To increase access to life-saving commodities for women and children, barriers to improving in-country public supply chains must be understood. The purpose of this document is to summarize barriers related to the supply chain to provide a framework from which to create a best practices review. This document expounds on barriers identified by the UN Commission on Life-Saving Commodities for Women and Children Commissioners’ Report, September 2012, and also draws from additional resources, to summarize the key barriers that need to be addressed to ensure good in-country practices in supply chain management. These barriers are grouped into broad themes, while fully recognizing that they are interrelated and interdependent. This document focuses only on aspects specific to in-country supply chains as other recommendation working groups are focused on other areas.
FUNCTIONS OF SUPPLY CHAIN

**Regulatory Policies & Procedures**

- Policies and systems (registration, quality control, drug authenticity verification, importation) that can potentially restrict product selection, delay shipments, or make entry prohibitive
- Omission from the National Essential Medicines List that can prevent procurement
- Weak quality control and assurance systems along the supply chain
- Limited quality control capacity that can delay testing and release of product into the system
- Limited enforcement of policies that do exist; limited capacity of regulatory bodies

**Quantification (Forecasting & Supply Planning)**

- Lack of mechanisms and tools for proper forecasting and supply planning
- Poor, inadequate, or inaccessible data that makes it difficult to forecast and plan commodity needs
- Lack of coordination between supply planning and technical units
- Lack of capacity for quantification
- Existing tools that do not take local context into account, and therefore cannot be applied properly
- Limited number of staff trained in proper quantification, forecasting, and supply planning processes
- Focus on public sector forecasting, rather than the whole market approach
- Lack of understanding of the difference between quantification for budgeting and quantification for supply planning

**Procurement**

- Poor collaborative planning between quantification and procurement
- Unpredictable and long lead times for delivery of procurements
- Bureaucratic and encumbered procurement processes
- Lack of coordination and/or standardization of products to procure
- Lack of consideration of recommended case management products (e.g., pediatric dosages)
- Little use of procurement flexibilities (e.g., framework contracts)
- Insufficient use of master supply agreement with best price possible based on volume discount
- Lack of agreement between standard treatment guidelines and National Essential Medicines List
- Lack of knowledge and skills for procurement planning and tendering within the public sector
- Limited competition in the private sector, leading to a lack of technical expertise to support the public sector and potential conflicts of interest or corruption
- Inconsistent flow of funds
- Lack of communication between the public and private sectors on changes in policy, regimens, etc.
- Lack of flexibility in funding strategies
Warehousing & Inventory Management

- Stock leakage and security issues with low product traceability throughout the supply chain
- Inadequate storage space and conditions, complicated by cold chain requirements for some temperature-sensitive commodities and by infrequent distribution of large quantities to stores with limited storage capacity
- Disposal policies absent or not followed
- Poor adherence to inventory best practices—stock rotation (first-to-expire, first-out [FEFO]), batch control, stock recall processes
- Poor inventory management (i.e., routine cycle counting of stock, physical inventory and reconciliation)
- Duplication created by a lack of communication between public and private sectors
- Lack of capacity of those managing inventory
- Administrative, rather than functional, positioning of warehouses
- Very little knowledge of operational costs, cost of goods in public sector
- Low-skill levels for managing outsourced warehousing

Distribution

- Inconsistent availability, reliability, and quality of transport infrastructure and services, especially at the last mile
- Limited funds to support distribution costs at the lower administrative levels of the health system
- Excessive distance between health centers and resupply points and between community health workers and health centers
- Ad-hoc distribution strategies and poor distribution planning with limited incentives for timely distribution
- Seasonality, affecting the need for some commodities, and geography, with terrain being a challenge for transportation
- Maintenance of cold chain during distribution for temperature-sensitive and cold chain dependent commodities
- Poor data management and/or lack of sufficient stock at higher levels of distribution
- Limited engagement with private sector providers
- Lack of organization and consolidation of private sector distributors; no incentives to consolidate and no synergy with public sector distribution networks
- Low quality of private sector distributors
- Limited capacity on government side to manage outsourced distribution contracts

Service Delivery & Utilization

- Inadequate health personnel training and knowledge gaps at each level of distribution, leading to underutilization or misuse of commodities
- Sub-optimal delivery mechanisms, product packaging, formulation, and distribution requirements lead to underutilization or misuse of commodities and can complicate supply chain management
- Competing priorities for health personnel time
- Lack of commitment to timely and accurate data collection and/or reporting
- Limited supervision of supply chain management tasks at service delivery points (SDPs)
- Poor access to hard-to-reach communities
Inadequate information provided to the community on service delivery and product availability issues, leading to low or nonexistent community engagement and limited accountability

- Poor conditions at health facilities
- Lack of coordination in donor assistance that supports supply chain and health services
- Limited monitoring of private sector SDPs (small shops, vendors, private providers)
- Lack of access to favorable pricing for private sector

CROSS-CUTTING AREAS

Country-Level Finance

- Budgetary constraints, particularly for key commodities and supply chain management
- Slow and inconsistent funding flows with inefficient use of funds
- Inadequate funds at the lower administrative levels responsible for distribution to rural primary health facilities
- Disparate, uncoordinated funding sources, and difficulties accessing budgeted funds
- Poor or incomplete understanding of supply chain costs with a tendency to under-budget
- Out-of-pocket expenditures for end users
- Ambiguous or amorphous business models within medical stores
- Reliance on donor funding which imposes distortions in supply chain management and in the market
- Lack of analysis and capacity to understand mechanisms to reduce both costs and price
- Lack of capacity building around budgeting and financing activities

Data Management

- Unclear protocols and inadequate training of staff for appropriate data collection and utilization
- Outdated or non-existent information systems and record keeping
- Competing software for managing supply data at different levels of the health system
- Poor logistics data, such as inadequate dispensed-to-user data
- Little emphasis on performance measurement
- Delayed/inaccurate/incomplete reporting from SDPs and multiple levels up the reporting chain
- No open, easily accessible, shareable, and standardized data portal available to all partners
- Lack of two-way flow of information to and from the central level and SDPs
- Insufficient use of data for decision making at all levels for procurement, distribution, and monitoring
- Poor supervision of data quality
- Lack of access to private sector data to include in modeling, forecasting, and quantification (proprietary nature of data)

Communications & Coordination

- Lack of synergies from technical and financial partners; poor communication and coordination among partners
- Lack of staff adequately trained in procurement processes—inattention to procedures, process quality concerns, and timelines
- Suboptimal coordination efforts with regional entities
- Inadequate coordination between parastatals and government health programs
- Financing and operation (including commodity provision and reporting) of public sector programs stove-piped by disease category
• No formal mechanisms by which the public sector can engage the private sector
• Fragmented/disorganized private sector which limits the public sector’s ability to engage

Human Resources
• Training gaps and limited capacity for quantification, procurement, product quality assurance, and stock management
• Few health personnel trained in the specifics of supply chain management
• Outdated or non-existent standard operating procedures with few user-friendly job aids
• Turnover and high mobility of personnel; limited number of health care providers and heavy workloads
• Low motivation to accomplish routine supply chain tasks such as reporting
• Lack of supportive supervision
• Lack of a systemic approach to human resources for supply chain
• High number of temporary and external staff involved in managing the supply chain
• No defined minimum standards for supply chain management positions, no professionalization

Governance
• Lack of commitment from leadership at every level of the health system to improve supply chain management and to ensure these commodities are in stock
• Government distribution systems with limited ability or capability to create incentives for improved supply chain management
• Lack of national policy guidelines on utilization of specific products
• Lack of metrics and understanding of the business and management aspects of supply chain performance (private sector invests in supply chain overhauls because it’s good business)
• Lack of holistic planning and long-term planning
• Budget inefficiencies due to lack of an effective coordination mechanism for commodity decision making across products and programs
• Lack of accountability on supply chain performance at all levels

RECOMMENDED CITATION
REFERENCES


UN Commission on Life-Saving Commodity Country Plans for Tanzania, Malawi, Democratic Republic of Congo, Uganda, Ethiopia, and Sierra Leone (one plan per country, all unpublished).

UNFPA Supply Chain Issues, Part 1 & 2 (from the Knowledge Gateway/Supply & Awareness library; unpublished).