





# **END-TO-END VISIBILITY IN MALAWI**

## **BACKGROUND**

Over the past five years, the government of Malawi has made supply chain commitments a part of its FP2020 strategy to promote increased access to and use of contraceptives, including:



Linking its service delivery stock status to its main supply chain system for last mile accountability.



Strengthening its supply chain management to respond to service delivery needs.



Linking its electronic Logistics and Management Information System (eLMIS) to DHIS2.

Previously, there was limited visibility into incoming orders and shipments, and siloed data systems had no way of speaking to one another, resulting in mistrust of data, missed opportunities to maximize funding, and stockouts. The government needed solutions that not

only improved visibility within the country from port to facility, but also provided visibility into the flow of products coming into the country.

When the government heard about the Global Family Planning Visibility and Analytics Network (GFPVAN or VAN) in 2018, it was interested in learning more. The GFPVAN is a shared platform to capture and use supply chain data from multiple sources and organizations to provide enhanced visibility for decision-making. The GFPVAN is intended to streamline access to country order, shipment, inventory, and supply planning data to facilitate data harmonization and to consolidate siloed tools to provide a single "go-to" decision-making platform.

As an important step toward meeting its national commitments, the Malawi Ministry of Health (MOH) became an early adopter of the GFPVAN with the hope of ultimately reaching end-to-end visibility.

## **ACTIVITY TESTED**

To reach its goals, the MOH focused on connecting incoming order and shipment data to distribution and inventory data in its eLMIS. The expectation was that this would help them "see" where products are and allow them to better plan, estimate needs, and ultimately act when movement is blocked. After learning more about the GFPVAN, the government decided to take a two-phased approach to integrating it into its vision.



The first phase was designed to focus on becoming an early member of the GFPVAN to gain access to incoming order and shipment data without automating the process.



The second phase was designed to establish the actual connection of the GFPVAN to the Malawi eLMIS to link incoming orders and shipments to better manage the supply chain.

#### **METHODS**





Phase 1 of this activity (adoption of the GFPVAN), started in 2018 and required meeting with the GFPVAN team to determine if the VAN could be a viable solution. Once the MOH's needs were documented and incorporated into the initial platform design, the MOH committed to membership by accepting the terms of use in March 2019 and identified an initial team of data providers and users to be trained. Once trained and able to see the value of the VAN. these users advocated for the integration of the GFPVAN into the Reproductive Health Commodity Security Technical Working Group (RHCS). The RHCS would test its use monthly to inform quantification and supply planning decisions, as well as punctual decisions to expedite, cancel, postpone, or otherwise modify orders and shipments.



Based on a successful phase 1, phase 2 began in 2021. The government looked at its technology road map and landscape to consider the best way to connect the GFPVAN to its eLMIS. Under the leadership of the government, Cooper/Smith, a key supply chain and system strengthening partner in Malawi, was engaged to support stakeholder engagement and the technical integration of the Malawi systems with the GFPVAN. A timeline was established for integrating the GFPVAN with Malawi's eLMIS, and key stakeholders were engaged.



For more detailed information regarding the work in phase 2, please visit the poster "Digitally enabling end-to-end data visibility of family planning commodities in Malawi" and its oral flash presentation under "Digitalization and FP" on November 15 at 4:15 p.m. at PEACH Pattaya 11.

# **KEY FINDINGS**



Use of the GFPVAN in Malawi has steadily increased over time since its adoption.



The government is now placing orders on time thanks to GFPVAN supply plan reviews. **Inventory is evaluated against incoming shipments shown in the GFPVAN, identifying the potential for shortages and stockouts,** allowing planners to proactively avoid stock imbalances.

- In December 2020, the VAN identified an oversupply of two-rod implants. The MOH used the VAN to track an incoming order of 350,000 units and made the decision to delay the order until 2022, preventing the risk of expiry and saving warehousing space.
- In March 2022, the VAN identified an imminent stockout of DMPA-SC, and the MOH was able to use the VAN to request an emergency shipment of 200,000 units that was airlifted later that month.



The MOH can now proactively identify shipment delays and redirect stock between facilities to avoid stockouts, which it did after Cyclone Idai in March 2019 and throughout the COVID-19 pandemic.



The GFPVAN is used to identify and respond to funding gaps, such as those for male and female condoms, IUCDs, and implants in 2020. These analyses were used to advocate for additional funding. And in 2021 and 2022, Malawi had sufficient funding to fulfill its entire supply plan.



Supply availability and supply trend **data in the GFPVAN are used in quantifications**. In 2019, an implant forecast was adjusted down 50% based on historical supply trends in the GFPVAN, releasing funds for undersupplied products.

### **IMPLICATIONS**

The Cyclone Idai situation was a good example of how visibility into orders and shipments could help inform decisions to avoid stockouts at the lower level.

With extended end-to-end visibility from the automated connection with the GFPVAN, relevant stakeholders are now able to track incoming shipments to their national and subnational warehouses, as well as

visualize stock availability and consumption at their health facilities, all in one place. Moving forward, the MOH plans to capitalize on this extended visibility by rolling out an expansive training program at the district level to help users better manage resource allocation, subnational stock distribution, and the early warning system for stock imbalances. Future connections between the central warehouse (CMST) and electronic Health Information Network (eHIN) are also planned.



