OSPSIDA, also known as the HIV and AIDS Commodity Management Tool for West Africa, is an early warning system (EWS) for better management of HIV and AIDS commodities. The goal of the dashboard is to capture, track, aggregate, and disseminate information about antiretrovirals (ARVs), rapid test kits (RTKs), and other HIV and AIDS commodities to support evidence-based decision making in the West African subregion.

Alerts on stock-outs of lifesaving ARVs emerged in a number of countries in the West African region in 2012 and 2013. Several root causes for this have been identified, including a lack of tools to improve the sharing of HIV and AIDS commodity information among stakeholders for faster decision making. This greatly affects the ability of partners to anticipate the needs of the host country, leads to delays in providing support, and creates doubt in the mind of the donors as to actual needs.

A SOLUTION

The US Agency for International Development (USAID)-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program, implemented by Management Sciences for Health, has provided support to six countries in West and Central Africa—Benin, Burkina Faso, Cameroon, Guinea, Niger, and Togo—to set up a web-based EWS to monitor HIV and AIDS commodities.

OSPSIDA, which uses a secure server, was designed to prevent unwanted intrusion by unregistered users and provide sufficient information to make decisions that ultimately support the management of ARVs and RTKs. This system does not require additional capital for equipment because most HIV and AIDS programs and even health facilities already have computers and internet access. OSPSIDA is a web-based data aggregator and does not depend on any particular data capture tools at the central and field levels to collect patient and commodity data. Reports are generated to allow users to monitor commodity stock status, anticipate future funding gaps, and respond to projected medicine shortages and expiries. OSPSIDA also helps ensure and maintain data quality.

HOW IT WORKS

- HIV commodity and patient information is captured, tracked, and aggregated
- Forecasting, supply planning, and procurement are improved
- Information about fund flow, stock-outs, and overstock and expiry risks is shared
- Data are generated by health facilities
- Data are aggregated at the subregion level and entered into OSPSIDA
- Data are used to generate reports for decision makers
- Decisions and recommendations are made by a formal committee

FEATURES

- Collation of patient and commodity information on the same platform
- Data analysis and enhanced reporting capabilities
- Adaptable: no additional workload for health workers at the national level; adaptable to current reporting systems
- Accessible: easy and timely access to data and reports
- Quantification, shipment, inventory, and consumption data are used to determine the risk of stock-outs
- Enhanced coordination among key players, including central medical stores, national programs, pharmacy departments, and donors/partners
- Tool for redistributing stock in-country and across countries to minimize wastage and reduce the risk of stock-outs, which will ultimately save lives
- Opportunity for trend analysis to identify patterns associated with an increased risk of stock-outs so that mitigation strategies can be put in place
- Allows for prompt management responses; timely decision making; and on time submission of monthly commodity reports, including stock-out reports.
System requirements

Server type and capacity: 8-core processor; 100 GB HDD; minimum 8 GB RAM
Browser: Firefox or Chrome
Platform: Any variant of Linux or Windows Server (preferred CentOS 6+)
Others: Apache/PHP/MySQL/SSL

Lesson Learned

Since its implementation:
✓ OSPSIDA has improved the reporting rate in Togo. The reporting rate went from 20% in June 2014 to 37.5% in September 2014 and 100% in December 2014.
✓ OSPSIDA has improved the quality of data in Togo. The concordance between closing balance and opening balance of subsequent months on logistics management information system reports increased from 55% to 100% within a year.
✓ OSPSIDA supported the early detection of stock-outs in Togo in November 2014 and facilitated access to PEPFAR Early Commodity Funding (ECF) to mitigate stock-outs. Data required to access ECF were available within a day, compared to six weeks or more before OSPSIDA was deployed.
✓ No stock-outs have been reported in Togo and Benin since January 2015.

OSPSIDA has improved donor and partner collaboration:
✓ The Global Fund funded the deployment of OSPSIDA at the regional level in Benin and Burkina Faso after USAID/SIAPS completed deployment at the central level. This has increased country ownership and the sustainability of the tool at the country level.
✓ OSPSIDA allows stakeholders to monitor access to HIV and AIDS commodities and facilitates the transfer of products from countries to mitigate stock-outs of ARVs in Niger. Products were transferred from Togo to Niger to avoid a stock-out situation after OSPSIDA reports were shared with the JURTA-PSM Group.

OSPSIDA has strengthened in-country coordination:
✓ Countries that are more advanced in the use of OSPSIDA, such as Togo, have abandoned the MS Excel sheets that were previously used to assess HIV/AIDS product stock status at central warehouses and guide decision making during procurement and supply management technical meetings.
✓ Using OSPSIDA reports, countries can assess stock status across all level of the national supply chain using actual consumption data instead of the distribution data they were using with MS Excel sheets.

OSPSIDA supported Togo to decrease the percentage of patients at risk of treatment interruption:
✓ Updating OSPSIDA with 2014 data showed that 71% of the ARVs being used in Togo were at high risk for stock-out at the national level, meaning that months of stock was less than six, including stock-outs, which put 96% of patients at high risk of treatment interruption (figures 1 and 2).

Figure 1. December 2014 dashboard – Togo (before SIAPS intervention)

Figure 2. November 2015 dashboard – Togo (after SIAPS intervention)

CONCLUSION

OSPSIDA combines patient and stock data to provide information to improve data quality and decision making, assist with accurate forecasting, and improve the capacity of local partners to anticipate and prevent stock-outs and risk of expiry by encouraging transfer among countries for equal access to stock. Within one year of its deployment in Togo, OSPSIDA has significantly enhanced the visibility of supply chain data in making timely and evidence-based decisions that have contributed to the increased availability of HIV and AIDS products. Other countries are strongly encouraged to use the dashboard to assess the number of HIV-positive patients at risk of missing their ARVs and make the right decisions at the right time, which can eliminate the hurried choices that are frequently made when a stock-out occurs.