

Improving forecasting and vaccine access with private health providers for urban poor communities

By Dauda Majanbu and Mariam Zameer



OVERVIEW

- Private health care providers are critical partners in improving equitable access to immunization by supporting under-reached communities, especially the urban poor.
- Private health providers should be incorporated in vaccine supply chains and store vaccines on site to improve access to immunization.
- The public sector can more accurately forecast its vaccine needs by using agile methods, such as considering demand, and not only basing it on catchment area populations.

Private health providers play a key role in health care delivery

The United Nations estimates that by 2050, 68%¹ of world's population will be living in urban areas. As populations grow and more people migrate to urban areas, there is subsequent growth of urban poor communities globally. Urban poor communities are often challenged by a lack of infrastructure, poor housing, poor water and sanitation and limited access to health services. All these factors facilitate the spread of diseases, which are often preventable by vaccines, and ultimately contribute to increased childhood mortality.

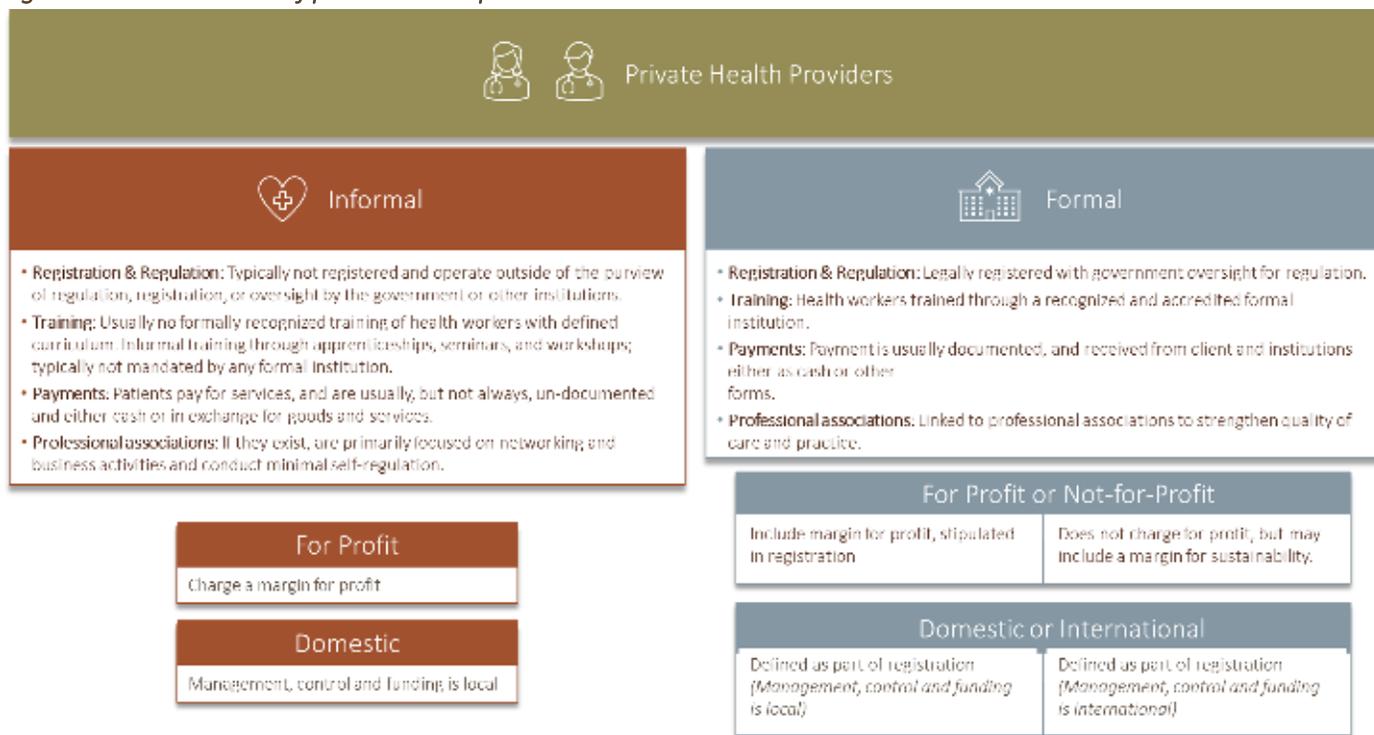
One of the challenges in addressing the needs of urban poor communities is the lack of data on people and their needs. Many internally displaced and cross-country migrants also live in these communities. However, we see that private health providers can operate in these environments to maintain supply and estimate demand. Private providers include all health-care providers who practice outside of the public sector, including for-profit and not-for-profit, formal and informal and foreign and domestic providers. There a range of characteristics that define private providers, as shown in Figure 1.

Private partners play a critical role in improving access to immunization. Because they are integrated into the unique geographies of the communities they serve, they can adapt their services for those who can afford to pay, offer longer service hours, operate in areas where public sector care is not available and address other service gaps in the public sector.

Considering the vital role of private providers in improving access to immunization, VillageReach explored the forecasting methods used by private providers that operate in urban poor communities and learnings for the public sector.

¹ https://www.un.org/en/events/citiesday/assets/pdf/the_worlds_cities_in_2018_data_booklet.pdf

Figure 1: Characteristics of private health providers²



Evaluation: Agile forecasting of private providers in Nigeria

Sixty-two percent of zero-dose children live in only ten countries, with 2.2 million living in Nigeria – the second highest number globally according to the latest WHO/UNICEF Estimates of National Immunization Coverage (WUENIC). Additionally, 41% of children had not received a single dose of measles in Nigeria according to these estimates.

To understand the role of private health providers in immunization, VillageReach explored the supply chain and specifically forecasting by five private health providers in Kaduna State and Abuja in Nigeria, serving large urban poor communities. All the private health providers consulted received their vaccines and syringes from the governments.

Figure 2: Supply chain findings from five private health providers serving urban poor communities in Nigeria



² Sudhinaraset, M., Ingram, M., Lofthouse, H. K., & Montagu, D. (2013). What is the role of informal healthcare providers in developing countries? A systematic review. PloSone,8(2), e54978

Access to health care is a challenge in Nigeria with stark inequities and drastic consequences for urban poor communities. Although private facilities offer additional options for under-immunized communities, there is room for expansion and improvement of services among private providers, including:

- Maintain vaccine potency by improving storage using WHO Performance, Quality and Safety (PQS) prequalified cold chain equipment³ and regularly monitoring temperature.
- Higher levels of open vial wastage should be accepted to vaccinate children, improving the current practice of referring children to the nearest public facility when there are more doses available in a vial than children present.
- Waiting times should be reduced by having some vaccine stock on hand.

Next steps: Build collaborations to improve access

Private health providers are uniquely positioned to improve health care access to urban poor communities and are currently providing additional pathways for immunizations among many communities. To ensure high quality of care and to meet the needs of under-served communities, our assessment identified that enhanced collaboration between the private and public sector and the use of demand data by the public sector would bolster vaccine access.

ENHANCING COLLABORATIONS BETWEEN THE PRIVATE AND PUBLIC SECTOR

Increasing equitable access to immunization requires increased collaboration between the public and private sectors. As the public sector is the provider of vaccines to the private sector, private facilities should be included in supply chain planning by the public sector; storage methods and wastage protocols should be enhanced and aligned with the needs of the public.

UTILIZING DEMAND DATA TO ESTIMATE VACCINE REQUIREMENTS

Forecasting is usually done in the public sector using census or population data. Because this data mostly relies on estimates, it is not a true reflection of actual vaccine demand. The result of inaccurate estimates could be stockouts and/or ad-hoc procurements, which can be expensive and inefficient. Private facilities capture immunization estimates using demand data. By adopting demand data methods, including vaccine utilization data, actual demand for vaccines on immunization session days, and pre-booking of immunization services, the public sector would be able to better forecast vaccine requirements.

For more information about forecasting by private health providers in Nigeria, please contact Dauda Majanbu, Supply Chain Manager, dauda.majanbu@villagereach.org.

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³ The WHO Performance, Quality and Safety (PQS) process prequalifies products and devices so that member states and UN purchasing agencies are assured of their suitability for use in immunization programs.