Product safety recall – the view from the theatre at Derby Teaching Hospitals NHS Foundation Trust

Kevin Downs, Director of Finance and Performance

Background

Derby Teaching Hospitals NHS Foundation Trust provides both acute hospital and community based health services, serving a population of over 600,000 people in and around Southern Derbyshire. The Trust runs two hospitals: the Royal Derby Hospital, which incorporates the Derbyshire Children’s Hospital, and is a busy acute teaching hospital. London Road is the Trust’s Community Hospital. Community services are based in health centres and GP practices across Southern Derbyshire providing care to patients in their own homes.

What is the problem?

As with many Trusts, they are faced with the problem of managing product safety recalls quickly and efficiently, and minimising risk to the patient. Traceability was a manual paper-based process, creating a drain on clinical time. Existing processes for tracking implants and other products to patients were inadequate – a problem clearly illustrated by the PIP implant problems.
But right from the start, the intention was to find a solution that would be capable of being implemented across all theatres, and even beyond, into wards and clinics. It was clear that barcodes would be essential to collect accurate, timely and comprehensive information needed to address the issues.

How was the problem solved?

The goal was to electronically capture all equipment usage and implant information within the theatre, so it would be easy to trace all instruments and implants to patients. To do this, the Trust ensured that all products, staff, patients, surgical instruments and medical equipment were identified and scanned in the theatre at the time of the surgical procedure - giving a complete and accurate record of the operation.

The Trust used a cloud-based inventory management system, a product catalogue and a barcode scanning solution. This system was then integrated into their financial system for automatically creating orders – via EDI or email – to their suppliers, based on the usage of products and supplies in the theatre.

How were GS1 standards used to help deliver the solution?

Kevin Downs, Director of Finance and Performance had previously worked in the retail industry - where GS1 standards are commonplace - and he understood how a standardised approach was needed, using GS1 identifiers and barcodes.

What are the benefits?

Within the theatre, staff were initially slow at scanning the products they were using, as they were unfamiliar with the process. But the project team worked closely with clinicians to develop procedures that met the needs of all parties – ensuring speed and accuracy. In cases of extreme pressure, products are bagged and scanned after the event.

When recalls now take place, the Trust can easily identify all products that are held within the Trust, preventing their use. They can identify all patients that may have been affected by the products, even patients with implants who are now at home – making it quicker and easier for the required actions to take place.

There have been a number of quantifiable results so far:

• Non-stock spend has reduced by at least 5-7% since go live
• Culture change in terms of waste, opening and using only what’s needed
• Auto-replenishment of stock means clinician time is diverted back to patient care
• Reductions in the stock holding
• Driving down delivery charges by grouping orders
• Released stock storage space which can be relocated for other uses
• Increased accuracy of OPCS codes due to data capture at point of care
• Coding of all un-coded patients equal to an extra £850k for the Trust
• Efficiency savings of £798,000 in 2015/16 and an estimated £1.18m in 2016/17

What’s next for Derby?

What started as a trial in theatres is now being rolled out to all wards and pharmacy, with RFID being introduced for patients, staff and assets.