Equitable COVID-19 Vaccine Delivery Case Studies

Promising practices from Africa





In December 2021 the World Health Organization announced its goal to vaccinate 70% of the global population against COVID-19 by mid-2022,¹ but this target has not been met. While 80% of populations in many high- and middle-income countries have received at least one dose of the COVID-19 vaccine, rates in low-income countries remain low where only 21% of received at least one dose.² Delayed access to vaccines among low-income countries has contributed to low vaccination rates, particularly in Africa – the region with the lowest vaccination rates globally. However, vaccine supply alone is not enough to explain low vaccination rates. Increasing these rates requires flexible approaches tailored to community needs.

VillageReach has over 20 years of experience in vaccine delivery in Africa, and we believe in a people-centered approach to health care delivery. Our experience and emphasis on government partnerships made us well positioned to support COVID-19 vaccine distribution in the countries where we work, but we quickly learned the same approach would not work in every country. This case study presents VillageReach's learnings from COVID-19 vaccine delivery in Cote d'Ivoire and how we successfully partnered with the government to adapt programming and increase vaccination rates.



Africa has the lowest vaccination rates against COVID-19 globally.

 $^{1 \ \} https://www.who.int/news/item/23-12-2021-achieving-70-covid-19-immunization-coverage-by-mid-2022$

² https://www.nytimes.com/interactive/2021/world/covid-vaccinations-tracker.html



Original Vision: Vaccinodrome As A Fixed Site

VillageReach began working in Cote d'Ivoire in 2017. We have built strong relationships with government and country partners. COVID cases in Cote d'Ivoire were first reported in March 2020, but the Ministry of Health (MoH) started the vaccination campaign on March 1, 2021 with the first target population, which included heath personnel, defense and security forces and teachers. Initially, it is worth noting the MoH was not able to vaccinate a high proportion of this first target population.

The MoH set a target of vaccinating 7 million people by the end of 2021, however, vaccination rates stagnated in September 2021. So, the MoH made two shifts to increase reach. First, it opened vaccination up to everyone 18 years of age and older. Second, the MoH began monthly community outreach intensification campaigns. During these campaigns, each 10 days in duration, the government chose a specific community, age group or geographic location to target for vaccination. MoH workers then went out in the community to vaccinate these target populations near their homes or work. These shifts in vaccine distribution saw the number of administered doses climb to reach nearly 7 million in 2022.

At the same time, the MoH worked with VillageReach to establish complementary programs to increase vaccination rates. Together we opened a vaccinodrome described as a high-volume vaccine site to create a central location, in Yopougon suburb within Abidjan, the country's capital city. The purpose of this vaccinodrome was to provide a vaccine location more central than a local hospital or health facility.

The vaccinodrome, is part of a COVID vaccine delivery model VillageReach is also implementing in the Democratic Republic of the Congo with funding from the Bill and Melinda Gates Foundation. This model creates temporary vaccination sites that can vaccinate anywhere from 300 to 1,000 people per day. The sites are located in busy urban areas with reliable transportation and have longer operating hours (6 or 7 days a week, 8-hours a day) than other available vaccination locations.

In Cote d'Ivoire, a vaccinodrome opened in December 2021 with the capacity to administer up to 1,000 vaccines a day. Initial radio advertisements for the vaccinodrome were used to provide the community with specific information about the purpose of the site, the exact location, types of vaccines offered and vaccine eligibility. Advertisements also informed the community that qualified health personnel were on site and able to provide vaccination certificates immediately. Community health workers were also sent out into communities to inform people about the vaccinodrome.

Despite this advertisement, utilization was lower than expected—only vaccinating an average of 86 people per day during the first five weeks of operation. Throughout the country vaccination rates began to stall in January 2022, so the MoH and VillageReach decided to shift resources from the vaccinodrome to community outreach activities that would make vaccination more convenient for community members.

From One To Many

In February 2022, VillageReach began daily outreach activities as a complement to the government's monthly campaigns. In addition to the large vaccinodrome, VillageReach set up smaller mobile vaccine sites throughout Yopougon, concentrating on busy urban areas while also vaccinating people directly in their homes. While the vaccinodrome remained open for vaccination, it was repurposed to serve as a base of operations for smaller vaccination teams to gather before going out into the community.

VillageReach quickly discovered that this mixed model combining a fixed site and outreach teams was a more effective way to reach people. In February over 2,100 COVID vaccines were administered during outreach activities, while only around 1,000 vaccines were administered at the vaccinodrome. The number of vaccines administered during outreach activities remained higher than those given at the vaccinodrome in both March and April as well. In May, over 2,300 vaccines were administered during outreach activities while only around 500 vaccines were administered at the vaccinodrome. Bringing vaccines to the community allowed people to get vaccinated without having to pay for transportation or lose time off from work. The figure 1 shows the continuous increase that are being observed since the adjustment of the vaccinodrome model.



Figure 1. Note: August represents incomplete data for the month.

VillageReach leveraged vaccinodrome staff to conduct outreach activities, which began with awareness and community sensitization. Mobilization agents went to defined areas within Yopougon and talked to people near the mobile site about why they should get vaccinated. Meanwhile, vaccinators set up nearby so mobilization agents could encourage people to receive their vaccine immediately. We also spoke to people during the 15-minute post-injection observation period to encourage them to champion immunization to their family and friends.

Throughout our outreach efforts, VillageReach worked directly with the MoH to ensure our outreach strategies aligned with their monthly vaccine intensification campaigns. The MoH also worked with us to think of strategies to reach more people. For example, the government suggested VillageReach set up mobile vaccine sites directly outside of pharmacies. Offering COVID-19 vaccination directly in the community, in addition to on-site at the vaccinodrome, helped build social norms around the safety and acceptability of receiving the vaccine. It also provided a convenient service to people who may not have the time or resources to seek out vaccination on their own.

Expanding Our Reach

To date, only 26% of Cote d'Ivoire is vaccinated against COVID-19, creating an urgency for relying on the vaccinodrome model to visit communities.

VillageReach agreed with the MoH to increase the size of the outreach team, which has led to an increase in the number of daily vaccination from 150 to 500, and reaching more than 800 for some days. The MoH's outreach team now dispatches its mobile units to four areas—the Yopougon Ouest, Yopougon Est, Koumassi and Adjame districts. The Yopougon Ouest and Yopougon Est mobile unit started on June 1, while the Adjame district mobile unit was the last to deploy, starting its vaccine delivery in mid-July 2022.

From the beginning of June to the middle of the month, the vaccinodrome visited three districts every weekday, accounting for roughly 33-40% of the daily vaccinations administered there. While the vaccinodrome is capable of administering 1,000 vaccinations daily, no district had a demand near that level during the first two weeks of July, signaling a need for a considerable outreach that continues to build trust in and demand for the vaccine.



Fortunately, an outreach campaign is in the works and will continue through September. However, the outreach efforts may extend to the end of the year and into 2023 with USAID funding.

Conclusion

Despite the low numbers of daily vaccines administered, the consistent demand and growth of the vaccinodrome program shows the effort is working and helping Cote d'Ivoire inch toward its immunization goals.

The linchpin of our successful vaccine drive is the ability to reduce friction for people willing to get the jab. By setting up the vaccinodrome outside pharmacies and near busy thoroughfares, by administering jabs in homes and allowing people to receive the shot without missing work, we are meeting people where they are.

VillageReach focuses on getting products to people where and when they need them and increasing pathways to primary health care. Our efforts transform health care delivery and fosters a people-centered health system that ensures equal access and moves the country closer to universal health care.

And yet, we have to notice that our vaccinodrome efforts have a long way to go. Organizations like VillageReach and funders need to analyze data and adapt, especially in emergencies, because what works in one country may not work in another. Take vaccinodromes, for example. While they were extremely successful in the Democratic Republic of Congo, various issues in Cote d'Ivoire make the target number of daily doses administered much lower. However, the outreach team has taken a more holistic approach, leading to roughly 800 people per day receiving the vaccine.

To learn more about how data-driven decisions can help improve vaccination rates, please contact Yvan Agbassi, Country Lead for Cote d'Ivoire.

