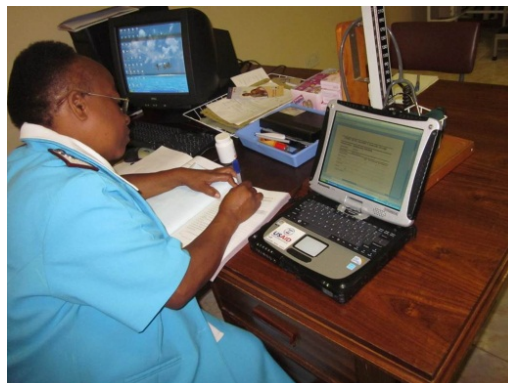


Delivery Team Topping Up System (DTTU)

Brief Overview

To ensure the availability of health commodities, countries must implement reliable supply chains with robust distribution systems. In countries described to be “fragile states,” generalized disruptive turmoil (such as political instability, war, civil unrest, economic failure, or particularly poor governance) drastically weakens government systems. Both the health and transportation sectors are affected by the weakened systems of fragile states—and the health commodity supply chain is often gravely compromised.



The Delivery Team Topping Up (DTTU) system, implemented in Zimbabwe by the Ministry of Health and Child Welfare and John Snow, Inc. (JSI) through the USAID | DELIVER PROJECT, is providing solutions to the challenges faced by fragile states. The DTTU system is a distribution paradigm in which investments are made to ensure that reliable vehicles, drivers, technical staff members, or a combination of these will directly provide or “top up” facilities with the health products that they need.

Under the DTTU system, delivery trucks are filled with a predetermined quantity of a product—based on past consumption patterns—and the product is driven to health facilities. The delivery team is made up of a Team Leader, who is a staff of the Zimbabwe National Family Planning Council, and a truck driver. The Team Leader, along with staff from the health facility, conduct physical inventories of products, calculate current consumption and re-supply quantities, and “top up” the inventory of each facility with quantities needed to meet the next period’s requirements.

The USAID | DELIVER PROJECT and its predecessor projects, Family Planning Logistics Management (FPLM) and DELIVER, also managed by JSI, have been working with the DTTU system since 2008, successfully employing the system to ensure reliable supply chains in areas that present logistical challenges.

■ Geographic Coverage:

Zimbabwe

■ Implementation Partners:

Zimbabwe Ministry of Health and Child Welfare; Zimbabwe National Family Planning Council (ZNFPC); DFID; USAID | DELIVER PROJECT through John Snow, Inc. (JSI); Supply Chain Management System through John Snow, Inc. (JSI); Crown Agents Zimbabwe; National Pharmaceutical Company (NatPharm)

■ Funder:

USAID, under the USAID | DELIVER PROJECT

■ For More Information Contact:

USAID

▪ **Peter Halpert, USAID Health Office Director:**

Tel: +263-4-252-400, email: phalpert@usaid.gov

Project

▪ **David Alt, Country Director, Zimbabwe;**

Tel: +263-4-309-829, email: dalt@zol.co.zw

Delivery Team Topping Up System

About the Delivery Team Top Up

In Zimbabwe, the USAID | DELIVER PROJECT and the Supply Chain Management System (SCMS) project support the Delivery Team Topping Up (DTTU) system, a logistics system which manages condoms, contraceptives, and HIV commodities such as test kits and antiretroviral medicines for the prevention of mother to child transmission. In the DTTU system, facility staff does not place orders; rather, every facility is visited once per quarter by a delivery truck, which acts as a rolling warehouse.

On the truck is a delivery team leader, who works with facility staff to collect basic logistics data, including physical inventories, any days out-of-stock, and any losses or adjustments. This data is entered into customized software called the AutoDRV (Automatic Deliver/Receipt Voucher), which is loaded on a laptop. The software calculates resupply quantities, and facilities are “topped up,” or re-supplied, to their maximum level. Upon return from a delivery, data from the laptops are synched to the TOP Up software at the central level. The TOP Up software generates national-level stock status and other program management data. These reports are shared with stakeholders electronically and in hard copy at regularly scheduled coordination meetings. The automation of data collection from service delivery points began in 2008, and was rolled out nationally in 2009.

Evaluation and Results

The DTTU system reduces the burden on healthcare providers, ensures reliable data is speedily available at any time it's needed at the central level, and minimizes stock-outs. An evaluation in 2008 showed remarkable results. Focusing on condoms for HIV and AIDS prevention and contraceptives, the evaluation found that throughout the nation, the DTTU system has achieved 99 percent of coverage of all service delivery points—more than 1,200 health facilities. On the same national scale, it has achieved more than 95 percent availability of contraceptives and HIV and AIDS condoms. HIV tests and nevirapine, an anti-retroviral drug used to prevent mother-to-child transmission of HIV as well as other uses in HIV and AIDS management, have been added to the DTTU.

A costing study conducted in 2010 compared different logistics systems in Zimbabwe to determine the most cost efficient approach. The study found that for a smaller number of commodities that are intended for primary health care facilities, the DTTU system was shown to be less costly than a pull system.

The AutoDRV and the TOP Up software are also used for the Zimbabwe Informed Push (ZIP) and Primary Health Care Package (PHCP) system, which is managed by the Ministry of Health and Child Welfare Directorate of Pharmacy Services (MOHCW DPS). The ZIP/PHCP teams have expanded and in early 2010 the team started a national round of deliveries of essential medicines, including malaria and tuberculosis medicines, and medical supplies included in the Primary Health Care Packages to all ten provinces across the country. The success of the DTTU and ZIP/PHCP commodity distribution systems is progressively advancing.

Lessons Learned

- In a vendor managed inventory system such as DTTU, shifting inventory tasks away from facility staff to a delivery team has enabled facility staff to have more time to spend with clients rather than completing logistics responsibilities.
- The costing study found that DTTU was actually cheaper to implement than the traditional pull system. Only team leaders (65 people) require training, rather than facility staff (~1,300 people).
- Automating data collection has significantly reduced the calculation errors that Team Leaders make, and has reduced the amount of time that must be spent at each facility.
- Data collected from the facility level is automatically migrated into the national level database. No data entry is required, and national level consumption and stock-on-hand data rapidly available for decision-making.

Conclusion

The DTTU system yields positive results in increasing the availability of health commodities in challenging environments by guaranteeing direct delivery to health facilities.

Information was excerpted from:

Video: Information Highway to Health:

http://deliver.jsi.com/dhome/search/searchdetail?p_item_id=26503029&p_token=17F12A1574567BF850E251BDA6244126&p_item_title=Nw%20Video%3A%20Information%20Highway%20to%20Health

Article in *Pharmalink* on using technology in supply chain management:

http://www.epnetwork.org/index.php?option=com_docman&task=doc_download&gid=295&Itemid=15

Success story on DTTU: http://deliver.jsi.com/dlvr_content/resources/allpubs/logisticsbriefs/ZW_DTTUBrin.pdf

Photo: JSI, USAID | DELIVER PROJECT. The delivery Team Leader records a clinic's inventory, indicated on a carbon copy report, into a laptop as part of the Delivery Team Topping Up system in Zimbabwe, 2011.