



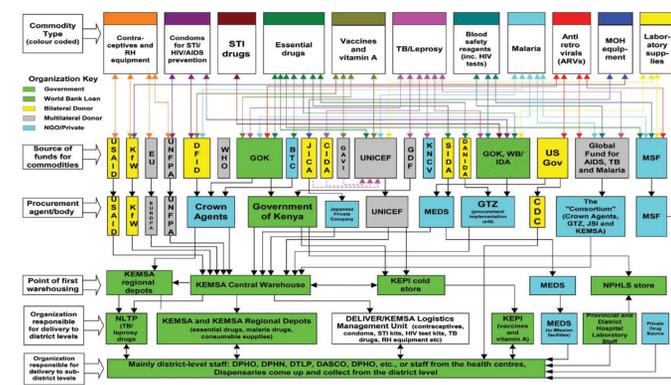
Managing HIV and AIDS Commodities through Integrated Supply Chains

Carmit Keddem, Yasmin Chandani, James Bates, Sarah Andersson, Claudia Allers, and Eric Takang

Purpose of HIV and AIDS Supply Chains

- Ensure products reach intended recipients.
- Provide uninterrupted supply of ARV drugs to achieve program goals and minimize resistance.
- Maximize security during transport and storage to protect against leakage.
- Enhance supply chain agility to accommodate program expansion.
- Deliver a broad range of HIV and lab-related products to support ART, HIV prevention, and care.

COMPLEXITY OF NATIONAL HEALTH COMMODITY SUPPLY CHAINS

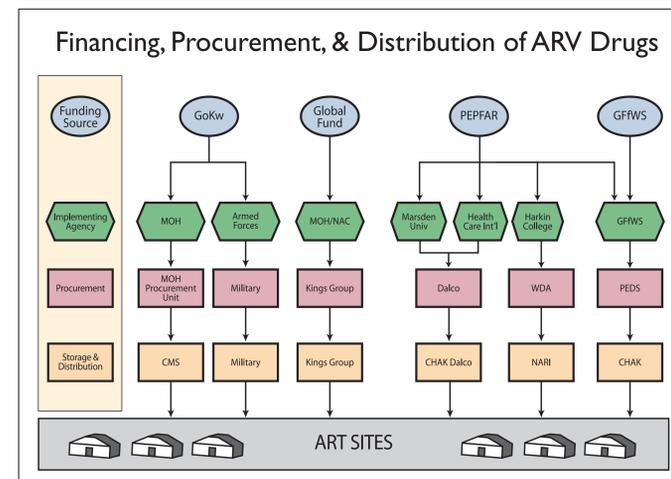


Commodity Logistics System, Kenya, April 2004

Mandate of national health strategic plans is to integrate commodity management

- Maximizes use of resources by merging operations and eliminating duplication of functions.
- Enables leveraging of disease-specific funding to increase availability of commodities across programs.

SINGLE PRODUCT CATEGORY MANAGED THROUGH MULTIPLE SUPPLY CHAINS



Approaches to Integration

1. Integration of different product categories into a single supply chain
 - Eliminates vertical supply chains that handle only certain products or product categories
 - e.g., HIV test kits and laboratory supplies could be integrated.
2. Integration of specific supply chain functions for different product categories
 - Specific supply chain functions are integrated for a variety of products, if appropriate
 - e.g., storage and distribution are often integrated, while forecasting and LMIS remain vertical.
3. Integration of the supply chain
 - A supply chain that seamlessly connects all the entities between end user and manufacturer, providing visibility of products and information.

COUNTRY EXAMPLES

In some cases, product selection and quantification may be coordinated but not integrated.

In Malawi, there is a national quantification team for all pharmaceutical and non-pharmaceutical products and medical devices, with subsets that focus on specific commodity categories.

COUNTRIES	SUPPLY CHAIN FUNCTION					
	Product Selection	Quantification	Procurement	Storage	Distribution	LMIS
Ghana	Not integrated	Not integrated	Full Integration All health commodities	Partial Integration ARV, essential medicines / contraceptives	Full Integration All health commodities	Partial Integration HIV test kits and Laboratory Supplies
Kenya	Not integrated	Not integrated	Not integrated	Full Integration All health commodities	Not integrated	Partial Integration Integrated LMIS database at the central level
Malawi	Not integrated	Partial Integration Coordination of procurement activities across commodities	Not integrated	Full Integration All health commodities	Partial Integration Essential medicines / contraceptives / HIV test kits	Partial Integration Integrated LMIS database at the central level
Tanzania	Not integrated	Not integrated	Full Integration All health commodities	Full Integration All health commodities	Partial Integration HIV test kits / essential medicines / contraceptives	Partial Integration HIV test kits / contraceptives
Zambia	Not integrated	Not integrated	Partial Integration All health commodities	Full Integration All health commodities	Full Integration All health commodities	Partial Integration HIV test kits / contraceptives
Zimbabwe	Not integrated	Not integrated	Not integrated	Full Integration All health commodities	Partial Integration HIV test kits / contraceptives / essential medicines	Partial Integration HIV test kits / contraceptives / essential medicines

LMIS data collection and reporting at facilities is integrated in some cases, but integration of LMIS data management at the central level is more common.

In Kenya, facility-level LMIS records and reports are separate for all programs, but the data is integrated into one central-level LMIS database.

Storage and distribution are the most frequently integrated.

In Zambia, all health commodities are stored at the MSL central warehouse (except vaccines). ARVs are kept in a secure area within MSL.

Benefits of Integration

- Provides product flow visibility throughout the chain, improving efficiency and customer service.
- Lowers operational costs.
- Reduces reporting burden on service delivery staff.

Lessons Learned

TIMING

- Identify opportunities for integration as HIV and AIDS programs mature and as supply chains stabilize.

IMPLEMENTATION

- Tailor integration to meet country-specific objectives.
- Develop a phased approach to—
 - assess and strengthen the individual functions of the existing supply chains
 - monitor the implementation of the process
 - adjust interventions, as necessary, to meet country objectives.

PROCESS

- Integration should be viewed as both a process and an outcome, which requires—
 - strong incentives
 - open, regular communication and good-faith negotiations
 - an impartial mediator, which can be critical to success.

Challenges of Integration

- Policy-level engagement is required to clearly define the highest priority products.
- Performance improvement efforts are key to support the integration,
 - e.g., the classic scenario: if the truck is full, what gets left out?
- Key decisions must be defined and made
 - e.g., should an integrated supply chain manage both full supply and non-full supply products?
- Must consider political pressure, donor funding, organizational turf issues, and program and product considerations.

