OPTIMIZE UPDATE 2013

Optimize, a collaboration between the World Health Organization and PATH, is a five-year project funded by the Bill & Melinda Gates Foundation to identify, develop, and test solutions to help countries manage an increasingly large and costly portfolio of vaccines. Ending in September 2013, Optimize has made significant progress toward achieving the goals we set for ourselves in 2009.

PATH/Jan Grevendonk

DEMONSTRATING GOOD IDEAS

Optimize collaborated with national governments of five countries to design, implement, and measure the impact of various supply chain improvements.

Albania: Optimize and the Albanian Institute of Public Health worked together to create an integrated immunization information system that combines child registry and stock management data and then tested it in the Shkoder District. As of mid-2013 the project is being scaled up in additional districts in Albania and has been shared with other countries for adaptation and adoption.

Tunisia: Project Optimize collaborated with the Ministry of Health to streamline the vaccine supply chain network design, including strengthening its integration with other health commodity supply systems. At subnational levels, a pilot net-zero-energy supply chain system was undertaken whereby all the energy needs for vaccine storage, handling, transport and monitoring were generated by solar energy. In addition, a computerized and networked logistics management information system was deployed for real-time tracking and tracing of vaccines at all levels of the supply chain.

Senegal: Optimize partnered with the Ministry of Health to integrate vaccine storage and deliveries from the national to district levels with other drugs and pharmaceuticals. In one region, moving warehouses were deployed to deliver vaccines and other health products directly to more than 100 health centers on a monthly schedule. The moving warehouse is currently being considered for other regions in Senegal. Optimize also gathered performance and user acceptance data on new and innovative cold chain equipment including battery-free solar refrigerators, cold boxes, and rolling containers used during the demonstration.

Vietnam: Optimize partnered with the Vietnamese government to develop two information systems, a track and trace system linking vaccine lots to patients and a vaccine stock management system. The team also introduced a new passive-cooling device for storing vaccines in commune health centers, as well as direct-drive solar refrigerators for vaccines in district health centers. Finally, Optimize supported the Ministry of Health in conducting an Effective Vaccine Management assessment, developing more rigorous standard operating procedures, and working with a local vaccine manufacturer to adopt vaccine vial monitors.

South Sudan: Though South Sudan was not an official demonstration project, Optimize partnered with an India-based software service provider to provide a mobile phone-based stock management service that allows government health workers at the central and district levels across the country to order and track stock using inexpensive cellular phones. The system is now being run without Optimize support and has dramatically improved stock management in the country.

PATH/Nguyen Phu Cuong

ENCOURAGING ONGOING
INNOVATION

Optimize helped the Vaccine Presentation and Packaging Advisory Group to develop the first generic preferred product profile (gPPP) for vaccines destined for low-income countries. The gPPP helps manufacturers make decisions about vaccine formulation, packaging, presentation, and labeling to better meet the constraints of developing countries.

Optimize also worked with manufacturers to design several new cold chain products that will help countries manage larger volumes of vaccines and keep them cool in different scenarios. Examples include the direct-drive solar refrigerator, long-life cold boxes, extra-large passively cooled cold boxes, and freeze-safe coolers.

In an effort to improve access to accurate and timely data, Optimize co-developed and tested a range of software tools tailored to meet the information needs of different country programs. We summarized our learning from this process in an Information Communications Technology toolkit to enable other countries to get started with creating or purchasing their own immunization information system.

Lastly, Optimize worked with manufacturers to start labeling vaccines to their true temperature stability, opening the door for countries to start using vaccines in a controlled temperature chain without ice at the last mile of the supply chain. The concept was successfully tested in one district of Benin with MenAfriVac vaccine, the first to be relabeled to reflect its true temperature stability.

PATH

INVITING
COLLABORATION

Recognizing the need for a global vision for supply and logistics systems, Optimize facilitated workshops and conversations with immunization partners at national, regional, and global levels to come up with the vision statement and five priority areas for work that are now shaping further investments in supply and logistics systems.

Working with TechNet-21.org, Optimize maintained a quarterly newsletter highlighting important work in the field and has documented and shared all its results and findings on the TechNet-21.org discussion boards and the WHO and PATH websites.

Starting in 2013, Optimize began sharing key findings with national immunization managers and other key immunization stakeholders through an interactive, traveling exhibit: Supply systems for today and tomorrow. The exhibit is traveling all over the world in 2013 to reach key audiences and engage them in meaningful discussions on how to improve vaccine supply and logistics systems.

WHO | www.who.int/immunization_delivery/optimize/

PATH | www.path.org/projects/project-optimize