

Zimbabwe's Logistics Sub Unit enables sustainable scale-up of HIV/AIDS programs

Just a few years ago, access to HIV/AIDS treatment was extremely limited in Zimbabwe, with only five facilities offering treatment. Like many other countries in sub-Saharan Africa, Zimbabwe dedicated itself to rapidly scaling up treatment for HIV/AIDS. However, the country suffered weak supply chain infrastructure and lacked a dedicated logistics system capable of managing procurement and distribution of significantly larger quantities of medicines, test kits and medical supplies.

Dr. Tsitsi Mutasa-Apollo, MOHCW AIDS&TB Programme ART Coordinator, recalled, “The national pharmaceutical services had limited capacity for procurement, warehousing and distribution of essential HIV and AIDS medicines and related commodities. Compounded with weak stock management at site level, it was difficult to assure commodity security, resulting in stockouts at site level.”

To respond to the massive scale-up, the Ministry of Health and Child Welfare (MOHCW), with SCMS support, rolled out a new logistics system for antiretroviral medi-

cines (ARVs) in 2006. In addition, with USAID funding, the MOHCW established a Logistics Sub-Unit (LSU) to coordinate procurement and distribution of HIV/AIDS commodities. “SCMS supported setting up the LSU into a functional unit where key staff was hired and equipped with necessary skills and competence to manage the supply chain for ARVs and related commodities,” said Dr. Mutasa-Apollo. Among their many duties, 14 LSU staff convene coordination groups, including the Procurement and Logistics Sub-Committee; conduct forecasting and supply planning; coordinate all donor procurements; expedite clearance of goods through customs and provide logistics support; conduct physical inventories of products; facili-



Computerization improves public health supply chain performance and efficiency.

tate sampling of medicines for quality assurance; distribute commodities to facilities; manage a new central-level computerized logistics management information system; and supervise and train staff of ART facilities.

Partner coordination. The LSU leads coordination and collaboration of HIV/AIDS supply chain activities, including resource mobilization, through meetings of the Partner's Forum Procurement and Logistics Subcommittee (PLS). The LSU's strong leadership helps prevent both gaps and duplication in funding of HIV/AIDS commodities. The PLS is the main forum for monthly HIV and TB supply chain coordination and is attended by key MOHCW units and partners, including SCMS, Global Fund, UNICEF, Clinton Health Access Initiative (CHAI) and Médecins Sans Frontières (MSF). Every quarter, the LSU presents a full set of targets and logistics management performance indicators, in addition to its regular reports on stock status. These performance indicators reflect the LSU's achievements and also highlight areas where partner support might be needed. Said Richard Sabumba, LSU Manager, "The LSU designed, developed and implemented robust logistics systems, which increased donor confidence and led to increased funding support for HIV/AIDS and TB medicines and related commodities."

Forecasting and supply planning. Planning ahead for HIV/AIDS care, treatment and prevention programs—forecasting the quantities needed and planning procurement of pharmaceuticals and supplies—is essential to ensuring that patients receive a continuous supply of medicines. MOHCW staff trained in forecasting and supply planning methodology and tools support regular updates to 24-month forecasts and supply plans for HIV commodities, including adult and pediatric ARVs, PMTCT commodities, PEP, HIV tests, TB drugs, fluconazole and male circumcision commodities. Supply plans then go to SCMS centrally, where they are consolidated with those of other PEPFAR-supported countries and then shared with manufacturers and suppliers to help them plan production and inventory.

Warehousing and inventory management. The LSU is an MOHCW unit based at NatPharm, the Government of Zimbabwe Central Medical Stores. This facilitates the LSU's ability to support management of the HIV/AIDS commodities stored there. LSU logistics officers participate in monthly stock inventories and oversee monthly stock audits performed by an independent local audit firm supported by SCMS; the firm certifies that ARVs are appropriately and transparently managed.

Distribution. Reliable distribution of medicines and other commodities ensures patients have access to the services and drugs they rely on. HIV/AIDS treatment sites report consumption and commodities needed on a bi-monthly basis using an integrated consumption and requisition form. SCMS supports a bi-monthly pull distribution system (Zimbabwe ART Distribution System, or ZADS) for ARVs, fluconazole and male circumcision commodities with three dedicated trucks.

In addition, condoms and contraceptives, HIV and syphilis rapid test kits, PMTCT (prevention of mother-to-child transmission) and EID (early infant diagnostic) commodities, and reagents for CD4 point-of-care testing machines are distributed through an informed push delivery system (Deliver Team Topping Up, or DTTU) supported by SCMS and Crown Agents Zimbabwe. Under DTTU—a mobile warehouse concept—delivery teams use 10 trucks to visit each site on a quarterly basis, count remaining stocks on hand and “top up” quantities to cover six months of consumption.

Logistics management information system. A well-managed public health supply chain relies on sophisticated computer technologies to record data and produce reports to inform decision making. The LSU uses the Zimbabwe Information System for HIV/AIDS Commodities (ZISHAC) to receive, aggregate and analyze routine LMIS data submitted from ART sites and to process resupply orders. Staff monitor ARV delivery to treatment sites and quantify ARV needs based on accurate, up-to-date logistics and service statistics data. This order processing tool cap-



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tures requisitions from ART sites, analyzes and vets requisitions, generates issue vouchers and helps produce patient and logistics data reports. LSU staff follow up directly with non-reporting facilities to ensure submission of reports and orders, as well as provide feedback to all reporting facilities on the quality of submitted reports.

Quality assurance. A robust quality assurance system helps ensure the efficacy and safety of medicines and prevent counterfeit or substandard drugs from reaching patients. The LSU encourages partners to import medicines that have been registered and prequalified by the Medicines Control Authority (MCAZ). Working with the MCAZ, LSU facilitates sampling of pharmaceuticals to be sent for quality testing. Implementing an SCMS recommendation, the MCAZ transitioned from universal to random batch testing to analyze medicines brought into the country, eliminating bottlenecks and decreasing lead time.

Capacity building. SCMS assisted the LSU in designing the ARV ordering and distribution system, developed SOPs and a training curriculum, and provided training of trainers to LSU staff, who are now fully capable of training ART site staff on the system. The LSU has trained staff from all 296 facilities on best practices in ARV management and continues to train new cadres due to both high staff attrition and new ART-approved sites. “The LSU is a substantial and sustainable institution within the MOHCW. It will improve the public health supply chain in Zimbabwe for many years to come,” said Peter Halpert, USAID | Zimbabwe Health and Education Team Leader.

Supervision. The LSU conducts supervisory visits, which help support expansion of ART access, efficient ARV logistics management and quality clinical treatment. For example, the LSU makes recommendations to improve accuracy in registering and reporting patient and logistics data, stock management, and use of regimens recommended in the MOHCW Standard Treatment Guidelines. In general, the sites that receive supervisory visits show marked improvements in the areas noted in previous visits.

Results

In the four years since its inception, the LSU has been responsible for managing ARV drugs for treatment and PMTCT, HIV test kits, and OI, TB, malaria and other essential medicines. “HIV and AIDS programs ... have been scaling up rapidly over the years. The LSU has had to constantly re-invent itself in order to meet the growing pro-



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gram demands and so remain relevant,” said Dr. Mutasa-Apollo. Results of the program have been impressive:

- 99 percent ARV availability at treatment sites, compared with 85 percent in 2007.
- 97 percent reporting rates on consumption and needed supplies from treatment sites, while reporting rates were much lower and not monitored before 2007.

The LSU has helped Zimbabwe scale up HIV/AIDS treatment from:

- 60,000 patients in 2006 to 335,000 by 2011.
- 99 treatment sites in 2006 to 296 treatment sites by 2011.

The LSU has made considerable strides in improving product availability. Said Mrs. Ropah Hove, Director of MOHCW Directorate of Pharmacy Services, “Stockouts have been reduced to a minimum. There has been no stockout reported at facilities in 2010 for the standard first-line adult ARVs. Stockouts for standard first-line pediatric ARVs is averaging 2.8 percent against a target of zero.” Reliable product availability has, in turn, increased the confidence of both service providers and clients that products will be available when needed, thus contributing to the increased number of clients enrolled in ART. Recognizing the LSU's achievements, in April 2010 the MOHCW recommended that the LSU be moved from the MOHCW AIDS&TB Programme to the MOHCW Directorate of Pharmacy Services (DPS) to apply supply chain management best practices to all public health commodities.

A well-established LSU with dedicated full-time staff can have a lasting impact on the supply chain, resulting in significantly improved commodity availability and overall logistics system performance. As a focal point for coordination, the LSU is involved in virtually all supply chain activities and system strengthening interventions. LSUs require significant and sustained investment to fulfill their designated logistics responsibilities. Key lessons learned include:

- Given the increased number of patients and treatment sites, accurate forecasting is more important than ever.
- Because it is supported by international donors, the sustainability of the program remains at risk, and it should eventually be funded locally.
- To be sustainable, management information systems should ideally “live” in-country and be supported by local IT firms.

To further improve performance, the LSU is implementing a redesigned and decentralized ARV and male circumcision commodities distribution system as well as implementing its role in managing and harmonizing procurement and logistics for other public health commodities, including for TB, malaria and other essential medicines.

LSU staff work behind the scenes supporting the doctors, nurses and other public health workers who provide direct support to people who need medical care. But the LSU’s work is in many ways just as critical. According to Dr. Mutasa-Apollo, “The LSU’s work has made a lot of difference to people living with HIV who have the peace of mind and assurance that when they get to the ART clinic, they will receive the life-saving medicines.”

CONTACT

Dimitri Pepper

Deputy Country Director

SCMS

Agriculture House

No. 1 Adylinn Road

Marlborough, Harare, Zimbabwe

Email: dimitriscms@gmail.com

Phone: +263.4.309.829

Fax: +263.4.309.8300

ABOUT SCMS

The Supply Chain Management System (SCMS) was established to collaborate within country and global partners to ensure a reliable, cost-effective and secure supply of high quality medicines and health products for HIV/AIDS prevention, care and treatment. SCMS is funded as part of the President’s Emergency Plan for AIDS Relief. Visit us at www.scms.pfscm.org.

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