Scan4Safety enables product-to-patient tracking

Safeguarding patients through improved traceability

Overview
Salisbury NHS Foundation Trust is one of six Trusts in England to be selected as a Scan4Safety Demonstrator Site. Scan4Safety is a pioneering programme led by the Department of Health that is improving patient safety, increasing clinical productivity and driving operational efficiency in the NHS. Scan4Safety is taking learnings from other sectors, such as retail, to improve traceability and efficiency in the NHS through the use of international barcoding standards (GS1 standards) and common ways of doing business (PEPPOL).

Through Scan4Safety, Salisbury NHS Foundation Trust has introduced point-of-use scanning in orthopaedic theatres and cardiology, enabling 93% of the Trust’s implantable devices to be accurately tracked to a patient.

Challenge
Salisbury NHS Foundation Trust faced the problem of managing product recalls quickly and efficiently to safeguard our patients from avoidable harm. Although the Trust had product recall processes in place, these were manual and extremely time-consuming. There was no process or single system in place for identifying or capturing implants used with a patient in a consistent or repeatable way across the Trust. Whilst hard to quantify the exact amount of time spent on a product recall, anecdotal feedback suggested product recalls could take ‘many hours’ of trawling through patient records and often involved highly skilled and senior members of clinical staff.

Aims
- To confidently and quickly track all high priority products (implantable devices) to a patient, clearly identifying expired or recalled products. This will be achieved through the implementation of GS1 barcoding standards and electronic capture of patients and products in theatres.
- To improve management of the Trust’s inventory and provide patient level costing through point-of-use scanning, enabling clinical practice to be enhanced and variation to be challenged.

Action Taken

Process
The Trust’s product recall process was reviewed and a new policy introduced. As part of this work, the Trust defined which implants must be tracked to a patient, aligning with the definition of implantable devices from the European Union’s Medical Devices Regulation. Analysis showed that 93% of such implants in use at the Trust were used in cardiology and theatres and these areas were therefore prioritised for rollout.
Technology
In October 2016, the Trust launched a new inventory management system, Genesis Automation, with point-of-use scanning in cardiology and followed this successful rollout by introducing the system across orthopaedic theatres in March 2017. The Trust’s theatre staff now scan the barcodes at point-of-use on all the inputs to patient care, including all consumables, implants, surgical trays, staff and patients. This is now live in four of the ten main theatres for orthopaedic and trauma cases.

People
Close working relations between clinical staff and procurement has been important to success. Launching in cardiology first, a very engaged clinical team helped to shape rollout across the Trust. After initial concern that scanning might add to an already highly pressurised and busy theatre environment, the benefits for patient safety and working practices quickly became apparent. Sixty members of staff have now been trained on point-of-use scanning.

Outcomes

Enhancing patient safety
1. Improved product recall processes – 93% of implants in the Trust are now tracked to a patient. So, in the event of a future product recall, the affected product can be automatically traced to the patient and appropriate action quickly taken. If an affected product is scanned at point-of-use, the handheld device alerts the surgical team that the product has now been recalled to prevent it being used on a patient.

2. Reducing risk of expired stock being used – If a product has expired and is scanned to a patient at point-of-use, the system will alert the surgical team that the product is past its expiry date. Previously, the Trust performed manual checks, this provides an extra level of security for patients and clinicians, removing the risk of human error and inadvertent usage of a product post expiry.

“Knowledge is power – not only does this provide us with a level of data and insight that can be used to better challenge clinical practice and variation, helping us to reduce inefficiencies and improve patient experience and outcomes – more importantly it ultimately helps to safeguard our patients from avoidable harm. In the event of a product recall, we can now easily and quickly track an affected product to the right patient.”
Tim Wells, Consultant Cardiologist, Salisbury NHS Foundation Trust

Improving efficiency
3. Releasing time to care – Prior to implementation, 32% of staff in orthopaedic theatres were spending more than one hour a shift on stock-related duties. Through point-of-use scanning, items are now automatically replenished, removing the previous manual stock ordering processes and releasing valuable clinical time to patient care. For example, in cardiology two hours a week of a band six radiographer’s time has now been released.

4. Reducing wastage – Like many other trusts, Salisbury NHS Foundation Trust didn’t have visibility of its stock wastage. This has now been identified as around 10-15% of total inventory value. Through point-of-use scanning, the Trust has improved visibility of its stock and can better track expiring stock and wastage, including identifying the reasons why items are being discarded. This enables the Trust to reduce waste in the future.

5. Reducing variation – Through the rich data that is now captured, practices can be challenged to increase standardisation and improve outcomes. Prior to launch, many consultants simply weren’t aware of the exact cost their product choices incurred the Trust. Now, when actually presented with clear and transparent data on all costs associated with their procedures and those of their peers, consultants are more open to consider rationalising product ranges. The Trust has already saved £121,069 through product range rationalisation in orthopaedic theatres.

The results to date have exceeded expectations and the Trust is now looking to roll this out across all areas of the hospital so 100% of all implantable devices can be tracked by early 2018. As the data continues to build, more benefits will become apparent to the Trust.

Further Information
Email scan4safety@salisbury.nhs.uk for further information from Salisbury NHS Foundation Trust, or visit the dedicated Scan4Safety website www.scan4safety.nhs.uk for all the latest developments from the six NHS Demonstrator Sites.