



OPTIMIZING SUPPLY CHAINS

Access to medicines, health products, and other essential commodities is elemental to ending extreme poverty, building human capacity, and creating vibrant markets around the world. Through our health supply chain solutions portfolio, we provide health commodity procurement services and systems-strengthening technical assistance that address all elements of a comprehensive supply chain. We hold ourselves to a similar standard as commercial supply chains yet we operate in some of the world's most challenging environments to get critical health supplies to where they are needed.

GENERATING COST SAVINGS THROUGH STRATEGIC SOURCING

We seek the best possible pricing terms for the supplies we deliver. We do this by leveraging our market influence globally to understand market trends and get the best deal possible. We also perform in-depth analysis of the market dynamics that go into manufacturing medicines to better understand manufacturer price points. Using this production economics analysis, the USAID Global Health Supply Chain Program-Procurement Supply Management (GHSC-PSM) project has already generated significant cost savings through relationships with 239 suppliers. For instance, the project has negotiated contracts that have yielded \$8 million in savings per year for an important HIV treatment, \$1.3 million per year for viral load tests, and \$1 million per year for malaria medication.

TRANSFORMING GLOBAL HEALTH SUPPLY CHAINS

We are tackling the greatest supply chain challenges head-on through implementation of the GHSC-PSM project. GHSC-PSM provides global commodity procurement and logistics services, systems strengthening technical assistance, and strategic engagement to improve long-term availability of health commodities in the communities most vulnerable to disease. Chemonics strategically pre-positions key products in regional distribution centers (RDCs) to facilitate quick order fulfillment. We recently consolidated our RDC footprint from seven to three highly trafficked sites — Belgium, South Africa, and the UAE — to improve efficiencies and create cost savings

OUR SUPPLY CHAIN MANAGEMENT SERVICES

- Strategic sourcing
- Procurement and freight forwarding
- Deliver/Return
- Market dynamics
- Demand planning
- Forecasting and supply planning
- Warehousing and inventory management
- Distribution
- Laboratory systems
- Pharmaceutical waste management
- Health workforce development
- Data visibility
- Innovation and technology

By linking the industry's best data, people, and systems, we work each day to ensure uninterrupted supplies of health commodities in approximately 60 countries around the world.

estimated at \$38 million over six years, through a combination of reduced warehousing and transportation costs. Additionally, more than \$867 million worth of commodities have been procured over the life of the GHSC-PSM project to date, including more than 6,000 products in the global supply chain catalogue, which equates to about 5,700 orders in process daily.

STRENGTHENING FORECASTING AND SUPPLY PLANNING

We use and promote advanced quantification methods to improve forecasts and provide suppliers and managers with more accurate information to plan their procurements and deliveries, all of which helps countries avoid stockouts and product waste through expiration. To address stockouts we use a tool called the Pipeline Monitoring and Procurement Planning System (PipeLine). PipeLine was designed to enable program managers to plan optimal procurement and shipment schedules for health commodities and to monitor the stock status of health products. We use PipeLine to assist in planning, to estimate future product needs in terms of quantities and costs, and to monitor the status of our procurement plans. The tool has been used in more than 40 countries to manage health commodities planning at program and national levels.

IMPROVING IN-COUNTRY LOGISTICS

We optimize in-country logistics by supporting storage and transportation efficiencies, including a shift to electronic proof-of-delivery, temperature logging of commodities to ensure quality, and real-time GPS tracking of delivery fleets. In order to harmonize warehousing across program areas — as well as to ensure stock visibility at central and zonal/axial warehouses — we manage third party logistics (3PL) providers to pick, pack, and distribute commodities to the last mile. When emergency situations arise, we engage with 3PL providers to assist with the uninterrupted distribution of commodities. For example, in Malawi's Karonga district which sees heavy rain and flooding during the rainy season, we were able to deliver 3,500 long-lasting insecticide-treated nets (LLINs) within 48 hours. In efforts to enhance our warehousing efforts, we have also established and implemented a Warehouse in a Box (WIB) infrastructure. WIBs are constructed from prefabricated modules that were assembled on-site, an approach that is 30 percent faster and 30 percent less expensive than traditional brick-and-mortar construction. WIBs assist in the efficient and effective storage and management of medicines and related pharmaceuticals in support of Ministries of Health and aid programs, in accordance with international best practices to enhance public health.

BUILDING CAPACITY IN PHARMACEUTICAL WASTE MANAGEMENT

To avoid the indirect or direct impacts of poorly managed health care waste, our pharmaceutical waste management activities provide technical assistance to country counterparts. In Benin, we are

PILLARS OF OUR APPROACH



Providing real-time, end-to-end visibility capability through world class information systems



Adapting proven commercial methods and tools to optimize supply chain performance



Building on our own experience managing an ISO-9001 certified Quality Management System to support supply chains



Supporting countries to create their own systems, capacity, and incentives for integrated and optimized supply chain management



Collaborating with stakeholders to enhance alignment and knowledge sharing, shape markets, and inform policy-making

collaborating with the government to develop local expertise in pharmaceutical waste management. Working alongside waste management experts, we are also working to identify a local service provider to design a tailored training program. Additionally, we assisted the Beninese government in destroying 110 tons of counterfeit pharmaceuticals. In Guinea and Nigeria, we are supporting improvements to health care waste management and general environmental hygiene systems to collect, treat, and dispose of unusable medical products.

BUILDING RESILIENT SUPPLY CHAINS TO RESPOND TO URGENT THREATS

Multiple recent epidemics have underscored global vulnerability to viral threats. We know that strong supply chain systems are especially critical to address unexpected and emerging health threats such as Zika and Ebola. We leverage our global supply chain and technical assistance offerings to respond to emergency outbreaks while committing to solutions that preempt epidemics before they occur. As part of our broader maternal and child health programs, Chemonics currently supports the availability of Zika prevention products and coordinates with other service delivery implementing partners, Ministries of Health, and Social Security Institutes to ensure the availability of these commodities to pregnant women in nine countries within South America, Central America and the Caribbean. In our efforts to support the Global Health Security Agenda (GHSA), we are developing an essential competencies framework called the Emergency Supply Chain (ESC) Playbook which will assist supply chain managers in responding to public health emergencies efficiently. We are currently testing this tool in Cameroon and the framework will also be customized for other countries. For supply chains to be fully equipped to respond to public health emergencies, stakeholder engagement and coordination are critical to ensuring resource availability and clearly defined responsibilities.

INNOVATION AND TECHNOLOGY FOR DATA-DRIVEN DECISION-MAKING

We aim to achieve the full benefits of end-to-end (E2E) data visibility by developing new tools and systems that will aggregate end-to-end data — from distribution planning through delivery to the recipient — in order to track performance, location, and costs as commodities move through the in-country distribution network. Through the supply of constant information, these tools will create an "instant report card," enabling distribution managers to better track shipments, make data-driven decisions, optimize distribution resources and assets, and use historical data to show trends over time. GHSC-PSM uses an Order Promise Tool that illustrates the unique context of each country's operating environment — including mode of transport and supplier — factoring variations such as in-country waiver time, product type, supplier location, and transport mode. This tool not only pulls information from various sources to determine lead time needed for delivering products by a certain date, but also differentiates lead times between different supplier and transportation lane choices.