

Simplifying Surgical Workflows leveraging GS1 standards



ABSTRACT

The adoption of universally recognised barcodes following GS1 standards has allowed platforms like Surgical Order (SOx) to prosper and, overall, improve the management of Surgical Workflows.

By freeing nursing staff from Admin tasks, they are able to focus more on patient care, benefiting the entire Healthcare system.

A case study from East Sydney Private Hospital, shows immediate & positive results by using SOx with a **total saving of 16 hours a week.**





The adoption of universally recognised barcodes following GS1 128, EAN 13, and GS1 DataMatrix standards is strictly linked to the performance of the Surgical Order (SOx) platform.

SOx is a cloud-based platform that simplifies and synchronises surgical workflows by connecting surgeons, hospitals, and suppliers to create and co-ordinate theatre lists, manage inventory, billing, and implant registries.

Thanks to this inter-connectivity, SOx reduces manual transcription and double handling of information by eliminating antiquated methods of communication (such as email, fax, phone) and replacing them with a secure and integrated communication platform.

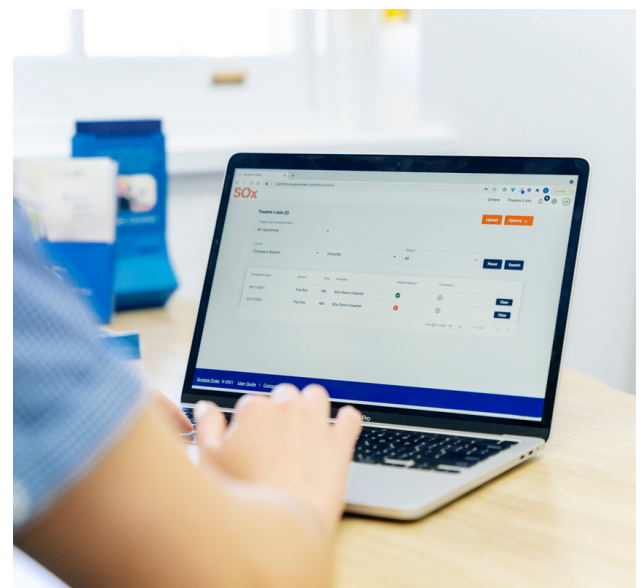
“There is no need to create new barcodes or key information in manually as is required with many traditional types of inventory management systems.”

When a practice needs to book a patient for surgery, they can simply upload the patient information in the software and, with a press of a button, notify both the hospital and the supplier of the upcoming procedure.

The supplier will ship the implants needed for surgery directly to the hospital and this is where power of using standardised barcodes comes into play. Data such as Serial Number, Batch Number, and Expiry Date can all be captured from the scan of a barcode.

SOx scanning algorithms and world-first database of available items allows native scanning of product packaging (barcodes; QR codes; GS1 DataMatrix; RFID and more):

Harnessing the power of GS1 standardised coding



There is no need to create new barcodes or manually key information in as required with many other traditional types of inventory management systems. SOx is able to extract and record information about the product such as serial numbers or batch numbers.

The hospital staff will scan the incoming stock, and this will automatically update its status in the software as available at the Hospital. They will then scan it again when preparing for the procedure and once more after it's been used. This will trigger a notification to the Billing Department, which will be able to easily invoice clients and reconcile bills from suppliers.



99%

Manual Task Automated

A previous 5 min task now digitised with the removal of sticker sheets.



75%

List Preparation

Time saving on list prep.
Reduction from 60 min to 15 mins per list.



87.5%

Billings

Previously took 2 hour per list. Now takes 10-20 minutes per list.



A Case Study:

East Sydney Private Hospital

The SOx team spent time with East Sydney Private Hospital nursing & finance teams to analyse the workflow & understand the hospital pain points.

SOx significantly improved their workflow through material & transcription reduction to an automated workflow, with the removal of the prosthesis charge sheet and supplier sticker sheets. Every product scanned before and after surgery are recorded in the Sox platform and can be accessed any time.

“And importantly, nursing staff are able to spend their time on what is most important - the patient.”

Billings have also noticeably improved, as they are now instant and staff no longer have to use and cross reference five separate forms: they simply copy the information from SOx and allocate it to the correct PO. This enables quicker supplier and patient invoicing and saves multiple hours per list for staff.

With SOx, East Sydney Private experiences a streamlined, transparent workflow that optimises their workforces time, with a total saving of **16 hours a week** in administration.

And importantly, nursing staff are able to spend their time on what is most important - the patient.

ABOUT THE AUTHOR

Dr. Paul Athanasiov is an Ophthalmologist who founded Eye Surgeons SA in 2014 and went on to expand to 6 sites across South Australia. In his spare time, he designed and built electronic medical records programs and other software systems to improve efficiency.

He then designed, with a team of developers in Adelaide and with input from hundreds of nurses, surgeons and suppliers from around the country, a new cloud-based platform called SOx which has now gone on to become the future of surgical workflow in Australia.