

**STRENGTHENING UGANDA'S SYSTEMS
FOR TREATING AIDS NATIONALLY**

Best Practices Handbook Supply Chain Management



DISCLAIMER

The USAID Strengthening Uganda's Systems for Treating AIDS Nationally (SUSTAIN) project supports the Uganda Ministry of Health to strengthen sustainable and innovative approaches for HIV and TB service delivery at selected healthcare facilities. This project is made possible by the support of the American people through the United States Agency for International Development (USAID).

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ACRONYMS

AIC	AIDS Information Centre
AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretrovirals
CCI	Child Chance International
EMTCT	Elimination of Mother-to-Child Transmission of HIV
FEFO	First Expiry, First Out
FY	Fiscal Year
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information Systems
JMS	Joint Medical Stores
MOH	Ministry of Health
NMS	National Medical Stores
RRH	Regional Referral Hospital
SMS	Short Message Service
SUSTAIN	Strengthening Uganda's Systems for Treating AIDS Nationally
TASO	The AIDS Support Organization
TB	Tuberculosis
UCMB	Uganda Catholic Medical Bureau
UMMB	Uganda Muslim Medical Bureau
UN	United Nations
UPMB	Uganda Protestant Medical Bureau
URC	University Research Co., LLC
USAID	United States Agency for International Development
VMMC	Voluntary Medical Male Circumcision

TABLE OF CONTENTS

SUSTAIN Best Practices Booklet Series	1
Introduction	3
Best Practice Interventions	3
1. Ordering facility supplies through national medical stores	5
1.1 Centralizing ordering under the management of an order focal person	5
1.2 Conducting targeted mentorships on completing accurate orders	7
1.3 Sending orders through electronic ordering system	8
2. Managing supplies at the facility stores	10
2.1 Conducting trainings and mentorships with the general store keepers at supported facilities	10
2.2 Intensive reorganization of facility medical stores	10
2.2 Redistributing supplies to supported facilities who are low or out of stock	10
3. Requisitioning supplies from facility stores to individual units	11
3.1 Organizing collaborative meetings with supported facilities to standardize requisition processes	12
3.2 Task shifting facility personnel to better support the stores	13
3.3 Standardizing ordering time for supplies from facility stores to units .	12
3.4 Placing the stock cards next to the corresponding supplies	13
Best Practice Outcomes	18



BOOKLETS IN THIS SERIES

Elimination of Mother-to-Child Transmission of HIV

HIV Care & Treatment

HIV Testing Services

Health Management Information Systems

Human Resources for Health

Laboratory Services

Nutrition

Supply Chain Management

Tuberculosis/HIV

Voluntary Medical Male Circumcision


SUSTAIN BEST PRACTICES BOOKLET SERIES

The Strengthening Uganda's Systems for Treating AIDS Nationally (SUSTAIN) project is funded by the United States Agency for International Development (USAID) and implemented by University Research Co., LLC (URC) in partnership with: The AIDS Support Organization (TASO), Integrated Community Based Initiatives (ICOB), Uganda Catholic Medical Bureau (UCMB), Uganda Protestant Medical Bureau (UPMB), Uganda Muslim Medical Bureau (UMMB), Child Chance International (CCI Uganda), AIDS Information Centre (AIC) and ACLAIM Africa. The original project duration was five years (2010-2015), but it received an extension of three years. USAID/SUSTAIN supports the Uganda Ministry of Health (MOH) to strengthen sustainable and innovative approaches for human immunodeficiency virus (HIV) service delivery at select regional referral and general hospitals and health centre IV's.

The project objectives are:

- ◆ Support the MOH to scale up elimination of mother-to-child transmission of HIV (EMTCT) and voluntary medical male circumcision (VMMC) as HIV biomedical interventions for infection prevention at select facilities;
- ◆ Ensure provision of HIV care and treatment, laboratory, and tuberculosis (TB/HIV) services at select facilities;
- ◆ Enhance the quality of EMTCT, VMMC, HIV care and treatment, laboratory, and TB/HIV services at select healthcare facilities; and
- ◆ Increase stewardship by the MOH to provide sustainable quality HIV prevention, care and treatment, laboratory, and TB/HIV services.

The purpose of the best practices handbook series is to document USAID/SUSTAIN's exceptional experiences over the last seven years, and to facilitate learning about what actions do and do not work by sharing those experiences with other implementers so that they might be able to replicate these best practices.



The series consists of ten handbooks on various areas of HIV programming (eMTCT, health management information systems (HMIS), HIV care and treatment, HIV testing and counseling, human resources for health, laboratory services, nutrition, supply chain management, TB/HIV, VMMC), highlighting efficient and effective, evidence-based interventions. The best practices handbooks serve as a reference guide for healthcare providers and program implementers to utilize for program planning and improvement in the delivery of quality HIV services. Interventions can be tailored to suit the specific needs of the program/facility.

Taking into consideration the definitions used by United Nations (UN) agencies and other health implementers, USAID/SUSTAIN has developed its own definition for “best practice.” For the purposes of this series, a **best practice** is an innovative action or set of actions that display evidence of effectiveness and sustainability, with the ability to be replicated or adapted to different contexts or situations.

USAID/SUSTAIN acknowledges the work of the project staff, our colleagues at MoH, and counterparts at supported facilities who have been instrumental to the project’s many successes throughout implementation of the documented best practices.

INTRODUCTION

Per the 2013-2014 Annual Pharmaceutical Sector Performance Report, only 19% of essential medicines and health supplies for the basic package of health services were covered under the national budget. The bulk of the resources for malaria, HIV, tuberculosis (TB), vaccines and reproductive health commodities are provided by global initiatives. This can lead to inconsistent availability of supplies of medicines and other commodities needed for HIV service delivery. SUSTAIN supports the Ministry of Health to provide quality HIV, TB, elimination of mother-to-child transmission of HIV, and laboratory services at select healthcare facilities. Health supplies are central to the provision of these services. The project supports effective supply chain efforts by:

- ◆ Ensuring a continuous supply of antiretroviral (ARV) commodities from the national supply chain system;
- ◆ Providing logistics trainings and on-site mentorships to overcome existing gaps in quantification, reporting and inventory management of supplies;
- ◆ Streamlining antiretroviral (ART) pharmacy services between the HIV clinic and the hospital pharmacy; and
- ◆ Utilizing quality improvement approaches, such as the 5S (sort, set in order, shine, standardize and sustain), to improve the quality of supply chain management systems at supported facilities.

However, the project has faced several challenges in being able to improve supply chain management systems for HIV. These include delayed or incomplete supply orders to the National Medical Stores, improper storage of medicines and supplies, frequent stock outs and deficient processes for internal supply requests.

This booklet is organized first by **MOH guidelines or national standard practices**, followed by a description of **USAID/SUSTAIN's best practices** to address challenges related to implementing each of those guidelines or practices.

BEST PRACTICES INTERVENTIONS

1 Ordering facility supplies through national medical stores

According to the Uganda Ministry of Health, healthcare facilities must submit orders to the national medical stores (NMS) every two months. This includes an order submission deadline and an order delivery deadline—the latest that NMS should deliver the supplies. Prior to the project, supported facilities were not submitting their orders on time and orders were not accurate. In order to remedy this, SUSTAIN streamlined hospital ordering systems, started sending reminders to ensure timeliness of orders, and trained staff on logistics management. In order to ensure on-time supply orders, facilities have developed the following best practices.

1.1 Centralizing ordering under the management of an order focal person

Why is this important? At the beginning of the project, supported facilities were not adhering to the NMS order deadline: they would submit the orders very late, or sometimes not at all. Furthermore, orders were being made by individual departments and quantities were not accurate for the two-month time period.



Pharmacist at Jinja RRH reviews delivery notes with store staff

How is it implemented? During a meeting of the supply chain management teams at the hospitals, it was decided that each facility should designate an order focal person, and that this person should be a pharmacist. Now the following process is followed:

1. Each unit fills out their own standard NMS order forms to request supplies. The project trains the order focal person to fill out the forms accurately and completely, and then the order focal person mentors the unit in-charges to ensure they are completing the orders correctly and on time.
2. Short Message Service (SMS) reminders were sent from SUSTAIN project to the respective health facility unit in-charges reminding them to prepare the respective orders before the NMS schedule deadline.
3. The order focal person collects the order forms from each of the different unit in-charges (Maternal and Child Health, HIV, TB, Lab, etc.) and uses a project-developed order checklist to monitor receipt of forms.
4. After receiving all the order forms, the order focal person makes any necessary corrections before submitting one order for the entire facility to the NMS.

Who is involved? The order focal person (a pharmacist) orders supplies from the NMS for the entire facility. The unit in-charges are responsible for filling out their unit's order form and giving it to the order focal person.

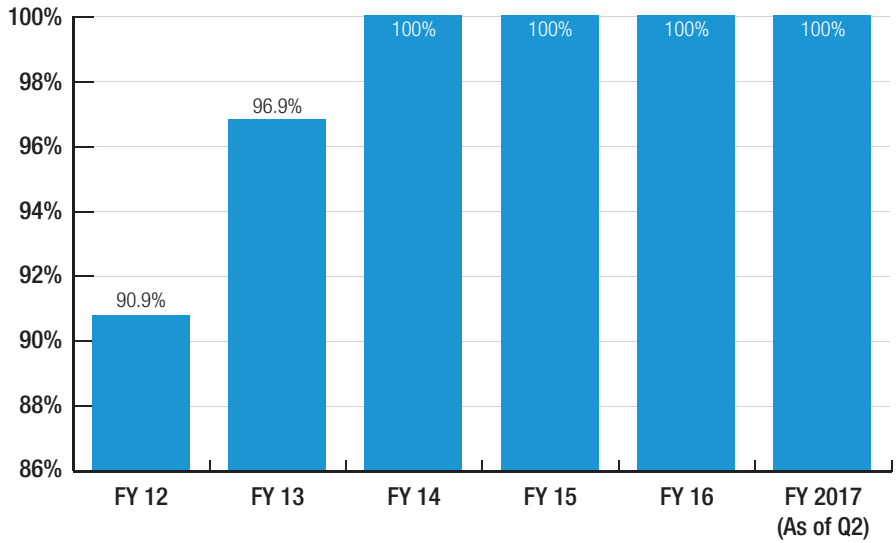
What was the result? The percentage of orders that were submitted on-time by the SUSTAIN project supported hospitals to the NMS increased from 54% in March 2011; to 87% in March 2012; to 91% in March 2013; to 94% in March 2014; to 95% in March 2015; to 98% in March 2016 and 100% in June 2017.

Having an order focal person at Fort Portal RRH has led to 100% on time submission of orders to NMS in the last four years.

What else to keep in mind?

- ◆ Identification of the order focal person and sending SMS reminders not only improves ordering, but also ensures the timeliness of order submission to the central warehouses. The use of an order submission checklist ensures that orders from all the different health facility units are submitted to the central warehouses.

Orders submitted on time to NMS on time across years at Fort Portal RRH



The chart above shows the percentage of orders that were submitted on time to NMS at Fort Portal RRH



1.2 Conducting targeted mentorships on completing accurate orders

Why is this important? At the beginning of the project, supported facilities were not submitting accurate orders—they were not requesting adequate supplies to last until the next order could be placed and received. As an outcome, facilities would run out of supplies needed for service delivery.

How is it implemented? The project staff conducted a training with the supply chain teams on how to properly record and order facility supplies. To follow up on the training and ensure these competencies are sustained, the project supply chain team conducts **targeted mentorships** about three times each year at supported hospitals.

- ◆ The project supply chain management team works with the facility supply chain management teams to walk through supply reporting, filling out forms, and calculating supply needs according to a consumption-based method. This method looks at past consumption as well as projections for future service delivery needs to estimate the supply needs for the upcoming two months.
- ◆ The project staff conducts a data quality assessment with the facility staff (the focal person and appropriate unit in-charges) to analyze and compare their orders and make any necessary corrections.
- ◆ Each mentorship visit lasts about one week, and typically occur during the ordering period so project staff can help to ensure the accuracy of the next order or when chronic challenges with ordering have been identified at a facility.

Who is involved? The project supply chain team conducts the mentorship visits and the order focal person and appropriate unit in-charges take part.

What was the result? The ordering system moved from one based on assumptions of needs to a scientific method of projections based on average monthly consumption and a maximum stock approach that replenishes stock to an optimal maximum level with every order. This improved the accuracy of orders submitted to the central stores, which in turn improved product availability at the supported sites, minimized stock outs, and reduced waste.

What else to keep in mind?

- ◆ The consumption method, quantification and forecasting based on actual use or past consumption to determine quantities to be ordered in the future, is the most applicable and easily adaptable method for the supported sites.

1.3 Sending orders through electronic ordering system

Why is this important? Previously, the project-supported facilities were submitting hardcopy requests to the NMS, which sometimes caused them to miss the submission deadline.

How is it implemented? In order to improve the timeliness of facility supply orders, SUSTAIN supported facilities to move to an electronic ordering system. Laboratories and pharmacies, and the order focal person, are provided computers and internet access. The order focal person submits orders via the online system to ensure receipt at the NMS by the order deadline.

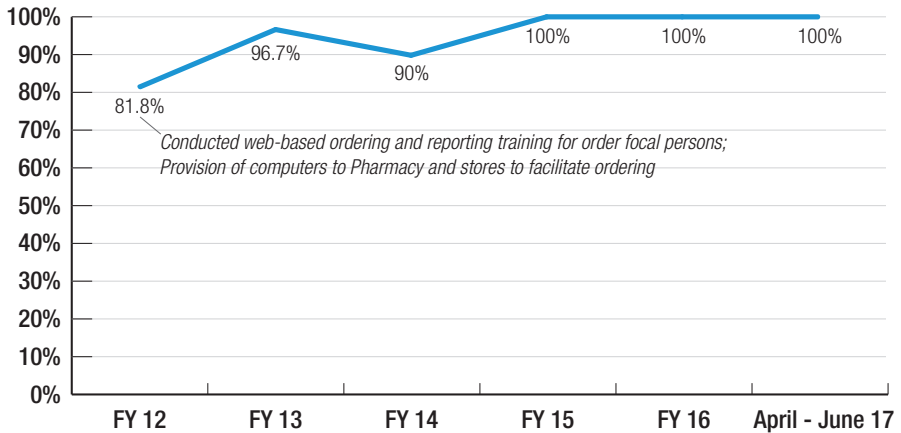
Who is involved? The order focal person submits the order request through the online system.



An intern uses RxSolution software to track and update stock levels at the Fort Portal medicine hospital store.

What was the result? On-time order submission increased from 81.8% (April 2012) to 100% (June 2017). The orders were received electronically and receipt was confirmed by NMS within 48 hours.

Graph showing % of orders submitted to NMS at Kawolo General Hospital



Graph showing percentage of orders that were submitted on time to NMS at Kawolo General Hospital

What else to keep in mind?

- ◆ Electronic order submission greatly improves on-time order submission because the orders are instantly received at the warehouse; hardcopy order submissions can take days, or even weeks, to reach the warehouse.

2 Managing supplies at the facility stores

According to the MOH, the NMS are mandated to supply essential medicines and health supplies to all public health facilities. **It is the facilities' responsibility to appropriately manage those supplies once they are received.** After receiving the supplies from NMS, the facility's inventory records at the main store are supposed to be updated. Any issues pertinent to the health facility units should be captured on the stock cards and in the stock book. In order to ensure effective supply chain management, SUSTAIN built the capacity of facility staff in good storage practices and improved

storage conditions for medicines and other commodities, and provided electronic systems for online ordering and supply tracking. In order to ensure effective supply chain management, the project has developed the following best practices.

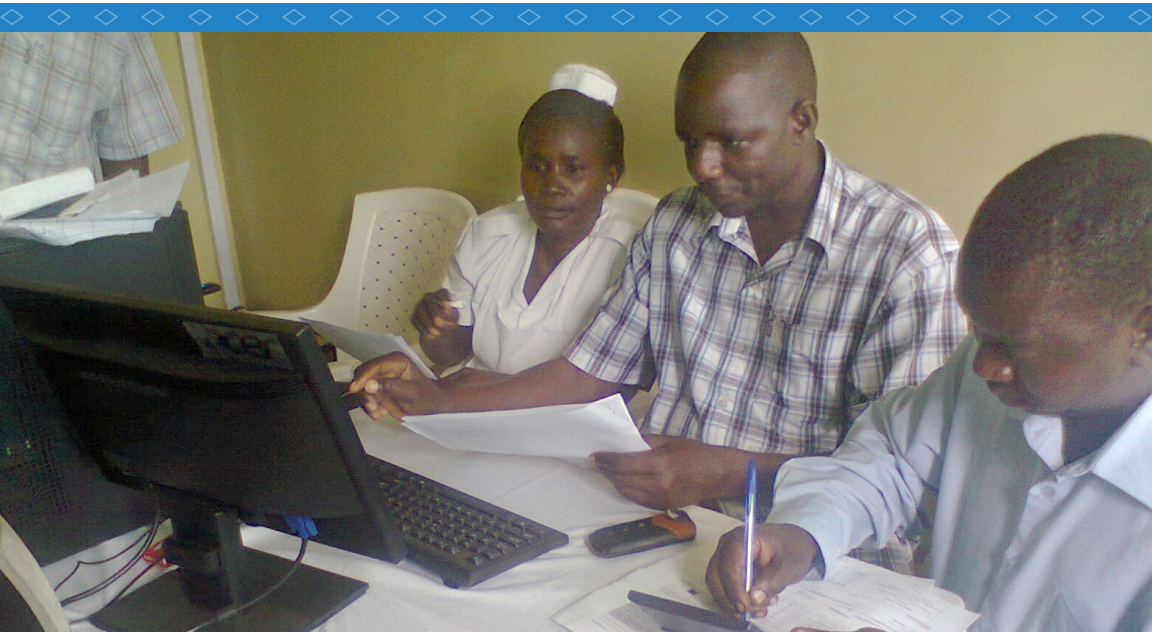
2.1 Conducting trainings and mentorships with the general store keepers at supported facilities

Why is this important? The general store keepers at supported facilities are staff from the Ministry of Finance, not the Ministry of Health. They therefore did not understand the medical value of supplies, which led to improper storage of facility supplies

How is it implemented?

Training: The project organized a two-week training with store keepers at supported facilities to discuss supply chain management.

- ◆ Two representatives from each facility attended the training, for a total of 32 attendees.



Nebbi General Hospital staff being mentored in the Electronic Health commodities inventory management system (Rx Solutions)

- ◆ The training was conducted by trainers and store keepers from the Joint Medical Stores (JMS).
- ◆ During the training, the store keepers learned the theoretical aspects of supply chain management, and then were placed at the JMS for two weeks to gain practical skills in supply chain management.

Mentorship: The project conducts onsite mentorship with new or rotating store keepers to ensure that they are knowledgeable in good supply chain management practices.

- ◆ The mentorships occur once a quarter for three days each.
- ◆ Store keepers are mentored on good storage practices as covered in the MOH manual.
- ◆ Sometimes, MOH medicines management supervisors also visit facilities to train or mentor new store keepers and identify gaps in supply storage. The project then conducts follow-up mentorship visits to address those gaps.

Who is involved? The JMS store keepers and trainers facilitated the initial training on supply chain management with store keepers at supported facilities. The project supply chain management team, as well as MOH medicines management supervisors, conduct mentorship visits with the facility store keepers.

What was the result? There was a notable improvement in stock management at the different hospitals as shown in the table below.

Stock management is a supply chain management indicator measured based on five sub-indicators (i.e. availability of stock cards, correct filling of the stock cards, agreement of physical count and stock card balance, correct use of the stock book, and accuracy of the average monthly consumption (AMC) recorded on the cards. This is on a total scale of five.

Table showing selected supported facilities which have attained the score of 4.0 and above in stock management, the maximum score being 5.0.

What else to keep in mind?

- ◆ Store keeper training helps to build supply chain capacity, skills, and ownership within hospitals, and enables store keepers to take preventive

actions against stock imbalances. The competency of the store keeper plays a critical role in determining how the available supplies are used. Accurate inventory data is key in forecasting and planning to achieve the ultimate objective of ensuring continuous product availability at the health facilities.

Facility	Stock Management Scores					
	FY12	FY13	FY14	FY15	FY16	FY17
Fort Portal Hospital	3.4	4	4.3	4.5	4.5	5
Gulu Hospital	4.6	3.5	3.7	3.1	4.9	4.9
Kabale Hospital	3.6	3.6	3.5	3	4.2	4.5
Kawolo Hospital	3.5	3.5	3.8	4.7	4.5	4.9
Lira Hospital	3.4	4.6	5	3.6	4.7	5
Moroto Hospital	2.2	3.4	4.9	4	4.5	4.5

2.2 Intensive reorganization of facility medical stores

Why is this important? Before the project, facility medical stores were not organized effectively and medicines were not stored properly, which led to reduced potency and effectiveness of drugs, and expiries, because the medical stores staff were not aware of the medicines they had on hand and their expiration dates.

How is it implemented?

1. The project provided shelves and pallets to the facilities for their supply stores.
2. With support from the project supply chain management team, the medical stores staff conducted an extensive activity to reorganize the supplies.
 - ◆ They removed all the supplies from the store room, cleaned the room entirely, installed pallets and shelves, and appropriately labeled the shelves.
 - ◆ The clinical staff from each unit were consulted as to how and where medicines and supplies should be stored for their technical area. For example, special store areas were created for laboratory, antiretrovirals, and sundries for easy retrieval of supplies.



Top: Mbale store before re-organization

Bottom: Mbale store after re-organization

- ◆ Signage was also put up in different areas of the store for easy identification.
 - ◆ The project also procured thermometers to monitor store temperature.
3. Medical stores staff who had completed the reorganization process then visited substandard stores to support their staff in conducting the reorganization.
 4. After completing the reorganization, the project supply chain management team, with MOH medical management supervisors, conducted regular on-site mentorships to ensure that the stores were being properly maintained.

To ensure sustainability, the project utilizes the MOH-recommended SPARS (supervision, performance assessment and recognition) approach to routinely train new and existing staff on supply storage and assess their skills in this area.

Who is involved? The project supply chain management team, with representatives of model facility stores, conducted reorganization of struggling facility stores. The project supply chain management team and the MOH medicines management supervisors conduct mentorships to ensure the stores are maintained and store keepers have the skills to do so.

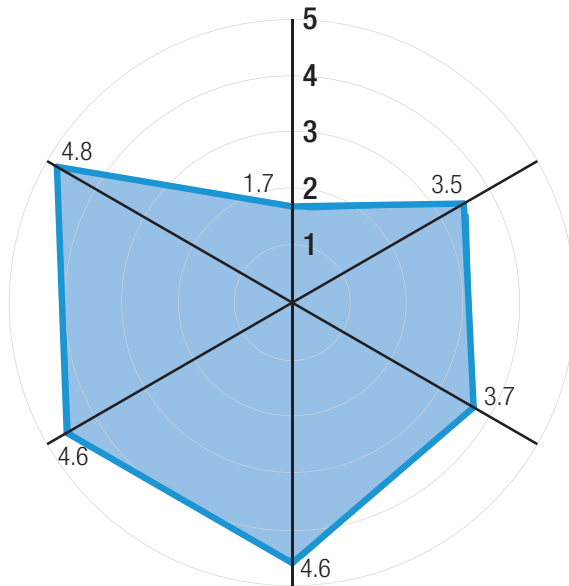
What was the result? Ease of identification, location, and retrieval of medicines from the shelves resulted from the systematic arrangement and labelling of shelves where the medicines are kept. This also reduced expiries, because application of the first expiry, first out (FEFO) principle became feasible. Storage management of health supplies at SUSTAIN-supported facilities improved from 87.5% (FY15) to 90% (FY16).

At Mbale RRH, the training and mentorship sessions increased storage management scores (as shown below).

What else to keep in mind?

- ◆ Many health commodities have a short shelf life, usually less than two years by the time they reach a health facility. Hence there is need for careful management at the facility stores to minimize expiries. Application of the FEFO principle can only be achieved in a well-organized store.

Spido graph showing scores in storage management at Mbale RRH 2012-2017



Note: Graphical representation of improvement towards the overall score of five in the storage management indicator over time.

2.3 Redistributing supplies to supported facilities who are low or out of stock

Why is this important? Sometimes facilities do not make accurate orders for certain supplies from the NMS, and experience stock-outs of certain supplies before the end of the two-month time period.

How is it implemented?

1. At the end of every month, each facility reports the exact stock numbers at their store.
 - ◆ The pharmacist manages and submits the stock updates for medicines to the project pharmacy technical lead.
 - ◆ The lab in-charge manages and submits the stock updates for antiretrovirals and laboratory supplies to the project lab technical lead.
2. The supply chain management team—the pharmacy technical lead and lab technical lead—uses an Excel tool to determine which facilities are overstocked or understocked; different colors identify each designation.

3. The project shares the stock updates for all facilities to the supported facilities via email.
4. The project supply chain management team will call and inform severely understocked facilities of which facilities have excess supplies. Facilities can also make supply orders via letter directly to overstocked facilities.
5. The project logistics team schedules and transports the delivery from the overstocked to the understocked facility, normally during already-scheduled mentorships and site visits.

Who is involved? Pharmacists and lab in-charges manage the stock updates at the facility and submit them to the project at the end of every month. The project supply chain management team receives the updates from the facilities, uses the Excel tool to determine those who are over- or understocked, shares this information with the facilities, and facilitates redistribution of supplies.

What was the result? Stock redistribution minimizes stock outs and reduces expiries of medicines and other medical supplies. The stock-out rate of key HIV commodities at SUSTAIN-supported hospitals reduced from 40% to 5% from March 2012 to September 2016.

What else to keep in mind?

- ◆ Redistribution of stock between health facilities is preceded by monthly physical counts. This physical count identifies any stock imbalances that would otherwise not be noted until a crisis became apparent.

3 Requisitioning supplies from facility stores to individual units

According to the MOH, the delivery and storage of essential medicines and health supplies must be strengthened at all levels of the health sector, including at each individual hospital department. In order to facilitate this, SUSTAIN developed standard operating procedures to harmonize systems for requisition, authorization, and issue of supplies and accountability at the facility level. The project also began using dispensing logs and daily

consumption logs for medicines and HIV test kits in all departments to properly record and track supply usage. In order to ensure appropriate requisition of supplies to each unit, the project has developed the following best practices.

3.1 Organizing collaborative meetings with supported facilities to standardize requisition processes

Why is this important? Despite standard guidelines for requisitions, each supported facility had their own procedures for requesting supplies from the facility stores at the beginning of the project.

How is it implemented? At the start of the implementation of SUSTAIN, the project organized two collaborative meetings/learning sessions with facility store keepers, laboratory and pharmacy in-charges, hospital administrators, supply chain teams, and MOH representatives to exchange ideas on how best to operationalize the standards for requisitions from facility stores to facility units. The outcome of this meeting was a set of standard operating procedures that can be customized by each facility while still staying within the MOH guidelines.

Who is involved? The project supply chain management team organized the collaborative meetings. Attendees included facility store keepers, the laboratory and pharmacy in-charges, hospital administrators, supply chain teams, and MOH representatives.

What was the result? A standardized ordering system, in accordance with the MOH national guidelines, was adopted across all facilities.

What else to keep in mind?

- ◆ At many facilities, logistics management functions are often assumed as secondary responsibilities by staff who are primarily employed to provide clinical services and therefore have either limited or no training in logistics management systems. These meetings therefore served as eye openers and refresher trainings on the national guidelines to the clinical staff involved in logistics management for their respective units.

3.2 Task shifting to better support the stores

Why is this important? At the beginning of the project, supported facilities had limited manpower in the stores to maintain stocks and manage supply chains.

How is it implemented? To remedy this challenge, the project recommended moving less specialized hospital workers to work in the hospitals' medical stores. The project held discussions with facility administration to determine who could be shifted to better support the facility stores. Laundry or security personnel, for example—departments that no longer exist in many facilities—were retrained as health volunteers. As a result, their strengthened capacity in stock management allowed them to monitor supplies in the facility stores, freeing store keepers to focus on supply chain management. These health volunteers, paid by the Ministry of Health, were satisfied with this new role, because they saw it as a step up at the facility.

Who is involved? Security and other personnel were trained as health volunteers to help in the facility stores.

What was the result? This allocated more manpower to the stores, alleviating staffing challenges in the stores department—a common occurrence across the supported facilities. Stock management at the facility stores improved from 52% (2012) to 66% (2013).

What else to keep in mind?

- ◆ Organization and staffing are an important part of the logistics cycle and the system can only work if a sufficient number of well-trained staff are available. Manpower impacts everything in the stores, from placing orders, moving boxes, and providing goods to clients. Inadequate manpower levels can result in employee stress, exhaustion, and injury, among other problems.

3.3 Standardizing ordering time for supplies from facility stores to units

Why is this important? At the beginning of the project, there were no standardized times for facility units to order from the medical store. This created challenges in supply chain management for the store staff.

How is it implemented? In order to accomplish routine ordering from the facility store, each facility standardized a weekly deadline for ordering. The unit in-charges sit down once a week to forecast a week's consumption and submit that request to the store keeper. This allows the store to better manage the distribution of supplies to each unit. For example, at Lira Regional Referral Hospital:

- ◆ The store requires all order requests to be turned in by Thursday so that they have enough time to assemble supplies, which are picked up by each unit on Monday.
- ◆ Emergency orders are submitted and picked up at the store on Wednesday.
- ◆ The store assistant uses the rest of the days to fill out the stock cards and to reconcile their records in order to maintain a correct inventory.

This effort has reduced waiting time and crowding at the stores.

Who is involved? The unit in-charges are responsible for submitting the orders to the facility store, the store keeper collects the supplies for each unit, and the store assistant fills out the stock cards.

What was the result? Waiting time and crowding at the stores, which caused store staff to work under pressure and made them more likely to make mistakes, has been greatly reduced. Emergency orders to the stores following departmental stock outs have reduced; the clinical staff are able to forecast and plan their requirements for a period of at least a week. Ordering costs in terms of both labor and other resources, like stationery, were reduced, as fewer orders were placed overall.

What else to keep in mind?

- ◆ An inventory control method, where orders are placed on a regular schedule, saves time, administrative costs and other resources, for both the store keeper and the clinical staff at the facility involved.

3.4 Placing the stock cards next to the corresponding supplies

Why is this important? ASometimes stock cards were not filled out after distribution, which can lead to incorrect inventory of supplies in the store.

How is it implemented? To ensure stock cards are filled out immediately after distribution, they are posted next to their corresponding supplies. This way, the store assistant can fill out the cards immediately and properly maintain inventory.

Who is involved? The store assistant fills out the stock cards..

What was the result? Keeping stock cards on the shelves next to the commodities helps the store assistant to maintain an accurate count of commodities. This enables the store keeper to proactively identify issues that could arise regarding stock expiries and perform a stock rotation based on expiry dates, an appropriate practice to support FEFO. For example, stock management (measured based on five sub indicators with a total score of five) at Gulu RRH improved from 3.1 (2015) to 4.9 (2016) and at Mubende RRH from 2.4 (2015) to 3.8 (2016).

The chances of forgetting to update stock cards following distribution of supplies are also greatly reduced when the cards are kept next to items on the shelves.

What else to keep in mind?

- ◆ In addition to keeping stock cards next to items on the shelves, a stock book may be used to maintain a duplicate record of each transaction. The stock book remains in use over an extended period of time, which facilitates easier retrieval of transaction data. Some facilities may use a computerized record keeping system of inventory management (Rx solution), depending on their needs and abilities.



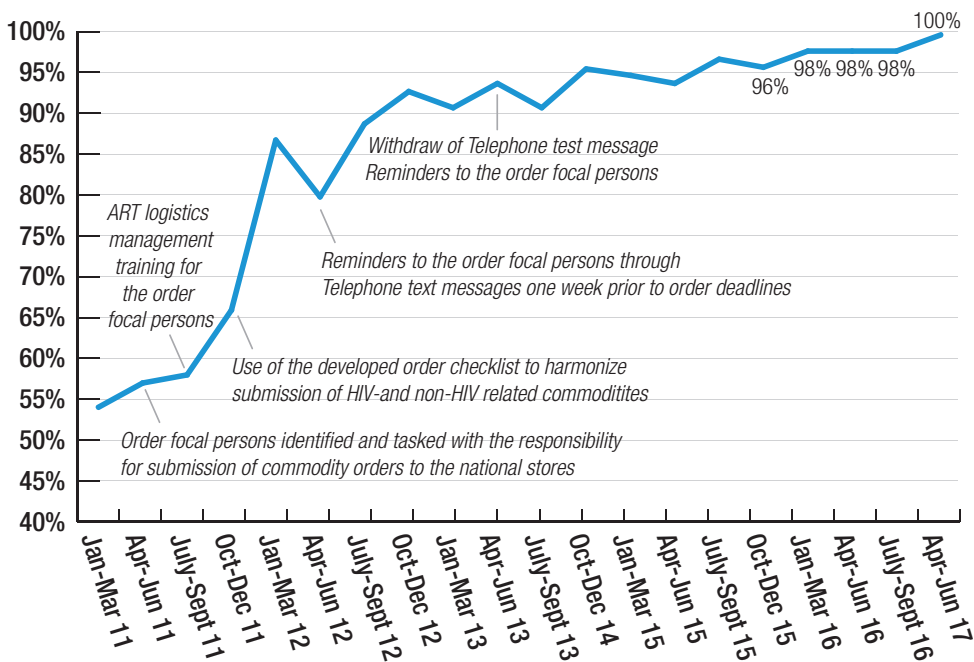
Store keeper at Gulu RRH reviews and updates the stock cards placed next to the items in the main store

PROJECT PERFORMANCE ON KEY SUPPLY CHAIN INDICATORS

During the seven years of consistent support to facilities in forecasting and quantification, reporting and ordering rates at 13 supported hospitals have skyrocketed from as low as 35.1 % to 100% in June 2017 resulting in consistent supply of ARVs, PMTCT, EMHSs, laboratory commodities and HIV test kits from the NMS.

The charts below shows the percentage of orders submitted On-time to the NMS for replenishment.

NMS Ontime order submission rate



Increased availability of Key HIV commodities. The high order submission rates have translated into product availability for the essential medicines and health supplies including: Cotrimoxazole, TB medicines and adult first line ARV regimens hence improved laboratory monitoring and clinical management of clients at the supported facilities. Where national stock-outs were experienced, the project team continued to facilitate redistribution of commodities from other supported health facilities.

A table showing trends in Key HIV-related commodities availability at hospitals:

Commodity Type	Period/Percentage Availability														
	Q1-14	Q2-14	Q3-14	Q4-14	Q1-15	Q2-15	Q3-15	Q4-15	Q1-16	Q2-16	Q3-16	Q4-16	Q1-17	Q2-17	Q3-17
Adult ARVs 1stline	95	95	100	91%	97%	95%	95%	92%	100%	100%	100%	97%	97%	100%	97%
Adult ARVs 2nd line	92	93	88	68%	75%	81%	96%	92%	96%	100%	100%	100%	100%	88%	86%
Children ARVs 1st line	93	93	88	68%	93%	69%	90%	92%	97%	95%	100%	97%	97%	100%	97%
Adult TB 1st line	91	91	88	91%	70%	69%	92%	92%	92%	92%	92%	100%	100%	100%	100%
Children TB 1st line	75	75	31	47%	90%	100%	96%	92%	92%	88%	83%	83%	83%	100%	91%
eMTC Medicine	78	78	85	81%	95%	100%	92%	92%	92%	96%	96%	83%	83%	96%	82%
Cotrimoxazole 960mg	100	100	100	91%	100%	100%	100%	100%	92%	92%	100%	100%	100%	100%	100%
Cotrimoxazole 120mg	50	50	46	55%	70%	83%	85%	92%	100%	92%	100%	100%	100%	100%	91%
HIV test kits	86	86	95	97%	97%	95%	100%	100%	100%	92%	100%	100%	100%	100%	100%

Commodity Type	Period/Percentage Availability																											
	Q1-14	Q2-14	Q3-14	Q4-14	Q1-15	Q2-15	Q3-15	Q4-15	Q1-16	Q2-16	Q3-16	Q4-16	Q1-17	Q2-17	Q3-17													
Complete CD4 set	92	92	100	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%												
Frosted slides	70	70	92	73%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	100%	100%												
LFT (GOT,GPT)													100%	100%	100%	100%	100%	100%	100%	100%	91%							
RFT (urea, Creatinine)													100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Hematology set													100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Syphilis test kits													100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	92%	100%	91%
Quarterly average	84%	84%	82%	78%	90%	90%	95.6%	95.6%	96.9%	95.9%	97%	95.1%	95%	95%	95.1%	95.1%												

*Supporting Sustainable and Innovative Approaches for
HIV & AIDS Prevention, Care and Treatment in Uganda*

**STRENGTHENING UGANDA'S
SYSTEMS FOR TREATING AIDS
NATIONALLY (SUSTAIN) PROJECT**

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