INTERNATIONAL VACCINE ACCESS CENTER

JOHNS HOPKINS BLOOMBERG SCHOOL of PUBLIC HEALTH

IVAC Webinar Questions & Answers: "How will a COIVD-19 vaccine be delivered?"

1. **Are there global, national and regional plans for allocations of vaccine doses?**

At the global level, the World Health Organization (WHO) leads the global allocation framework. The WHO convened global partners, national governments, manufacturers, ethicists, and others to establish a global framework for ethical allocation of vaccines, diagnostics and treatments.

In parallel, countries are discussing allocation priorities, which some plan to take different approaches to accomplish. In the United Kingdom, the Joint Committee on Vaccination and Immunisation (JCVI) published its interim guidance. In the United States, the Advisory Committee on Immunization Practices (ACIP) is meeting to discuss this, while at the federal level agencies formed Operation Warp Speed to oversee the delivery of vaccines, therapeutics and diagnostics.

Regional immunization technical advisory groups (RITAGs) are also considering COVID-19 and the implications on their regions.

2. **What considerations are taken into account for allocations?**

A framework needs to articulate the allocation goals, priorities, and timing. First, countries will want to know how many doses are needed. There will likely be both bilateral agreements between countries and manufacturers, and the COVAX facility.

Such agreements will include purchase commitments from countries and volume commitments from manufacturers.

The strategy for how to allocate doses is still being discussed at a global level, although it will consider both product- and country-specific factors including how to prioritize populations to maximize health impact, and how to assess risk and vulnerability. Individual countries may look at other factors based on their priorities and the product availability.

3. Who could get the vaccine first?

This decision will be made by each country based on their priorities. Most countries prioritize protecting health workers (this would still need to be defined by the country as there are many types of health workers with varying degrees of contact with at-risk populations) to ensure their health infrastructure remains in place and to prevent infection and possible transmission to patients. They may also prioritize based on vulnerable populations such as older adults, races/ethnicities at higher risk of disease, immunocompromised people (e.g. HIV/AIDS), or those with underlying illness. Other considerations include chronic diseases (e.g. diabetes, cardiovascular disease, chronic respiratory disease, chronic kidney disease), pregnant women, essential workers, the military, transmitters of disease, and more.

4. Once a vaccine is available, how will it be distributed?

Developing a vaccine is only half the battle. Once it is licensed and/or approved from emergency use, there are several steps that need to be taken. The steps depend on which country, state, or province the vaccine becomes available in. First,

logistical steps and processes need to be in place to safely plan, receive, store, ship, administer, and monitor the vaccine. Then depending on the country, it may be delivered through existing systems, or in some cases, particularly where a population may not be routinely immunized, new systems will need to be developed. These systems should consider the population, so it is as easy and safe for them to get the vaccine.

Other considerations for distribution include regulatory, logistic, quality testing, and storage facilities. A key step is determining whether the vaccine will be delivered through existing immunization centers, provider offices, or other locations. They may also consider new ways of delivering vaccines, methods for tracking and monitoring vaccination, and processes for determining how those prioritized can get it. Other logistical considerations include cold chain capacity, registries, or methods to track who has received doses, and much more.

Vaccine delivery should also consider safety measures such as syringes, safety boxes, and methods of disposal. Many countries do not have sufficient capacity for existing vaccine programs so they will need to help developing a strategy to distribute a COVID-19 vaccine safely and effectively.

5. **How can we ensure a vaccine reaches low-income populations, rural populations, people of color or other marginalized groups?**

Distribution systems will need to be strengthened to ensure the vaccine reaches the people that need it most. Each community has its own challenges and it is important that governments and those responsible for the health system engage communities

to ensure that there is a plan: (1) to build awareness, trust, and acceptance of vaccines; (2) to make vaccination points convenient and enable access; (3) to bring awareness to people who are eligible to receive vaccine of how they can get it; (4) to address barriers to access; (5) and, to make sure the vaccine supply and other needed equipment is available, and can be safely stored and transported. A system for reporting and accountability is important for demonstrating that vaccines reach the groups at highest risk. Effort and investment are needed to ensure these populations receive the vaccine because the impact of a vaccine will only be seen if it reaches all people that need it.

6. How will civil society organizations (CSOs) be engaged?

There are many types of civil society organizations and they play an integral role in the successful delivery of COVID-19 vaccines. They are an important voice that have the pulse on the needs and challenges in communities and can serve as a representative for marginalized groups. CSOs providing immunization services can help link those doing the planning, and relay the opportunities, challenges, and concerns of communities. Others deal with aging and health, while some are focused on conditions affecting older populations (e.g. non-communicable diseases) or delivery of universal healthcare. CSOs can offer innovative ideas on how to better reach communities, and sound the alarm when issues arise. They also play a critical advocacy and accountability role, where they call on local and global leaders to ensure the vaccine program is efficient and impactful. They also call on donors to ensure that sufficient resources are available to successfully deliver the vaccine.

7. What special considerations are there for delivering vaccines to older adults or other high-risk groups?

It is important to set expectations about availability of vaccines for older adults and their effectiveness. Older adults and those with underlying illnesses are a varied group compared to those active and healthy. Those who are completely dependent with underlying conditions will have varying needs. Given immune senescence (natural decline in the immune system as we age), vaccines may not be as effective in older adults as they are in younger populations. Groups planning for older adult vaccinations must communicate what can be done to prevent disease in addition to a COVID-19 vaccine such as providing nationally recommended vaccines for influenza, pneumococcal and/or herpes zoster (recommendations vary by country). Additionally, many countries typically do not give vaccines to older adults so creating access for that population will be key. Another concern is older adults may not be comfortable going to the same locations where others are sick or younger people that can transmit disease will be.

Other considerations include establishing registries and the ability to call back older adults for a second dose. To complicate matters, healthcare providers may not have a culture of immunization or the older adult may see multiple providers. It is important that all providers are educated about the importance of immunization for high risk groups.

Older adults require extra safety measures beyond getting vaccinated. Those coming in regular close contact or caring for older adults should be immunized and take appropriate precautions. At the community level, they need to understand the

value of immunizing older adults and educating against ageism because the health of older adults has an impact on the entire community.

8. Will it be mandatory for everyone to be vaccinated?

It is unlikely that vaccines would be mandatory, but instead would be recommended for at-risk groups. The high-risk groups might include a broad range of individuals varying based on a country's context. Vaccines would be more likely targeted to adults, versus younger children. In one scenario, certain employers, such as hospitals, might require vaccination or that vaccination may be a requirement before conducting certain work activities. Any such mandate would also be difficult to enforce.