Global Health
Supply Chain Summit

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Introduction

Malawi Ministry of Health and partners adapt the public health supply chain to swiftly and effectively distribute COVID-19 vaccines

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Introduction: Support to COVID-19 commodity management

- USAID supports Malawi's Ministry of Health (MOH) to respond to the COVID-19 pandemic with technical assistance and COVID-19 commodity support.

- And collaborates with other partners to leverage existing resources:
  - e.g., GAVI vehicles, MOH and District Health Office (DHO) stores and personnel, and USAID running costs for delivery of COVID-19 vaccines and ancillary supplies.

- USAID's Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project manages a parallel supply chain system for procurement, warehousing and distribution of USG-donated commodities, using third-party logistics provider (3PL) to improve commodity security in Malawi.

- To respond to COVID-19, GHSC-PSM quickly modified its contract with the 3PL to accommodate storage and distribution of COVID-19 commodities (PPE, medicines and lab supplies) to the last mile.

Support to the COVID-19 vaccine roll out

- Malawi is one of 92 countries accessing COVID-19 vaccine doses from the COVAX initiative and in early 2021, USAID began supporting COVID-19 vaccine distribution in Malawi through GHSC-PSM.
- The country received its first shipment of 512,000 vaccine doses on March 5, 2021.
- GHSC-PSM in Malawi received $500,000 from USAID to support the MOH with technical assistance, commodity warehousing, and distribution of COVID-19 vaccines.
- GHSC-PSM supported MOH through its Expanded Program on Immunization (EPI) to successfully implement the national vaccine deployment plan (NVDP) in 28 districts.

GHSC-PSM support to implement vaccine deployment plan

- Coordinating the logistics subcommittee:
  - information and data gathering, regular meetings, updates and presentations to decision makers

- Warehousing and distribution of vaccines to all 28 districts; within the first two weeks of vaccine arrival, **428,407 vaccines administered**

- Redistribution from low-uptake to high-demand districts to address stock imbalances and minimize wastage through expiry

GHSC-PSM support to implement vaccine deployment plan

- Designing guidelines for reverse logistics, i.e., vaccine waste management, to facilitate decentralized incineration of vaccine waste

- Enhancing MOH capacity in vaccine commodity management
  - Designed, printed, and distributed data tools for vaccine tracking
  - Configured OpenLMIS (existing electronic health commodity tracking system) for vaccine tracking, reporting and ordering.
  - Trained 66 MOH/EPI staff in vaccine tracking, reporting and ordering.

Key challenges

- Low vaccine uptake, limited shelf life of products, low visibility on remaining shelf life of incoming vaccines
- Inadequate internal coordination and unavailability of key MOH staff due to competing priorities
- Lack of visibility on shelf life and unavailability of real-time stock and consumption data from districts, leading to vaccine wastage through expiry (19,000 doses - 3.7%)
- Vaccine data tracking hampered by low availability and poor data quality

Key learnings and solutions

- Redistribution was essential in minimizing wastage due to expiry
- Demand creation (e.g., through vaccination campaign) could have been useful to avoid wastage due to expiry of short-dated vaccines
- Significant efficiency gained by leveraging existing resources.
- Joint planning and information sharing among the key partners was essential to avoid duplication and fill gaps
- Existing OpenLMIS was an opportunity for vaccine visibility: wide geographic coverage, robust support mechanism, and sustainability

Conclusions

Operational flexibility is critical in an emergency response for efficiency and effectiveness. The support provided by GHSC-PSM has contributed to:

- Effective and efficient vaccine rollout through coordination, joint planning and leveraging resources
- Enhanced warehousing and timely distribution of vaccines and ancillary supplies throughout the country

Conclusions: Impact of GHSC-PSM support

- Strengthened MOH data management system for vaccine tracking, reporting and ordering
- Improved waste management mechanisms for effective management of vaccine-related waste
- Ensured reliable and timely supply of COVID-19 vaccines to the last mile across the country, including remote and hard-to-reach health facilities