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COVID-19 vaccines for all?

If an effective COVID-19 vaccine is developed, how will it get to everyone in need? Ann Danaiya Usher reports on the initiatives being planned to ensure equitable access, and their shortcomings.

The third replenishment meeting for Gavi, the Vaccine Alliance, on June 4, which raised a record US\$8.8 billion for the next 5 years, was overshadowed by the COVID-19 global pandemic and the burning question of how to ensure equitable access to any vaccines that become available. Donors used the conference, which was held virtually for the first time, to launch a new multibillion-dollar fund—the Gavi Covax Advance Market Commitment (AMC)—to subsidise doses for lower-income countries.

“We must use the collective purchasing power of Gavi, the vaccine alliance, to make that future vaccine affordable and available to all who need it”, said UK Prime Minister Boris Johnson, who hosted the meeting. Doing so, he said, is “the most essential shared endeavour of our lifetimes” and will require that donors, industry, and international organisations “cooperate on a scale beyond anything we have seen before”.

To meet this historic challenge, donors proposed a financing mechanism for COVID-19 vaccines, called an AMC, to which donors have so far committed half a billion dollars. The fund aims to accelerate the manufacture of a COVID-19 vaccine on a massive scale and to distribute it according to need, rather than ability to pay.

Gavi says it has an “initial goal” of raising \$2 billion to make possible the manufacture of the first 20 million doses. But supplying vaccine for all developing countries will clearly require a much bigger investment. Gavi has so far been tight lipped about the details of how exactly the fund will work and what it will ultimately cost.

The idea behind AMCs is that if left entirely to the market, too little vaccine will be produced, too late. By guaranteeing to buy large volumes of specific candidates before they are licensed, the new fund will encourage manufacturers to make investments in production capacity. This, in turn, will increase supply availability and

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reduce the time it takes for licensed vaccines to become available, particularly to the poorest countries around the world.

An internal white paper on COVID-19 by the Bill & Melinda Gates Foundation estimates that production, procurement, and delivery of COVID-19 vaccines to low-income and middle-income countries would cost up to \$74 billion in grants. This would help to “reduce the likelihood of ... only the wealthiest [benefiting] from the vaccine”.

Civil society organisations (CSOs) are critical of the secrecy surrounding a scheme of such import that is likely to lock up billions of aid dollars for many years to come at a time when global aid budgets are shrinking. “We are disappointed that [meaningful civil society engagement] has not been the case and that CSO involvement has thus far been piecemeal and at late stages of development and decision making”, says Karrar Karrar, access to medicines adviser for Save the Children.

The Gavi Covax AMC is inspired by a similar fund for pneumococcal vaccines that Gavi has managed since 2008. While Gavi describes the pneumococcal AMC as a “huge success”, Médecins Sans Frontières (MSF) says that this first AMC had flaws and suffered from pharmaceutical companies demanding a relatively high price for the vaccine. Open debate is needed so that lessons are learned from the failures of the pneumococcal vaccine fund, MSF wrote in a press release. “Governments and Gavi need to demand that pharmaceutical corporations open the books so we can see how much potential COVID-19 vaccines will actually cost to produce.”

The Gavi fund is only one of several initiatives being floated. On June 3, Italy, France, Germany and the Netherlands launched the Inclusive Vaccine Alliance, which aims to establish a European manufacturing base for COVID-19 vaccines for the EU and other countries.

A second AMC proposal comes from a group led by Harvard University economist and Nobel Laureate Michael Kremer, who came up with the AMC concept and helped to design the pneumococcal AMC fund. It proposes that the US Government invests \$70 billion in manufacturing capacity for several promising vaccine candidates and pays around \$100 per person to vaccinate 300 million US citizens. Kremer and colleagues argue that this approach is relatively inexpensive compared with the \$375 billion the International Monetary Fund estimates the world is losing in economic output each month as a result of the lockdown.

“We must protect Americans, but by going big we make sure

there is adequate supply to vaccinate people around the world”, Kremer and his team wrote in *The New York Times*. The proposal has reportedly been incorporated into Operation Warp Speed, through which the US Government is investing in the development of several promising vaccine candidates.

Chris Snyder, an economist at Dartmouth College who has worked with Kremer on the proposal, insists that Americans being first in line will also benefit the rest of the world. “If the USA managed to vaccinate its population in a month rather than over the course of a year, a tremendous amount of COVID-19 harm is avoided domestically. But this sort of speed requires [that] large capacity facilities be funded, and this large capacity can be offered to the rest of the world very soon after it is installed”, he says.

Ideally, Snyder admits, one would want a comprehensive international agreement on vaccine manufacture and procurement with all countries participating. But if the USA or China decides to go it alone, all remaining countries could participate in their own mechanism, he says, adding that Gavi would take care of the interests of low-income countries. The Kremer team has been helping Gavi with the design of its AMC. Several different simultaneous approaches are seen to be advantageous “so that the world has many shots at a successful candidate”, Snyder says.

Is an AMC model based on “America first” compatible with the vision of equitable access? Rachel Silverman at the Center for Global Development (CGD) says it is not perfect but “the best we can hope for”. She argues that expecting any country to export vaccine before serving its own population is simply wishful thinking. “I think the best equitable access we can achieve is a fair global distribution after the first country gets it.”

Silverman says the two AMC approaches are compatible, but she sees a weakness in both. “Our concern is that there seems to be a segmentation: a rich-country approach and an approach based on official development assistance for poor countries, which leaves out the middle-income countries such as Brazil, India, and South Africa. They don’t seem to be part of the thinking about how to scale up manufacturing.” She says a country like Malawi must receive vaccine for

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free, financed by aid. Middle-income countries would not pay as much as the USA or the UK, but could chip in, to some extent.

The CGD has presented a third model, called the Benefit-Based AMC for COVID-19, which addresses this omission. They hope that elements of it can be brought into the other two. Silverman points out that every country without vaccine development capacity has an incentive to talk about equitable access, even if they have enough money to get to the front of the line once a vaccine is available for export.

Indeed, the COVID-19 Technology Access Pool, proposed by Costa Rica and adopted by WHO last month, presents a framework for equitable global allocation. It has so far been endorsed by 30 mainly middle-income countries but only four high-income countries: Norway, the Netherlands, Luxembourg, and Portugal. It calls for the voluntary sharing of knowledge, intellectual property, and data, and a guarantee of free access and use by WHO member countries of drugs and vaccines that are developed.

The Kremer and Gavi AMCs might be compatible with each other,

but the Costa Rican proposal and the US model are probably not. In *The New York Times* article, Kremer writes: “Firms can ... be confident that if they develop a successful product, the government will not expropriate their intellectual property.”

Implementation of the American AMC will depend on the willingness of the US Government to go “really, really big”, as Kremer puts it. The Gavi AMC, however, relies on funding from donors. In his presentation at the Gavi replenishment meeting, Bill Gates urged donors to fully fund Gavi so that ongoing routine immunisation is not jeopardised by the inordinate focus on the pandemic. “Gavi can’t let one task slip while it concentrates on the other”, he said.

Yet donors have decided to do just that, moving resources from pneumococcal vaccines to COVID-19 ones. After the conference, Gavi announced that five of the six original donors to the first AMC—Italy, the UK, Norway, Canada, and the Bill & Melinda Gates Foundation—will move their share of money, amounting to \$177.5 million, remaining in the pneumococcal fund to the Gavi Covax AMC. Gates added \$100 million in fresh money, while Saudi Arabia, Germany, and a few others brought the total to \$567 million in assured resources for the new fund.

AstraZeneca was the first vaccine manufacturer to sign up to the new fund, offering a guarantee of 300 million doses of the vaccine it is developing in collaboration with the University of Oxford, and on a no-profit basis. Gates called for others to pledge support for the Gavi Covax AMC at the upcoming Global Goal: United for Our Future conference, to be hosted by Global Citizen and European Commission President Ursula von der Leyen on June 27.

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