

## TECHNICAL BRIEF

# Strategic District and Site-level Interventions Result in Sustained Improved Performance for Supply Chain Management Systems in East Central Uganda: The USAID RHITES-EC Experience

## BACKGROUND

A well-functioning supply chain management system is essential for ensuring accurate quantification, ordering, timely reporting and efficient inventory management of health commodities at all health service delivery points. However, supply chain management systems in many low-income countries like Uganda remain weak and under-funded. According to the 2015/16 Annual Pharmaceutical Sector Performance Report of Uganda, only 6.4% of the total Government of Uganda (GOU) budget was allocated to the health sector in fiscal year (FY) 2015/16 - the lowest in over a decade. The declining domestic resources for health hinder health systems strengthening and places health programs and the health of the Ugandan population at risk.

Through the stewardship of the Uganda Ministry of Health (MOH), USAID's Regional Health Integration to Enhance Services in East Central Uganda (USAID RHITES-EC) project supports public healthcare facilities in 12 districts of East Central Uganda (Bugiri, Bugweri, Busia, Buyende, Iganga, Jinja, Kaliro, Kamuli, Luuka, Mayuge, Namayingo and Namutumba) to improve delivery



The In-charge of Iwemba HC III, Bugiri District, reviewing stock cards to issue medicines from the store.

of quality integrated health services including HIV/AIDS; tuberculosis (TB); maternal, neonatal and child health (MNCH); family planning (FP); laboratory; and nutrition. As part of its integrated efforts, USAID RHITES-EC works to strengthen supply chain and logistics management to ensure improved availability and access to essential medicines and health supplies (EMHS).

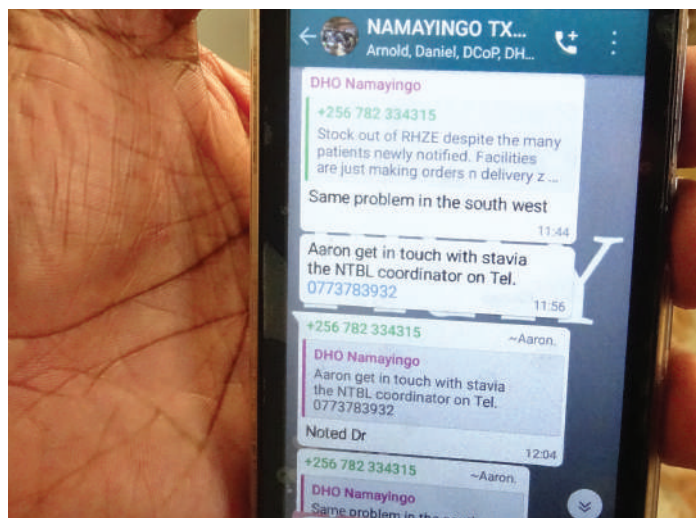
At the beginning of the project in October 2016, the average submission rate for Lab, TB and EMHS orders/reports was at 69% while the average Web-

Based Antiretroviral (ARV) Ordering and Reporting System (WAOS) rate for HIV commodities was 57%. An in-depth analysis of the Health Management Information System (HMIS)105 report revealed that at that time, 12% of healthcare facilities had a stockout of TDF/3TC/EFV (first-line antiretroviral therapy [ART] regimens for adults), while 22% had a stockout of NVP 50mg & EFV 200mg (pediatric ARV formulations). To ensure that the over 70,000 clients on ART across the 12 districts have uninterrupted access to life-saving medicines, USAID RHITES-EC closely collaborates with the MOH-Pharmacy Division, National Medical Stores (NMS), Joint Medical Stores (JMS) and the USAID Uganda Health Supply Chain (UHSC) Project to support correct quantification, on-time order submissions, and effective and appropriate management of EMHS at district and facility levels through the following key strategic interventions.

## STRATEGIC INTERVENTIONS

**Training of service providers in logistics management and good storage practices:** District Medicines Management Supervisors (DMMS) and the USAID RHITES-EC team provided training, coaching, and mentorship to healthcare facility staff involved in supplies management – including service delivery unit heads, pharmacy and laboratory staff – to improve quantification and stock management, conduct timely and accurate ordering and reporting, and use data to guide decision-making including focused redistributions. USAID RHITES-EC has also supported trainings for 21 high-volume sites (>500 clients on ART) to utilize RxSolution, a MOH electronic pharmaceutical management system, to submit timely reports into the Pharmaceutical Information Portal.

Over 300 staff from 140 ART accredited health facilities were trained in quantification and ordering to promote accurate and timely forecasting, distribution, and ordering of buffer stocks of health commodities. The project rolled out the new Supervision, Performance Assessment, and Recognition Strategy (SPARS)



A WhatsApp message from Namayingo district provides real-time updates on stock status of TB medicines

model and trained 30 District DMMS to implement, coordinate, and manage the program. The project further trained 20 district staff as peers to monitor the performance of DMMS and provide technical support to the hospitals and Health Center IVs.

**Strengthening timely and accurate ordering and reporting at district level:** USAID RHITES-EC has successfully provided coordination and logistics support to district biostatisticians to decentralize the District Health Information System 2 (DHIS2) user rights, permitting DMMS to support the timely entering of TB and ART orders in the WAOS and TB Drugs Web-Based Ordering System, respectively. Using a checklist, a selected team consisting of DMMS, health sub-district medicines management supervisors, and USAID RHITES-EC staff routinely ensure that forecasts from each healthcare facility are accurate before submission into WAOS to avert stockouts and wastage.

**Using Information and Communication Technology (ICT) to improve the availability of and accountability for priority EMHS:** USAID RHITES-EC uses various ICT tools (e.g., WhatsApp and short message reminders) to receive real-time notifications from healthcare facilities when drug stocks are low, overstocked, or stocked out.



A DMMS from Iganga district loading supplies for redistribution to an understocked healthcare facility

Access to real-time data to monitor stock levels has helped to ensure the availability, accountability, and justification of back-orders for EMHS at the facility level.

### **Integrating quality improvement (QI) methods and activities in supply chain management:**

USAID RHITES-EC uses key QI approaches to improve supply chain management systems, including the “5S Principles” (Sort, Set in Order, Shine, Standardize and Sustain) and SPARS. Using the “5S Principles”, the project has supported 131 healthcare facility teams to sort, set, and rearrange commodities and institute measures to maintain and sustain the good storage practices. Through periodic SPARS implementation, USAID RHITES-EC works with healthcare facilities to improve medicines management performance by identifying, prioritizing, and addressing gaps in stock and store management practices, quality prescriptions, and management of expiries. To facilitate SPARS implementation, 10 motorcycles and seven laptops were provided to districts to enable DMMS to continually identify systems gaps; supervise facility teams and enact corrective actions; monitor improvement in medicines stock and storage management, ordering

and reporting; and support facility team to improve prescribing and dispensing practices in seven districts (Kaliro, Kamuli, Buyende, Luuka, Namayingo, Iganga, Busia) that were previously not supported by UHSC.

### **Equipment and Infrastructure Improvement:**

USAID RHITES-EC supplied eight districts and seven health facilities with standard operating procedures manuals and job aides, pallets, shelves, and temperature and humidity loggers to improve store infrastructure.

## **KEY ACHIEVEMENTS**

### **Improve availability of uninterrupted supply of HIV care commodities**

Through USAID RHITES-EC support, timely ordering and reporting for laboratory, TB and EMHS for 141 ART accredited sites increased from 90% in FY17 Q1 to 100% in FY19 Q4. USAID RHITES-EC also helped to reduce and eliminate stockouts of key HIV commodities at the site level from 69 healthcare facilities in FY17Q1 (October 2016) to 0 healthcare facilities in FY19 Q3 (June 2019) (see Figure 2).

Figure 1: Orders and Reports submissions rates into DHIS2 for 12 East-Central sub-region districts (October 2016–September 2019)

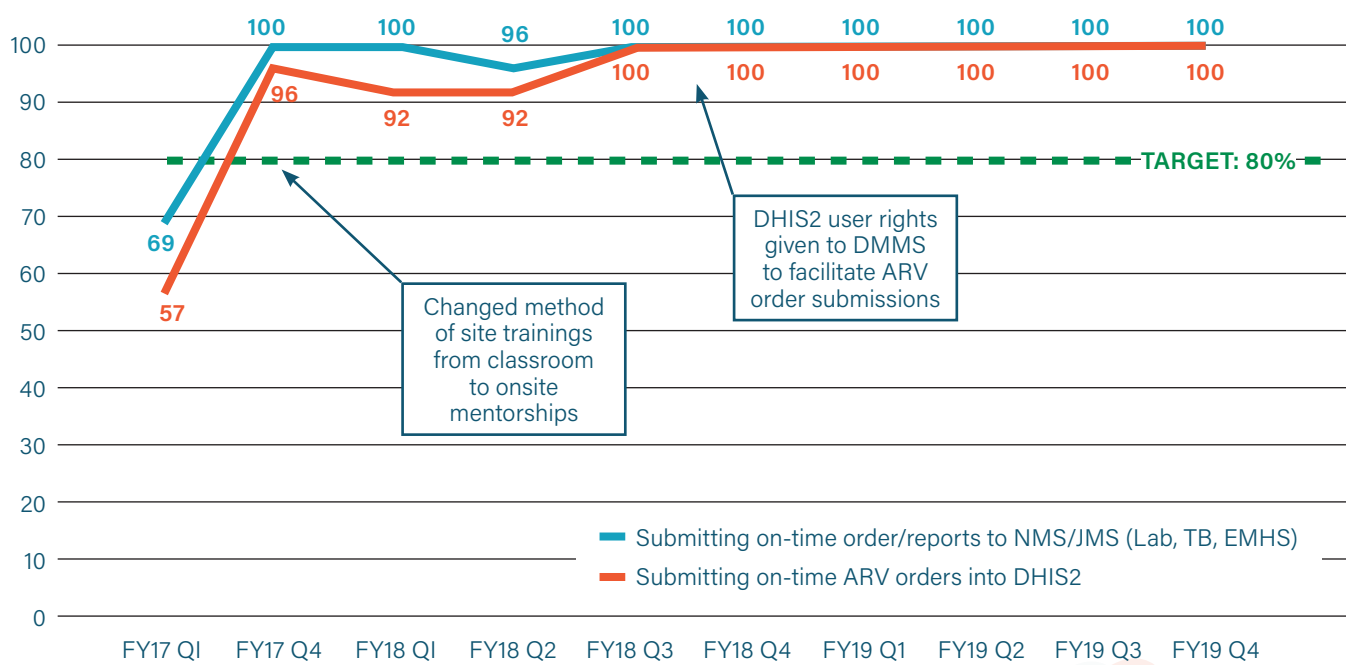
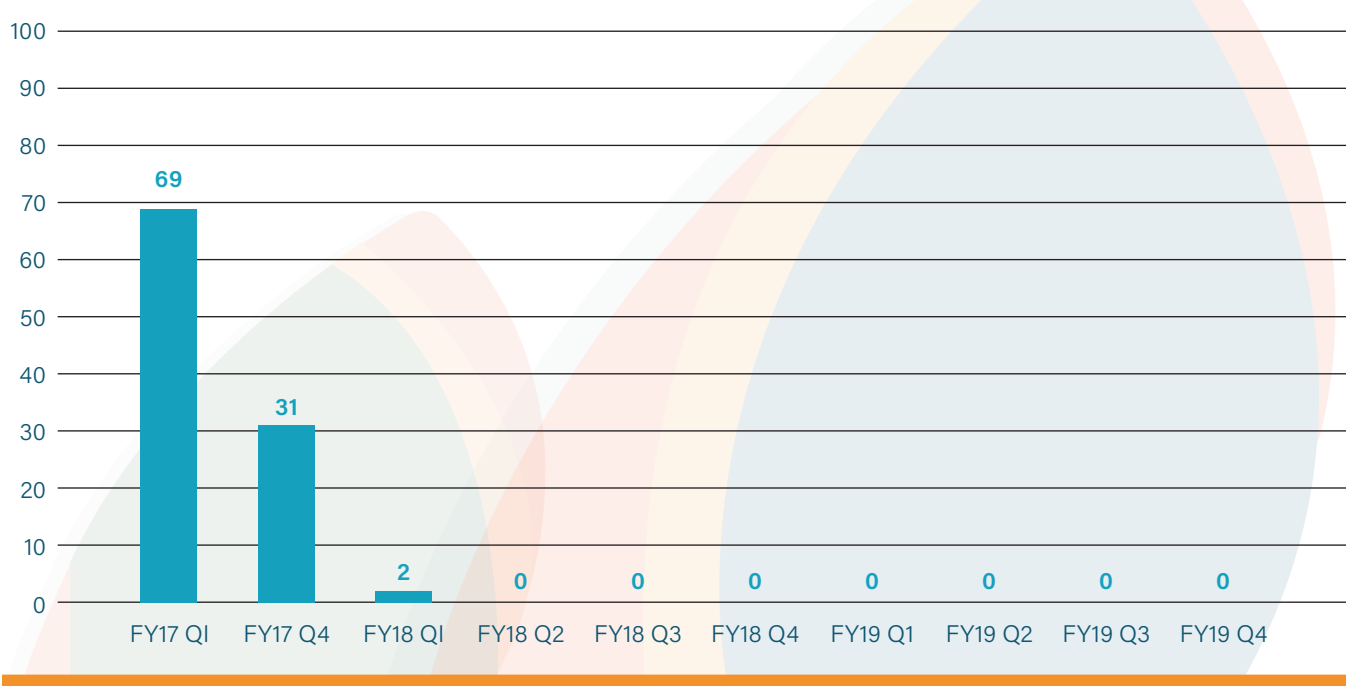


Figure 2: Number of health facilities reporting stockout of ARVs and Rapid Test Kits (October 2016–September 2019)



### ACKNOWLEDGEMENT

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