MOMENTUM Routine Immunization Transformation and Equity

COVID-19 Vaccination Program in Review June 2022–March 2024

NIGERIA

COVID-19 VACCINE IS SAFE AND EFFECTIVE





April 2024



MOMENTUM Routine Immunization Transformation and Equity

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Contact Information

JSI RESEARCH & TRAINING INSTITUTE, INC. 2733 Crystal Drive, 4th Floor Arlington, VA 22202, USA Phone: 703-528-7474 Fax: 703-528-7480 Web: https://usaidmomentum.org/

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EMID	Electronic Management of Immunization Data
LGA	local government area
NPHCDA	National Primary Health Care Development Agency
PHC	primary health care
RI	routine immunization
SCALES	Service Delivery, Communication, Accountability, Logistics, Electronic Reporting and Supportive Supervision

Results

Strengthening the Health System



Provided **233 mobile vaccination teams** with logistic support.

Reaching Underserved and Priority Populations



Supported the administration of **3,917,916 COVID-19 vaccine doses across five states** through direct service delivery support measures.



Trained **2,529 staff, volunteers,** and **local government agency monitors** on COVID-19 communication skills, vaccination logistics, and data monitoring.



Revised **COVID-19 microplanning guidelines** to use during vaccination campaigns in Jigawa state.

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Supported **6,891 community COVID-19 dialogue sessions** attended by **666,573 people**.

Background

Nigeria is located on the western coast of Africa and, with 222 million people, is the most populous country on the continent. The first COVID-19 case was reported in Nigeria on February 28, 2020.¹ As of December 19, 2023, of the 267,173 confirmed cases, 3,155 ended in death.² Nigeria received its first batch of COVID-19 vaccines on March 2, 2021, when it set and started to pursue its goal to vaccinate 70 percent of its population by December 2022.³

The government's four-phase National Deployment and Vaccination Plan prioritized vaccinating health care and other frontline workers such as police. In the first year of roll-out, the majority of states struggled to reach vaccination goals and by July 2022, only three states had a vaccination coverage rate over 50 percent. In August 2022, to accelerate COVID-19 vaccination coverage, the federal government, through the National Primary Health Care Development Agency (NPHCDA), launched the Service Delivery, Communication, Accountability, Logistics, Electronic Reporting and Supportive Supervision (SCALES) 3.0 strategy.⁴ The strategy aimed to design state-specific strategies for COVID-19 vaccination goals. A key difference between SCALES 3.0 and SCALES 2.0 was a shift to focus on mobile teams as the primary strategy for vaccination. Mobile teams, composed of two vaccinators, two recorders, one validator, and one mobilizer, are deployed to areas with a large population, and rural and hard-to-reach areas that are often unreached by immunization services. By December 31, 2023, 71.6 percent of Nigeria's 115,983,921 eligible persons had been fully vaccinated.⁵

- 2 WHO. (2023, December 19). Nigeria. https://www.who.int/countries/nga
- 3 Usigbe, L. (2021, April 6). Nigeria: COVID-19 vaccine rollout kicks off in Africa's most populous country. https://www.un.org/africarenewal/magazine/april-2021/nigeria-covid-19-vaccine-rollout-kicks-africasmost-populous-country
- 4 Wadzingi, Williams. WHO Nigeria. (2022, November 9). Imo leaves no stone unturned, takes COVID-19 vaccination to the last mile. <u>https://www.afro.who.int/countries/nigeria/news/imo-leaves-no-stone-unturned-takes-covid-19-vaccination-last-mile</u>
- 5 NPHCDA. (2024, January 1). Daily Call-In Data Analysis of COVID-19 Vaccinations.



¹ GAVI. (2021, March 11). Ten lessons from Ogun State - from first COVID-19 case in Nigeria to building a resilient response. <u>https://www.gavi.org/vaccineswork/ten-lessons-ogun-state-first-covid-19-case-nigeria-building-resilient-response?gclid=Cj0KCQiAy9msBhD0ARIsANbk0A8FE9aBnXfCOdvnVzQunvCj92HKQ-3JmrMJgFiespvLXIMGADoRuiCIaAm_pEALw_wcB</u>

Project Overview

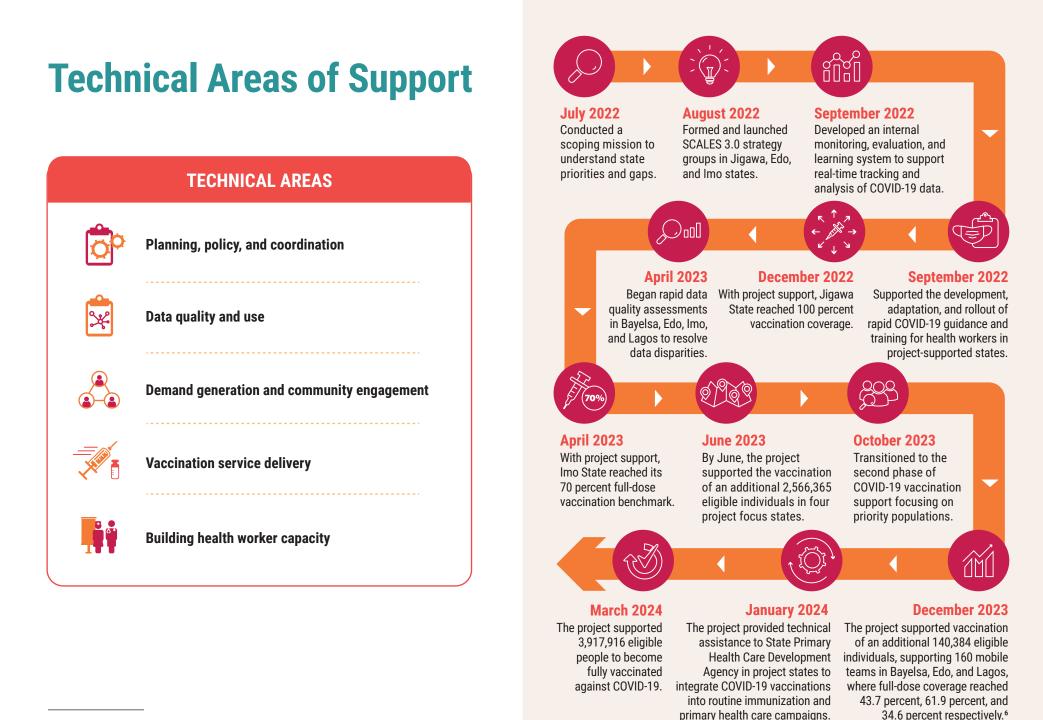
MOMENTUM Routine Immunization Transformation and Equity (the project) applies best practices and explores innovations to increase equitable immunization coverage in USAID-supported countries. The project is USAID's flagship technical assistance mechanism for immunization in and is active in 12 countries and has supported over 18 countries. It builds countries' capacity to identify and overcome barriers to reaching zero-dose and under-immunized children and older populations with life-saving vaccines and other integrated

health services, including rebuilding immunization systems adversely affected by the pandemic. It also supports COVID-19 vaccine rollout across countries with a wide range of circumstances and needs.



To support the Nigerian government in responding to the COVID-19 pandemic and providing vaccines to all eligible populations, USAID provided funding to the project from June 2022 to March 2024. Through this funding, the project coordinated with the Federal Ministry of Health and provided technical assistance to Bayelsa, Edo, Imo, Jigawa, and Lagos states to:

- Roll out the National Deployment and Vaccination Plan.
- · Strengthen governance and leadership for immunization services.
- Improve data quality and management for vaccination.
- Improve the capacity of the health workforce to deliver high-quality immunization and primary health care (PHC) services.
- Strengthen mechanisms for advocacy, communications, and social mobilization to increase trust and uptake in immunization services.



⁶ National Primary Health Care Development Agency/Operation Room analysis of daily call-in data.

Strengthening Health Systems Management



In a large decentralized country like Nigeria, strong planning and coordination is vital for a successful health program, particularly an immunization program responding to a global emergency. The project provided technical and operational support to multiple planning and coordination efforts based on SCALES 3.0 to increase COVID-19 vaccination rates.

One component of the SCALES 3.0 guidelines was the development of state-specific coordination platforms. The project provided technical and logistic support in Bayelsa, Edo, Imo, Jigawa, and Lagos to operationalize coordination platforms including a strategy group and operations rooms at the state and local government area (LGA) levels. These operations rooms were control centers for COVID-19 vaccination coordination. Their staff addressed data entry challenges, coordinated review meetings, and provided data management capacity building to data officers. However, state operation rooms had challenges such as low capacity for analysis and use of coverage data; and delays in transmitting daily coverage data from sites, responding to and providing feedback to mobile teams, and fixing Electronic Management of Immunization Data (EMID) system problems. The project supported state operations rooms with IT equipment and data bundles to fill some of these critical gaps. Each state also developed indicators to measure the progress of the coordination platform, which enhanced multi-partner decision making, real-time COVID-19 data reporting, and accountability for resolving operational challenges.

In each focus state, the project supported the inauguration and implementation of key coordination mechanisms including strategy groups focused on integrating COVID-19 and PHC services, as recommended by SCALES 3.0, to increase vaccine reach and availability. The project also supported the NPHCDA to develop COVID-19 integration into routine immunization (RI)/PHC guidelines, a critical step for long-term COVID-19 vaccination sustainability.



States had varying levels of readiness for integrating COVID-19 and PHC services. In Imo, during the early implementation period, the project supported a vaccination strategy group that resulted in the state reaching NPHCDA's 70 percent COVID-19 vaccination coverage goal. After reaching this goal, the governor declared COVID-19 vaccines should be integrated into RI at all PHC centers and secondary hospitals and said the COVID-19 strategy group would transition to a RI/PHC strategy group. The project supported the state to implement NPHCDA integration guidelines on transitioning COVID-19 vaccination to RI at PHC centers. These efforts helped more than 30,000 people get vaccinated against COVID-19 through facility-based integrated RI sessions.

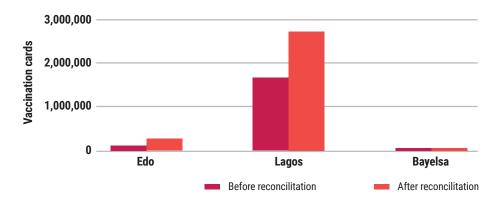
To support efficient vaccination efforts the project revised microplanning guidelines, incorporating lessons learned from COVID-19 and convened meetings with other U.S. government partners working on COVID-19 response. The meetings resulted in better alignment of vaccination teams within focus LGAs to avoid duplicating efforts and wasting scarce resources. The project shared revised microplanning guidelines in Jigawa state. Sections of this guidance were adapted for use in microplanning guidelines to support ongoing human pappilomavirus vaccine introduction.

🔀 Data quality and use

One of the project's challenges was delays in uploads of vaccination data to the EMID system. Vaccination teams were supposed to upload data to the server daily but often lacked the technical capacity and time to record the data. Additionally, the platform had technological limitations and data synchronization was delayed in areas with low bandwidth. As a result, it was challenging to make timely decisions about strategies because there was incomplete information on coverage. The project worked closely with the NPHCDA, state PHC development agencies, USAID, US-CDC, and other implementing partners to explore solutions to these challenges. They agreed that the EMID needed to remain an option to archive COVID-19 vaccination coverage data and that the technology behind the system needed to be improved. They also decided to retrain EMID recorders; develop a simplified guideline on data extraction, analysis, and reporting; and expand the bandwidth of the EMID system. Following the agreement, the project retrained 95 EMID recorders in Bayelsa, Edo, Imo, and Lagos and helped simplify the data extraction guidelines.

Additionally, the project developed an internal monitoring evaluation and learning system adapted from the paper-based NPHCDA call-in data system and digitized it using JotForm, an online data management tool, to collect and process call-in data from project-supported vaccination mobile teams. JotForm allows real-time tracking, reporting, and analysis of COVID-19 service delivery indicators, improving the accountability of vaccines administered and data quality, which circumvented some of the EMID system challenges.

Graph 1. Vaccination card data captured in the national EMID system



Due to the high number of mobile vaccination teams operating in different states, it was essential to monitor and track vaccination strategy progress. The project supported Bayelsa, Jigawa, and Imo to deploy digital supportive supervision checklists with JotForm, which helped the states supervise mobile teams' competencies. The project used the checklist results to analyze mobile teams' daily vaccination performance and identify gaps, provide real-time feedback, and develop data quality improvement action plans. The project conducted 64 rapid data quality assessments across selected LGAs in Bayelsa, Edo, Imo, and Lagos to resolve disparities between call-in and EMID-reported data. The findings informed data reconciliation exercises with vaccination teams that had a large volume of vaccination cards that were not uploaded into the EMID system or captured in the call-in reports. The project also worked at the state and LGA levels to upload previously uncaptured vaccination card information onto the national EMID system (Graph 1). Thanks to these efforts, there was a substantial decrease in discrepancies between the call-in and EMID vaccination data.

Reaching Underserved and Priority Populations

Demand generation and community engagement

There are 49 million Nigerians in the project-supported states; reaching priority groups (health workers, people with comorbidities, people over 50 years old, pregnant and lactating mothers, and people living in humanitarian/security-compromised settings) within this large population necessitated tailored demand generation and community engagement efforts. Part of the project's strategy to support the Nigerian government with vaccination efforts was identifying and engaging key populations and priority groups. This included pregnant and lactating women, people in correctional facilities, older people, people living with HIV, students, and police, all of whom required different engagement strategies.

At the national level, the project held coordination meetings with the USAID-funded project, Breakthrough ACTION-Nigeria, to identify areas of collaboration and learning including the adoption and use of mass media communication products. Additionally, the project provided technical support for the National Risk Communication technical working group's weekly and quarterly meetings. The project helped states print and distribute NPHCDA-approved information, education, and communication materials to reach community members with accurate COVID-19 information at campus and market sensitization activities.

The project intensified interpersonal communication during outreaches, including during RI and COVID-19 integration campaigns. It reached 14,366 university students in Lagos with COVID-19 messaging, and increased involvement of ward health committee leaders in Lagos, ward development committee chairs in Bayelsa and Imo, and *jakadun lafiya* (health ambassadors) in Jigawa. It also supported the state PHC development agencies to hold compound meetings and community dialogues in Edo.

As part of efforts to strengthen interpersonal communication, the project identified 100 vaccine champions (90 women and 10 men) in communities to increase vaccine acceptance. The project worked with these champions in areas with lower vaccination rates to conduct 6,891 community dialogue sessions that were attended by 666,573 people. In Bayelsa, the project organized vaccination services at football matches and



conducted house-to-house visits to vaccinate older people. Mobile vaccinators met pregnant and lactating women at antenatal care clinics to provide information about the COVID-19 vaccine.

As the project was analyzing COVID-19 health facility registers and COVID-19 vaccination tally sheets to identify missed communities, it found people in correctional facilities, a priority population, were not prioritized for vaccination during the initial two campaigns. The project conducted an assessment of over 5,000 unvaccinated people in three correctional centers in Imo to assess barriers to vaccination and found that 93 percent were open to vaccination but had some concerns. Seventy-three percent were worried about getting a vaccine on an empty stomach; 11 percent were worried about effectiveness; and 9 percent were worried about safety. In response to these concerns, the project provided health education and snacks prior to vaccination, and was then able to vaccinate 3,668 people in this priority population. After expanding this approach to correctional facilities in Bayelsa, Jigawa, and Lagos, it vaccinated a total of 6,883 people (Table 1).

Table 1. Vaccination of imprisoned people

	Bayelsa	Imo	Jigawa	Lagos	Total
Men	132	3,588	250	2,116	6,086
Women	18	80	150	549	797
Total	150	3,668	400	2,665	6,883

In September 2022, the project supported the roll out of SCALES 3.0 and an acceleration of COVID-19 vaccinations in Edo, Imo, Jigawa, and Lagos states. As part of this, the project supported the logistics and remunerations of 233 mobile vaccination teams recruited and allocated by the state governments. These units operated on the motto "If you don't come to us, we go to you" and visited areas without a health facility, which the project worked with ward focal people to identify.

The project supported **233 mobile vaccination teams** with logistic support to deliver **3,686,514 COVID-19 vaccine doses** and reach **97,665 children with RI doses**.

Mobile vaccination teams brought COVID-19 vaccines to communities at transportation hubs, markets, correctional facilities, and security-compromised areas. During the floods in Bayelsa, COVID-19 vaccinators combined efforts with existing mobile PHC services such as child health and screenings for malaria, hypertension, and diabetes.





During a three-day market campaign in Ikotun, **10,140 people were vaccinated against COVID-19**.

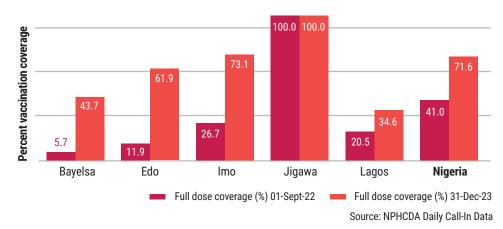
The project also used learning from each month of COVID-19 campaigns to tailor and adapt outreach strategies. For example, in Jigawa, the project started using mobile vaccination teams to reach women who were unvaccinated, recognizing that women's mobility constraints, due to transportation costs and/or household and childcare responsibilities, affect their ability to access services. Project members found that houses in certain communities were scattered far apart, and people weren't showing up to mobile vaccination events. The project switched to a combination of mass congregation (market, mosque, school, church, motor park) and house-to-house vaccination to reach more people. It also continued to conduct best practices such as use of mobile teams, evening vaccination, and weekly payment of team members.

In Imo, the project faced security concerns, where government presence and vaccination activities were considered sacrilegious. The project conducted community dialogues on the importance of vaccination to prevent COVID-19 and other vaccine-preventable diseases and worked with community champions who supported vaccination teams. When people wanted to be vaccinated, the project helped two security-compromised LGAs to transport people to facilities outside the LGAs to be

vaccinated, ultimately vaccinating 86,415 people and reaching 90 percent coverage in both LGAs. The project also adopted digital technology-based remote mentoring through WhatsApp to contact facilities that were physically inaccessible to make sure COVID-19 data were uploaded.

In September 2022, full-dose COVID-19 coverage across project-supported states was on average less than 50 percent. By December 2023, vaccination coverage increased in each state, with two exceeding 70 percent (Graph 2).

Graph 2. COVID-19 vaccination coverage in project supported states



Strengthening the Health Workforce

Building health worker capacity

The project supported health workers to conduct COVID-19 vaccinations in areas with lower vaccination uptake. To begin this process, the project analyzed data to identify underperforming LGAs for COVID-19 vaccination. Project staff then recruited high-performing vaccination teams from each state and gave them additional training to act as mobile teams at the LGA levels. These trainings utilized the SCALES 3.0 curriculum and were facilitated by government immunization program managers. The project provided logistical support for developing and monitoring



daily implementation plans for teams assigned to local health facilities, and with the government immunization managers, made periodic supportive supervision visits and transmitted findings through the NPHCDA-led supervisory platform using the Open Data Kit tool. Key challenges from the supportive supervision visits included delays in funding, lack of support from immunization partners, and incomplete and low performing vaccination teams.



The project supported **1,027 project and health center staff supervisors** who monitored vaccine administration across project-supported states.

To overcome these challenges, the project worked with health facility officers-incharge to ensure staff attendance, improve social mobilization, and conduct periodic check-ins with vaccination teams. Building trust with health workers was essential to reach and maintain high-performing vaccination teams, so the project ensured routine payments and offered refreshments during long campaign days. The project also contributed to the development and rollout of rapid COVID-19 guidance and training for health workers in project-supported states, including appropriate pandemic control precautions and provision of essential personal protective equipment.



The project trained **2,529 health workers on COVID-19**related topics.

Lessons Learned



Engaging key stakeholders throughout the vaccination process supported a more coordinated, efficient, and effective vaccination system.

- · Working with vaccine champions increased vaccine acceptance in the community.
- Engaging government officials and aligning with national and state priorities helped ensure consistent coordination and support for project activities.
- Building trust with health workers through regular payment, routine training, and supportive supervision visits was a critical component of vaccine administration.



Innovative approaches such as mobile vaccination units allowed for greater vaccine access.

- Using mobile vaccination units allowed vaccines to be brought to hard-to-reach communities such as security-compromised areas and areas that were blocked due to flooding.
- Integrating mobile unit services (e.g., COVID-19 vaccination with RI or malaria screenings) led to efficient use of resources and the ability to vaccinate more people against COVID-19.



Adaptive learning allowed the project to recognize when strategies were no longer effective and adjust them to better reach unvaccinated populations.

• Up-to-date and accurate data is an essential component of being able to make informed decisions about vaccination strategies.

A Way Forward

The project built a solid foundation for equitable and integrated immunization coverage. Engaging with health workers, strengthening data quality, and using strong community engagement techniques all supported successful COVID-19 vaccination activities. The project worked closely with key stakeholders to continuously monitor data and activity outcomes to see what was and wasn't working about their approach. With this learning mindset, the project and its partners were able to shift and change course as needed to reach more people and smartly use their resources. To continue to strengthen this foundation, RI initiatives should embrace the same innovation, flexibility, and sustained collaboration. By incorporating the lessons and maintaining a focus on community engagement, health worker trust, integration, and adaptive learning, Nigeria can continue progress to reach immunization goals and equitable coverage.





JSI RESEARCH & TRAINING INSTITUTE, INC.

2733 Crystal Drive, 4th Floor Arlington, VA 22202, USA Phone: 703-528-7474 Fax: 703-528-7480

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