



USAID | DELIVER PROJECT

FROM THE AMERICAN PEOPLE

Success Story

Zimbabwe: Innovative Distribution System Brings Steady Supply of Tuberculosis and Malaria Drugs to Health Facilities



USAID | DELIVER PROJECT 2010

During the ZIP pilot project, delivery trucks reached more than 90 percent of health facilities in the Midlands province.

Since the introduction of the ZIP system in the Midlands province, stockout rates for tuberculosis drugs have fallen from over 30 percent to less than five percent.

JULY 2010

This publication was produced for review by the United States Agency for International Development. It was prepared by the USAID | DELIVER PROJECT, Task Order 1.

U.S. Agency for International Development
www.usaid.gov

Between 2000 and 2008, Zimbabwe experienced a period of unprecedented chronic hyperinflation that destabilized all areas of the country's economy, including delivery of basic health services. In the public health sector, deliveries of tuberculosis (TB) and malaria commodities deteriorated to a point where all the health facilities had shortages of medicines.

To alleviate the situation, Zimbabwe's Ministry of Health and Child Welfare (MOHCW), with support from the USAID | DELIVER PROJECT, started a pilot project to improve delivery of TB and malaria drugs to public health facilities. In September 2009, the Zimbabwe Informed Push (ZIP) system was launched.

The pilot project was carried out in the Midlands province, where the ZIP system brought supplies to more than 90 percent of facilities and significantly lowered stockout rates. TB drug stockouts fell from over 30 percent to less than five percent. As a result, the ZIP system was introduced in all of Zimbabwe's 10 provinces by the end of the year.

In the past, the MOHCW used a monthly pull ordering system for distributing medicines and medical supplies—a system in which health facilities were responsible for ordering new supplies. During Zimbabwe's economic turmoil, this system was barely functioning. Brain drain, lack of funds for commodities and distribution, and low staff morale as inflation eroded salaries contributed to the decline.

To find a better solution for distributing TB and malaria commodities, the MOHCW met with its partners in 2008. At this time, Zimbabwe had a well-functioning distribution system for contraceptives, called Delivery Team Topping Up (DTTU). Implemented by the Zimbabwe National Family Planning Council (ZNFPC) with assistance from the USAID | DELIVER PROJECT in 2004, DTTU was based on best practices in commercial companies. The ZIP system was modeled on this successful distribution network. Similar to DTTU, the ZIP delivery system has two tiers:

commodities are distributed from an area or regional warehouse, supplying multiple service delivery points (SDPs). Trained district pharmacy managers serve as team leaders, traveling with the delivery trucks every other month. After the truck is loaded at the area warehouse, it sets out for the districts, where the team leader joins the driver on the route to the SDPs.

At each SDP, the team leader physically counts the TB and malaria commodities, calculates losses and adjustments, analyzes consumption since last delivery, and determines the average monthly consumption (AMC). Based on the minimum and maximum stock levels of two and four months of stock, respectively, the AMC tells the delivery staff which quantity to deliver or withdraw. The emergency order point is one month of stock, and preventing stockouts is critical, especially for seasonal products like malaria commodities.

The team delivers enough products to bring the SDP stock level back to the maximum or removes excess stock, if necessary. They capture essential logistics data by filling out a paper form, called a delivery receipt voucher (DRV). The National Pharmaceutical Company of Zimbabwe (NatPharm), which handles central storage and distribution, collects the forms and enters the data into the TOP-UP software that produces several critical reports for decisionmaking, including how much stock to order for the central warehouse. For the ZIP system to function effectively, a full supply of commodities must be available at the central warehouse. The TB products delivered on the ZIP system are fixed dose combinations, streptomycin, and sputum cups, while the malaria commodities are artemether-lumefantrine, sulphadoxine-pyrimethamine, and rapid diagnostic kits.

Before the ZIP pilot project, the stockout rates were between 30 and 100 percent for all TB and malaria commodities. Some facilities were overstocked, resulting in drugs expiring, while others were understocked, leading to stockouts. The project achieved delivery coverage of more than 90 percent and stockout rates of less than five percent for all commodities that were in full supply. With the countrywide roll-out of the ZIP system, patients in all districts are now benefiting from the increased availability of TB and malaria drugs.

The ZIP system has brought greater capacity to Zimbabwe's distribution system, now delivering primary health care packages that include more than 40 medicines and medical supplies. Before ZIP, TB drugs were delivered by NatPharm only to TB diagnosing sites and not to continuation sites (those providing patient follow-up); today, they all receive ZIP deliveries. Starting in September 2010, the MOHCW plans to add TB single dose formulations and quinine tablets and injections to the ZIP system for TB diagnosing sites and SDPs in malaria endemic districts, respectively. Officials also tentatively plan to add TB laboratory reagents in the near future.

In addition to the USAID | DELIVER PROJECT, the MOHCW implemented the ZIP system with help from the United Nations Development Programme and Crown Agents Zimbabwe.

The USAID | DELIVER PROJECT, Task Order 1, is funded by the U.S. Agency for International Development, and implemented by John Snow, Inc. The project improves essential health commodity supply chains by strengthening logistics management information systems, streamlining distribution systems, identifying financial resources for procurement and supply chain operations, and enhancing forecasting and procurement planning. The project also encourages policymakers and donors to support logistics as a critical factor in the overall success of their health care mandates.

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

USAID | DELIVER PROJECT

John Snow, Inc.

1616 Fort Myer Drive, 11th Floor

Arlington, VA 22209 USA

Tel: 703-528-7474

Fax: 703-528-7480

www.deliver.jsi.com

askdeliver@jsi.com