Leveraging Technology for Supply Chain Resilience in Malawi’s FP/RH Commodity Management

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Agenda

❑ Background
❑ VAN Malawi journey
❑ Integration
❑ Benefits
❑ Impact
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Background

• MOH vision for health equity -
  “All the people of Malawi shall have access to health services without distinction of ethnicity, gender, age, disability, sexual orientation, mental and health status, religion, political belief, economic and socio-cultural condition or geographical location” (National SRHR Policy, 2017)

• Malawi MOH, through its Reproductive Health Directorate (RHD) commodity security team, prioritizes commodity security by strengthening logistics management systems (LMIS) and distribution of family planning (FP) commodities. This has led to:
  ✔ improved **visibility** over FP/ Reproductive Health (RH) product availability data (at all levels of public sector health supply chain in Malawi)
  ✔ improved **availability** of FP/RH commodities at all levels of the public sector health supply chain in Malawi (according to data from the country’s logistics and health information systems)
Parallel Supply Chain Flow

Procurement and storage
The USAID-funded GHSC-PSM project, Malawi government, and partners procure FP commodities and stores these in Central Medical Stores Trust (CMST) and a GHSC-PSM-run parallel supply chain (PSC). Products procured by government and other partners are stored in CMST. USAID products are outsourced to a private company called Cargo Management Logistics (CML) which is managed by GHSC-PSM.

Distribution
Based on LMIS data reported each month, GHSC-PSM specialists provide technical assistance to RHD to produce a distribution plan with re-supply quantities for all health facilities. This distribution plan is then shared with the CMST and PSC team that coordinates distribution with third-party logistics (3PL) that distributes the commodities directly to the 690+ health facilities in Malawi.

Reporting
Malawi operates a monthly LMIS report. Primary health facilities are required to submit a monthly paper-based LMIS report to the district hospitals and other data entry sites by the 5th day of the reporting month. The monthly report has 150+ products including FP commodities. District staff capture data from LMIS forms into OpenLMIS.

OpenLMIS is a web-based open-source application that was implemented in Malawi in August 2017 to 38 sites comprised of 28 districts hospitals, 5 central hospitals and 5 data entry sites. OpenLMIS facilitates LMIS reporting and real-time visibility of data that is used to monitor the supply chain and make informed decisions.
VAN

The **Global Family Planning Visibility and Analytics Network (VAN)** is a shared platform to capture and use supply chain data from multiple sources and organizations.

- VAN aggregates, shares, and aligns country demand data with production, procurement and funding to avoid stock imbalances and maximize use of limited resources to ensure continuous availability of family planning commodities.

- Malawi was an early VAN adopter in 2019. GHSC-PSM supported the following steps in this process:
  
  ✔ VAN planning, training, rollout and implementation
  ✔ Data validation and input to the VAN
  ✔ Training and retraining of VAN users from MOH and CMST, and donor and partner organizations including USAID, CHAI, UNDP, UNFPA, and local NGOs including Family Health Service, Banja La Mtsogolo, Family Planning Association of Malawi, and more

- VAN participation has allowed Malawi MOH to address these challenges:
  ✔ Multiple PSC structures
  ✔ Limited upstream data visibility
  ✔ Ineffective distribution planning
  ✔ Stock outs rates >10% (recommended stock out rate is 5% max)
Integration

- GHSC-PSM assisted the MOH to integrate VAN with other data management systems used in the country
  - With funding from USAID, the MOH developed a data integration interoperability layer
  - This paved the way to integrate VAN with OpenLMIS
  - VAN is also integrated with the Quantification Analytics Tool (QAT)
Benefits of using VAN

The VAN is a ready source of FP data:

✔ Requisitions, orders, inventory stock levels and shipments data readily available to Reproductive Health Commodity Security (RHCS) members

✔ Data is used for quantification and supply planning

✔ VAN analytics are used to review commodity stock levels and funding gaps & shared with stakeholders

✔ Data for advocacy to donors/funders
Benefits of using the VAN

• Increased transparency, accountability, and collaboration among funders, procurers, suppliers and the MOH
  ✔ Orders are placed on time following VAN supply plan reviews
  ✔ Shipments are tracked from the manufacturer until they arrive in Malawi
  ✔ Shipments are expedited/delayed as necessary
• The country can see shipment delays in real time and initiate commodity redistribution efforts promptly
  ✔ In 2019, during Cyclone Idai, Malawi shipments were stuck in Mozambique and VAN flagged the delay, prompting the MOH to organize national redistribution of commodities.
  ✔ In 2023, during Cyclone Fredy, FP commodities were damaged and victims in camps were in dire need of supplies. Using the VAN, the country conducted reverse logistics from other overstocked facilities and redistributed emergency stocks to affected districts.
VAN Successes in Malawi

- Malawi has provided FP inventory and supply plan data to the VAN from February 2019 to the present
  - ✔ This has increased data visibility for stakeholders
  - ✔ Increased trust and confidence in available data

- Requisition, order and shipment data are readily accessible
  - ✔ Increase in efficiency due to automated processes and seamless interoperability
  - ✔ Faster decision making for all stakeholders

- MOH ownership of VAN implementation processes
  - ✔ Increased coordination across stakeholders
  - ✔ Reviewing data validation and action request to funders/procurers
  - ✔ VAN Planner, Rose Chikumbe of the RHD is a VAN Ambassador

- VAN country users increasing over time
  - ✔ 10 viewers from four partner organizations trained in March 2022 (USAID, CHAI, UNFPA, FPAM)
  - ✔ Trained 19 additional viewers in April 2023, from eight partner organizations (USAID, CMST, FHS, BLM, UNDP, CHAI, UNFPA, and FPAM)
VAN Impacts

- COVID-19 shipment delays abated (due to VAN coordination)
  - ✔ In-country redistributions were conducted to avert stock outs
- System integration
  - ✔ VAN is interconnected with QAT for supply plan data transmission.
  - ✔ VAN is connected to Open LMIS through an interoperability layer
- Improved supply planning in QAT (due to VAN automation)
  - ✔ Improved coordination of FP commodity supply planning
  - ✔ Better aligning of shipments
  - ✔ Better estimates of shipment arrival
- Following VAN reviews and alerts, emergency supplies are mobilized
  - ✔ UNFPA airlifted MPA-SC (Medroxyprogesterone Acetate Subcutaneous Pre-Filled Device) in March 2021
  - ✔ USAID airlifted and shipped Microgynon following stock outs in 2022
Interventions following VAN adoption

VAN facilitated the following solutions to existing public health supply challenges:

- **Multiple PSC structures**
  - ✓ The country developed a single distribution list and shared it with 3PLs (based on FEFO and availability of FP commodities in warehouses)

- **Limited upstream data visibility**
  - ✓ The MOH as well as other partners are now able to see in real time all the inbound shipments and are also able to identify risks associated with delays in shipments
  - ✓ There is much better information flow and exchange as the VAN serves as the pool of information from where all parties can draw for evidence-based decision making

- **Ineffective distribution planning**
  - ✓ RH commodity security (RHCS) team now jointly analyze and clean LMIS data prior to district planning. The MOH is able to see all the FP data in one place without having to reach out to partners.
  - ✓ This has made stakeholder coordination and engagement easy and has put the MOH in the front row of decision making in FP related issues.

- **Stock outs rates >10% (recommended stock out rate is 5% max)**
  - ✓ Relocation of FP commodities from overstocked facilities to stock out facilities where VAN alerts the country of any delayed shipment
  - ✓ Shipments are expedited where central level low stock is anticipated before next distribution takes place
Next steps

GHSC-PSM will support MOH to expand VAN use in Malawi through

✔ Supportive supervisory visits to enhance data quality
✔ VAN advocacy to MOH senior management – encouraging use and ownership
✔ Increased coordination of stakeholders for VAN use
✔ VAN training for District Pharmacists (by MOH)
Questions?