

Medicines Management is Key to NHI Success

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As South Africa makes strides towards universal health coverage, efficient management of medicines will be more crucial than ever because medicines, and their availability and affordability, are fundamental to the success of the NHI roll out.

While the recently released White paper on NHI didn't answer all the questions, what is clear is that the move towards NHI will require major changes in the service delivery structures, as well as administrative and management systems. Efficient use of resources will play a critical role in achieving sustainability – especially as there will need to be a significant increase in access to essential medicines, including generics, as outlined in the White paper:

“Key element of improving service delivery is to ensure that the full range of essential medicines and other medical supplies are available in all public health facilities. Various interventions are currently being assessed and initiated to improve the distribution of medicines” Improving Access to Pharmaceuticals Services page 42.

This vision is in contrast to the ongoing stock-outs of essential medicines which currently threaten the delivery of quality healthcare for all. In today's world, patients either get referred to other facilities when clinics and hospitals experience shortages of medicines, may have to buy medicines from private pharmacies at higher prices, or go home without the medicines they need.

Diagnosing the problem

Non-profit organisation, Stop Stock Outs Project (SSP), conducted a nationwide survey in 2014 gathering information sent to their anonymous hotline by healthcare workers and patients. The report, released in June 2015, revealed a chronic shortage of essential medicine including ARVs, vaccines and TB treatments.

While the National Department of Health (NDoH) pointed to external factors – such as global drug supply shortages and suppliers not delivering on time – as reasons for the escalating drug shortage, the SSP report indicates that only 20% of reported cases were caused by manufacturing issues and that the crisis is, in fact, due to failures within the state supply-chain.

The report went on to highlight management and logistical challenges between the medicine depots and clinics at provincial and district levels, including: incorrect quantities of drugs being ordered by clinics; inaccurate forecasting of drugs stock needs; and poor stock management at facility level. Problems that account for 80% of medicines shortages throughout the country.

Given that the majority of the medicines' supply-chain is currently still administered using manual, paper-based processes – leaving this cornerstone of healthcare open to mistakes, unnecessary duplication and data entry errors – it's only appropriate that the NDoH is looking to implement a nationwide digital health system for the NHI programme to relieve ongoing drug stock-outs.

The NHI White paper states that: *“Pharmaceutical depots will no longer be a preferred method for ensuring the sustainable supply of medicines because of the inherent risks of pilferage, expired stocks, lack of security of supply, drug stock-outs and inefficient distribution to healthcare facilities. A mechanism of direct delivery of health commodities from suppliers to facilities shall be implemented.”* *Procurement of Pharmaceuticals and Goods, page 77.*

While the details of how this will take place in reality are still unclear, there's an acknowledgment that medicines management needs to be overhauled to meet the increasing demand and address the inefficiencies in the system. Some claim that electronic prescribing is the answer but e-prescribing only digitises one, small part of the supply-chain and has little to no effect on the availability of medicines for dispensing. What is needed is an approach to medicines that can be efficiently managed from end-to-end and is based on ensuring patient safety and better outcomes.

Getting the dose right

Leading SA in addressing the medicines supply chain is the Western Cape Department of Health (WCDoh) who've taken a regional approach. They understand that the challenges around the availability of medicines at individual facilities are best addressed when managed across a wider coverage area.

In 1999, the WCDoh contracted for an electronic medicines management system from Health System Technologies (HST) and JAC – the leading provider of medicines management systems to the UK's NHS – and implemented the first drug dispensing and inventory management systems at Red Cross Children's Hospital, Groote Schuur Hospital and Tygerberg Hospital.

The success of this implementation led to roll-out of the system across the province. Khayelitsha Hospital and the surrounding facilities in its sub-structure were among the first to adopt the province's regional medicines system to improve the availability of medicines – bringing greater efficiencies,

fewer stock-outs and improved patient safety. The regional approach also means that patients can now easily move between facilities because shared pharmacy records are available at all hospitals.

In addition, pharmacists are able to manage drug stocks better and speed up the dispensing process using the data generated by the system. Because pharmacy teams know how much stock they are using, they can more accurately calculate and plan stock levels. Because facilities can view the stock-levels across the region, they are aware of potential stock-outs before they occur and are able to either order more in time or transfer stock from other facilities if there's a delay in new supply or a spike in demand.

The system also reduces the risk of overprescribing, where patients end up with more medicines than they need, reduces the inherent risk associated with paper-based systems – such as illegible handwriting, missing drug information or data entry errors – and reduces the overall cost per patient.

The prescribed benefits

It's acknowledged that if pharmacists don't have the drugs that they need to fill a prescription, there's a delay in care which is a risk to the patient's well-being. This issue is particularly important in SA, where adherence to medicine regimes related to chronic conditions such as TB and HIV is imperative both in the short and long term.

Thus far, JAC's system is the only system in South Africa that has been proven to deliver a modern medicines management service on a regional basis. Verified by the data generated across the region, the WCDoH have significantly reduced costly dispensing errors, ensured better accountability and audit of drug supplies, and improved patient outcomes, particularly with regards to streamlining repeat prescriptions and monitoring of therapy compliance for complex and chronic illnesses across the province.

Since the initial roll out, HST's local expertise and close relationship with South African health services has allowed them to continually configure the software to make it more suitable for the local context and the system is now implemented across more than 70 additional sites – a network of hospitals and CHCs all linked to each other. It's this ability to combine systems of international standards with in-depth local expertise that enables the delivery of services to be re-engineered to be effective in the South African context.

Getting medicines right could make a marked difference to the success of NHI as it's envisioned. Choosing mature, proven health IT systems in this critical clinical area, will not only streamline processes, but accelerate the implementation of other areas of NHI and make the overall health service faster for hospital staff and safer for patients.

As the White Paper itself concludes: "Improving systems and processes within the procurement system will bring greater efficiencies, fewer stock-outs and better access to health products for the patient." Procurement of Pharmaceuticals and Goods, page 77.

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