

HIV SUPPLY CHAIN MANAGEMENT

Experience During The Covid-19 Pandemic

MALAWI'S EXPERIENCE

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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

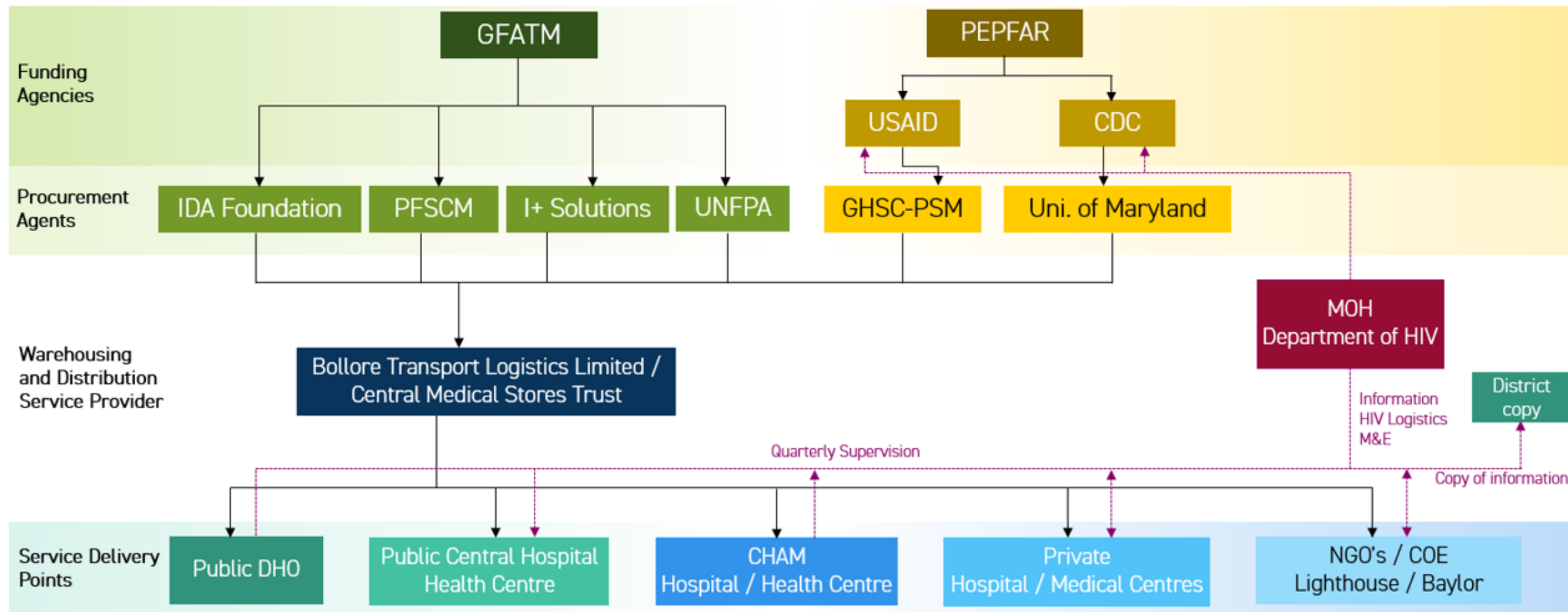
2020 Malawi Program Supply Chain Context



- Over **837,000 clients** on ART as at end of December, 2019
- Over **4 million** tests conducted annually
- Annual commodity budget of **USD 120million** (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)



HIV Commodities Supply Chain Flow Map



I-TECH TA Support to HIV Program



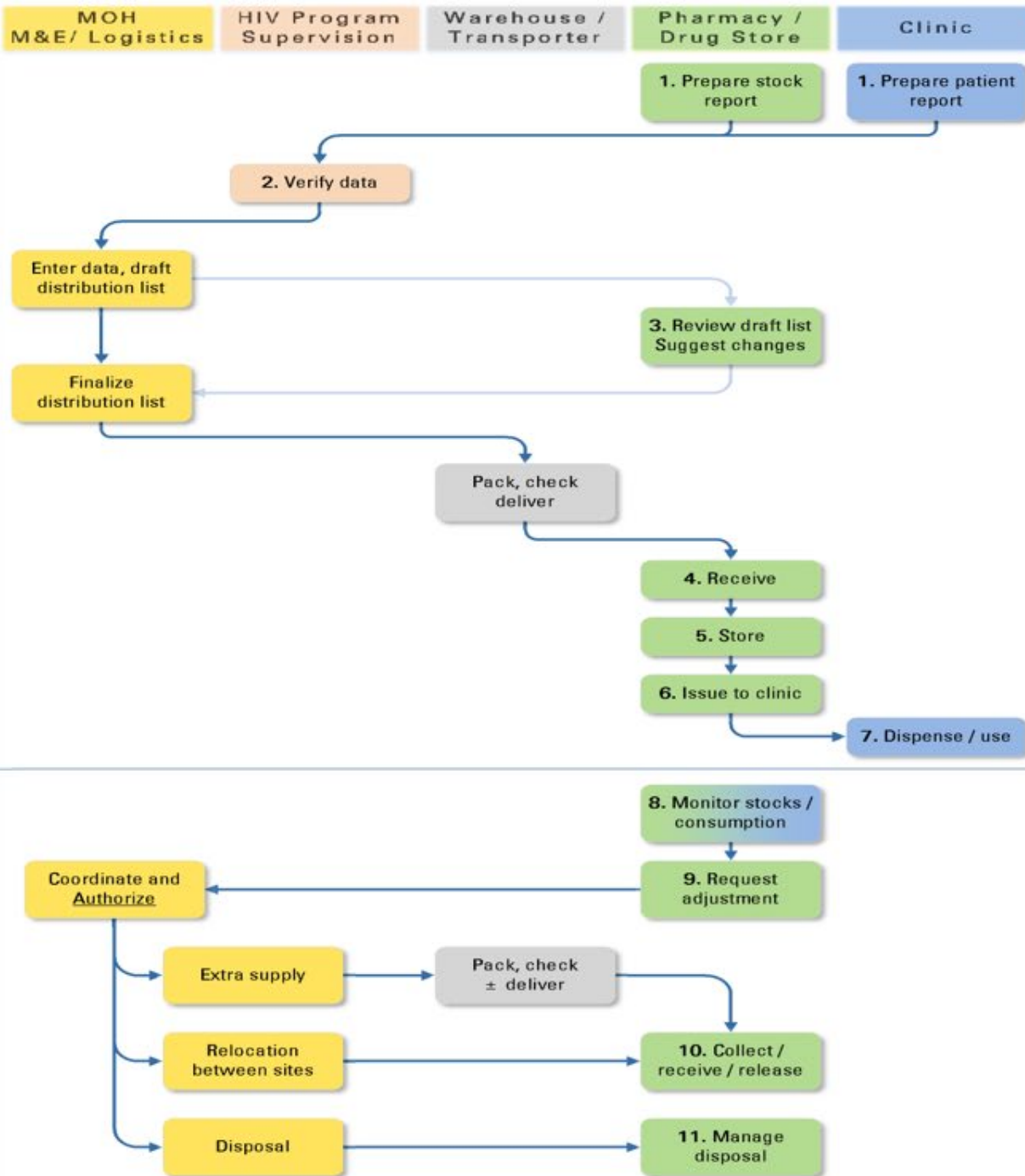
- **Development of National Strategic Plans , Policies and Guidelines**
- **Resource mobilization**
 - ✓ **The Global Fund;**
 - ✓ **PEPFAR**
 - ✓ **Other Donors-World Bank and Bill & Mellinda Gates Foundation**
- **Management of core functions of the supply chain**
 - ✓ **Procurement;**
 - ✓ **Warehousing;**
 - ✓ **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 tracking of shipments
- Status of health facility deliveries
- Proof of deliveries
- Last mile visibility

Real-time Distribution Tracking through Link Mobile-June 2020

The screenshot displays the Link Mobile app interface for tracking a shipment. It includes a QR code, a reference number (MWDIS/49/18155), and a timeline showing the shipment's progress from Lilongwe to Lilongwe Area. The timeline includes events: Take in charge (09 JUN 20 - 10:45), Departure (09 JUN 20 - 11:07), and Delivery (09 JUN 20 - 14:01). Below the timeline, details such as FROM (MW - LILONGWE), TO (MW - LILONGWE AREA), SHIPPER, SHIPPER REF (DMS), GOODS (PHARMACEUTICAL PRODUCTS), LOADING TYPE, and YOUR TRACKING REFERENCE are provided. A SHIPMENT section at the bottom shows INCOTERMS (EXW), MODE (ROAD), and JOB FILE TYPE (I-BREAK BULK).

Impact of COVID 19 on HIV Supply Chain



	Anti-Retroviral Therapy (ART)	Viral load monitoring	Data for decision making
Disruption	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Delays in air freight shipments affecting laboratory service delivery especially viral load monitoring• Back log of Viral load samples (>100,000 samples)• Long Turn Around Times	<ul style="list-style-type: none">• Delayed report transmission for April 2020 reports (ART Cohort and stock report data)
Impact	<ul style="list-style-type: none">• Stock outs experienced at selected sites	<ul style="list-style-type: none">• Delayed transition from Protease Inhibitor based regimens	<ul style="list-style-type: none">• Stock Imbalances for ARVs
Recovery time	<ul style="list-style-type: none">• 12 months	<ul style="list-style-type: none">• 6 months	<ul style="list-style-type: none">• 6 months

Adaptation of the Supply Chain



RISKS	MITIGATION STRATEGIES
Health Facility congestion	Long Dispensing intervals for patients on DTG based regimens –6MMS
Stock outs due to Multi months scripting	Redistribution of stocks between health facilities
Inadequate storage space at health facilities	Frequent deliveries (especially to high volume sites) – Monthly deliveries
Air freight based constraints	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)
Production related challenges	Adequate procurement planning (All orders for 2020 have been confirmed with respective vendors

Opportunities for Supply Chain Improvements

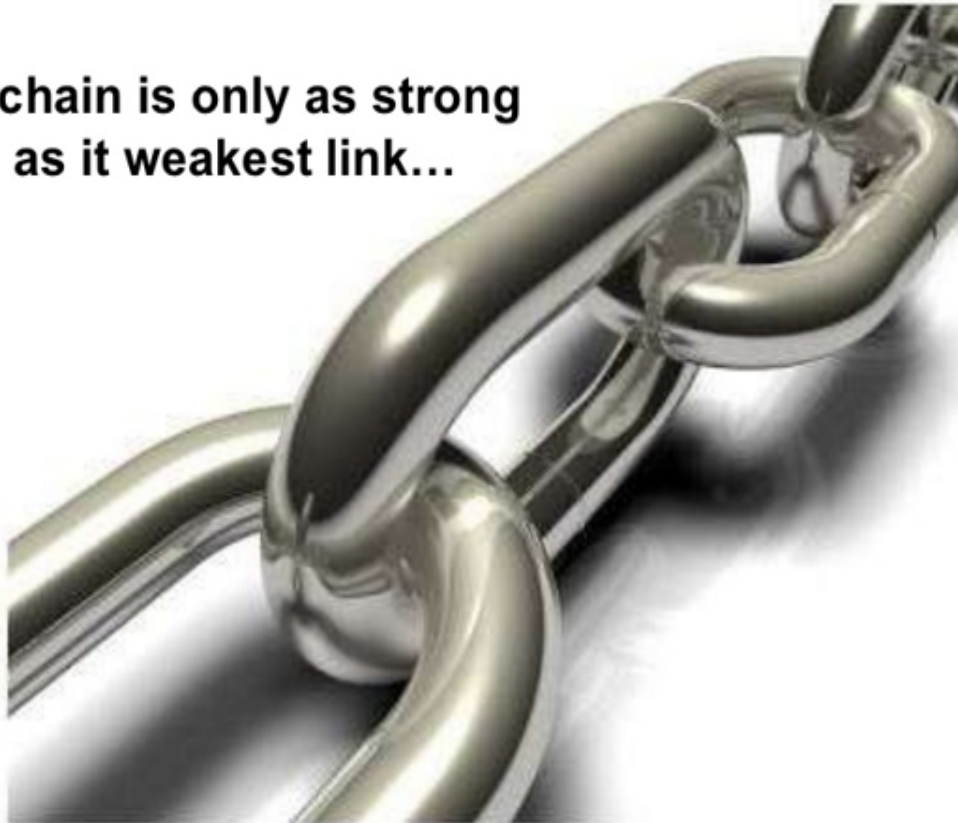


- Increased government investments is need for sustainability
- Fast track Integration road map
- Scale up of e-LMIS/EMR implementation
- Improved supply chain HR Capacity
- Scale up of Supply chain emergency response system
- Decentralization of technical oversight to District Pharmacy personnel
- Scale 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



A chain is only as strong
as it weakest link...



- **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

