) works to save and improve lives by encouraging the research and development of essential health technologies. We bring together more than 30 nonprofit organizations, academic institutions, and aligned businesses to advance policies to accelerate the creation of new drugs, vaccines, diagnostics, and other tools that bring healthy lives within reach for all people.

www.ghtcoalition.org