Evaluation of COVAX Facility and AMC and COVAX Pillar Delivery Efforts

Evaluation Brief

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INTRODUCTION

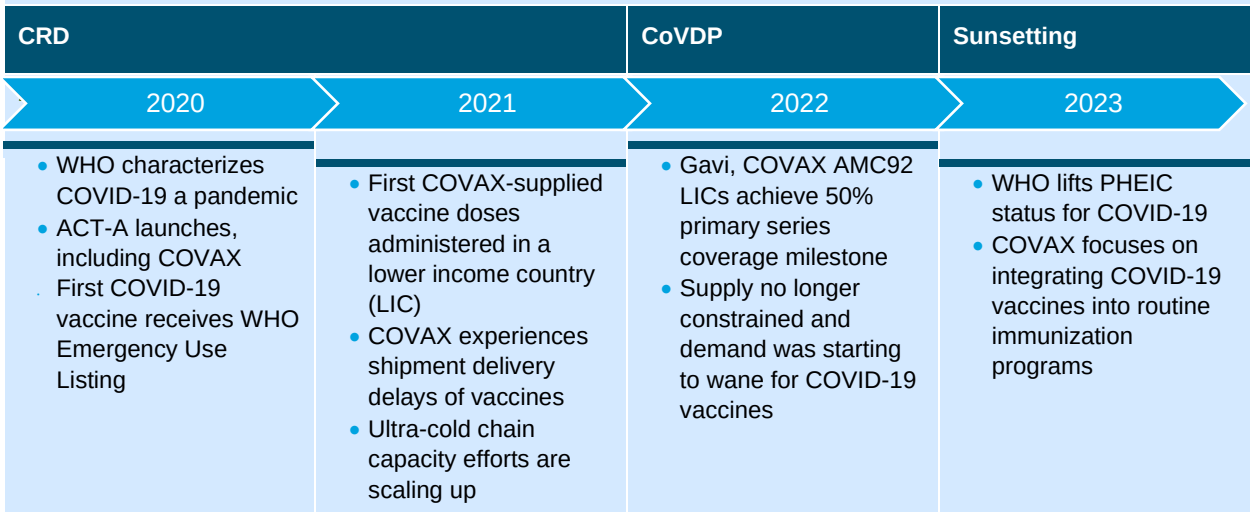
Purpose of this brief

This briefing paper distils key messages from findings, lessons learned and recommendations from the Evaluation of COVAX Facility and AMC and COVAX Pillar Delivery Efforts. The evaluation recommendations are intended to inform ongoing discussions for future pandemic preparedness and response.

COVID-19 was the most significant public health emergency in over a century, with global economic and societal repercussions. At the start of the pandemic, international organizations and countries recognized that equitable vaccine access was key to minimizing lives lost, ending the pandemic, and enabling economic recovery. On January 30, 2020, the Director-General of the World Health Organization (WHO) declared the COVID-19 outbreak a public health emergency of international concern (PHEIC), underscoring the urgent need for widespread vaccine distribution. Launched in April 2020, the Access to COVID-19 Tools Accelerator (ACT-A) was a multi-stakeholder partnership aimed at deploying COVID-19 tools to accelerate the end of the pandemic. One of its key pillars, the COVID-19 Vaccine Global Access Facility (COVAX), aimed to provide equitable vaccine access through pooled global funding for research, procurement, allocation, and distribution. COVAX was co-led by the Coalition for Epidemic Preparedness Innovations (CEPI), Gavi, the Vaccine Alliance (Gavi), United Nations Children's Fund (UNICEF), and the World Health Organization (WHO). The Gavi COVAX Facility and Advance Market Commitment (AMC) enabled 92 lower- and middle-income countries to access vaccines for vulnerable populations, supported by guidance, funding, technical assistance and delivery services through the COVAX Pillar.

From 2020 to 2022, the Country Readiness and Delivery (CRD) workstream aimed to ensure country readiness to accept vaccines and support for the deployment of COVID-19 vaccine doses. In response to lagging vaccination rates in certain countries, the COVID-19 Vaccine Delivery Partnership (CoVDP) was launched in 2022 to provide intensified support to 34 countries with coverage below 10% to accelerate uptake. In line with publication of the WHO and UNICEF interim guidance in July 2022, COVAX began to work with countries on integrating COVID-19 vaccinations into routine immunization programs.

Timeline of COVAX workstreams aligned with the global context:



LESSONS FROM COVAX

1. A multilateral mechanism can add significant value within the global architecture to support equitable access to vaccines in pandemic contexts.

The global response to COVID-19 highlights that vaccine nationalism, vaccine diplomacy, and commercial interests will influence pandemic responses. Any multilateral or market-based solution to vaccine equity must be designed to function effectively within this context, where the needs of high-income countries (HICs) are met through alternative channels.

Despite the challenges posed by the unprecedented and evolving circumstances in which COVAX was implemented, significant progress was made in achieving equitable vaccine access. This underscores the importance of a multilateral approach to developing, procuring, allocating, and supporting the rollout of vaccine technologies in global health emergencies.

Distribution

The first access to vaccines in LIC was not until February 2022, by which time 88% of HICs, 60% of UMICs, and 30% of LMICs had started vaccinations. By the end of 2023, LICs had still only provided a first vaccine dose to 36.1% of their population.

1.8 billion doses 147 countries

Almost 1.8 billion doses were delivered to AMC participants. This accounts for 74% of doses in LICs, 68% in African AMC countries, and 39% in the 20 AMC LICs new to Gavi.

Between December 2020 and November 2023, COVAX accounted for almost 13% of the total number of vaccines distributed globally

57% coverage

By the end of 2023, 2.2 billion people among the AMC92 counties were vaccinated with the complete primary series, which equates to 57% coverage.

Impact of CoVDP

In the CoVDP subset of the AMC92 countries, primary series coverage increased from 3% to 28% by May 2023.

2. Ensuring equitable access to vaccines in a pandemic requires an end-to-end approach, addressing a full, integrated range of functions and processes required to bring vaccines in a timely fashion to those at risk.

An effective pandemic response requires an end-to-end approach covering the entire value chain, from research and development (R&D) to procurement, policy, vaccine allocation, and delivery at the country level. Coordination across functions like resource mobilization, human resource management, political advocacy, risk management, and communication is crucial for success. By 2021, COVAX had built a robust end-to-end solution for equitable vaccine access, enabling it to scale efforts in 2022 despite challenges.

Findings from the Key Aspects of COVAX Response End-to-End Approach:

RESOURCE MOBILIZATION

COVAX used Gavi's strong fundraising capacity and a high-level summit in 2022 to mobilize stakeholders around a convincing investment case for the Pandemic Vaccine Pool. This ensured continued resources for vaccine procurement amid changing epidemiological needs.

ALLOCATION

In 2022, COVAX adapted its allocation approach to address excess supply, but the implementation of the Phase 2 approach was hindered by unreliable data, unpredictable demand factors, and limited forecasting capacity at the country level. Despite efforts to strengthen demand forecasting, these challenges undermined the approach. As a result, a rolling allocation method was adopted in August 2022, which was more suitable for managing excess supply.

DELIVERY

The COVAX CRD workstream helped countries assess and strengthen their readiness for vaccine rollout. While delayed and not flexible enough to cover all operational and rollout costs, COVAX delivery financing was scaled up in 2022, with efforts to boost vaccination coverage also becoming more targeted to the lowest performing countries through CoVDP.

PORTFOLIO MANAGEMENT

COVAX adopted a proactive and risk-conscious portfolio management approach to address the uncertainty over future vaccine needs. In 2022, facing excess supply, COVAX minimized wastage by renegotiating firm orders and not exercising APA options. COVAX's decision to continue dose donations through 2022 and 2023, influenced by pressure from HICs and Gavi donors, complicated negotiations with manufacturers. Although effective in reducing vaccine wastage, the ongoing renegotiations raised questions about how manufacturers will view multilateral procurement mechanisms in future pandemics.

CLOSE-OUT

The closure of COVAX was well planned and resourced, but faced complications that required significant negotiation, particularly around repurposing funds and renegotiating commitments with manufacturers for doses. This process was complex and sensitive, with some key informants feeling there was insufficient consultation regarding how funds should be used.

3. Operating in a pandemic requires an emergency response and flexibility to respond to a highly dynamic environment.

COVAX was a global first, designed once the COVID-19 pandemic had already started, and at great speed. Many components of the COVAX design had never been done before or were firsts for Gavi and Alliance partners. This included establishing indemnity and liability agreements and a no-fault compensation scheme; setting up the Humanitarian Buffer; administering dose donations; and operationalizing a global vaccine allocation mechanism. These and many other aspects of the COVAX design and business model evolved considerably in response to the changing context, evolving needs, and lessons learned. This flexibility was a core strength of the COVAX response. However, particularly in 2021, the scope of innovation and the speed of implementation created a heavy burden for COVAX's management team, with implications for its efficiency and effectiveness. It also led to a perception by some stakeholders that COVAX's ways of working were 'top-down', although COVAX Facility staff contend this was necessary, given the need for rapid decision making. COVAX continued to evolve and adapt through 2022 and 2023:

- Raise funding for future vaccine procurement, as needed, via the Pandemic Vaccine Pool
- Calibrated approaches for allocating doses across countries
- Secure supply by balancing self-procured and donated doses
- Renegotiation of contracts with vaccine manufacturers reflecting the shift in demand and supply dynamics over time
- Evolution in delivery from the CRD workstream to CoVDP
- Decision to close the COVAX Facility and move towards a routine immunization

4. Strong coordination across agencies and stakeholder groups operating at the global, regional and country level is critical.

The evolution in COVAX design, and implementation more generally, has been enabled by strong coordination and collaboration across COVAX partners, the proactive management function provided by the Office of the COVAX Facility and coordination by the COVAX Strategic Coordination Office, as well as a strong risk management function underpinned by Gavi's pre-existing capacities in this area and a significant investment in data and information sharing across agencies. This is despite persistent challenges in ensuring sufficient human resources to manage COVAX, particularly at key moments when workload was not manageable for a core body of staff. For delivery specifically, CRD was successful in supporting countries to increase vaccine readiness and support delivery. The creation of CoVDP helped to strengthen partner coordination for in-country delivery work and enable individuals to act as representatives of CoVDP rather than their respective employing agencies. With well recognized global leadership and more emphasis on global advocacy, CoVDP brought a step change in momentum for COVID-19 delivery at a critical juncture.

Having clarity on roles and responsibilities across partners, including for decision making and including country, regional and global teams, and with strong governance mechanisms in place is critical to strong coordination and collaboration. Country Delivery Support (CDS) funding and human resourcing for delivery at country, regional and global levels were two points of contention between partners. This appears to be in part due to an initial lack of ownership and unclear roles and responsibilities across partners. Clarification on these issues over time, notably through the creation of CoVDP, as well as more formalized and embedded systems, processes, and ways of working across COVAX operations, supported improvements in partner working relationships.

Also important is the recognized need for the design and operationalization of any future mechanism to be based, in part, on the inputs and engagement of those the mechanism seeks to benefit and having strong channels of communication with these stakeholders from the outset. This includes most importantly participating regions and countries and civil society organizations (CSOs), providing them with adequate foresight and time horizons of what to expect to inform their implementation strategy.

In planning for future pandemic response mechanisms, the allocation of responsibilities and the modalities of collaboration among partners should be grounded in an objective assessment of comparative advantages. While the Evaluation of the COVAX Facility, AMC, and Delivery Pillar Efforts has provided valuable insights into the roles and performance of the co-lead agencies in designing and implementing the mechanism, it did not extend to a comprehensive review of the contributions of other actors. As such, it is not positioned to prescribe future governance arrangements. Looking ahead, it will be essential to determine which functions are best executed at a global scale—where coordination, efficiency, and standardization are paramount—and which would benefit from regional leadership, where proximity to implementation and contextual understanding are critical. These decisions must be context-specific and responsive to the nature of the health emergency. One of the key lessons from COVAX was that regional capacity within Alliance partners served as a vital link between global and country-levels during the COVAX response, but its full potential was not leveraged—highlighting the need to strengthen and better utilize regional mechanisms in future efforts. Several country case studies highlighted a strong interest in enhancing regional capabilities, particularly in vaccine production and procurement, to improve responsiveness and equity in future health crises.

5. Clarity on objectives is essential.

The Evaluation of COVAX Facility and AMC and COVAX Pillar Delivery Efforts highlighted two key issues related to the need for clear and consistently understood objectives. The first relates to delivery support, which was initially provided through the CDS Early Access Window on a 'no regrets' basis – i.e. where a light touch application was required but monitoring and evaluation would not be conducted – and later changed, eventually to include an explicit objective for such funding to support longer-term health systems strengthening. While several global stakeholders questioned whether such objectives were reasonable and appropriate in a pandemic context, some country case studies appreciated the flexibility afforded by the later CDS windows for broader, complementary efforts. The second issue relates to clarity over COVAX's objective for equitable access. Initially COVAX was primarily focused on procurement, allocation and distribution of vaccines across countries, with its objectives focused on inter-country equity. Over time, COVAX provided support for equitable rollout, however, country-specific implementation was hampered by limited human and financial capacity, and challenges in reaching vulnerable populations, including those in remote areas. The extent to which vaccination coverage at the country level was equitable is unclear, but intra-country equity could likely have been improved had a more intentional approach been adopted by COVAX alongside simplified and timely country funding modalities to overcome health system capacity challenges.

While COVAX partners (WHO and UNICEF) provided support to countries to define and develop strategies and plans to reach priority populations and implement equitable vaccine rollouts, some countries had little human and financial capacity to implement these strategies and plans. The role of the COVAX Delivery Pillar in supporting such implementation was not clear or defined. There also remain differing views on the sufficiency and accessibility of delivery financing provided by COVAX to countries.

Key Country Insights:

- ✓ COVAX boosted equity by expanding vaccine access and strengthening health systems.
- ✓ Strong national-partner collaboration was key to successful vaccine rollout.
- ✓ Vaccine hesitancy and misinformation were widespread barriers to uptake.
- ✓ Logistical hurdles—stockouts, short shelf lives, and funding delays—disrupted equitable distribution.
- ✓ Routine immunization suffered in several countries due to the intense focus on COVID-19.

RECOMMENDATIONS FOR THE FUTURE

Area 1

A future pandemic response mechanism should adopt a multilateral approach to ensuring equitable access to vaccines.

TARGET OWNER: Agencies and country governments leading on the design of a future pandemic response mechanism

Establish a coordinated, multilateral approach that includes both Civil Society Organizations (CSOs) and global agencies, with clearly defined roles while leveraging experience and strengths for vaccine procurement, allocation, and delivery. Prioritize low-income countries (LICs) and plan for vaccine donations. Ensure strong leadership, clear communication, and active engagement with all stakeholders. Foster collaboration between agencies and countries, build trust-based partnerships, and set clear expectations for transparency.

Enablers: Strong leadership grounded in a commitment to equity, along with effective cross-organizational line management and the strategic use of partner strengths. Rapid decision-making supported by agile systems and mechanisms that prioritize guiding principles over rigid formal processes. Clear, consistent communication and meaningful engagement with non-traditional actors—such as CSOs, regional alliances, national and subnational implementing partners, and beneficiary governments. Build on existing country-level health equity strategies and promote true country ownership.

Area 2

Develop an end-to-end vision and approach for equitable access to vaccines.

TARGET OWNER: Agencies and country governments leading on the design of a future pandemic response mechanism

Leverage global health initiatives and donor relationships to secure funding and balance donated and self-procured doses for rapid supply, accounting for wastage. Adopt a flexible allocation approach based on demand and supply, with the ability to adjust during high-demand periods. Develop a risk-based decision-making approach, considering imperfect data. Ensure technical agencies like WHO and UNICEF are prepared to guide countries, and engage CSOs for diverse input. Establish a communications team during the response period to manage external messaging and support country-facing staff. Integrate delivery considerations into procurement and allocation, providing financial and technical support early, with funds reaching the community level for activities like demand generation.

Enablers: relevant partners relevant partners including non-traditional actors—such as CSOs, regional alliances, national and subnational implementing partners, and beneficiary governments included in the design process, address supply and delivery together at the outset

Area 3

Continue to working towards resilient health systems and define a realistic delivery support objective for acute and long-term phases.

TARGET OWNER: Agencies and country governments contributing to WHO leadership in Global Health Security and Health Systems teams

Identify and engage potential partners in health systems now to prepare for future pandemics, ensuring complementarity and reducing country burden. Share lessons learned from COVID-19 vaccine delivery to improve future responses, such as integrating vaccines into existing health services. Develop a clear framework for delivery support during a pandemic, outlining objectives, partner roles, and strategies to address health system bottlenecks. Ensure financial support and technical assistance are complementary and tailored to varying country needs.

Enablers: knowledge documented related to health system strengthening legacy of COVAX.

Area 4

Develop approaches to address specific surge capacity challenges at country, regional and global levels.

TARGET OWNER: Agencies and country governments leading on the design of a future pandemic response mechanism

Future support should consider a minimum package of essential personnel and skills, assess gaps, and develop strategies to meet future needs. Additionally, leveraging existing structures like health clusters, addressing regulatory and financial barriers, and creating a clear mandate for regional teams such as WHO and UNICEF Regional Offices to bridge global and country-level gaps are crucial, especially if essential health services are to be maintained in countries during an emergency. At the global level, lessons from recruitment delays, skill mismatches, and managing surge capacity staff should inform the design of future centralized response mechanisms, ensuring staff with relevant expertise are efficiently recruited and effectively utilized.

Enablers: collaborative team-working spirit to get things done at every level and willingness of volunteers to support at country levels.