A GLOBAL FRAMEWORK TO ENSURE EQUITABLE AND FAIR ALLOCATION OF COVID-19 PRODUCTS

And potential implications for COVID-19 Vaccines

WHO Member States briefing
18 June 2020
Purpose of today’s briefing

• To present the major elements of WHO’s proposal for a Global Allocation Framework for COVID-19 products

• To illustrate the potential use of this framework to allocate vaccines

1. Global Access Principles
   Align on global principles to ensure fair and equitable access and allocation of products
   Presented in May 2020

2. Global Allocation Framework
   Develop a global Allocation Framework for all COVID-19 products
   Working draft: End June 2020

3. Fair and equitable Allocation Mechanisms
   Tailored for each intervention (beginning with vaccines)
   Scenarios: End August 2020

The focus of this presentation is the Allocation Framework, which is a key component of an overall approach for achieving fair and equitable access to COVID-19 products
A Global Allocation Framework can expedite the control of the COVID-19 pandemic

• Stopping the pandemic requires using a combination of products and interventions across all countries (incl. public health and social measures)

• New products will initially be supply-constrained, requiring a sequential allocation as supply increases to achieve the best public health impact

• Several constraints and uncertainties must be managed at the same time:
  • the disease’s epidemiology and pathophysiology
  • the characteristics of new products and timing of their availability
  • the settings in which they will need to be used
The Allocation Framework applied to COVID-19 vaccines

Strategies and allocations for all product types are interdependent, but we are focusing on vaccines for illustration.
Major elements of the Global Allocation Framework for COVID-19 vaccines

<table>
<thead>
<tr>
<th>1</th>
<th>Goals</th>
<th>2</th>
<th>Priorities</th>
<th>3</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the overarching goals of the response?</td>
<td>Which populations should be prioritized to help achieve this goal?</td>
<td>How should specific products be allocated given their characteristics?</td>
<td>At what pace will countries receive products given:</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• their vulnerabilities (health systems and population factors)</td>
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<td></td>
<td></td>
<td></td>
<td>• the dynamic nature of the threat</td>
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The initial public health goals of the Global Allocation Framework

• Reducing COVID-19 mortality & protecting health systems will significantly improve the well being of populations and reduce the impact on societies and economies

• These public health goals can be achieved by prioritizing specific populations for vaccination

• Achieving these goals will be a key milestone in the pandemic response, even though it will not eliminate the disease altogether
The goals of reducing mortality and protecting health systems translate into a priority population

Strategic allocation of scarce products will maximise the health impact

<table>
<thead>
<tr>
<th>Prioritised populations</th>
<th>Share of global population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare system workers(^1)</td>
<td>~1%</td>
</tr>
<tr>
<td>Adults &gt; 65 years old</td>
<td>~8%</td>
</tr>
<tr>
<td>Other high risk adults (with comorbidities)(^2)</td>
<td>~15%</td>
</tr>
</tbody>
</table>

1. based on WHO data on medical doctors, community health workers, nurses and midwives
2. based on WHO data on adults between 30 and 70 suffering from cardiovascular disease, cancer, diabetes, obesity or chronic respiratory disease

The goal of reducing mortality and protecting healthcare systems leads to prioritization of these population groups.

These priority groups would be used to calculate how much product should be allocated to each country, and may inform how countries use those doses.

This approach will be fine-tuned based on product characteristics.
The goals would be achieved by prioritizing populations groups for initial vaccination.

Strategic allocation of scarce products will maximise the health impact.

<table>
<thead>
<tr>
<th>Prioritised populations</th>
<th>Global population</th>
<th>Doses needed to vaccinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare system workers¹</td>
<td>~ 50 M</td>
<td>~ 115 M</td>
</tr>
<tr>
<td>Adults &gt; 65 years old</td>
<td>~ 650 M</td>
<td>~ 1,500 M</td>
</tr>
<tr>
<td>Other high risk adults (with comorbidities)²</td>
<td>~ 1,150 M</td>
<td>~ 2,650 M</td>
</tr>
</tbody>
</table>

1. Based on WHO data on medical doctors, community health workers, nurses and midwives
2. Based on WHO data on adults between 30 and 70 suffering from cardiovascular disease, cancer, diabetes, obesity or chronic respiratory disease
3. Assumes 2 doses per person and a 15% wastage rate
Given the ubiquitous nature of COVID-19, all countries should receive an initial allocation as products become available.

Eventually, prioritisation of geography and timing would be based on a risk assessment of countries’ vulnerability and COVID-19 threat.

**A** **Threat**
The potential impact of COVID-19 on countries will be assessed using epidemiological data.

**B** **Vulnerability**
The allocation of products would be adapted to the vulnerability of countries’ health systems and population factors.
Key considerations for the Global Allocation Framework

• **Flexibility** will be key for adapting to the nature of each new product and the evolving epidemiology and risk

• **Transparent criteria** will drive allocation as doses become available

• **Increasing volumes** will be allocated to participating countries as more products become available, allowing for immunization of additional groups

• As **product-specific information** becomes available, WHO will issue policy recommendations to inform optimal use of scarce resources
Allocation will also consider product and country-specific factors

A. **Product supply and logistics**

Allocation will account for available quantities of vaccine products, as well as their characteristics.

Logistical considerations surrounding delivery, and timing will also be considered.

B. **Country context**

Allocation should consider countries’ context and potential for doses to be delivered.

This will be used to understand which products will be most appropriate for which context.

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**Current limitations in country capacities should not limit allocation** and deployment – support will be provided for this.
The vaccines in development use different technology platforms, with implications for how they can be used.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Description</th>
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<tbody>
<tr>
<td>RNA</td>
<td>Nucleic acid RNA packaged within a vector (e.g., lipid nanoparticles)</td>
</tr>
<tr>
<td>DNA</td>
<td>Plasmid containing the DNA sequence encoding the antigen (s) against which an immune response is sought</td>
</tr>
<tr>
<td>Viral vectors</td>
<td>Chemically weakened virus to transport pieces of the pathogen – usually antigen coding surface proteins</td>
</tr>
<tr>
<td>Inactivated</td>
<td>Killed version of the germ that causes the disease, providing shorter-term protection and requiring boosts</td>
</tr>
<tr>
<td>Attenuated virus</td>
<td>Weakened virus to stimulate immune response</td>
</tr>
<tr>
<td>VLPs</td>
<td>Virus like particles – molecules that closely resemble viruses, but are non infectious because they contain no viral genetic material</td>
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<tr>
<td>Protein subunit</td>
<td>Purified or recombinant proteinaceous antigens from a pathogen to elicit immune response. Some assets employ a nanoparticles-delivery system for enhanced antigen presentation</td>
</tr>
<tr>
<td>Repurposed</td>
<td>Repurposed vaccines already on market, e.g., measles, BCG</td>
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Vaccine characteristics affect deployment:
- Immunogenicity (e.g. sub-optimal effect on elderly populations)
- Safety profile (e.g. women of childbearing age)
- Ability to scale-up manufacturing
- Cold chain requirement (e.g. -70°C)
- ...

One vaccine may be more suitable for a target group / country type than another

Vaccines are unlikely to be interchangeable.
Due to these uncertainties, a global access mechanism that meets the needs of all countries is the preferred option.

### Three options

- **National access mechanism**
  - Countries negotiate deals with manufacturers individually (e.g., lock into supply agreements locally)

- **Grouped access mechanism**
  - Countries form regional groups or blocks to negotiate supply agreements

- **Global access mechanism**
  - Countries participate in a global mechanism to procure and access products

### Implications

<table>
<thead>
<tr>
<th>Number of manufacturers accessed</th>
<th>Number of countries</th>
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<tbody>
<tr>
<td>Low</td>
<td>Single country</td>
</tr>
<tr>
<td>High</td>
<td>Region</td>
</tr>
<tr>
<td></td>
<td>Global</td>
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- **Global access offers:**
  - Opportunity to have fair access and allocation across countries
  - Access to a large number of manufacturers, offering 'risk-pooling' (e.g., less risk of having no supply if certain vaccine candidates fail, or do not cover all populations)
Next steps

• Initial feedback can be provided to the WHO lead on Access and Allocation, ADG Mariângela SIMÃO via ACTaccelerator@who.int

• Please provide initial feedback by 24 June 2020

• A follow-up briefing will be conducted in the first week of July

• The Framework will continue to be tested & refined for each product area based on the feedback of Member States & other stakeholders