



GOING DIGITAL

Utilizing RxSolution to Improve Medicine Management in South Africa's Eastern Cape

GHSC-TA

Unathi Sonanzi is a post basic pharmacist's assistant at Nkwenkwezi Clinic in the Makana sub district, Port Alfred, Eastern Cape. Nkwenkwezi Clinic is located in a semi-rural town where it is surrounded by difficult socioeconomic circumstances. Nkwenkwezi Clinic, like other primary health care (PHC) health establishments across South Africa, has had its share of challenges. The dispensaries located in PHC health establishments in semi-rural and rural South Africa normally do not have access to computers, label printers or reliable internet connectivity. They are also often understaffed. Furthermore, before the electronic stock management system, RxSolution, was introduced, staff performed every process relating to medicine management manually, making it nearly impossible for the province and the National Department of Health (NDoH) to know which clinics had certain medicines in stock and which needed more.

The United States Agency for International Development (USAID)-funded Global Health Supply Chain Program – Technical Assistance (GHSC-TA) is working with South Africa's

provinces and the NDoH to address these challenges by building the capacity of the National Surveillance Centre (NSC), a web-based performance monitoring and evaluation tool, to monitor medicine availability in the provinces. The use of RxSolution supports the reporting of information on medicine availability to the NSC, enabling informed supply planning decision-making.

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– Unathi Sonanzi

Before the introduction of RxSolution, PHC health establishments used hand-written bin cards and direction labels to dispense medicines

to patients. Now, RxSolution has moved the former manual, time-consuming process to a digital system by replacing the need to record orders, requisitions and receipts by hand. RxSolution also enables the expiry dates of medicine to be tracked digitally, reducing the amount of waste as the system allows pharmacy personnel to quickly track which stock is close to expiring. When the system was first introduced in the clinic, the system was only used for stock management. Over time, use of the system has evolved to include tracking of patients and their prescriptions and printing of direction labels. GHSC-TA provided guidance to the Makana sub district pharmacist to provide access to computers, label printers and internet connectivity, as well as provided training, IT support and anything else that clinics like Nkwenkwezi Clinic need to keep using RxSolution and ensure it is set up and running correctly. Submission of data to the NSC required a report to be run on RxSolution, then downloaded and sent to the NSC via email. To overcome this challenge, GHSC-TA developed an application programming interface (API) to automatically extract and submit the data from RxSolution to the NSC without the need for manual intervention.

This intervention has also improved efficiency at the NDoH. As pharmacists enter information throughout the day when they add medicines to their stock and dispense prescriptions to patients, RxSolution collects this data and submits a daily report to the NSC dashboard on stock-on-hand at each facility. GHSC-TA is working on additional improvements to how the NSC and facilities use RxSolution so that the NDoH can determine if the levels of stock-on-hand at facilities are enough to meet patient demand.

The implementation of the RxSolution API at the clinic level is a first for South Africa’s public health medicine supply chain. Through the API, RxSolution automatically sends information on approximately 200 medicines and related commodities to the NSC each day. In addition, the process of ordering, approving and submitting orders for medicines and supplies is now completely electronic. Each of the Makana sub district’s 18 PHC health establishments uses RxSolution to improve medicine availability, with 14 connected to the NSC via the API. Since implementation, each clinic using RxSolution has loaded an average of 6,000 patients, dispensed approximately 52,000 prescriptions and reported on approximately 200 medicines to the NSC daily, all while giving pharmacy workers like Unathi more time to counsel her patients and answer questions about their treatment.

RxSolution and the related API have greatly improved the way that small PHC clinics work. According to Unathi, “RxSolution makes record management efficient and recalling prescriptions, as well as stock management records, effortless.” RxSolution also allows her to spend more time with patients, improving the quality of care as she spends less time manually recording their information.

