

# South Africa

## Netcare: Investing in GS1 standards and quality product information for patient safety

### Challenge

The Netcare Group (Netcare) in South Africa operates the largest private acute care hospital, primary healthcare, emergency medical services, mental health and renal care networks in the country. With a continuous focus on providing the best and safest health and care to each patient, Netcare wanted to transform its paper-based business and clinical processes to ones that are automated, digital and highly efficient.

### Approach

Netcare is now scanning GS1 barcodes on products—pharmaceutical drugs and medical devices—as they are received in the hospital's pharmacy and theatre storage rooms, and as they are used throughout wards and operating theatres. Netcare, collaborating closely with GS1 South Africa, engaged with suppliers to start using GS1 standards on medical devices. For master data management, Netcare and its suppliers use the Global Data Synchronisation Network™ (GDSN®) to exchange accurate and complete product information.

85%

of products used by Netcare have GS1 barcodes applied by suppliers



Enhanced visibility of pharmaceutical drugs and medical devices throughout the hospital



Time savings in stock counting and improvements in stock management



More time for nurses and staff to focus on patient care by scanning GS1 barcodes

### Leading the way

As a leading healthcare provider in South Africa, Netcare is continually investing in ways to better care for patients—the latest in medical technologies, professional expertise and the digitalisation of its processes. “Our strategy is to go digital throughout all of our operations within the Group,” says Caroline Potgieter, Procurement E-Commerce Manager with Netcare. “Creating a standardised, fully mobile platform of capturing and sharing information is a vital part of this strategy.”

Under the leadership of Chief Executive Officer Richard Friedland, Netcare is the first major healthcare provider in South Africa and throughout Sub-Saharan Africa, to adopt and integrate GS1 standards to support its digital transformation of business and clinical processes.

While global pharmaceutical regulations mandated the use of standardised barcodes on drugs, there was no national regulation focused on medical device traceability. Netcare decided to take a proactive stance and has been at the forefront of approaching medical device suppliers to implement GS1 standards.

With help from GS1 South Africa, Netcare developed a strategy for engaging suppliers about the benefits of using GS1 barcodes and sharing quality data. When these engagement efforts commenced, just over 28% of suppliers were using barcodes—GS1 standards-based and in-house created—to identify medical devices.



## Success with suppliers

For Netcare, engaging and gaining buy-in from medical device suppliers to use GS1 barcodes has been a long, yet fruitful journey.

“Working with our team, GS1 South Africa took the lead to approach each supplier, one-by-one,” explains Ms. Potgieter. “This meant visiting suppliers on their premises, touring their warehouses—taking a ‘hands-on’ approach with nearly every supplier in our network.”

The effort was structured as a project with the establishment of key performance indicators (KPIs), measurements and a targeted timeframe to guide the work. Each supplier’s progress was measured and reported throughout the project. An individualised assessment of the current situation, list of requirements and implementation best practices were formulated and shared with each supplier.

*“Today, about 85% of the products we use, across most of our suppliers, are compliant by using GS1 standards to uniquely identify and barcode medical devices.”*

**Caroline Potgieter,**  
Procurement E-Commerce Manager, Netcare

“Based on regular communication with GS1 South Africa, we understood at all times where suppliers were in their compliance journeys—who was fully compliant and who needed time to work on certain factors within their environment,” says Ms. Potgieter.

## Scanning with GS1 standards

For the vast majority of products used in Netcare’s hospitals, each is identified with a GS1 Global Trade Item Number® or GTIN® encoded in a GS1 DataMatrix barcode, applied on the product’s package. When barcodes are scanned at various points throughout the hospital, data about the pharmaceutical drugs and medical devices are captured in Netcare’s information systems—information like the product’s GTIN, batch number and expiry date.

“Using GS1 standards has been a game-changer for us since we can now scan barcodes that are standards based, across multiple processes like patient billing and stock management,” says Ms. Potgieter. “Scanning GS1 barcodes has enhanced our visibility of products as they travel throughout our hospital environment.”

As products come into the Netcare pharmacy and theatre storage rooms, staff scan the DataMatrix barcodes to register information about the products in Netcare’s inventory management system. As drugs and devices are transferred and used in wards and operating theatres, the products’ barcodes are scanned each step of the way.

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E-Commerce Manager, Netcare

This enhances Netcare’s ability to track its drugs and devices throughout the hospital and, if needed, trace the product back to the supplier.

## Linking product information in electronic medical records

Netcare is currently implementing electronic patient medical records that will extend the value of GS1 standards-based information to patients’ electronic medical records, captured in operating theatres and at bedsides.

When a medical device is used, its barcode is scanned in the theatre to link the device’s identification information to the patient’s electronic medical record. The same process can also apply to pharmaceutical drugs as they are administered to patients at bedside.





“We have three sites live now with nine more rolling out later this year (2021),” explains Ms. Potgieter. “This is especially important in case of a recall. With traceability built into our processes, we can more easily and quickly identify patients who received a medical device or was given a pharmaceutical drug.”

### Sharing medical device information

A key component of the Netcare digital transformation is its use of the 1WorldSync data pool and the Global Data Synchronisation Network or GDSN. Netcare’s suppliers also use the GDSN to enter their product information once and have it published to all participating healthcare providers like Netcare.

GS1 South Africa provided GDSN services to Netcare and its suppliers for a smooth and seamless implementation. “GS1 South Africa has a trusted data program that includes onboarding support for GDSN and training on data quality,” explains Ms. Potgieter.

In addition, GS1 South Africa has developed a “data-out” strategy for its data recipients like Netcare, developing application programming interfaces (APIs), supported by a solution provider called Trusted Source, so that product data can be easily shared through a front-in portal or through a data-to-data transfer process.

*“With the GDSN common platform and data quality best practices in place, we can be assured the product data we are using from suppliers is complete and accurate.”*

**Caroline Potgieter,**  
Procurement E-Commerce Manager, Netcare

“It’s involved significant work and collaboration with all members of the GDSN, driving us to support a process of trusted data,” says Ms. Potgieter.

### Automation with a simple scan

Netcare’s adoption of GS1 standards and the resulting enhanced visibility have contributed towards increased efficiencies and accuracy in the billing and stock management processes. The seamless exchange and accessibility of standards-based data has been achieved at Netcare with the implementation and use of the GDSN platform.

During the COVID-19 pandemic, Netcare used GS1 barcodes to enhance the sourcing of personal protective equipment (PPE), enabling a degree of assurance about the PPE products’ origins.

With the automation of processes, clinicians, nurses and other healthcare staff are realising significant time savings and productivity gains. Furthermore, using GS1 standards, Netcare has ensured that information used within Netcare’s systems is standards based.

*“Our focus is providing patient centred the best and safest healthcare. By digitising processes, enhanced with standards-based data, our nurses now have more time to care for patients. It’s about ensuring each patient is at the centre of their care, with the aim of reducing the burden of administration for nurses.”*

**Caroline Potgieter,**  
Procurement E-Commerce Manager, Netcare



## Visibility and assurance

Ms. Potgieter stresses the importance of implementing GS1 standards in hospitals and throughout the healthcare supply chain.

“Having visibility and quality product information is important to everyone. It’s not only a benefit to a hospital, but to suppliers, regulators and, especially patients. Ultimately, it’s about working together in a partnership between you, your suppliers and the entire supply chain of stakeholders.”

*“With GS1 standards in place, you can have the assurance knowing you are recording the right products with the right patients. The journey is not easy, but well worth it.”*

**Caroline Potgieter,**  
Procurement E-Commerce Manager, Netcare





**About the author**



**Caroline Potgieter,**  
Procurement E-Commerce  
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Caroline Potgieter has 27 years’ experience in private healthcare. She is currently the Procurement E-Commerce Manager for Netcare. Ms. Potgieter is responsible for the e-procurement systems at Netcare, and the database used for both purchasing and billing purposes. She is responsible for supplier engagement for the Netcare Barcoding project.

**About the organisation**



**NETCARE**  
You're in safe hands

In South Africa, **Netcare** operates the largest private acute care hospital, primary healthcare, emergency medical services, mental health and renal care networks. In addition to the operations mentioned above, the Group offers physical rehabilitation, sub-acute care, day surgery, occupational health, and employee wellness services. Netcare is a leading private trainer of emergency medical personnel and nurses in the country.

[www.netcare.co.za](http://www.netcare.co.za)