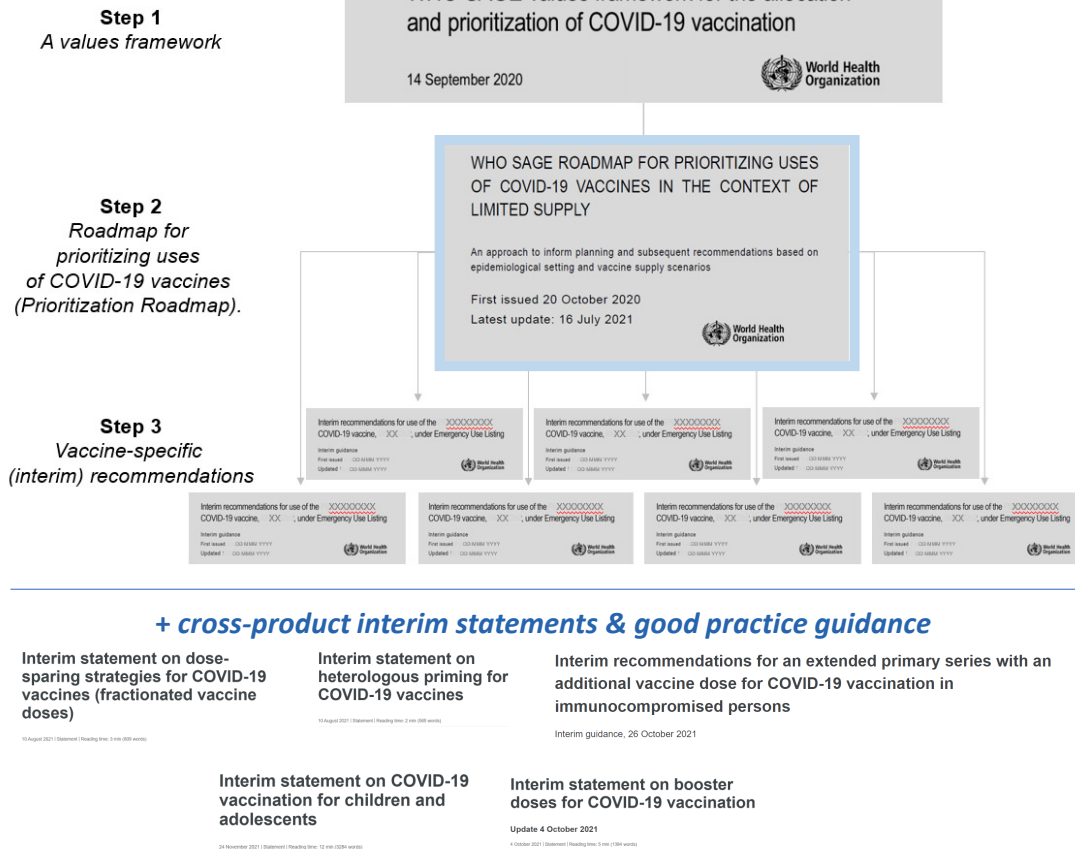


Why propose an Optimization Roadmap?

Current state



What's changed

- **Prioritization** based on limited vaccine supply (due to manufacturing capacity and global access constraints) →

Optimization to be based on **vaccine access and coverage equity**

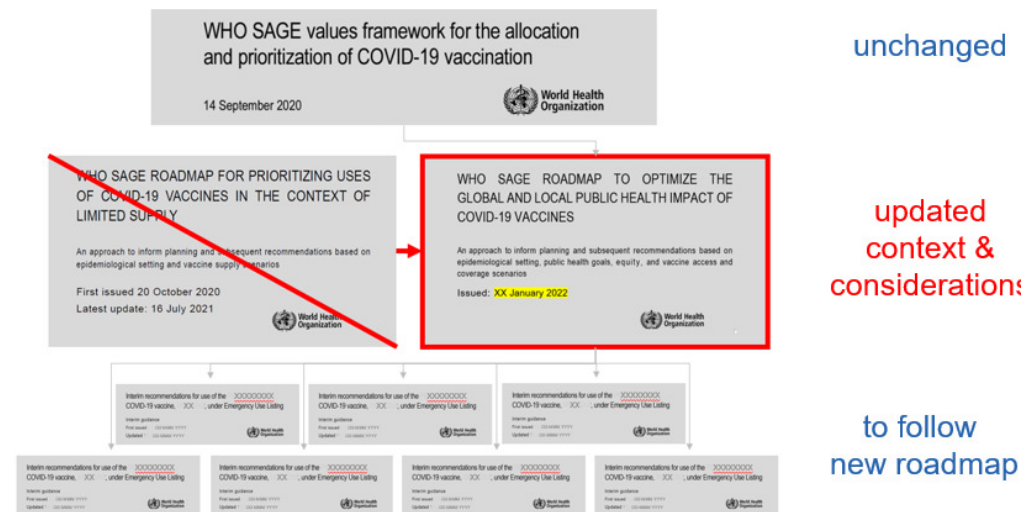
- includes vaccine and vaccination supplies, absorptive capacity, acceptance, and other potential barriers to immunization
- **Vaccine supply scenarios** (e.g., 10-20-50%) →
- **Vaccine coverage targets** (e.g., 10-40-70%)
- **Primary vaccine series for high-risk priority-use groups** →

To achieve a range of **public health and societal goals**, considerations of 1) **lower risk groups** (e.g., primary series in adolescents and children); and 2) **booster doses**

Context for proposed Optimization Roadmap:

Values- and evidence-based approach to optimizing global and local COVID-19 vaccine impact

Updated state



+ cross-product interim statements & good practice guidance

Interim statement on dose-sparing strategies for COVID-19 vaccines (fractionated vaccine doses)

10 August 2021 (Statement) (Reading time: 3 min (200 words))

Interim statement on heterologous priming for COVID-19 vaccines

10 August 2021 (Statement) (Reading time: 2 min (200 words))

Interim recommendations for an extended primary series with an additional vaccine dose for COVID-19 vaccination in immunocompromised persons

Interim guidance, 26 October 2021

Interim statement on COVID-19 vaccination for children and adolescents

24 November 2021 (Statement) (Reading time: 13 min (2000 words))

Interim statement on booster doses for COVID-19 vaccination

Update 4 October 2021

4 October 2021 (Statement) (Reading time: 4 min (200 words))

New roadmap context

- Global, regional, and national decisions on **optimization** of vaccine use should be based on:
 - evidence of public health benefit **AND**
 - obligations to secure global and local equity in vaccine access and coverage
- Global and local policies on **booster dose use** and vaccination of **lower risk subgroups** should consider the **continuing inequities** in global and local vaccine access and coverage
- Although data are only available for **some vaccines**, **emerging** evidence over a period of **~6 months** after primary series vaccination indicates that, to date, **initial vaccine effectiveness declined**:
 - moderately against infection and symptomatic disease
 - minimally against severe disease

Proposed Optimization Roadmap: *Key considerations*

Vaccination programmes should ensure **fair access** to a **sufficient level of protective immunity** against **severe disease and death**, while **minimizing risks**.

Higher priority-use groups should be offered ***primary series doses* first**, before offering COVID-19 vaccine doses to **lower priority-use groups**, **unless** there is adequate justification to do otherwise, which may include: significant **vaccine delivery** or **acceptability obstacles** in **higher priority-use groups** that would result in **vaccine wastage**

In such cases, efforts to **overcome access barriers** to reach **higher priority-use groups** should be **prioritized**.

Lower priority-use groups should be offered ***primary series doses* first**, before offering ***booster doses*** to **higher priority-use groups**, **unless** there is adequate justification to do otherwise, which may include:

- **sufficient evidence** that such a policy will **optimize use** of vaccine doses to **minimize severe disease and death** (use case 1)
- a **pressing need** to deploy booster doses to **health workers** to **curtail the impact** of COVID-19 on **health systems** (use case 2)

In addition to evidence to recommendation domains, policy **decisions to implement *primary series vaccination*** of **lower risk subgroups** (e.g., young adults, adolescents and children) and ***booster doses*** in **high-risk priority-use groups** should consider:

- **epidemiologic setting** (transmission pattern, seroprevalence, variants of concern)
- **time** since completion of primary vaccination series
- vaccine **access and coverage**
- **specific vaccine** product*

* (although all WHO Emergency Use Listed vaccines have a favorable benefit-harm profile, vaccine products differ in their safety and efficacy profiles for all or for some subgroups; therefore, the specific vaccine used in the primary series should be considered in determining if and when a booster dose is offered to a subgroup)