HIV SUPPLY CHAIN MANAGEMENT

Experience During The Covid-19 Pandemic

MALAWI'S EXPERIENCE

Caroline Kiyiika Ntale
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AGENDA

Part I: Context and Supply Chain Process

Part II: COVID-19 Impact on HIV Supply Chain

Part III: Adaptation and Future Opportunities
2020 Malawi Program Supply Chain Context

- Over 837,000 clients on ART as at end of December, 2019
- Over 4 million tests conducted annually
- Annual commodity budget of **USD 120 million** (GF/PEPFAR)
- Key policies adopted in April 2019 include;
  - Annual Viral load testing
  - 6 multi-months scripting/dispensing
  - Phase out of NNRTI based regimens starting with Nevirapine
  - Scale up of TB preventive Therapy to all patients on ART
  - Scale up of Advanced HIV Disease (AHD)
I-TECH TA Support to HIV Program

- Development of National Strategic Plans, Policies and Guidelines
- Resource mobilization
  - The Global Fund;
  - PEPFAR
  - Other Donors-World Bank and Bill & Mellinda Gates Foundation
- Management of core functions of the supply chain
  - Procurement;
  - Warehousing;
  - Distribution, and;
  - Capacity Building
- Management support for the toll free line
- Supervision, mentorship and coaching for health facility personnel
Dedicated Supply Chain Management Team

- Toll free supply hotline
- Quarterly site supervision:
  - QA, data audit
  - Physical stock count
- DHA- Management Information System
  - Data visibility
  - Service data (Patient data)
  - Stock data (Logistics data)
  - Registration and authorization of all stock transactions at site level
  - Data driven quantification rules for health facility distribution lists
  - Circulation for feedback (Implementing partner, District and Health Facility Staff)
  - Bar-coded delivery notes

>99% uninterrupted supplies at all 750 sites
Real-time Distribution
Tracking through Link Mobile-June 2020

- Real time tracking of shipments
- Status of health facility deliveries
- Proof of deliveries
- Last mile visibility
<table>
<thead>
<tr>
<th>Impact of COVID 19 on HIV Supply Chain</th>
<th>Anti-Retroviral Therapy (ART)</th>
<th>Viral load monitoring</th>
<th>Data for decision making</th>
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<tbody>
<tr>
<td>Disruption</td>
<td>• Transition from NVP based regimens for pediatric patients due to production constraints for LPV/r based formulations • Transition from ATV/r to DTG based regimens</td>
<td>• Delays in air freight shipments affecting laboratory service delivery especially viral load monitoring • Back log of Viral load samples (&gt;100,000 samples) • Long Turn Around Times</td>
<td>• Delayed report transmission for April 2020 reports (ART Cohort and stock report data)</td>
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<tr>
<td>Impact</td>
<td>• Stock outs experienced at selected sites</td>
<td>• Delayed transition from Protease Inhibitor based regimens</td>
<td>• Stock Imbalances for ARVs</td>
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<td>Recovery time</td>
<td>• 12 months</td>
<td>• 6 months</td>
<td>• 6 months</td>
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## Adaptation of the Supply Chain

<table>
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<tr>
<th>RISKS</th>
<th>MITIGATION STRATEGIES</th>
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<tr>
<td>Health Facility congestion</td>
<td>Long Dispensing intervals for patients on DTG based regimens –6MMS</td>
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<td>Stock outs due to Multi months scripting</td>
<td>Redistribution of stocks between health facilities</td>
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<td>Inadequate storage space at health facilities</td>
<td>Frequent deliveries (especially to high volume sites) – Monthly deliveries</td>
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<td>Air freight based constraints</td>
<td>Some shipments have been switched to ocean freight except cold chain and dry ice shipments (Chartered a consolidated flight for laboratory commodities in May 2020)</td>
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<td>Production related challenges</td>
<td>Adequate procurement planning (All orders for 2020 have been confirmed with respective vendors)</td>
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Opportunities for Supply Chain Improvements

- Increased government investments is need for sustainability
- Fast track Integration road map
- Scale up of e-LMIS/EMR implementation
- Improved supply chain HR Capacity
- Scale up of Supply chain emergency response system
- Decentralization of technical oversight to District Pharmacy personnel
- Scale up of Quality monitoring /Quality improvement initiatives
- Institutionalization of Pharmacovigilance
- Create room for innovations (Drone academy pilot in Malawi at Daeyang Luke University)
Key Take Home PSM Messages

- **Data** is the heart of a successful supply chain (Improved visibility)
- Supply Chains need to be **responsive** and **resilient**
- Long term planning minimizes service interruptions (Ocean Vs Air Freight) - **Improved efficiency**
- **Minimum buffer stocks** need to be attained before implementing new policies
Thank you