

Should a partner choose to buy hardware, please contact the Pharmacy Department to confirm which individual facilities need the hardware. Partners are expected to deliver and install the hardware in the facility and inform the Pharmacy Department of this development, so that they can update the list of computerized facilities.

2. Support training of facility staff and RxSolution trainers

The Uganda Health Supply Chain Program (UHSC) on behalf of the Ministry of Health offers a five-day classroom training course on RxSolution for personnel who will operate the software. With this training, a person will be able to install RxSolution and begin operating the software.

UHSC also offers a five-day training-of-trainers course to expand the number of trained personnel who can train facility staff and provide more advanced follow-up support to facilities that operate RxSolution. Achieving national scale up will rely on more qualified RxSolution trainers.

Contact UHSC directly through the contacts at the end of this booklet to schedule a training. Partners will need to pay for their participants to attend the training courses (transport, per diem, etc.).

3. Providing site support to RxSolution users

The Pharmacy Department maintains an electronic tracking system on the Rollout of RxSolution and its Operation and Maintenance Status in facilities (ROMS). The system identifies facilities that are using RxSolution, the hardware available, the names of facility staff that have been trained, and the partners providing technical support to the facility.

The Pharmacy Department wants to expand the number of partners providing site support to resolve hardware or user issues with RxSolution at facility level. Site supporters will also help by updating the ROMS system, which includes the history of RxSolution hardware and software issues and their resolution at facility level.

UHSC currently responds to facility requests for RxSolution technical support through phone, Skype, and remote desktop as well as through on-site visits. If you are able to help provide this vital support, please contact the Pharmacy Department and UHSC.

To optimize use of the system, a 4 indicator monitoring and

supervision system (RX SPARS) has been developed and will be rolled out. It will monitor set-up and configuration, training, data entry and reporting, and data use.

Collaborating Partners

Many partners already support RxSolution scale up in various ways, namely: procurement of equipment, installation, training users, performing maintenance and site support. The partners include UHSC, IDI, UNHCR, UNFPA, UNICEF, all medical bureaus, Joint Medical Store, SUSTAIN, SDS, IDRC, Baylor, RHITES-SW/EC/E, and Makerere University.

JOIN US!

For future sustainability, partners are collaborating with the Ministry of Health to establish a national call center to provide site support for eHealth systems including RxSolution. UHSC is also working with Makerere University and other academic institutions to incorporate RxSolution into national pre-service health worker training curricula for pharmacy and pharmacy technicians.

Get in Touch

Please send an email to the contacts below:

Ministry of Health:

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Mr. Paul Bamwoze, bamwozepaul@gmail.com

Uganda Health Supply Chain Program

Mr. Michael Kavuma, mkavuma@uhsc.ug

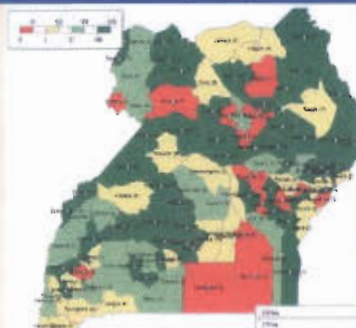
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RxSolution Implementation Status

Computerization of medicines management

GoU 2018-target: 431 facilities in 112 districts

Current coverage: 224 sites in 97 districts



Published by Ministry of Health

with support from USAID/Uganda Health Supply Chain Program



Republic of Uganda
Ministry of Health

Computerization of Medicines Management in Health Facilities in Uganda



RxSolution

Foreword

In an effort to improve logistics management and increase accountability in public sector health facilities, the Ministry of Health decided to computerize management of medicines and health supplies by introducing an integrated digital pharmaceutical management software called RxSolution.

Computerization of medicines and supplies management in public sector health facilities in Uganda is an important step towards making our services more efficient and effective.

The RxSolution system will initially be rolled out to all hospitals and health centre IV facilities in Uganda and the Ministry has tasked the Pharmacy Department to support districts and health facilities in the roll out of RxSolution.

I therefore urge our partners to support Ministry of Health through Pharmacy Department to effectively implement the RxSolution system. Details of the support requirements are outlined in this booklet.

As a caring partner, we are counting on your full support and collaboration in this important development for Uganda.

Dr Henry G. Mwebesa
Ag. Director General, Health Services



What is RxSolution?

The RxSolution is an integrated pharmaceutical management software that the Ministry of Health chose in 2010 to be the computerized tool in health facilities to manage medicines and health supplies.

RxSolution enables facility staff to effectively track, analyze, and manage stock information and product usage to prevent stock outs, reduce expiry and overstocks, and improve financial accountability. The software includes modules for budgeting, procurement, receipts, requisitions, issues, and dispensing. Using the procurement function, facilities are also able to order supplies electronically from central medical warehouses using RxSolution.

Why Computerize?

Paper-based inventory management records are cumbersome to use and lack automated calculation and analysis of stock information.

The Ministry of Health Pharmacy Department's goal is to raise pharmaceutical management standards by expanding the use of RxSolution in all hospitals and level IV health centres in the country by 2018.

Currently, only 224 of Uganda's 400 higher-level health facilities use RxSolution. The Ministry of Health Pharmacy Department invites development partners to support the national scale up of RxSolution to ensure optimal use of our pharmaceutical resources for the benefit of the population.

Join us in strengthening Uganda's health commodities management - your support will be appreciated!

About RxSolution Modules

The **stock module** is a facility's starting module for RxSolution. It is the first module to be implemented in the bulk store of the facility and requires a basic desktop computer with the hardware accessories specified above. It includes comprehensive functionality for procurement and receipt of items from suppliers, requisitioning and issuing of items from the store, and other inventory control

components. Once the facility has mastered how to use the stock management module, they can implement the dispensing module, which relies on the stock module.

The **dispensing module** is implemented after the stock module above. It involves setting up a LAN with a server computer in the bulk store and basic client computers at the dispensing points, such as the outpatient department, inpatient department, ART clinic, TB clinic, wards, etc. This module is linked to the stock module and allows for additional computerized stock management tasks at patient service points, but also facilitates electronic prescribing and dispensing. The dispensing module allows the user to trace medicine all the way to the patient and ensure accountability at dispensing level.

Become a supporting partner

1. Buy the facility hardware to operate RxSolution

A full package of the hardware needed for one facility to operate RxSolution costs approximately US\$3,500 for the stock module and US\$5,000 for both the stock and dispensing modules. The package includes a desktop computer, printer, and power supply, plus one year of internet access (stock module) and an additional server computer, local area network (LAN) system, and label printers for the dispensing module. It is important to supply a full set of hardware with the appropriate specifications.

Hardware specifications for RxSolution

STOCK MODULE	
Specifications	Main Purpose
Desktop computer <ul style="list-style-type: none"> 3GHz CPU, 4Gb RAM, 500Gb hard drive, Windows 7, Microsoft SQL Express 2014, SQLbak (back-up) 	Installation in the facility main store for stock management plus on-site back-up
Printer <ul style="list-style-type: none"> Laser printer or LED printer or equivalent, A4 paper 	Printing reports

Power supply <ul style="list-style-type: none"> 750 VA inverter, 200 AH batteries 	Ensuring power supply for a full 8-hour working day
Internet <ul style="list-style-type: none"> 3G modem or equivalent 	Easy communication and enabling remote support to the facility
Cost US\$3,500/installation for full package and 1-year internet access	

DISPENSING MODULE	
Specifications	Main Purpose
SERVER <ul style="list-style-type: none"> 3GHz CPU, 8Gb RAM, 500Gb hard drive, Windows 7, Microsoft SQL Express 2014, SQLbak (back-up) 	Installation in the facility main store to act as a server plus on-site back-up
LAN <p>1000 Mbps Fast Ethernet using UTP Cat 6 cabling; 100 meter limit</p>	Networking computers
SWITCHES <ul style="list-style-type: none"> 8 10/100/1000 Mbs Nway Auto-MDI ports, Full/half duplex transfer mode for each port, IEEE 802.3x flow control for full-duplex, Wire speed reception and transmission 	Networking computers
LABEL PRINTER <ul style="list-style-type: none"> Print width: 4.09"/104 mm, Print resolution: 203 dpi/8 dots per mm, Maximum print speed: 5"/127 mm per second (203 dpi), Media sensors: Standard—Fixed reflective and transmissive sensors, Communication methods, RS-232 auto-sensing Serial interface, DB-9, USB V1.1, bi-directional, Centronics® Parallel, Ethernet—10/100 internal (optional, replaces serial and parallel ports) 	Printing medicine labels
The following have the same specifications as stock module above (one for each dispensing point: e.g., outpatient department, inpatient department, ART, TB, etc.) <ul style="list-style-type: none"> Desktop computer Prescription printer Power supply Internet 	Same as stock module above
Cost US\$5,000/installation for full package with 1-year internet access	