



TECHNICAL BRIEF: STOCK VISIBILITY SYSTEM

GLOBAL HEALTH SUPPLY CHAIN PROGRAM – TECHNICAL ASSISTANCE

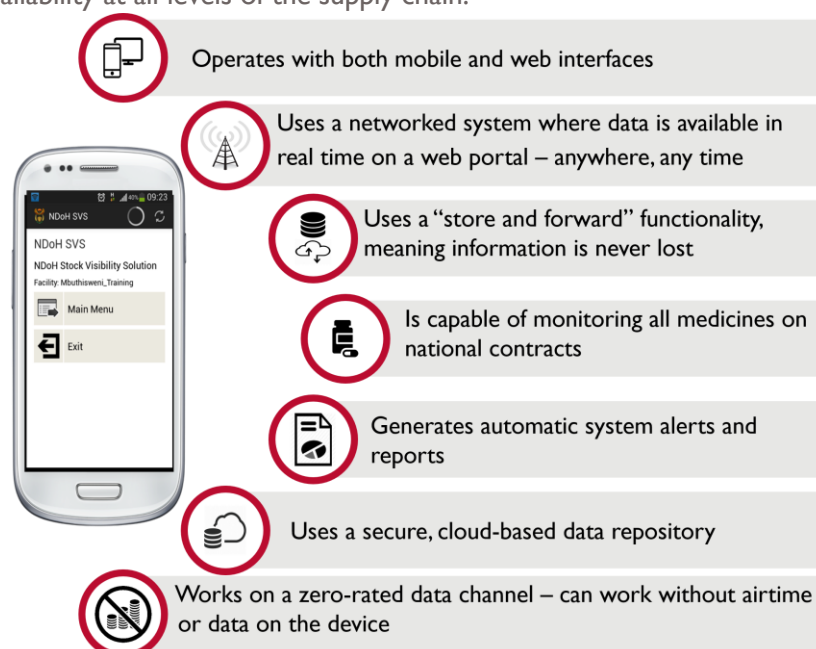
The United States Agency for International Development (USAID)-funded Global Health Supply Chain Program – Technical Assistance (GHSC-TA) provides technical assistance to the South African government to strengthen public health systems and supply chains to advance an AIDS-free generation, increase medicine availability, and contribute to the achievement of universal health coverage.

The Stock Visibility System (SVS) is a web-based management tool with a mobile application that is used at public primary health care (PHC) clinics to capture and monitor medicine availability. In South Africa, where outdated and fragmented paper-based systems have made it difficult for supply chain managers to accurately forecast and avoid stockouts of life-saving medicines, SVS supports improved access to medicines and contributes to reducing the cost of health care delivery by ensuring that the supply of medicines in public health facilities meets demand.

OBJECTIVES

SVS was developed to act as an early-warning system to alert health care facility staff and broader supply chain stakeholders of facilities affected by low stock levels that could lead to supply interruptions. SVS aims to support better management of stock availability to ensure reliable access to life-saving HIV/AIDS, tuberculosis (TB), and other essential medicines in public health care facilities. Health care providers rely on SVS to develop targeted interventions to prevent stockouts from occurring and rapidly resolve them when they do occur.

Each PHC facility using the system is allocated a smartphone with the SVS application pre-loaded on the phone. The application is designed to work even in remote areas. On a routine basis, health care workers capture stock levels on the SVS application. The data captured at PHC facilities is synchronized in real time to a cloud-based server, where it is available to view on the designated SVS web portal by approved users. The portal generates automated email and SMS system alerts to web users at all levels of the supply chain that allow them to monitor and manage medicine availability at facilities. The data is also made available to the National Department of Health's (NDOH) National Surveillance Centre (NSC), with the data being visualized on a dashboard which enables monitoring of medicine availability at all levels of the supply chain.



When used correctly by stakeholders at various levels of the supply chain, SVS contributes to ensuring that essential medicines are available at the facilities where they are needed. In turn, SVS helps to ensure that patients receive their medicines and achieve optimal treatment outcomes for HIV/AIDS, TB, and other diseases, contributing to South Africa's 90-90-90 treatment target for HIV/AIDS.

APPROACH AND KEY ACTIVITIES

GHSC-TA provides technical assistance in the development and implementation of SVS in South Africa. The program has worked closely with the SVS service provider contracted by the NDOH to adapt the application to the South African context and make sure it is operational at all eligible PHC clinics in the eight provinces where it is deployed.

During the pilot and expanded roll out, GHSC-TA provided technical support to the NDOH to implement SVS, including working with the training teams and stakeholders to encourage the use of SVS on the ground. Support activities included:

- Leading high-level stakeholder engagement meetings with provincial heads of health to drive institutionalization of the system;
- Supporting device and application distribution to all deployed facilities;
- Facilitating end-user training and ongoing support;
- Supporting system improvements and report development;
- Integrating data reported through the application into NSC dashboards;
- Assisting with and encouraging evidence-based approaches to the use of reports generated by the system; and,
- Engaging with key stakeholders to include reporting via SVS as a standard practice in the national Ideal Clinic Framework.



GHSC-TA is currently supporting the expanded development of the SVS application to enable ordering and receiving of stock on the same device used to capture stock updates. The program is providing technical inputs to support the development of specifications, testing, piloting, and deployment of this new functionality on a national basis. To build local capacity and support sustainability, GHSC-TA has handed over routine management of SVS to the NDOH project manager.

Implementation of SVS in South Africa means that low-stock levels can be proactively managed and that facilities experiencing stockouts can receive priority attention. The NDOH is able to monitor the availability of medicines on the shelves of clinics as well as at provincial warehouses and hospitals, thus helping to prevent stockouts before they occur.

ACHIEVEMENTS

GHSC-TA's SVS technical assistance has resulted in the following improvements, strengthening the health supply chain in South Africa:

- Forty-six percent increase in the availability of antiretrovirals to treat HIV/AIDS during the pilot implementation period (2014-2016).¹
- Forty-nine percent increase in the availability of medicines used to treat TB during the pilot implementation period (2014-2016).
- Implementation of SVS in more than 3,100 clinics in eight provinces since 2014.
- Expanded deployment of SVS beyond the pilot program to more than 1,100 additional facilities in just three months between April–June 2016 -- this is approximately twice the number of facilities deployed in the same time frame during the pilot period.
- Increased understanding among users of how and why to use SVS to improve supply chain

¹ Updated changes to medicine availability will be reported in GHSC-TA's endline assessment.

management.

- Increase in overall national reporting rate from 70.9 percent to 90.6 percent from August 2018 - August 2019.

LESSONS LEARNED

One of the key lessons learned during the implementation of SVS in South Africa was the importance of political will in driving the project. Having the Minister of Health fully invested in the success of the implementation of SVS helped to drive key activities which were critical for encouraging user adoption and institutionalization. Engagement and participation of multiple stakeholders was also key.

Another critical component to the pilot's success was the training and capacitation of users on both how to use the system to upload data as well as how to use the reports generated by the system to inform practice.

Furthermore, to promote and maintain reporting compliance, it is critical that the user is able to witness improvements in medicine availability to patients as well as in the supply chain as a whole.

The role of project governance in implementing new systems such as SVS cannot be understated. GHSC-TA provided significant support to ensure that service level agreements, standard operating procedures, and user manuals were in place and aligned with departmental policies and strategy documents. A key outcome of these efforts was the SVS implementation repository, which tracks the implementation of SVS, enabling provincial governments to support effective management of the system now and in the future.