

# COMPLETE VISIBILITY

## Optimizing Medicine Availability by Providing End-to-End Online Stock Visibility Across the Pharmaceutical Supply Chain in Gauteng Province, South Africa

For many health care workers in South Africa, access to information on medicine availability is vital to adequately service the health care needs of their patients. To acquire this data, health establishment staff and pharmacy managers have been developing various medicine availability reports, which differ from province to province and sometimes even between districts. These reports are usually generated using manual paper-based data collection methods that are then transferred to a central database, usually in Excel, for analysis and sharing with a broader team of stakeholders.

An example of this is the provincial pharmaceutical services team in the Gauteng Department of Health (GDoH) who used this kind of data collection method to understand medicine availability across the province. The GDoH includes 370 clinics, 28 hospitals, seven district/regional depots/pharmacies and one central medical supplies depot. These institutions utilize various medicine availability reporting platforms, including the Stock Visibility System<sup>1</sup> (SVS) for clinics and RxSolution<sup>2</sup> for the hospitals, district/regional depots/pharmacies and some clinics.

Pharmacy personnel in the GDoH provincial office accessed information from these systems on Excel spreadsheets, which allowed them to see medicine availability at the provincial level. Data from SVS and RxSolution were entered into Excel spreadsheets by health care workers across the province, and sent to the provincial office for review. Medicines were classified as vital, essential and necessary. The classification was, however, province-specific, and only included certain medicines, which meant excluding surveillance of other medicines at the provincial level. As health care workers were entering the data into the Excel spreadsheets manually, the data was often incomplete or contained errors, potentially providing an inaccurate picture of medicine availability in the province.

The United States Agency for International Development (USAID)-funded Global Health Supply Chain Program – Technical Assistance (GHSC-TA) has been collaborating with the South African National Department of Health (NDoH) since 2016 to improve access to, and availability of medicine through the development of the National Surveillance Centre (NSC).

<sup>1</sup> SVS is a mobile application and web-based management tool that provides innovative solutions for addressing stock-outs in the health care system. SVS is used by health practitioners at primary health care clinics to capture and monitor medicine availability.

<sup>2</sup> RxSolution is an electronic transaction inventory management system that captures and records medicine transactions such as stock movement into and from a pharmacy.

With support from GHSC-TA, the NDoH conceptualized the NSC to provide visibility of medicine availability across all levels of the public health supply chain, from the supplier, provincial and district depot levels to health establishment (site) level. The NSC is a web-based performance monitoring and evaluation tool. Using nationally agreed key performance indicators, medicine availability data from hospitals and clinics, pharmaceutical depots and suppliers of medicine is visualized on dashboards, providing a holistic view of medicine availability throughout the South African public health medicine supply chain.

GHSC-TA provided formal training of Gauteng provincial representatives on the system in 2019. Since the training, usage of the NSC in the province has increased as it provides end-to-end visibility of medicine availability, something which was lacking in the internal provincial reports. Like any new concept, user adoption was initially a challenge. Users had concerns about the accuracy of the NSC data and reports but, through constant engagement between the GDoH and GHSC-TA's Provincial Support Team, these concerns were allayed and confidence in the NSC increased.

This increased appreciation of the NSC led Ms. Zuleika Rhemtula, the Head of Pharmaceutical Services for Gauteng, to decide that provincial reporting should now rely fully on the NSC. During a meeting with pharmacy managers and district pharmacy managers, she announced, **“We [Gauteng Province] will no longer be using our internal reporting system; as of next week [June 8, 2020] all the reports will be sent to the NSC.”**

This was a welcome development as it reduces the level of effort of personnel involved in collecting, collating and analyzing data so that they can spend more time using the information provided on the NSC to address availability challenges. As it provides end-to-end visibility, the NSC empowers managers to identify where in the supply chain any challenge

lies, which better informs the remedial actions needed to mitigate the challenge.

So far, the NSC has helped the GDoH to understand stock on hand reporting and facilitate the re-distribution of stock between facilities based on need. The provincial team is also using the NSC's reports to understand and monitor medicine availability at facility level.

The NSC is vital to the province as data from different sources is now stored and viewed on one platform, by allowing access to multiple reports at once and giving a complete picture of medicine availability at all levels of the supply chain in the province, ultimately enabling improved medicine availability to support better health outcomes for patients. With the adoption of the NSC, skilled and driven pharmacists can, through complete visibility of medicine availability, identify challenges at the supplier, provincial depot, district or regional depots/pharmacies, and health establishments that may impact their stock levels and quickly act to resolve medicine availability issues before they affect patients' wellbeing.

