

TECHNICAL BRIEF

RxSolution



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SIAPS
Systems for Improved Access
to Pharmaceuticals and Services



AN INTEGRATED PHARMACEUTICAL MANAGEMENT SYSTEM

RxSolution is an integrated tool that addresses many pharmaceutical stock management challenges. Supporting pharmacists and program managers to better manage their inventory of medicines and health supplies, plan future procurement orders, and facilitate best prescription practices, RxSolution helps to ensure an uninterrupted supply of pharmaceutical products is always available.



CHALLENGE

Proper stock management is crucial to ensuring that patients have the medicines they need when and where they need them. This is especially important for patients on intensive or long-term treatments. Problems in the supply management cycle can have serious implications on patient outcomes. Without tools to track, analyze, and manage the current stock of medicines, clinicians and pharmacists may struggle to have the appropriate amount of medicines on hand which may result in a surplus of medicines, medicines waste due to expiry, or stock-outs.



A SOLUTION

To help address this challenge of stock management, SIAPS uses RxSolution — an integrated computerized pharmaceutical management system developed by SIAPS' predecessor project, Strengthening Pharmaceutical Systems (SPS). Designed by pharmacists with experience implementing stock solutions in resource-limited settings, RxSolution is used to manage inventory, process purchase orders, and transfer or refer prescriptions to other levels of the health system.

RxSolution supports best practices for procurement, storage, distribution, and dispensing of medicines and health supplies, helping to ensure that these products are always available.

RxSolution is specifically designed to manage medicines and health supplies from start to finish— from the planning stages of procurement to the moment the product is given to the patient. Users, typically pharmacists or clinicians, record information

on pharmaceutical products, suppliers, prescribers, dispensers, and patients into the system, and can also manage and track stock transactions and product usage. RxSolution is capable of generating a wide range of clinical and pharmaceutical reports which can help improve pharmaceutical use, stock availability, and financial and logistic accountability.

RxSolution is made up of six modules (any or all of which may be used depending on the needs of the health facility):

- Budgeting
- Procurement
- Receipts
- Requisitions
- Dispensing
- Patient referrals to other health facilities



FEATURES

- Monitors stock and records the quantities requested, ordered, received, and distributed
- Recommends quantities to be ordered based on historical data
- Tracks batch/lot and expiry date for the medicines and supplies being dispensed
- Helps to manage the dispensing process across prescribers, dispensers, and patients
- Monitors referrals to assist with the control of stock between health facilities and patients
- Stores treatment protocols to facilitate prescribing and dispensing

- Generates budgets based on past consumption rates and prices
- Allows users to print reports using more than 80 predefined templates or to develop customized reports
- Can export data into common document formats including Excel, PDF, and text files
- Can be used on either a single-user or multi-user basis, on a stand-alone computer, a local area network, or a wide area network.

SIAPS EXPERIENCE

RxSolution is currently being used at over 100 sites in Swaziland, Lesotho, and South Africa.

- Staff at one South African hospital can now produce a monthly list of key tracer medicines for the provincial office automatically, rather than manually counting stock and writing the report. They can also track expenditures against budgets, and readily know the how much money has been spent on ARVs to date.
- RxSolution allows a city in South Africa to better manage their stock system and cost centers, as they can more easily track budgets and monitor clinics. The main depot receives up to 95 facility orders each month and can fill all of the orders in two weeks.
- Installing and using RxSolution in 11 hospitals and health centers in Swaziland met the Global Fund's requirements for a reliable ARV tracking system. These facilities use the system to produce regular stock, patient, and prescribing reports for national-level managers. As a result of the successful installation and use of RxSolution, the Global Fund has authorized funds for Swaziland to purchase ARVs.
- A chief pharmacist at a South African hospital uses RxSolution to produce reports for departments throughout the hospital to support and inform the pharmacy and therapeutics committee.

IMPLEMENTATION

Pre-implementation assessment (2 days)

SIAPS staff members meet with information technology and audit staff at the health facility to demonstrate the software, assess existing hardware and software capacity, review report requirements, and discuss gaps.

Installation and data configuration (4 days)

With guidance and assistance from SIAPS, the site installs the tool, builds the databases, and reviews the reporting requirements.

Training (3 days, if all modules are used)

SIAPS trains key personnel on how to use the RxSolution modules. Each module has consistent layout and user interface, making them easier to learn, and thus, reducing training time across multiple modules.

Equipment

Component	Minimum Requirement
Computer CPU	3.0 GHz (client) / 3.6 GHz (server)
Memory	1 GB of RAM for the client and 4 GB for the server for SQL 2005
Hard Disk Space	160 GB available on the client and server, 1TB recommended for high-volume servers
Additional Drive	DVD/CD-RW, USB flash drive for backups
Operating System & Accessories Configuration	Windows XP (for client) Windows Server 2000 / 2003 (server)
Network	Network adapter card and cabling, if used by multiple users on the same network, wireless network facility required
Printer	Windows-compatible printer to print A4 size documents
Power Backup	UPS minimum 500 VA

SIAPS TECHNICAL BRIEF SERIES | This document is part of a series describing the technical approaches and tools used to implement SIAPS work in Pharmaceutical Systems, Pharmaceutical Services, and Supply Chain Management. The information provided does not reflect or represent the position or views of the US Agency for International Development or the US Government.

ABOUT SIAPS | The Systems for Improved Access to Pharmaceuticals and Services (SIAPS) program works to assure access to quality pharmaceutical products and effective pharmaceutical services through systems-strengthening approaches to achieve positive and lasting health outcomes. SIAPS is funded by the US Agency for International Development (USAID) and is implemented by Management Sciences for Health. For more information, visit www.SIAPSprogram.org.

