
Technical Brief: In-Country Supply Chains

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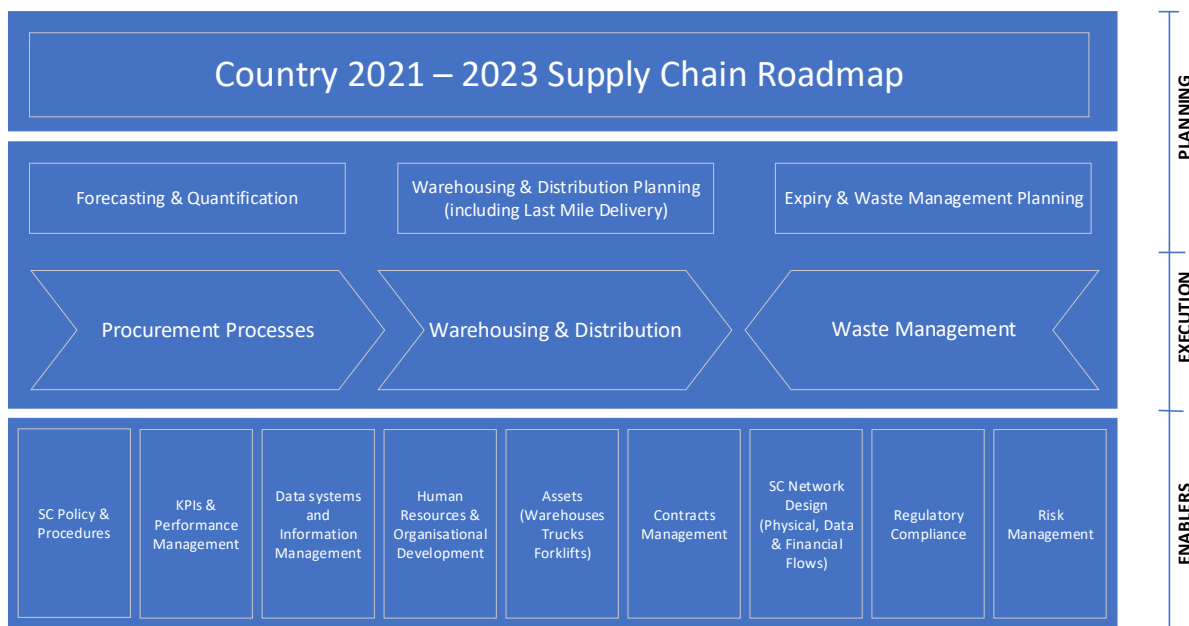
1. Background

Public health supply chain transformations aim to deliver uninterrupted access to life-saving health products at points of service., also known as a “People-Centric Supply Chain” operation. In pursuing this goal, the Global Fund expects to establish sustainable supply chain systems that will live beyond the tenure of donor support.

The in-country public health supply chain begins at the first point of delivery - a central warehouse, or other location where suppliers first transport health commodities after port clearance. It extends to the point of service – the pharmacy, hospital or provider where commodities are dispensed to the people who use them. The flow of data, including order management, product flow and financial flows, are also part of the in-country supply chain.

In-country public health supply chain management broadly comprises the planning and execution of relevant processes, and several enabling processes, structures and resources. Each of these components is defined in this briefing note, and relates to the Global Fund’s [Modular Framework Handbook](#).

2. Supply Chain Framework



This Supply Chain Framework can be used to guide assessment, formulation and prioritization of work to strengthen in-country public health supply chains. It is based on the on-shelf availability of health products at Service Delivery Point and a target Supply Chain Reference Model. The framework summarizes the processes, infrastructure, structures and enablers that make up a standard in-country public health supply chain and its management.

This framework should be applied following an assessment of the challenges to accessing health products and a measurement of the ‘on shelf availability’ of key health products at health facilities. This baseline information is essential to investments in result-improving solutions. It provides insight into which geographic areas of a country receive good, average or insufficient service so that the most likely root causes, such as people skills, availability of trucks or system issues, can be identified.

2.1 Planning

Planning is an essential component of in-country public health supply chain management, including:

Supply Chain Roadmap: This is a long-term supply chain roadmap spanning at least three years. It should establish the aggregate demand of health commodities during the plan period, as well as the resources required to deliver those commodities to people. The roadmap should include a high-level outline of required resources, like warehouse capacity, vehicles required for distribution, human resources, third party services and data systems. It is also critical to forecast how the 'enablers' will evolve and support the supply chain's goals over the plan period.

Countries that do not have a supply chain roadmap are encouraged to allocate resources to create one. Those with an existing roadmap should review and align it to their public health supply chain's newest requirements. The updated roadmap should then be the sole document driving supply chain-related investments made by the government and in-country partners.

The roadmap should include processes for Order Management, Warehousing & Distribution Planning, and Expiry & Waste Management Planning. Each should be recorded in detail in a Supply Chain Policy & Procedures document (see below), with clear lines of accountability and responsibility, and well-defined KPIs to measure performance. Each process should be reviewed quarterly to align delivery plans with current demand patterns.

Order Management Process: This maps out the ordering of health commodities and schedule of delivery by suppliers to the central warehouse.

Warehousing & Distribution Planning: This maps out the receipt and warehousing of health commodities, as well as their final delivery to points of service and/or health facilities.

Expiry & Waste Management Planning: This plans for the safe, regulated disposal of expired and damaged products. It includes shipment from stocking points, such as warehouses and health facilities, across the supply chain to a central location.

2.2 Execution

Following the planning processes outlined above, supply chain execution includes:

Procurement Process: The actual ordering of commodities and schedule of delivery by suppliers to the point of receipt at the central warehouse. This includes authorization of supplier payment.

Warehousing & Distribution: The storage and downward distribution of commodities from warehouse until reaching the final point of service, for issue by health facilities to people.

Waste Management: The movement of expired, damaged and non-compliant health commodities to a central location for safe disposal as per country regulations.

2.3 Enablers

Supply Chain enablers include:

Supply Chain Policies & Procedures: This document or manual outlines the policies and procedures used to operate, manage and govern the supply chain.

KPIs and Performance Management: The relevant authorities agree on this list of key performance indicators (KPIs) to track performance across the entire public health supply chain. It should define each of the KPIs and clear lines of responsibility for performance. It should also identify how performance is reviewed and corrected, and include rules for escalation, in case changes are required to resolve performance problems.

Data Systems and Information Management: As the public health supply chain generates and relies on huge amounts of data, it is important to outline the processes for collecting, maintaining and reporting accurate supply chain data, including the necessary manual or electronic systems. This should include the choices and functionality of a Logistics Management Information System (LMIS), and requirements to interface with other health management information systems.

Human Resources and Organizational Development: Having the appropriate organizational structures and supply chain skills relevant to the different sub-functions of the public health supply chain. This are defined in the PtD HR4SCM [toolkit](#).

Review whether existing structures and people skills can deliver and respond accordingly. Actions may include structural changes, training and development for critical requirements.

Supply Chain Assets: Running the public health supply chain involves many assets like warehouses, vehicles and computers. It is critical to determine the required resources, including which assets to own and which to lease.

Contracts Management: Contracts and framework agreements are critical to hold public health supply chain partners accountable to their roles and responsibilities. Therefore, it is critical to have and/or develop, the capability to draft and manage contracts.

Supply Chain Network Design: Map and align the three main flows of the public health supply chain – physical, information and financial - to service optimization and cost reduction objectives. For donor funded commodities, special attention should be placed on compensating for the absence of core financial flow that is associated with most commodities. Segmentation is also important to ensure that services are tailored to their recipients.

Regulatory Compliance: Health commodities are governed by several regulations throughout the supply chain. Investments in time and resources are required to either comply or update certain regulations in line with the latest needs.

Risk Management: To mitigate potential risks that may disrupt the performance of the public health supply chain, resources, processes and time must be devoted to identify and quantify potential risks, likelihoods and relevant performance safeguards.

3. The Global Fund Supply Chain Imperatives

The Global Fund emphasizes the following to guide the creation of in-country transformation plans:

3.1 Private Sector Engagement

Working with for-profit and not-for-profit organizations that have a local presence and focus on supply chain as a core purpose is encouraged. These organizations are able to sustainably attract people talent who are passionate about supply chain, and have access to supply chain-related assets like warehouses and trucks that can to optimize performance.

Private sector engagement provides an opportunity to access best practices and capabilities, and also releases government resources that can be used to focus on other relevant areas, such as regulatory compliance, policy formulation, and enforcement & contract management.

3.2 Planning and Innovation

Data generally travels on the same path as products flow, but in the exact opposite direction. While products flow from factories to health facilities, data flows from the health facilities to factory. To be used effectively for order management, manufacturing and procurement planning, data created at the health facility should be flowing to all parts of the supply chain at the same time.

3.3 Supply Chain Segmentation

Different communities, groups and geographies can be supported through different supply chain modalities. Many clever options can segment parts of the supply chain.

For example, stable HIV patients do not need to return to public health facilities each time they collect their health products. By collecting health products at other locations, they can help de-clog public health facilities.

3.4 Sustainable Governance

Donor collaboration with partners and in-country stakeholders, such as the Ministry of Health and parastate, should be frequent, output-oriented and focused on getting the right return on investment, as facilitated by the relevant governance and support structures.

4. Global Fund Investment Opportunities for Supply Chain

Areas for supply chain investment opportunities can be found in the Global Fund's RSSH Modular Framework Handbook and are summarized below. Investments can include:

1. Health products management and systems strengthening. Policy strategy and governance; storage and distribution capacity; procurement capacity; regulatory and quality assurance support; avoidance, reduction and management of health care waste.*
2. Health management information systems and M&E. Routine reporting; program and data quality; analysis, evaluations, review and transparency; surveys; administrative and finance data sources; and civil registration and vital statistics.
3. Human resources for health including community health workers. Education and production; remuneration & deployment; in-service training; and policy and governance frameworks.
4. Integrated service delivery and quality improvement. Quality of care; service organization and facility management; and service infrastructure.
5. Financial management systems. Public financial management systems and routine grant financial management.
6. Health sector governance and planning. National health sector strategies and financing; policy and planning for national disease control programs.
7. Community systems strengthening. Community-based monitoring; community-led advocacy and research; social mobilization; building community linkages and coordination; and institutional capacity building, planning and leadership development.
8. Laboratory systems. National laboratory governance and management structures; infrastructure and equipment management systems; quality management systems and

accreditation; information systems and integrated specimen transport networks; and laboratory supply chain systems.*

*Points 1 and 8 cover areas of strengthening in-country supply chain systems. These are further explained in the Global Fund Modular Framework.

5. Additional Resources

- [Information Note: Building Resilient and Sustainable Systems for Health \(RSSH\)](#)
- [Health Products Management Annex to the STC Guidance Note \(2019\)](#)
- [Technical Brief: Laboratory Systems Strengthening](#)
- [Technical Brief: Support to Effective Regulatory Systems for Procurement and Supply Management of Health products](#)
- [People That Deliver HR for SCM Assessment Tool](#)