IN MALI, THE MARRIAGE BETWEEN TWO SYSTEMS BRINGS DATA HARMONY

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Context, Challenge and Motivation

To have access to quality medication, you need access to quality data. In Mali, two separate web-based Logistics Management Information Systems (LMIS), OSPSANTE and DHIS2 (District Health Information System 2), aggregate data for health commodities to enable the Ministry of Health (MOH) and service providers to better track and manage commodities.

Although the data are used to achieve different goals, implementation of these tools has resulted in duplication of efforts. Users were required to enter the same data into two systems, leaving ample room for error in data entry.

To address this, the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) and MEASURE Evaluation projects helped the MOH to select DHIS2 as the primary platform for data entry and make the systems interoperable, ensuring data are transferred automatically from DHIS2 to OSPSANTE following entry. By integrating the two systems and creating a link to automatically exchange data following entry, the need for double entry is eliminated, reducing the workload for users and improving the quality of logistics data for decision making.

Methodology

GHSC-PSM worked in collaboration with the Pharmacy and Medicine Directorate (DPM), MEASURE Evaluation and other stakeholders to engage a software consultant with expertise in designing dashboards to establish the link between the two systems by:

- Reviewing DHIS2 and identifying possible metadata coupling
- Developing an LMIS registration form in DHIS2
- Updating OSPSANTE to allow data entry from DHIS2
- Developing a data import script

GHSC-PSM and MEASURE Evaluation then established a technical committee with key MOH entities to identify interoperability needs, address challenges, co-create solutions and assess the soundness of solutions presented. Recommendations from the committee were presented to a MOH-led steering committee for approval. In 2018, data sharing between OSPSANTE and DHIS2 began in 2018 in five regions and the Bamako district. GHSC-PSM trained 16 directors representing DHIS2 technical committee members and 158 regional health product managers in the new system.

Results

The marriage between OSPSANTE and DHIS2 has created a unique data entry platform where DHIS2 data is transferred from a dashboard at periodic intervals to OSPSANTE for reporting.

The new system:

- Cut the data entry workload in half for health workers in 1,300 facilities
- Harmonized the structures of both tools while combining logistics inputs for different health programs

With interoperability came enhancements to OSPSANTE, including:

- The addition of over 20 new features and system updates.
- The ability to calculate absolute consumption, forecast error with variant bias, and integrate nutrition, HIV and Ebola into monthly reports.
- The decentralization of responsibility for capturing logistics data from the district to the community level.
- Above all, interoperability has improved
- Improved reliable data quality for fast, informed decision-making.