

"If we all use the [NSC] report in this manner, I foresee great savings, reduced expired stock, and improved service delivery".

- Ann Evans, Responsible Pharmacist at Settlers Hospital in the Eastern Cape

Imagine having to procure 36 units of an important medicine, when your hospital needs only two, because of supplier minimum order quantities. One of the advantages that the National Surveillance Center (NSC) has brought to the South African public health supply chain is the ability to identify medicine stock levels across districts, provinces, and indeed the whole country. This enables pharmacists to engage each other and work together to transfer medicines from areas where there is excess stock to other health establishments where they are needed.

The National Department of Health and the United States Agency for International Development (USAID)-funded Global Health Supply Chain Program – Technical Assistance (GHSC-TA) collaborated and developed the NSC, 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 availability throughout the South African public health medicine supply chain.

The NSC has helped the country's hospitals and clinics to understand stock-on-hand reporting and facilitate re-distribution of stock between health establishments based on need. The GHSC-TA provincial support team (PST) is also working with provinces to interpret and use the NSC's reports to understand and monitor medicine availability at the health establishment level.

Settlers Hospital is one of the many hospitals that utilizes the NSC. This hospital is a provincial government-funded health establishment in Makhanda (previously known as Grahamstown), in the rural Eastern Cape province of South Africa. According to the most recent census, Makhanda is home to just over 67,000 people and Settlers Hospital is the main hospital that serves the population. The hospital provides a wide range of services, and its pharmacy department provides the necessary medicines and medical-related products to meet patient needs.

Being the largest hospital in the area, there is an obvious need for Settlers Hospital to practice comprehensive medicine supply management to facilitate optimal medicine availability, promote rational medicine use, and support cost-effective management of these costly resources. On a weekly basis, the GHSC-TA PST generates a report from data extracted from the NSC. This report is shared with all the hospital staff in pharmacy departments in the Eastern Cape. The report provides details of stock on hand in each hospital in the province, providing province-wide visibility to the broader stakeholder group of pharmacy staff. Settlers Hospital has identified several advantages of using NSC data.

Saving costs and preventing wastage

In June 2020, Settlers Hospital needed to procure only two units of Sevoflurane (an inhalational anesthetic) for use by a specialist anesthetist as it is not a commonly used product. The minimum order quantity, however, was 36 units with a total cost of R72,000. This would not make sense for the hospital as Sevoflurane is a slow-moving item and it would take about six years for the hospital to use an order of 36 units. Using the report generated by the GHSC-TA, the pharmacist at Settlers Hospital was able to identify a nearby hospital-Port Alfred Hospital (60km away) – which had 16 Sevoflurane units that were slow moving and expiring in 2021. It was clear from the demand for the medicine that it was unlikely to be used before it expired.

After obtaining this information from the NSC report, Ann Evans, Responsible Pharmacist at Settlers Hospital, was able to save on the purchase cost of the anesthetic by drawing stock from Port Alfred Hospital. At the same time, this contributed towards minimizing the risk of stock expiry before use that would lead to wastage at Port Alfred Hospital. Using the NSC report, a mutually beneficial outcome was reached, leading to Settlers Hospital saving R68,000 from not having to order 36 units instead of only the two units needed. Port

Alfred Hospital also avoided a potential loss of R4,000 by having a high-cost, slow-moving stock item taken off their hands. Settlers Hospital now has an arrangement to continue drawing stock of Sevoflurane from Port Alfred Hospital to reduce unnecessary expenditure and reduce anticipated expired stock.

Preventing medicine stock outs

Phenylephrine injection is used in the Settler Hospital theater and has been in extremely short supply in 2020. In June 2020, Ann realized that she was down to the last 10 ampoules. The NSC report showed her that Frontier Hospital in Queenstown and the Port Elizabeth Provincial Hospital each had a large amount in stock. She contacted Frontier Hospital (218km away) first, as their availability appeared to exceed their demand. The pharmacy manager agreed to transfer 30 ampoules to Settlers Hospital in exchange for caffeine powder that was required by Frontier Hospital. This suited Settlers Hospital since they had excess caffeine powder which would expire in September 2020. Within a few days, Settlers Hospital had the Phenylephrine ampoules required. Since then, Settlers Hospital has continued to make similar exchanges based on NSC data.

"This is such a fabulous [report] ... It is great to see who has stock to share when the depot has none. Great money saver too I was able to draw from Port Alfred Hospital who had ... slow moving [stock], with an expiry date of next year." – Ann Evans

As the use of the NSC spreads across the Eastern Cape, more pharmacists will be able to engage each other and work together to transfer medicines from areas where there is excess stock to other health establishments where they are needed, saving costs and improving quality of care as they go.



