

USAID | DELIVER PROJECT

Final Country Report

Zambia



USAID | **DELIVER PROJECT**
FROM THE AMERICAN PEOPLE

A person wearing a white lab coat and a dark skirt stands in a storage room with high shelves. The shelves are filled with various boxes, some labeled 'HANDLE WITH CARE'. The person is reaching up to a shelf. The room has a concrete floor and a drop ceiling with a light fixture.

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USAID | DELIVER PROJECT, Task Order 4

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USAID | DELIVER PROJECT, Task Order 7

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Abstract

This report summarizes the work carried out by the USAID | DELIVER PROJECT in Zambia from 2009–2016. The project provided technical assistance in HIV, FP, malaria and MCH prevention and treatment by strengthening the health supply chains and improving the environment for commodity security.

Cover photo: Mother and child hanging LLIN, Zambia. February 2014.

All photographs © Gareth Bently on behalf of USAID | DELIVER PROJECT and Supply Chain Management System

USAID | DELIVER PROJECT

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Project Overview and Context

Project Overview

The USAID | DELIVER PROJECT (the project), in partnership with ministries of health and other organizations, improves health outcomes in developing countries by increasing the availability of health supplies. For more than 30 years, USAID has been a world leader in providing health commodities to field programs—a critical component of health program success.

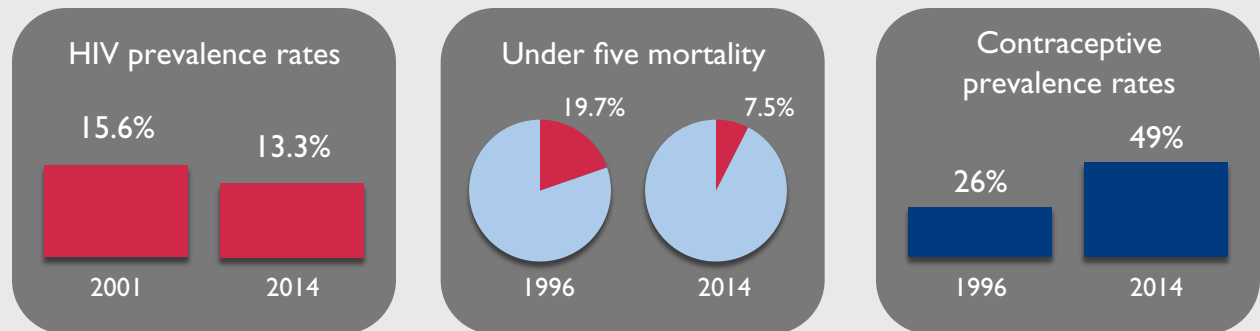
In concert with USAID, government counterparts, and other partners, the project's activities focused on increasing the availability of human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS), family planning, maternal and child health (MCH) commodities, and essential health products; strengthening logistics systems; and promoting contraceptive security (CS). In support of the President's Malaria Initiative efforts, the project improved malaria services in Zambia by increasing availability of anti-malarial products. The project also increased availability of family planning and other essential commodities.

In addition, the project has provided essential supply chain support to the U.S. Global Health Initiative's Saving Mothers, Giving Life Program, focused on

providing comprehensive, integrated, and timely maternal health products and services to reduce maternal mortality in Zambia substantially.

Zambia has a supportive enabling environment for strengthening the public health supply chain. Stockout rates for key health commodities have decreased, helping support higher quality health programs. In recent years, HIV prevalence rates have declined from 15.6 percent in 2001—to 13.3 in 2014; under-five mortality has decreased from 197 deaths per 1,000 live births in 1996 to 75 in 2014; and contraceptive prevalence rates have improved from 26 percent in 1996 to 49 percent in 2014. These advancements have led to fewer deaths and a healthier population overall (CSO 1997; 2003; 2014).

Results of higher quality health programs



Project Overview

Vision:
Build the capacity of the Government of the Republic of Zambia (GRZ) to ensure availability and security of vital health commodities at health facilities



Result Area 1: Support the GRZ to strengthen logistics systems to avail critical data for informed supply chain decisionmaking



Result Area 2: Increase ownership to conduct coordinated, transparent procurement planning and supply monitoring



Result Area 3: Provide cost-effective, reliable procurement services to the GRZ



Result Area 4: Reinforce infrastructure for warehousing, distribution, and testing



Result Area 5: Improve strategic management for increased CS

Investment in Commodity Support and Technical Assistance



Prior to 2006, the public sector supply chain for health commodities in Zambia had many challenges. At the time, districts and hospitals did not report consumption data. Consequently, selection and quantification of medicines were based on resource availability rather than actual facility needs. Poor coordination led to costly procurement for small-quantity

emergency commodity purchases during stockouts. Health facility staff often travelled to order and retrieve health commodities on an ad hoc basis from Medical Stores Limited (MSL), where managing stock levels was difficult due to unpredictable lead times and limited storage space- (Yadav 2007).

When the USAID | DELIVER PROJECT arrived in Zambia in 2006, it was primarily an emergency response project, partnering with SCMS, the Ministry of Health (MOH) and MSL to procure and distribute antiretroviral (ARV) medicines and manage ARV stock in health facilities through a newly established logistics management unit (LMU). Over time, the logistics system expanded to include family planning, malaria, essential medicines, and HIV test kits, as well as labs supported by the USAID-funded Supply Chain Management Systems (SCMS) project.



The establishment of the LMU resulted in a number of improvements including use of logistics data for resupply decisions; integrated distribution of ARVs and HIV tests with other essential drugs for opportunistic infections; a fixed ordering and reporting schedule; and more accurate forecasting on the needs of each health facility.

Over the past 10 years, the project has supported and strengthened four national logistics systems serving more than 2,000 health facilities; developed and launched a web-based reporting system that streamlines transactions in stock control cards for all health commodities; advanced mechanisms of coordination among partners within the supply chain; availed data for improved forecasting and quantification; and enhanced commodity security through strategy development, training health workers in logistics management information systems, and partnering with local institutions to build sustainable capacity.

Family Planning

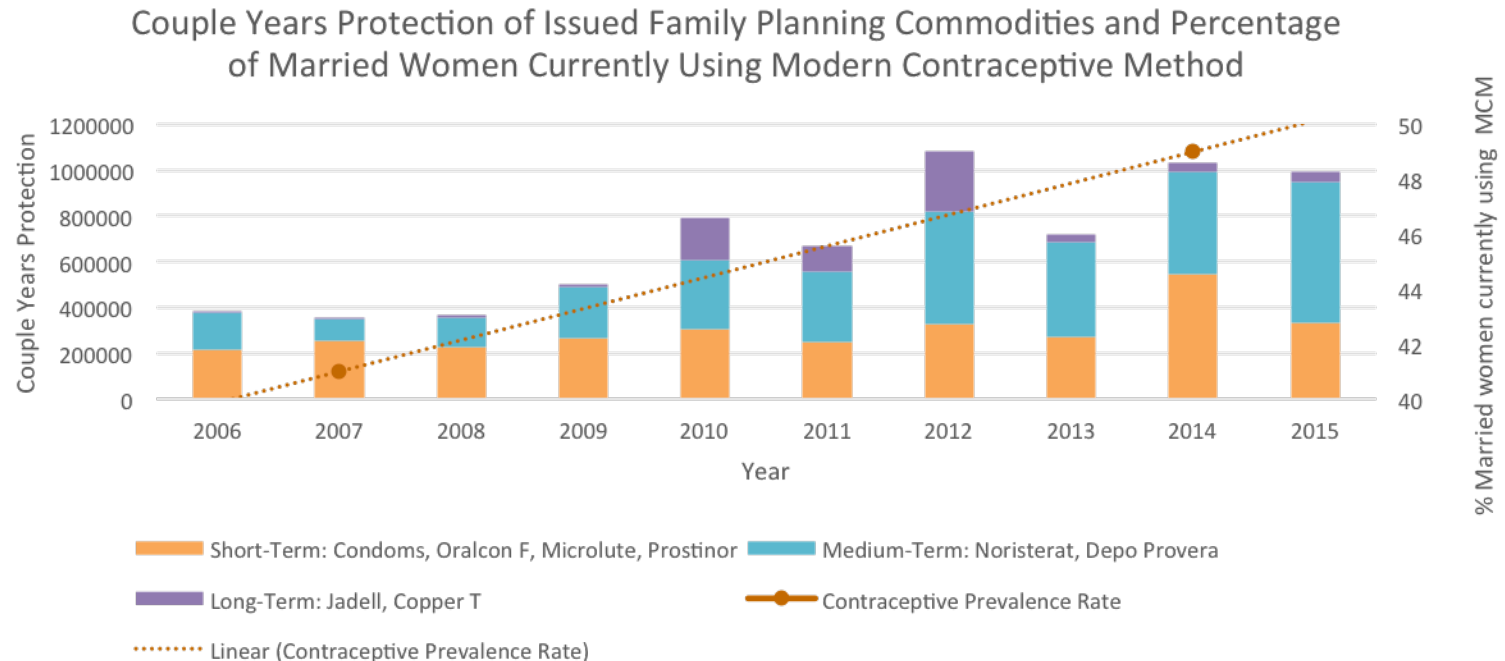
Promotion of family planning and access to modern methods of contraception saves the lives of women and children by helping women delay, space, and limit pregnancies.

The total fertility rate in Zambia is 5.3 children per woman. Although 37 percent of women express a desire to limit childbearing, 65 percent reported not using any methods of family planning. Only 45 percent of married women and 24.6 percent of all women used modern contraceptive methods (CSO 2014).

United States Government (USG) investment in family planning is concentrated in procurement of medium- and long-term

contraceptives, as they provide greater couple-year protection, offering a significantly higher return on investment.

The project worked closely with the GRZ to improve forecast accuracy and convene stakeholders to review forecast assumptions and agree on procurement plans. This transparency enabled the increase in contraception procurement from 2006 to present and discussions on increasing medium term contraceptive procurement.



HIV and AIDS

In Zambia, 13.3% of adults are HIV-positive. The virus is largely spread through heterosexual sex, with prevalence of infection higher among women, individuals residing in urban areas, and people in higher wealth and education quintiles (CSO 2014).

To address the estimated 1.1 million people living with HIV (PLHIV) in Zambia, GRZ implemented a multipronged approach to HIV-prevention and treatment. Preventive measures include condom promotion, male circumcision, prevention of mother-to-child transmission (PMTCT), HIV testing and counseling (HTC), post-exposure prophylaxis, and treatment of sexually transmitted infections. Antiretroviral therapy (ART) and management of HIV/TB co-infection are central to the GRZ strategy for HIV treatment (NAC 2010).

Prior to 2003, ARVs were not available at public clinics. When the project arrived in 2005, it shipped ARVs and sought to improve access to ARVs by developing an LMU in cooperation with MOH and MSL. At the end of 2005, there were only 50,000 active patients on ART.

Results

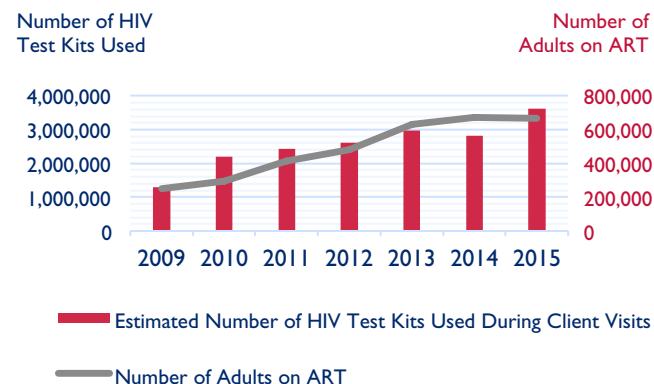
1715

Facilities supported by the
HIV Test Kit Logistics
System

309

Facilities supported by the
ARV/PMTCT Logistics
System

**Number of HIV Test Kits (Determine) used
During Client Visits and Estimated Number
of Adults on ART**



Malaria

Between 2006 and 2012, malaria prevalence in children under five decreased from 22% to 15% (GRZ MOH 2012). Despite these gains, malaria cases in Zambia are increasing, with 5.8 million new cases in 2014.

Malaria remains a major cause of morbidity and mortality in Zambia, accounting for 36 percent of hospitalizations and outpatient attendance. Controlling malaria is a major priority for GRZ. In recent years, the country and cooperating partners have significantly strengthened and scaled up malaria treatment and prevention interventions.

The project shipped and distributed long-lasting insecticide-treated nets (LLINs), artemisinin-based combination therapy (ACTs) packs, rapid diagnostic tests (RDTs), and artesunate injections, a first-line treatment for severe malaria as outlined in the National Malaria Treatment Guidelines.

Epidemiological Profile

First-line treatment	Artemether lumefantrine
Rainy season	November- June
Population living in high-transmission areas	100%
#U5s at risk	2,744,625 (19.5% of the population)
#PW at risk	626,337 (4.45% of the population)
Incidence	25,242/100,000
Cases per year	5,462,078



The USAID | DELIVER Project has procured commodities for Zambia to

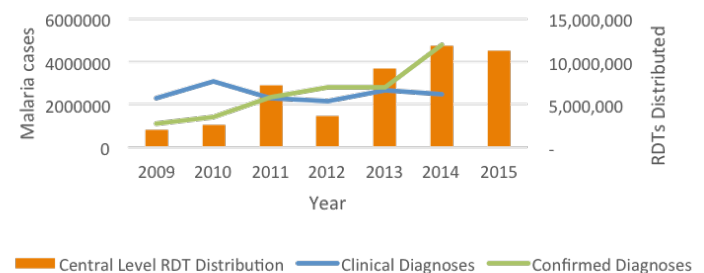
Protect against malaria with
10.6 million LLINs

Treat 36 million
malaria cases with ACTs

Test 37 million
suspected malaria cases with RDTs

Prevent malaria in pregnancy with
18 million SP tablets

Confirmed and Clinical Malaria Diagnoses and Central-Level Rapid Diagnostic Test Issues



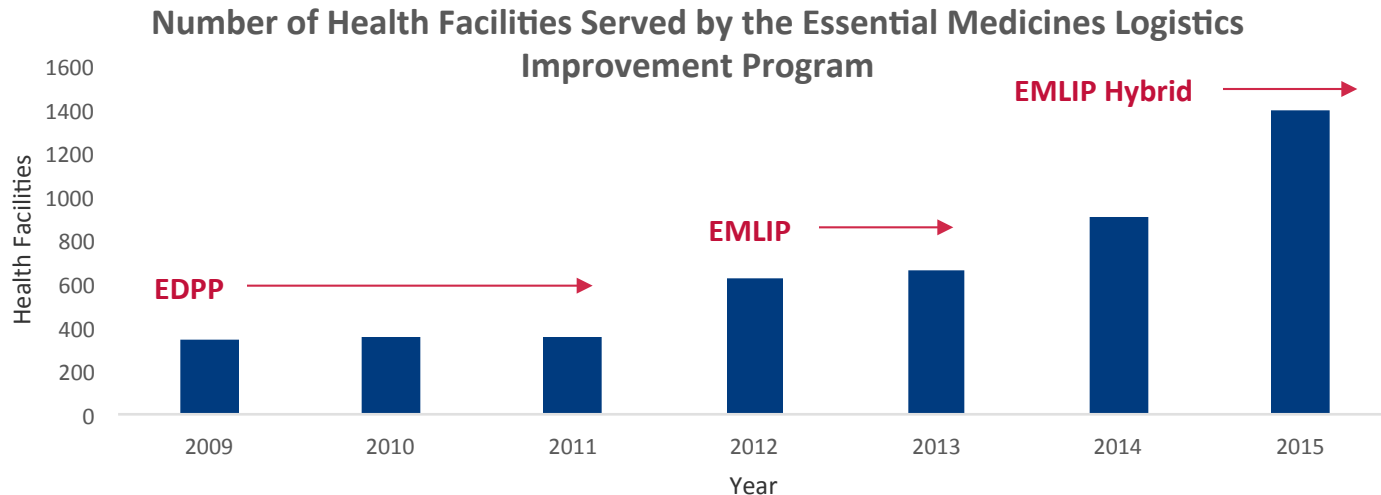
Essential Medicines

In addition to HIV and AIDS and malaria, major causes of morbidity and mortality in Zambia include respiratory infections, tuberculosis, diarrhea, trauma, cardiovascular disease, malnutrition, and meningitis.

Between 2001 and 2014, Zambia experienced a considerable reduction in mortality for adults (-34% women, -30% men), neonates (-57%), infants (-41%), and children under-5 (-41%). Despite these gains, 1 of 13 children Zambia will not reach his/her fifth birthday (CSO 2014). Major causes of mortality and morbidity in Zambia can often be treated with essential medicines, but they must be accessible and available to the public.

To support essential medicines CS, the project worked with MOH to develop a logistics system for essential medicines. This system evolved

from a push system into a combination push and pull system. Using LMIS consumption data, pre-packed kits delivered to health facilities containing diarrheal medicines, antibiotics, pain relievers, and surgical supplies are now supplemented according to need with additional commodities, thereby improving stock availability at the facility level. The project helped MOH deliver essential medicines to an increasing number of the country's more than 2,000 health facilities, from 319 in 2009; 1,399 in 2015; and nationwide in July 2016.



**In 2009, the project started the Essential Drugs Public Pilot Program. It was expanded as the EMLIP in 2012, and the EMLIP Hybrid in 2014.*



Technical Assistance

Technical Assistance Overview

Delivering high-quality health care to patients and clients requires health facilities and dispensaries to have a full supply of medicines and other health products. This necessitates a well-functioning supply chain.

Using best practices and innovative approaches, the USAID | DELIVER PROJECT develops and implements robust logistics solutions, fosters supportive commodity security environments, procures and ships health commodities, and partners with local organizations to build sustainable capacity.

In Zambia, these interventions included efforts to—

Strengthen Logistics System Performance

- Increase Data Visibility through eLMIS
- Ensure Commodity Security through EMLIP
- Improve GRZ Capacity to Conduct Forecasting and Quantification



Increase National Commitment to Commodity Security

- Improve Coordination at District and Provincial Levels
- Lobby for Increased Commodity Investments by the GRZ
- Support Commodity Security Strategy Development



Build Sustainable Capacity

- Strengthen Human Resources in Health Logistics
- Support the National Medical Stores





Strengthen Logistics System Performance

To improve health outcomes in the countries where we work, the USAID | DELIVER PROJECT increases the availability of health products by strengthening supply chains and creating global commitment. These efforts are guided by the project's supply chain integration framework.

In the public health setting, an integrated supply chain links everyone involved in managing essential health commodities into one cohesive supply chain management organization, ultimately helping clients access quality health care services and supplies.

Increase Data Visibility through eLMIS

Due to increased data accuracy and visibility through eLMIS, shipments prepared at MSL are more reflective of the most recent stock and consumption levels at each facility.

The project and key partners developed eLMIS, an open-source web and software-based logistics management system that streamlines documentation of transactions in stock control cards for all health commodities.

eLMIS is a cost-effective alternative to the existing paper-based LMIS because it reduces data inaccuracies and the time it takes for health facility information to reach the central level. Previously, MSL processed orders based on outdated consumption data as a result of a three-month data entry lag.

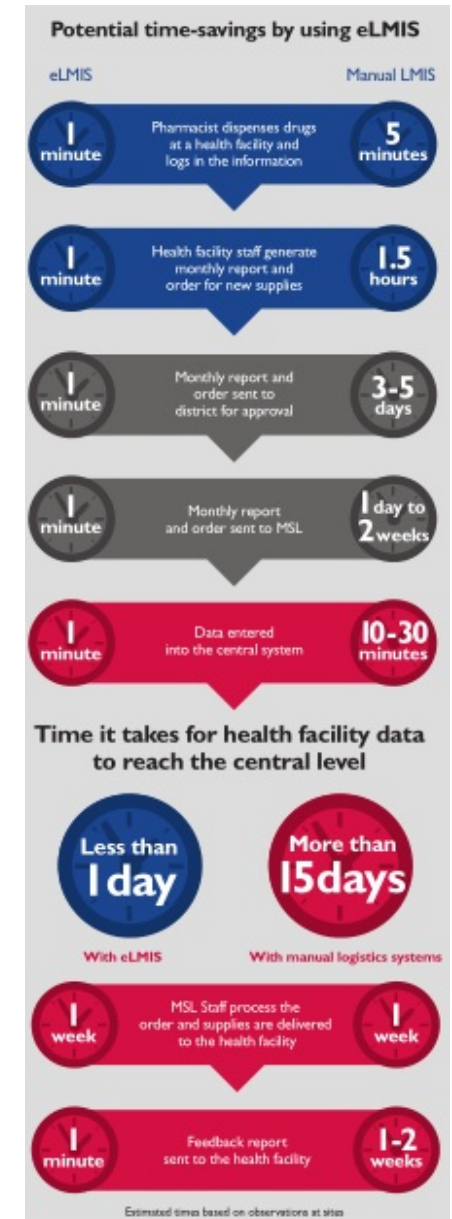
The requirement-development phase for eLMIS began in 2011 and was followed by system design and development in 2012. In early 2014, DELIVER, MOH, and MSL launched eLMIS. Training and piloting of the new platform began the same year. Currently, eLMIS is being rolled out at the facility level, specifically at high-volume facilities.

Initially, the project piloted eLMIS in eight districts in eight provinces. Today, the web-based eLMIS Central Edition, for use at the provincial, district, and national level, is being used nationwide. The software-based eLMIS Facility Edition is currently

used at approximately 250 health facility sites in all provinces.

The new eLMIS system increases efficiency in requisitioning and supplying health commodities, improves commodity management, and enhances service delivery across the country. Because the eLMIS Central Edition system is web-based, it offers health workers easy access to commodity consumption data in real time, thus enabling district, provincial, and central-level supervisors to make informed decisions about the supply quantities required at each facility.

The eLMIS project was made possible with contributions from the USAID-funded SCMS project, Zambian Ministry of Health, MSL, Tanzania Ministry of Health and Social Welfare, Churches Health Association of Zambia (CHAZ), the Bill & Melinda Gates Foundation, the Rockefeller Foundation, the World Bank, Centers for Disease Control and Prevention, PATH, Village Reach, UN Commission on Life-Saving Commodities, and UNICEF.



Ensure Commodity Security through EMLIP

Given high stockout rates of key essential medicines at district stores and facilities, the project and its partners designed EMLIP, a cost-effective system that strengthens the supply chain from MSL to supply delivery points, thereby improving the availability of commodities.

From 2009 to 2010, the project administered the Essential Drugs Public Pilot Program (EDPPP) in 16 pilot and eight control districts. Following an evaluation, the project and its partners used the most effective pilot model to develop EMLIP, which began nationwide rollout in 2012. EMLIP was then implemented in a phased approach nationwide. Over time, challenges in maintaining stock levels led to changes in the program, resulting in the EMLIP Hybrid, a combination push and pull system, in 2014.

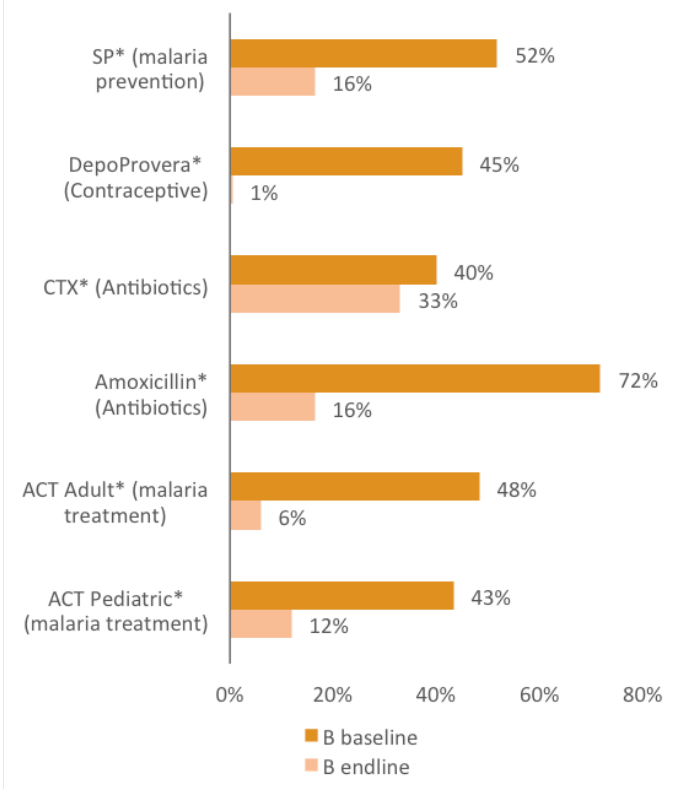
The project and its partners designed two models for the EDPPP focused on improving logistics capacity at the district level and reducing the number of stockholding points. Results from the pilot program demonstrated that reduced district-level stockout rates improved access to essential drugs at the facility level.

In addition, storage practices improved following health facility staff training and reporting rates increased from 72 percent to 95 percent over the course of the 12-month pilot.

The scale-up of the EDPPP model into the EMLIP Hybrid system has led to reduced wastage and improved stock availability at the health facility level. In the new system, health facilities receive a monthly predetermined quantity of supplies through a baseline kit for essential commodities (push) in addition to supplementary supplies ordered through the logistics system (pull). By reporting consumption of supplies from the health center kit and supplemental supplies, district and provincial supervisors can plan and anticipate needs more accurately.

The project has completed the nationwide implementation of the EMLIP Hybrid system.

Comparison of Baseline and End-line Stockout Rates in District Health Facilities Participating in the Essential Medicines Logistics Pilot Program (2009)



Improve GRZ Capacity to Conduct Forecasting and Quantification

The strengthened distribution system has increased availability of health commodities and positively effected health outcomes.

Quantification, the process of estimating the quantities and costs of the products required for a specific health program and determining when the products should be delivered, ensures an uninterrupted supply of commodities for a program. The project helped GRZ staff and partners conduct the forecasting and quantification (F&Q) process at the central level by establishing quantification core teams, supply planning committees, and training GRZ staff in F&Q tools and exercises.

The F&Q core team comprises national, provincial, district, and facility-level staff. They are responsible for collecting data for quantification, building assumptions, entering data in the quantification tool, and facilitating the quantification meeting.

The first project-led F&Q for ARV commodities began in 2006. The process evolved to the point that the project was able to help the GRZ conduct annual long-term national forecasts and quantifications for family planning, malaria, HIV test kits, and essential medicines commodities.

Formal trainings in F&Q methodologies for GRZ staff started in 2008. The first commodity quantification core teams were formed in 2008, as was the supply chain coordinating committee.

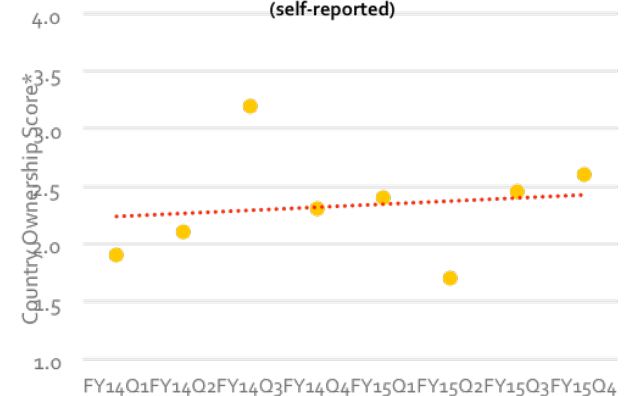
Quantification informs supply chain decisions on product selection, financing, procurement, and delivery. Quantification exercises have helped program managers identify funding needs and procurement gaps of required commodities, maximize use of available resources, advocate for additional resources when needed, and develop a supply plan to coordinate procurements and shipment delivery schedules to ensure a continuous supply of commodities.

The development of supply chain coordinating committees has improved stakeholder coordination in the procurement of health commodities because partners can more readily monitor progress and status of procurement plans, discuss challenges, successes, and strategies to avoid stockout and overstock.

Results

Training key GRZ staff in the F&Q process has improved quantification for health commodity areas and increased appreciation for data required to complete national quantification. Most important, improved forecast accuracy helps ensure the right quantities of products are procured.

Country ownership score: central-level GRZ staff ability to conduct annual quantification processes (self-reported)



*Country ownership score key

- 1) project leads everything;
- 2) project leads with country input;
- 3) country leads with project input;
- 4) country leads everything



Increase National Commitment to Commodity Security

Commodity security (CS) exists when every person is able to choose, obtain, and use quality contraceptives and other reproductive health (RH) products whenever s/he needs them. Strong supply chains alone cannot ensure availability of or access to these commodities.

To help countries create an enabling environment for RH CS, the USAID | DELIVER PROJECT, in collaboration with its counterparts, undertakes a variety of policy and advocacy activities at the global, regional, and country levels.

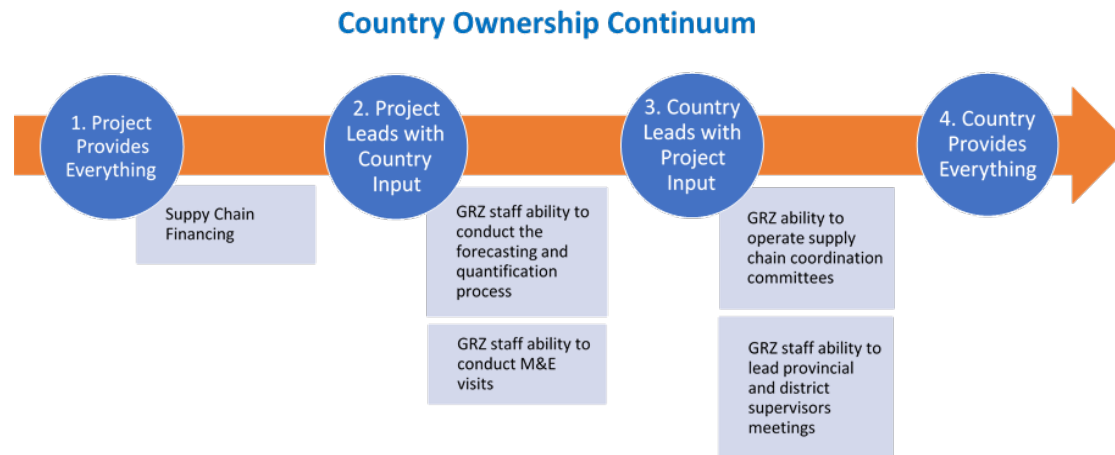
Improve Coordination at District and Provincial Levels

Provincial and district supervisor meetings provided a platform for GRZ managers to use data for informed supply chain decisionmaking

Since 2009, provincial and district supervisor meetings have significantly improved logistics coordination within the health commodity supply chain among MSL, MOH, and implementing partners, and between provincial health officers (PHOs) and district medical officers (DMOs). For example, improved sharing of information on stock status and redistribution of excess commodities between districts and within districts in Northern Province reduced percentage of facilities with lab commodity overstock from 26 percent in November to 4 percent in December 2014. The provincial-level quarterly meetings strengthen data visibility and understanding among partners. This improves reporting rates and record-keeping, and promotes communication between stakeholders and understanding of logistics challenges at each level of the supply chain. This approach improves commodity availability and leads to increasingly cooperative supply chain solutions.

Provincial and district supervisor meetings are an opportunity for stakeholders to share and analyze logistics data with provincial and district logistics supervisors; identify logistics system implementation successes and challenges; strengthen supportive supervision within the supply chain; and develop action plans to mitigate implementation challenges in each district and province.

These quarterly meetings have been held consistently in all 10 provinces since 2009. MOH, central, provincial and district representatives now lead the process, a considerable accomplishment on the country ownership continuum scale. The meetings are planned in conjunction with MSL, MOH, MCDMCH, PHOs, and DMOs. Additional USG-supported and other partners working within health commodity areas also participate.



Lobby for Increased Commodity Investment by the GRZ

Routine publicizing of health commodity funding gaps prompted resource mobilization by GRZ

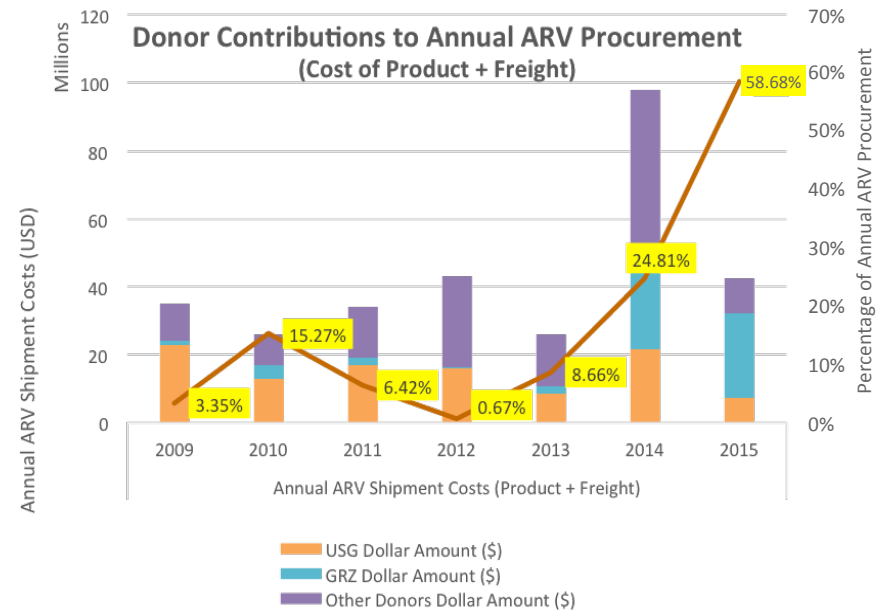
The project, in conjunction with MOH, has tracked annual donor contributions to ARV procurement for the public health supply chain since 2007. In recent years, cooperating partners have steadily increased financial commitments to meet the growing demand for ARVs as determined in F&Q exercises.

To increase country ownership of the supply chain, the project detailed unmet commodity needs through an annual gap analysis, which MOH used to request support from various cooperating partners. Over time, it became clear to both MOH and its partners that GRZ needed to increase investments in commodities if the ARV supply chain was to operate sustainably.

USAID used the gap analysis in conjunction with the Zambia National HIV and AIDS Commodity Security Strategy to negotiate a Partnership Framework, an incentivized funding agreement, to garner increased commitment from GRZ in procurement of ARVs. As a result, **GRZ increased investment in ARVs from \$1.2 million in 2009 to \$24.3 million in 2014**. As GRZ continues to take ownership of ARV procurement through increasing financial contributions, it boosts its ability to operate all aspects of the supply chain long after partners leave.

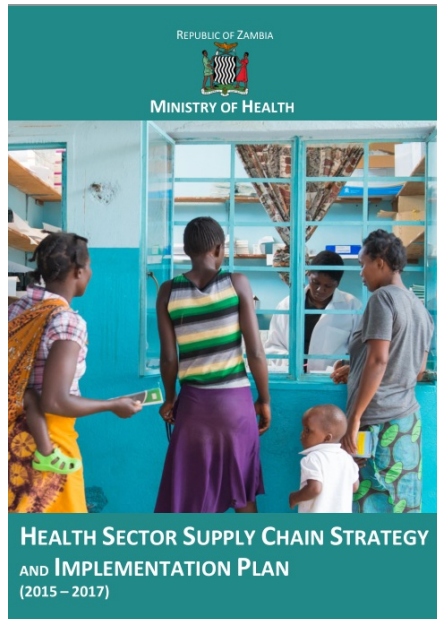
Gap analyses, derived from annual F&Q exercises, indicate unmet funding requirements for the procurement of health commodities. These analyses are presented to MOH, USAID, and cooperating partners to lobby for increased investment in commodity areas and to

determine procurement funding deficits. The Mission uses these analyses to inform the Partnership Framework, joint strategic framework for cooperation between USG, Zambia, and other partners to mitigate HIV through service delivery, policy reform, and coordinated financial commitments.



Support Commodity Security Strategy Development

Development of supply chain strategy streamlines operational strategies and increases synergy between cooperating partners in support of the GRZ



Commodity security is an integral part of MOH policies, strategies, and practices for the provision of medicines and medical supplies. It underpins procurement and supply chain management as well as plans for providing access to those medicines.

Despite a number of supply chain improvements, inadequate access to medicine remains a leading cause of poor health outcomes in Zambia. The project worked with MOH on two strategies to harmonize efforts to improve CS.

1) From 2012 to 2014, the project provided technical assistance and funding for the health sector supply chain strategy, which was developed in conjunction with MOH, MSL, UNICEF, Department for International Development, CHAZ, MCDMCH, and other cooperating and implementing partners. Within the context of the overall public health sector agenda, the Health Sector Supply Chain Strategy presents a significant change in the way the supply chain of essential medicines and medical supplies is managed. This plan emphasizes MSL as the single lead entity managing and coordinating all elements of the public health supply chain cycle, effectively streamlining the processes of quantification, procurement, and distribution.

2) From 2008 to 2010 the project worked closely with the MOH and MCDMCH on the development of a national reproductive health commodity security (RHCS) strategy.

While the RHCS strategy compliments the health sector supply chain strategy, it highlights needs specific to RH in Zambia, defining practical steps and activities to achieve an uninterrupted supply of RH commodities for family planning, safe motherhood, and service delivery programs.

These two strategies unified stakeholders on a common set of objectives that are roadmaps to ensure commodity security. Though not fully adopted, MOH and MCDMCH regularly operationalize strategies within the plans, using the frameworks to advocate commitment to CS in Zambia's health facilities.



Build Sustainable Capacity

An essential component of a robust health supply chain is the staff that implements logistics tasks. To run effectively, public health supply chains require motivated, trained, and skilled staff who are competent in the various essential logistics functions and who are empowered to make decisions that positively impact health supplies and supply chains.

The goal of the USAID | DELIVER PROJECT's capacity building activities is to strengthen human resources in public health supply chain systems in the developing world. A focus on developing a superior workforce allows organizations and individual staff to accomplish their customer service goals, ensuring higher performance among public health personnel and, therefore, increased availability of contraceptives and other essential health products.

Strengthen Human Resources in Health Logistics

The project trained more than 16,000 people in the various logistics systems, thus improving data for decisionmaking and ultimately commodity security.



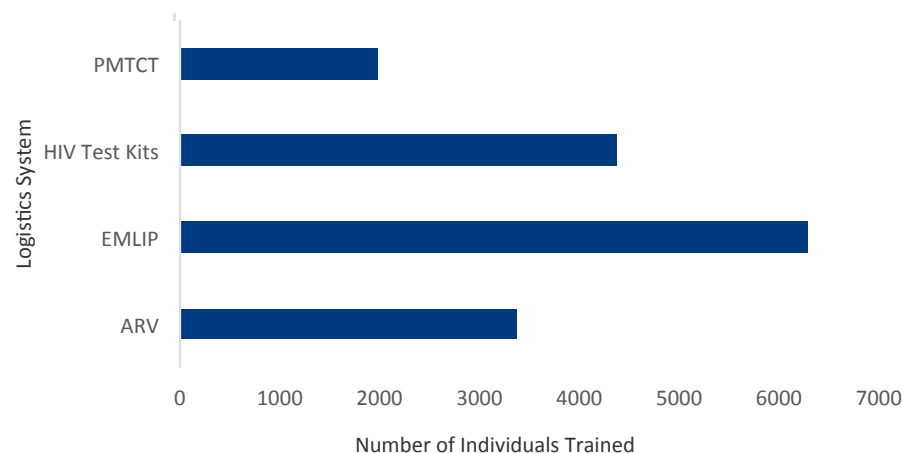
Prior to the establishment of the LMU at MSL in 2006, there were no official logistics systems for managing public health commodities. That year, the project helped MOH and MSL establish a logistics system and associated training materials for MSL and health facility staff to conduct ARV procurement and delivery efficiently. As the project expanded to additional commodity

areas, the project developed training materials and offered on-the-job training in logistics systems for HIV test kits, PMTCT commodities, and essential medicines (e.g., malaria and family planning commodities). In-service training is conducted with MOH and MCDMCH (PHOs, DMOs, and health facility staff), MSL, and CHAZ.

Recognizing the need for sustainability in human resources for health logistics, the project, in partnership with the Ministry of Education, sought to institutionalize the training programs by introducing supply chain theory and LMIS modules into the pharmacy curricula at the University of Zambia and Evelyn Hone College, and for community health assistant school trainees in Ndola and Mwachisompola. As new health professionals who are LMIS-competent enter the public health system, the need for in-service training reduces and money is saved.

LMIS training programs improve health commodity data quality and data management, instill health workers with the importance of reporting, and give provincial and district supervisors a better understanding of facility-level logistics challenges. Logistics data that is reported by trained health workers informs important supply chain processes and helps ensure CS.

Individuals Trained in Logistics Management Information Systems 2006 to 2016 (Life of Project)



Support the National Medical Stores

Project support increased MSL's mandate beyond warehousing and distribution, and resulted in streamlined responsibility for Zambia's public health supply chain.



Zambia's national medical store, MSL, is the backbone of the medicines supply chain. The project began supporting MSL in 2006 with the establishment of the logistics management unit (LMU). The project provided ongoing internal warehousing support, human resources strengthening, policy development, and technical assistance in logistics systems management and implementation.

The LMU completely altered the function of the national supply chain by providing critical consumption data for decisionmaking. Over time, MSL assumed responsibility for LMU staff and management and took ownership of the unit.

Technical assistance in data management, commodity tracking, and procurement planning through training and support help MSL staff manage stock levels in warehouses more efficiently. MSL staff now using tools like eLMIS to work directly with districts to improve reporting and data quality. Furthermore, the establishment of a pipeline coordinator position at MSL ensured that partners coordinate orders, thereby reducing overstocking and stock outs of key commodities.

The project lobbied continuously for MSL to be given responsibility for full management of the national supply chain from forecasting and quantification to last-mile distribution. Its streamlined role was detailed in the National Supply Chain Strategy and the project continues was instrumental in MSLs successful transition to its new role.

Additional project assistance—such as procurement of vehicles, racking, forklifts, and other warehousing equipment—made it possible for MSL to fulfill its mandate to store and distribute medicines.



The Way Forward

The Way Forward



Poor infrastructure continues to impede health commodity supply chain operations in Zambia. Limited storage space and suboptimal storage conditions for medicines reduce the ability of MSL and MOH to ensure uninterrupted access to necessary commodities. Transport challenges, such as poor road conditions and inadequate vehicle capacity for delivering medicines, compound these issues.

While eLMIS is an efficient alternative to paper-based LMIS, the stressed national power supply and limited internet connectivity at many health facilities reduces its efficiency and limits data availability for informed decisionmaking.

As demand for health services in Zambia continues to grow, the capacity of the

supply chain to meet demand must also increase. Work with MSL and MOH to anticipate infrastructure challenges and garner support from the local and international community, including public-private partnerships, is necessary.

In the past 10 years, the health commodity supply chain in Zambia has experienced a number of positive changes. Despite these advancements, GRZ's continued reliance on donors to support supply chain strengthening threatens the sustainability of existing systems. Though the government has dramatically increased investment in particular commodity areas such as ARVs and ACTs for malaria, poor support for others suggests a need for a new approach in supply chain financing. Demonstrable success in partnership frameworks for ARV procurement indicate that incentivized funding and improved coordination among partners is increasingly important to strengthen and sustain supply chains.

The GRZ has made improving access to essential medicines in Zambia a priority. In recent years, the government and cooperating partners conducted a number of interventions to improve drug availability at the health-facility level. Despite these endeavors, health centers across Zambia

continue to have problems accessing commodities.

The health sector supply chain strategy and implementation plan responds to those challenges and provide a roadmap to overcome end-to-end supply challenges. However, operationalization of this strategy continues to be a challenge for GRZ.

The strategy calls for the streamlining supply chain operations by shifting responsibilities from MOH to MSL, enhancing donor coordination to meet supply chain gaps and prevent duplication of efforts, and improving human resources for health. Health commodity supply chain partners in Zambia can contribute to systemic changes by aligning their priorities and interventions with this national strategy

As demand for health services in Zambia grows, so will the capacity of the supply in.



Additional Resources

Acronyms

ACT	artemisinin-based combination therapy	LMU	logistics management unit
AIDS	acquired immune deficiency syndrome	MCDMCH	Ministry of Community Development, Mother and Child Health
ART	antiretroviral therapy	MCH	maternal and child health
ARV	antiretroviral	MOH	Ministry of Health
CHAZ	Churches Health Association of Zambia	MSL	Medical Stores Limited
CS	commodity security	PHO	provincial health officer
DMO	district medical officer	PLHIV	people living with HIV
EDPPP	Essential Drugs Public Pilot Program	PMTCT	prevention of mother-to-child transmission
eLMIS	electronic logistics management information system	RDT	rapid diagnostic test
EMLIP	Essential Medicines Logistics Improvement Programme	RH	reproductive health
F&Q	forecasting and quantification	RHCS	reproductive health commodity security
GRZ	Government of the Republic of Zambia	SCMS	Supply Chain Management Systems project
HIV	human immunodeficiency virus	UNICEF	United Nations Children's Fund
HR	human resources	USG	United States Government
HTC	HIV testing and counseling		
LLIN	long lasting insecticide-treated nets		

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