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COVID-19 Vaccine Delivery Partnership

# Situation Report

September 2022

## COVID-19 Vaccine
## DELIVERY PARTNERSHIP

unicef · World Health Organization · Gavi The Vaccine Alliance

**IN THIS EDITION**

- Overview: Global Situation │ 92 Advanced Market Commitment Countries │ 34 Countries for Concerted Support

- In-depth: Data and reporting systems for vaccine delivery

- Country insights: Opportunities and challenges of real-time COVID-19 reporting systems - Malawi, Burkina Faso and Rwanda

*This report is produced by the COVID-19 Vaccine Delivery Partnership (CoVDP).*
*It covers the month of September 2022.*

## SPOTLIGHT

- **Several of the 34 countries for concerted support are planning more campaigns until the end of the year.** After reduced activities because of the rainy season in July, August and September, many countries are now planning more COVID-19 vaccination campaigns until the end of the year to increase complete primary series coverage.

- **The UN General Assembly reaffirmed the need for continued focus to close the vaccine equity gap, and to lay the foundations for better future pandemic preparedness.** There is appetite by many of the 34 concerted support countries to maintain the current momentum of COVID-19 vaccination over the next months. It is important that these efforts are bundled with other health or humanitarian activities, e.g. childhood immunization or screening for and responding to malnutrition. Further, lessons from the COVID-19 pandemic should inform the future architecture of pandemic preparedness and response – in particular how to strengthen primary health care at the community level.

- **As vaccination efforts continue towards the end of the year, a particular focus needs to be on reaching high-priority groups.** Most countries have coverage rates of high-priority groups that exceed total population coverage, showing that countries deliberately target high-priority groups. Still, continued efforts and targeted planning and outreach activities are needed to reach healthcare workers, the elderly and immunocompromised with complete primary series vaccination to achieve targets, and provide booster doses where necessary.

- **COVID-19 has led to a range of investments into data and reporting systems – but further efforts are needed to make the progress sustainable.** With support from partners, many countries have invested in and rolled out electronic immunization registries, which are able to capture more granular and more timely information as needed during the COVID-19 vaccine roll-out. However, continued investments in infrastructure and training are required to leverage the potential of electronic immunization registries.

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# Global situation overview

- Almost 13 million new cases and 42,000 new deaths were registered in September, continuing the decline in deaths and cases observed since early August. The weekly death toll is now at its lowest since March 2020.
- Cases were in decline in all regions except Europe which has seen a 42% increase in weekly reported cases in late September compared to late August, with large increases in the 7-day average observed in Germany, France and Italy.
- In preparation of an expected autumn surge, the European Medicines Agency (EMA) and the US Food and Drug Administration (FDA) have approved the use of two bivalent, or variant-containing, vaccines (Moderna and Pfizer-BioNTech) as booster doses. However, data shows that these offer similar protection as the existing vaccines.
- There are currently no bivalent vaccines being procured by COVAX and the original Pfizer-BioNTech vaccine will be discontinued with the last COVAX shipments of Pfizer doses expected in early October.
- The global picture of primary series coverage has remained stagnant with 63% of the global population having completed their primary series versus 18% in low-income countries and 24% in Africa – a one percentage point increase from August.
- 31% of the global population have not yet received a single dose of COVID-19 vaccines. The rates are lowest in the WHO Africa and the Eastern Mediterranean regions where 73% and 45% remain unvaccinated, respectively.
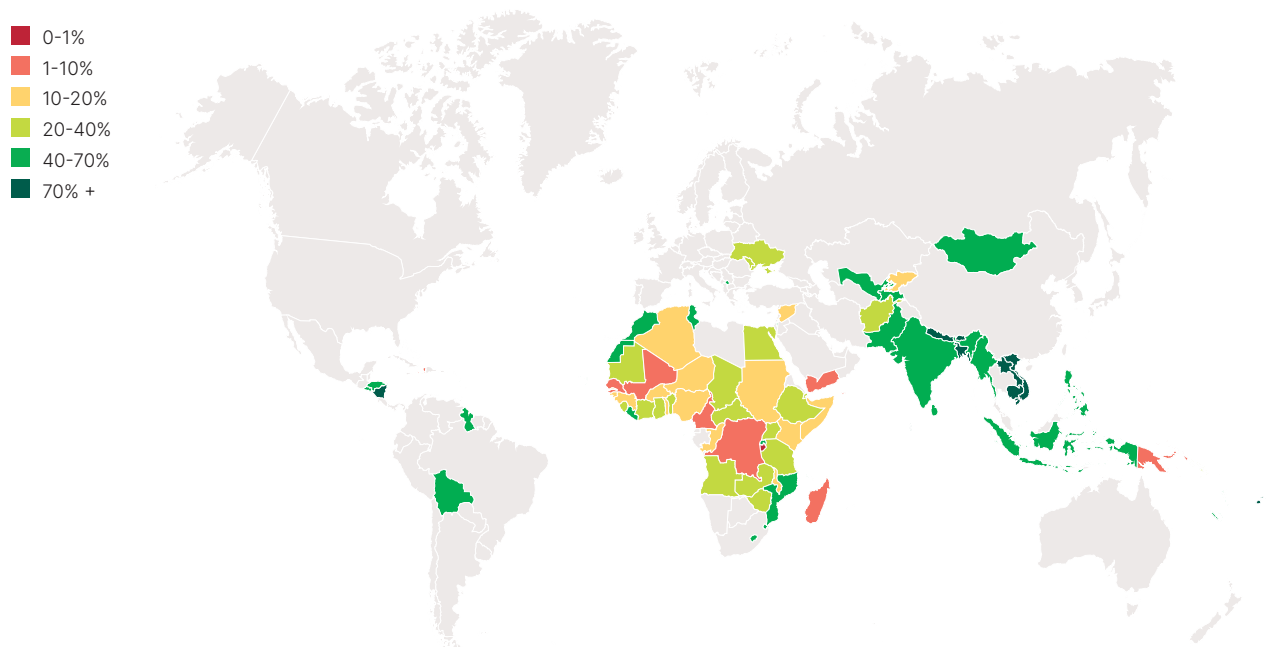
For more on the global situation:
- [WHO COVID-19 Weekly Epidemiological and Operational Updates](#)
- [WHO COVID-19 Dashboard](#)
- [UNICEF COVID-19 Vaccine Market Dashboard](#)
- [UNDP Global Dashboard for Vaccine Equity](#)
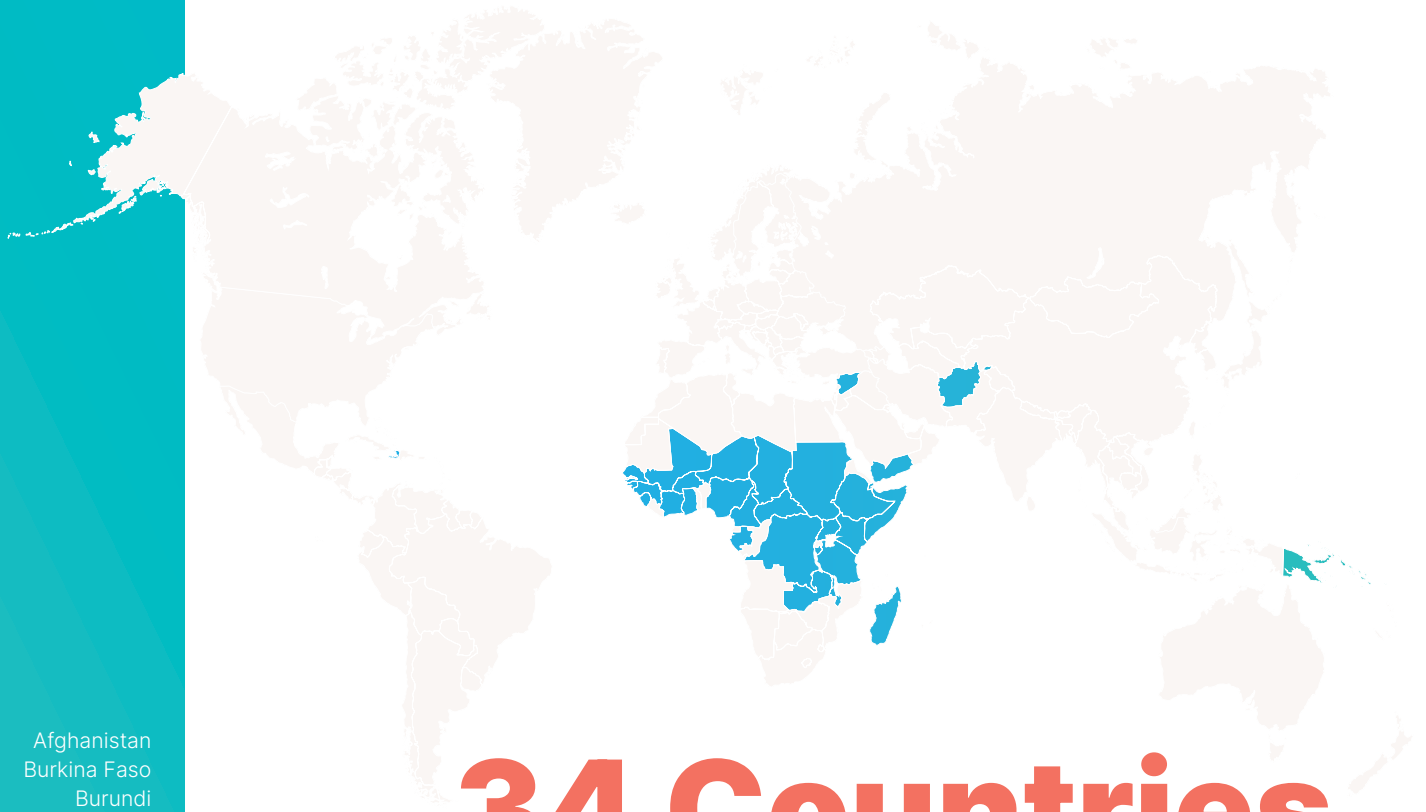- [COVID-19 Vaccine Delivery Partnership Information Hub](#)



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# Advanced Market Commitment (AMC) countries

- Across the 92 Gavi Advanced Market Commitment (AMC92) countries, primary series coverage has remained largely stagnant, reaching 51% by the end of September.

- A cumulative total of 4.7 billion doses were administered across the AMC92 since the start of the vaccine roll-out, with an additional 75 million doses administered in September – a decline of almost 100 million doses compared to August.

- No additional countries have crossed the 70% threshold but due to a revision in reported data, Rwanda's primary series coverage rate was corrected downwards to 69%.

**FIGURE 1**

**Coverage with complete primary series in AMC participants**

- 0-1%
- 1-10%
- 10-20%
- 20-40%
- 40-70%
- 70% +

Afghanistan
Burkina Faso
Burundi
Cameroon
Central African Republic
Chad
Côte d'Ivoire
Djibouti
DRCongo
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Haiti
Kenya
Madagascar
Malawi
Mali
Niger
Nigeria
Papua New
Guinea
Senegal
Sierra Leone
Solomon
Islands
Somalia
South Sudan
Sudan
Syria
Tanzania
Uganda
Yemen
Zambia

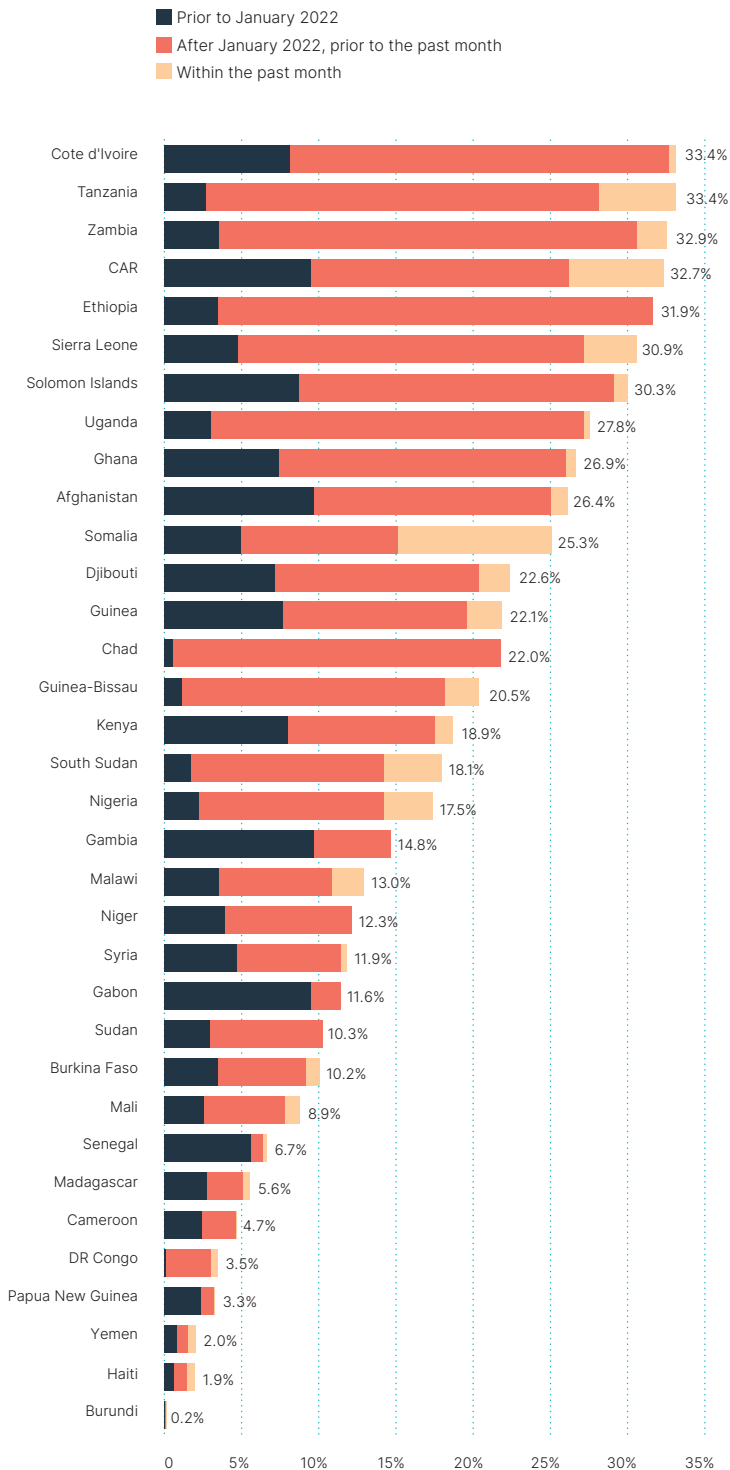# 34 Countries for concerted support

## Progress on primary series coverage

- **Average vaccination coverage among the 34 countries for concerted support increased more than five-fold** from 3% in January to 17% by the end of September.
- **There are still nine countries below 10% coverage rates,** remaining stagnant since the last month. However, 15 countries now have rates above 20%, with Somalia and Guinea-Bissau the latest countries to move passed this milestone.
- **Seven countries among the 34 for concerted support now have primary series coverage of 30% or more, up from 3 last month.** The Central African Republic, Sierra Leone, Solomon Islands and Tanzania have passed the 30% threshold in the past month.

## FIGURE 2

**Proportion of coverage achieved within the past month, since January 2022, and prior to January 2022 across Concerted Support Countries (34)**

- Prior to January 2022
- After January 2022, prior to the past month
- Within the past month



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| Country | Coverage |
|---|---|
| Cote d'Ivoire | 33.4% |
| Tanzania | 33.4% |
| Zambia | 32.9% |
| CAR | 32.7% |
| Ethiopia | 31.9% |
| Sierra Leone | 30.9% |
| Solomon Islands | 30.3% |
| Uganda | 27.8% |
| Ghana | 26.9% |
| Afghanistan | 26.4% |
| Somalia | 25.3% |
| Djibouti | 22.6% |
| Guinea | 22.1% |
| Chad | 22.0% |
| Guinea-Bissau | 20.5% |
| Kenya | 18.9% |
| South Sudan | 18.1% |
| Nigeria | 17.5% |
| Gambia | 14.8% |
| Malawi | 13.0% |
| Niger | 12.3% |
| Syria | 11.9% |
| Gabon | 11.6% |
| Sudan | 10.3% |
| Burkina Faso | 10.2% |
| Mali | 8.9% |
| Senegal | 6.7% |
| Madagascar | 5.6% |
| Cameroon | 4.7% |
| DR Congo | 3.5% |
| Papua New Guinea | 3.3% |
| Yemen | 2.0% |
| Haiti | 1.9% |
| Burundi | 0.2% |

## TABLE 1:

**Vaccination coverage ranges among the 34 CoVDP Countries for Concerted Support**

| VACCINATION COVERAGE RANGES | Countries |
|---|---|
| **<30%** (n=7) | Côte d'Ivoire, Tanzania, Zambia, Central African Republic, Ethiopia, Sierra Leone, Solomon Islands |
| **20–30%** (n=8) | Uganda, Ghana, Afghanistan, Somalia, Djibouti, Guinea, Chad, Guinea Bissau |
| **10–20%** (n=10) | Kenya, South Sudan, Nigeria, Gambia, Malawi, Niger, Syrian Arab Republic, Gabon, Sudan, Burkina Faso |
| **<10%** (n=9) | Burundi, Cameroon, Democratic Republic of Congo, Haiti, Madagascar, Mali, Papua New Guinea, Senegal, Yemen |

# Update on the work of the COVID-19 Vaccine Delivery Partnership

## COUNTRY ENGAGEMENT

The CoVDP continues to engage in particular the countries for concerted support through high-level political and follow-up missions.

- During a high-level political mission to Madagascar, together with USAID and the World Bank, CoVDP met with key government officials, including the Prime Minister, the Minister of Foreign Affairs, Minister of Health, Minister of Finance, Minister of Tourism, Senators and with professional organizations, religious leaders, and traditional healers to discuss steps to improve COVID-19 vaccination in one of the countries with the lowest coverage rates. The mission highlighted the need for further political engagement, but also the opportunities for technical solutions.  In this regard, CoVDP supported the country partners in addressing a number of coordination and technical bottlenecks including revamping coordination structures, a review of the 100-day campaign underway with increased use of mobile teams given that 40% of the population lives more than five kilometers away from a health facility, and a commitment to conduct an integrated campaign in November.

- Following a first mission to Malawi in June, CoVDP followed up with a technical mission in early September. The delegation met with the Presidential Adviser on COVID-19, the Secretary of Health and the National EPI Managers of the Ministry of Health, and key partners. The mission took stock of COVID-19 vaccination progress to date, supported the development of Malawi's One Budget and One Plan, and discussed Malawi's efforts to strengthen its data and reporting systems.

- CoVDP also conducted a technical mission to Gaziantep to review access to COVID-19 vaccines in Northwest Syria.

## POLITICAL ENGAGEMENT AND ADVOCACY

### UN General Assembly
**The UN General Assembly figured among the last major global political opportunities this year to bring the international spotlight back on COVID-19**. This was important for two reasons – to highlight the importance of vaccine equity and continued efforts to support in those countries that continue to have low vaccination rates.

Secondly, the need to take the lessons from COVID-19 and inform the future global architecture of pandemic preparedness and response.

Supported by the CoVDP, the first objective was pursued through a high-level side event under the leadership of the UN Secretary-General António Guterres and with

the support of the ACT Accelerator, WHO and UNICEF to discuss progress made in recent months on accelerating vaccines delivery as well as access to test and treat. It closed with a call to action to member states and partners to steer the course to support countries reach the 100-100-70[1] global goal.

CoVDP also contributed to a member states-hosted event to share key lessons on vaccine delivery in humanitarian settings, including the need to (i) focus preparedness and response investments on the primary care level including a remunerated health work force, (ii) support national organizations and institutions who have the local expertise and knowledge to contribute effectively to pandemic preparedness and response planning and implementation; and (iii) emphasize and advocate for the role of community engagement as a key element of pandemic preparedness and response, especially in humanitarian settings.

## Global Action Plan (GAP)

**The CoVDP was invited to share insights on trends, best practices and learnings during the Senior Officials Meeting (SOM) led by the US Government and co-hosted by the Government of Spain.** The high-level meeting in Madrid, which brought together key bilateral and multilateral partners as well as representatives from countries participating in the US' COVID-19 Global Action Plan (GAP), served as a sounding board to prepare some key decisions and initiatives in the run-up to the US-hosted ministerial side event during the UN General Assembly. CoVDP provided input in particular on line of effort (LOE 1) – Getting Shots into Arms – highlighting the need to focus in particular on high-priority groups, to leverage the investments under the GAP to strengthen primary care systems, and support innovative delivery models to reach populations in humanitarian settings.

# FUNDING

By end of September, CoVDP had facilitated the **disbursement of a total of US$ 115 million** across WHO, UNICEF and Gavi to cover urgent funding gaps in fifteen countries that would have otherwise hindered the delivery of vaccines. The following countries have received additional funding support in the past month:

- **US$ 1.6 million for Ethiopia** to fund operational costs for vaccine delivery to IDPs and refugees, vaccine transportation, production of vaccination card, and to support the revision of the NDVP and campaign supportive supervision
- **US$ 3.6 million for Nigeria** for technical assistance provided through CDS funding
- **US$ 3 million for Malawi** for vaccination campaigns in September and October, including reporting systems strengthening during the vaccination campaigns

- **US$ 3.2 million for Côte d'Ivoire** to provide funding for a vaccination campaign in October
- **US$ 0.5 million for Ghana** to fund advocacy activities, documentation of lessons learned, support for CSOs, and for refugees via IOM and UNHCR

The **new Gavi emergency funding window** will soon be launched, with an additional US$30 million available to support COVID-19 vaccine delivery.

**Seven countries have now submitted draft One Budgets to the CoVDP.** In total, 13 countries are in advanced stages of One Budget development. CoVDP is providing targeted support to countries requesting TA to develop these budgets.

# TECHNICAL ASSISTANCE

In Sudan, the CoVDP deployed technical support for the planning of the upcoming COVID-19 vaccination campaigns. This included support to the country teams in the preparatory activities for the campaign,

support for macro- and micro-planning, including the monitoring of progress against these plans, the development of relevant guidelines and SOPs, and support for improved coordination among the various

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1   Reaching 100% of healthcare workers, 100% of people aged 60 and older, and 70% of the total population.

stakeholders involved in the campaign planning and implementation.

In September, the CoVDP ran the fourth session of the Learning Collective with a focus on learnings from the implementation of the One Budget approach in Malawi and Sierra Leone. In both countries, the technical support provided to develop and implement the One

Budget has allowed the countries to engage a broader set of stakeholders (other ministries, decentralized governments, technical partners, etc.), increase ownership of the process by various partners, gain efficiencies by avoiding duplication of efforts and funding, and leverage the One Budget as a tool to improve funding for areas in routine immunization and primary care that are otherwise critically underfunded.

# IN-DEPTH:
# DATA SYSTEMS STRENGTHENING

- **The COVID-19 vaccine roll-out has led to unique demands to immunization monitoring system, in particular monitoring of new target groups and higher frequency of data collection**

- **Many countries have shifted to electronic monitoring systems to address those demands – but these come with high operational and change management requirements**

- **While monitoring and reporting systems tend to be stronger than before, more concerted efforts are needed to make those systems sustainable**
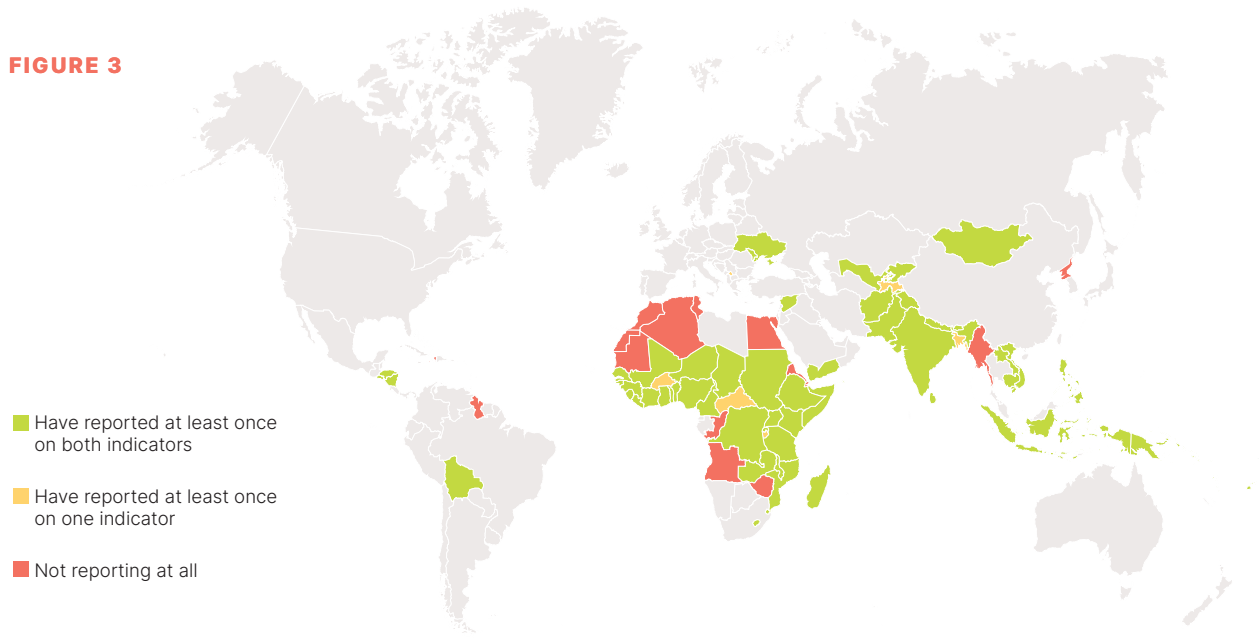
**Strong monitoring systems are essential to measuring the progress and effectiveness of COVID-19 vaccination programs.** Armed with timely and accurate data, decision makers can ensure programs are reaching targeted populations and can identify obstacles preventing smooth program implementation. Due to the unprecedented scale and speed of the COVID-19 vaccine rollout, however, immunization programs have had to quickly establish and adapt monitoring systems to meet new data needs related to the frequency, timeliness and granularity of the data required to make critical decisions about the vaccine roll-out. In doing so, they are facing both new and old challenges as they manage fundamental system changes and work to ensure appropriate system resourcing amidst competing priorities. Despite these obstacles, the COVID-19 vaccine rollout is an opportunity for countries to strengthen immunization monitoring systems, for routine immunization and future new vaccine introductions throughout the life course.

**The COVID-19 vaccine rollout has presented unique data needs and has made new demands of immunization monitoring systems.** Due to the epidemiology of COVID-19 infection, immunization monitoring systems have needed to monitor vaccine uptake in new population groups, notably healthcare workers, and older adults, among others[2]. This breaks from typical immunization program monitoring, which looks at uptake in yearly cohorts. Further, the urgency of the COVID-19 vaccine rollout has required near real-time vaccine implementation data at regional and global levels, requiring weekly and monthly reporting. This breaks with typical immunization program monitoring for which reporting occurs on a quarterly or yearly basis at the global level.

**To satisfy new pandemic data demands, many countries have opted to establish electronic monitoring systems to monitor COVID-19 vaccination.** Monitoring systems for vaccination programs typically take one of two forms: aggregate reporting systems

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2   WHO SAGE Roadmap for prioritizing uses of COVID-19 vaccines, https://www.who.int/publications/i/item/WHO-2019-nCoV-Vaccines-SAGE-Prioritization-2022.1

**FIGURE 3**



- Have reported at least once on both indicators
- Have reported at least once on one indicator
- Not reporting at all

or nominal electronic immunization registries (EIRs). Aggregate reporting systems involve tallying doses administered along key dimensions, often using paper tools, which are then shared physically or digitally with higher level health institutions. EIRs involve recording vaccination encounters as digital records, which can then be aggregated and shared with higher level health institutions directly. Both types of systems can be effective with the appropriate resourcing, though EIRs have potential advantages. They allow for more granular information and can make information available more quickly. EIRs come, however, with significant material, financial, and human resource demands. Where EIRs are not already in place, they require strong institutional foundations built on a culture of data use and adequate resources, which are often not available in times of emergency.

**Due to these substantial requirements, many countries opting to establish electronic immunizations registries for COVID-19 vaccination have encountered difficulties.** Due to the labor-intensive nature of data entry into these systems, the volume of entries required, and the subsequent resources needed for their operation, most countries implementing a new EIR have large backlogs to be entered into the new system. As a result, most have reverted to the aggregate tally-based systems they

were using prior, creating parallel systems. In a recent assessment conducted by the WHO Regional Office for Africa (AFRO) on existing COVID-19 vaccine data systems, 14 of the 15 countries assessed were using an electronic platform to record patient data at vaccination sites[3]. 11 of the 14, however, had reverted to a parallel aggregated monitoring system to satisfy data needs[4].

**In light of these new data demands and resulting system changes, countries have struggled to collect and report key data points, though considerable progress has been observed since early 2022.** Across the 90 Advanced Market Commitment (AMC) participants having started COVID-19 vaccination, 78% (70) have reported at least once on primary series uptake in healthcare workers, increasing from four reporting countries in July 2021 to 49 in the most recent reporting period[5]. Similarly, 79% (71) participants have reported at least once on primary series uptake in older adults, increasing from four reporting countries in July 2021 to 43 in the most recent reporting period. Across the 34 countries for concerted support (CCS), 94% (32) and 82% (28) have reported on healthcare worker and older adult primary series uptake, respectively. Reporting rates are lower for booster doses. Of the 23 CCSs that have adopted booster policies, 30% and 35% have reported on booster uptake healthcare workers and older adults, respectively.

3  Rapid analysis of existing data systems for COVID-19 vaccination data management and use for decision making in the African Region, WHO AFRO, 17 August 2022.
4  Idem
5  Data from WHO-UNICEF electronic Joint Reporting Form (eJRF) COVID-19 vaccine module and WHO regional reporting systems on COVID-19 vaccination, available at infohub.crd.co

**FIGURE 4**
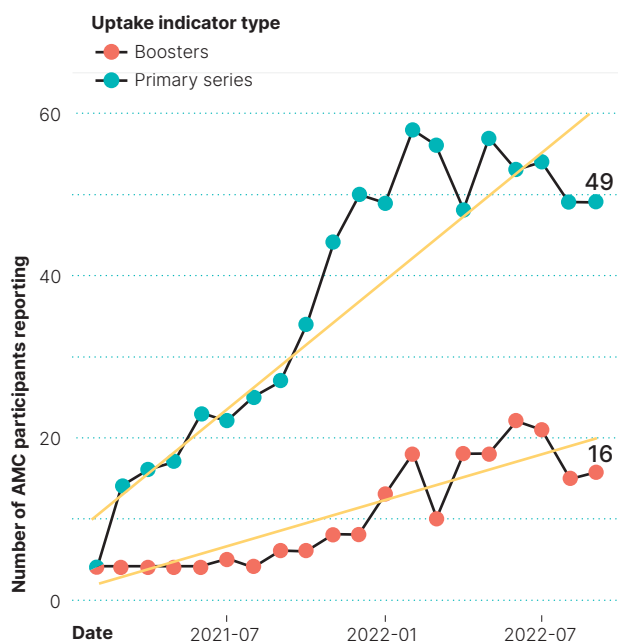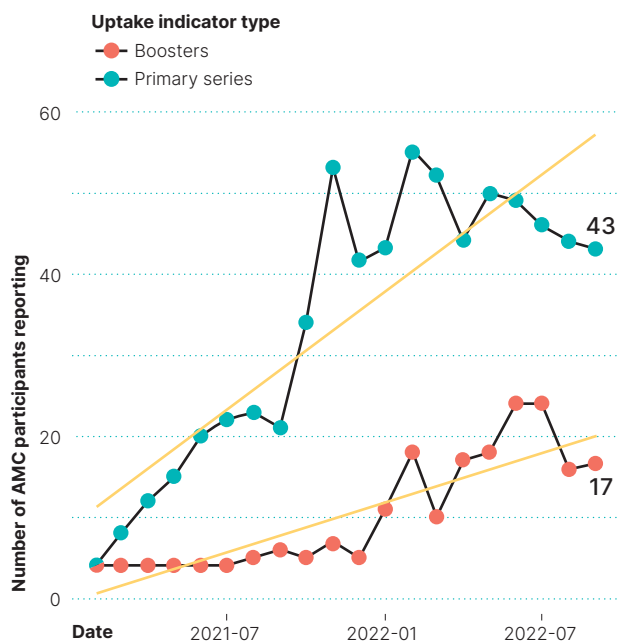
## Reporting on HCW coverage over time

**FIGURE 5**

## Reporting on coverage of older adults over time



**The COVID-19 Vaccine Delivery Partnership (CoVDP) and its constituent agencies are working to support countries in strengthening their COVID-19 vaccination monitoring systems.** Following its assessment of COVID-19 vaccine data systems, WHO AFRO (which covers 25 of the 34 CCSs) is working directly with countries through a series of multi-partner missions to create country-specific plans of support. In countries where establishing an EIR has led to parallel systems, WHO AFRO is working with national health authorities to develop costed operational plans for 1) the resulting clearing data backlogs and 2) the optimization the new EIR, addressing material, financial, and human resource gaps, among other activities. In the Country Snapshots section, we will explore the COVID-19 vaccination monitoring system in Burkina Faso, including the challenges it is facing and the opportunities to strengthen it moving forward.

**Complementing the work of WHO AFRO in the African Region, the CoVDP is working with in-country teams to identify the root causes for the data gaps observed at the global level.** Based on this deeper understanding, the CoVDP is connecting country teams with partners & resources to fill data system gaps to both address COVID-19 related data needs and also strengthen these systems for the future. Once root causes have been identified across the 34 CCSs, the CoVDP will publish a white paper detailing data system gaps and support needs, inviting partners to engage. In concert, via its Digital Health & Innovation Working Group, the CoVDP is developing a tracking tool to streamline technical assistance requests and support being provided in the data system space. This enables the clear identification of remaining technical assistance gaps, while working to prevent development partner activity overlap.

**RESOURCES:**
- **Guidance document for countries on data & monitoring related to COVID-19 vaccination – available online here, in all UN languages**
- **Monitoring metrics document outlining COVID-19 vaccination data monitored at the global level, accompanying the July 2022 update to the Global COVID-19 Vaccination Strategy - available online here, in English, and soon in French, Spanish, and Arabic**

**FIGURE 6**

## Reporting on COVID-19 vaccination



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**Reporting status**
- Reporting on CPS and boosters
- Reporting on CPS, but not boosters
- Not reporting

**Reporting timeliness**
- Reported recently
- Has not reported recently

Countries (top to bottom): Madagascar, Solomon Islands, Papua New Guinea, Senegal, Nigeria, Sudan, Zambia, Ethiopia, Afghanistan, Sierra Leone, Cameroon, Chad, DRCongo, Gambia, Ghana, Malawi, Mali, South Sudan, Syria, Uganda, Guinea-Bissau, Guinea, Niger, Côte d'Ivoire, Kenya, Tanzania, Somalia, Yemen, Burundi, CAR, Gabon, Burkina Faso, Djibouti, Haiti

Uptake indicator columns: General population, Healthcare workers, Older adults

# COUNTRY SNAPSHOTS

## Burkina Faso –
## Maintaining momentum in the roll-out of an electronic immunization registry
### Strengthening electronic reporting systems



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**Burkina Faso put in place an electronic immunization registry (EIR) for COVID-19 vaccination to meet the unique data demands of the COVID-19 vaccine rollout.** Having adopted the District Health Information System (DHIS) 2 as the country's health management information system in 2013, health authorities implemented the platform's "Tracker" module for COVID-19 case and vaccination management in 2021. This decision to move away from the aggregate reporting system for routine immunization was made given the EIR's capacity to transmit near real-time data and provide greater data granularity, both needed for effective COVID-19 vaccination program monitoring.

**However, the EIR's high material, financial and human resource requirements led to important gaps during the implementation of the system.** Effective data collection requires that each vaccination site be equipped with at least one tablet, internet connection, and staff trained in data entry. While some health centers had previously received tablets for similar data entry, this was not the case for all. Further, appropriate supervision mechanisms from higher-level health institutions are essential to ensuring the transmission of good quality and timely data. In Burkina Faso, health workers often had limited experience with the data entry application and tablet manipulation, leading to a considerable increase in

the time required to enter a vaccination record compared to paper-based registries. In many places, this has led to an accumulation of backlogged records. An assessment conducted by WHO AFRO estimated that only 30% of vaccination records had been entered into the system[6].

**The difficulties in the rollout of the EIR in Burkina Faso have prompted the Ministry of Health to establish a parallel, paper-based reporting system to satisfy data needs.** While the parallel system has allowed important data to continue to flow, its paper-based reporting templates are limited in the number of disaggregations they can record, as the forms quickly become too complex with too many demographic breakdowns. In its paper-based tools, Burkina Faso has included disaggregations for healthcare workers, Internally Displaced Persons (IDPs) / refugees, and adolescents, further broken down by sex and comorbidity status. Reliance on these paper-based tools thus prevents collection of COVID-19 vaccine uptake data in other key target groups, notably in older adults. This information, along with other key data points, would be available if records were entered into the EIR.

**To realize the full benefits of the EIR, the Ministry of Health is working to address implementation gaps.** In September 2022, WHO AFRO organized a workshop with the Ministry of Health to develop an operational plan to clear the existing data backlog and optimize implementation of the EIR to prevent similar gaps in the future. The budgeted plan lays out clear timelines for strengthening the system, including for reinforcing health care worker data entry skills, addressing material and internet connection gaps, and putting in place a system for supervision across all levels of the health system. WHO will support the Ministry of Health with the financing required to action the plan. The Ministry expects existing data backlogs will be cleared by end of 2022 and will focus on the system strengthening activities for the remainder of the 6-month plan period.

6   Rapid analysis of existing data systems for COVID-19 vaccination data management and use for decision making in the African Region, WHO AFRO, 17 August 2022.

# Malawi
## Strengthening electronic reporting systems



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**Malawi has a digital health strategy in place and a digital health center that leads operationalization of the strategy.** Technical teams from different agencies are seconded at the centre to support the team. The digital health center aims to have integrated systems in place at different levels of health (community level (iCHIS), facility level (e.g NEMRS), district (DHIS2. etc.), and they are working to actively drive the agenda of aligning partners for mobilizing resourcing jointly and avoiding multiplicity of tools.

**Several electronic monitoring systems are used for COVID-19 vaccination and there are ongoing efforts to increase the interoperability of systems and databases.** Malawi's health management information systems builds on DHIS2 and contains the "Tracker" and Android models for COVID-19 reporting. To improve interoperability between systems, the country is using OpenHIE interoperability layer and has made strides in linking registry services (health worker registry, client registry, terminology services, product catalogue) with point-of-service systems (HMIS, eIDSR etc). The use of RapidPro, a USSD-based application, helped rapid reporting, monitoring and tracking during the Vaccinate My Village campaign and daily monitoring of vaccination trends by the Ministry of Health. There are ongoing efforts to link RapidPro to DHIS-2.

**However, there are challenges that limit the impact of the data infrastructure.** More devices, better network connectivity and better training of healthcare workers and additional data clerks are needed to remove the considerable data backlogs that accrue when translating data from paper-based to electronic reporting forms. While digital solutions are being rolled out across the country, investments are often made in siloes and not adequately linked. This leads to a multiplicity of tools, with several solutions still being in pilot phases. For better coordination across the sector, the government is aiming to centralize procurements for digital health and strengthen consultations for procurement decisions with the digital health centre.

**In an effort to improve covid-19 vaccination data, WHO is currently supporting MoH in Covid-19 vaccine electronic data capturing capacity building in Kasungu district.** To clear the data backlog, WHO is supporting third party providers identified by MOH to support districts with backlog clearing. To support electronic data capture during the ongoing vaccination campaigns, WHO is also providing financial and technical support for data clerks in each vaccination team. In addition, WHO is providing capacity building to health workers on COVID-19 vaccine electronic data capturing. For health districts where electronic data entry is not yet feasible, additional manual data entry templates were provided to improve data capture at source.

# Rwanda –
## Scaling digital monitoring approaches during the pandemic



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**Rwanda represents a strong example of the successful of how digital solutions can support immunization surveillance and planning.** Rwanda, while note of part of the 34 countries for concerted with below 10% coverage rates in January, is worth a spotlight as it showcases the benefits of an integrated surveillance for pandemic response. The Ministry of Health utilized a range of digital health solutions to enable real-time information, data collection and monitoring which were leveraged for case tracking, management, contact tracing and immunization.

**With the implementation of the COVID-19 vaccine roll out, Rwanda's Ministry of Health required a system for registering and monitoring individual vaccinations.** Similar to other countries, Rwanda's routine immunization reporting system was not fully adequate for the monitoring needs of COVID-19 roll-out, which required real-time and granular data to track the progress of the program and swiftly respond to bottlenecks in areas of low coverage. To respond to

these needs, the Rwanda Biomedical Centre adapted its District Health Information System (DHIS) 2 to include an Electronic Immunization Registry (EIR) module, which supported individual-level data collection, monitoring and follow-up. By the time COVID-19 vaccines arrived in-country, the digital transformation away from paper-based reporting was already in place, accelerating the digitization of real-time data for vaccination delivery and monitoring.

**Patients are with a unique identifier which allows synchronization across various databases and effective to increase turn-up.** At facility level, healthcare workers input vaccination data, including name, identification (ID) number, age, location, occupation, type of vaccine, batch number, dose number and date, into the EIR. For new users, the health worker creates a profile for the patient with their national ID number. A unique health code allows health workers to access patient medical history, and individuals to access their medical records. Rwanda's vaccination certificates are digital, featuring name, passport number, type of vaccine, data, batch number, physician signature and stamp. To encourage community engagement and take-up of the immunization program, the platform also issues text messages informing people of their vaccination appointment details.

**At the central level, vaccination data is used for daily briefings and decision making.** The DHIS2 vaccination data is reviewed and analyzed daily and used for briefings for all relevant stakeholders involved in the planning and implementation of the vaccination roll out, including the MoH/RBC, police and army representatives, the COVID-19 command post, Minister of Finance and others. On a weekly basis, the vaccination data is presented to the Scientific Advisory Group (SAG), which includes high-level government officials and partners, and during which strategic decisions, issues and course corrections are discussed and vaccination data is used to support consultations.

**Rwanda's detailed vaccination data is also used to inform supply chain management.** To manage the multiple vaccine products that Rwanda receives (AstraZeneca, Pfizer, Moderna etc.), DHIS2 data is used to assess supply chain capacity for each district and review which vaccine type was predominantly used in which district, to limit the public being offered two different vaccine types. This was critical in limiting vaccine hesitancy, by ensuring that the second dose of vaccines was the same as the first dose provided. The updated real-time information helped to encourage the public to attend their appointments and support efficient vaccination delivery in general.



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## COVID-19 Compendium of best practices

Read the full report on Rwanda's experience scaling real-time monitoring approaches in the COVID-19 compendium.

Rwanda's full case study can be accessed alongside more case studies and insights on the COVID-19 Compendium. The COVID-19 compendium is developed by CoVDP and partners. It is a knowledge platform that documents the operational legacy of COVID-19 vaccination and contains detailed case studies on COVID-19 vaccination in humanitarian settings, vaccination strategies to reach the elderly or people with co-morbidities, strengthening of information management systems, supply chain strengthen, demand generation and integration with routine services. It is directed at national authorities who are responsible for managing or making key decisions on the deployment, implementation and monitoring of COVID-19 vaccination, as well as for those who are directly working on routine immunization and life-course vaccination at country level.

If you have case studies to share and to be listed in the compendium, please contact the compendium's content curator Alejandro Ramiro Gonzalez.

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# RESOURCES

- Global COVID-19 Vaccination Strategy in a Changing World: July 2022 update
- Monitoring Metrics Related to the Global Covid-19 Vaccination Strategy in a Changing World: July 2022 update
- Updated WHO SAGE Roadmap for prioritizing uses of COVID-19 vaccines
- COVID-19 Vaccine Delivery Partnership Information Hub
- COVID-19 Vaccine Implementation Analysis & Insights Report archives
- COVID-19 vaccine introduction toolkit
- Considerations for choosing COVID-19 vaccine products Eng | French
- Microplanning guide
- For all countries, various tools and guidance and vaccine confidence and uptake are available here, including:
  - Demand planning guide
  - Planning and budgeting template (Excel)
  - Behavioural and social drivers: tools and guidance to assess and address low uptake
  - Conducting community engagement guide
  - Misinformation management guide
  - Vaccine safety surveillance manual, communications chapter
  - Health worker conversation guide
  - Communicating on Covid 19 Vaccines in a Changing Environment
  - Explainers
- For all countries monitoring tools and guidance available here including:
  - Monitoring COVID-19 vaccination: Considerations for the collection and use of vaccination data
  - DHIS2 COVID-19 module developed and rolled out to interested countries

## COMING UP

**16–18 October 2022**
World Health Summit, Berlin

**18 October 2022**
CoVDP Learning Collaborative – Session 5. Register here.

**25 October 2022**
COVAX Participant and Country-Facing Staff briefing (9:00 and 16:00 CET)

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# COVID-19 Vaccine
### DELIVERY PARTNERSHIP

unicef | World Health Organization | Gavi The Vaccine Alliance