Scan4Safety enabling better traceability of inventory and wastage

Reducing wastage and the risk of utilising expired products

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 increased visibility of its inventory and stock wastage, reducing wastage in orthopaedics by 96%.

Challenge
Salisbury NHS Foundation Trust faces the challenge of meeting increased demand for operational efficiencies in the supply chain. Prior to the upgrade of the inventory management system, there was no methodology to track stock wastage, which resulted in a highly manual expiry management process.

Aims
- To improve expiry management through implementing a new inventory management system. This will work to better manage expiry dates of products, and ensure appropriate stock rotation to utilise items closest to expiry.
- To optimise supply chain management through analysing data, to enable forecasting of product usage that will expire in the next 3, 6 and 12 months.
- To formalise policies and procedures regarding receipting products and exchanging items with less than 18 months before expiry.

Figure 1: Example expiry date labels
Action Taken

Process
Following the launch of the new inventory management system, Genesis Automation in Healthcare, the Materials Management team was trained to use the new system and to analyse data relating to operational efficiency. The Materials Management team can now view items close to expiry, review receipting and distribution of products as well as utilisation trends in order to minimise stock wastage. The Trust incorporated a new procedure for the receipting of products, ensuring items received are 24 months clear of their expiration date. For products that are less than 18 months from their expiry date, Materials Management must seek clinical guidance for the likelihood of utilisation within the next six months. If the probability of utilisation is low, then they would contact the suppliers for an exchange.

Data Analysis
Prior to going live with Genesis Automation in Healthcare for orthopaedics, a stock take of the department was undertaken in order to establish a baseline of inventory and expired products. The value of expired consigned and owned products from the initial stock take (baseline) to current has reduced. With the visibility of the stock on hand, Scan4Safety can utilise the data to increase supply chain transparency, forecasting the products and areas that are close to expiry. This resulted in better stock management and a 96% reduction of wastage in orthopaedics in six months.

Expiry Dashboard
Highlights products that will expire in 3, 6, and ≥12 months.
Displays the total inventory value as well as breaking down items by suppliers, along with the number of items to be expired and location.

Working with Genesis Automation in Healthcare, Salisbury Foundation Trust has created a dashboard for expiry management in order to monitor inventory strategically throughout the Trust, utilising data visualisation and metrics.
Sustainability
In order to drive an efficient expiry management process, it is necessary to adopt the rule of stock rotation, ensuring the products closest to expiry are used first. In April 2017, 14% of all implants had an expiry date less than 12 months. By November 2017, 6% of implants had an expiry date less than 12 months. This means that the stock closest to expiry was utilised first and stock with more than 12 months before expiry were receipted into the department. This process will improve as the team continue to flag all products with less than 18 months shelf life.

Outcomes
Enhancing operational efficiencies
1. Improved expiry management processes – New procedures and processes were implemented for receiving, rotating stock and proactively managing inventory. This enhances the management of supply chain flow coming in and out of the Trust.
2. Reducing wastage – With increased visibility of stock through the inventory management system, and setting procedures for receiving and rotating stock, the Trust can accurately forecast savings over £100,000 in orthopaedics by the end of the 2017/18 financial year.
3. Improving supplier relationships – Through increased understanding and management of expiring products, the Trust developed better relationships with its suppliers. For example, with consignment stock, suppliers would be notified months in advance of their products reaching expiry, in order to negotiate terms and conditions for an exchange. Together with suppliers, utilisation trends could be analysed to rationalise inventory and implement appropriate stock levels.

"Scan4Safety has given visibility to the historic wastage within the supply chain. We can now proactively manage our products, safeguarding patients while making the NHS more efficient. Wastage within the NHS is not only just being recognised as an area of value, we now have the evidence that others can use to ensure the whole supply chain becomes safer and more efficient.”
Rob Drag, Scan4Safety Programme Manager, Salisbury NHS Foundation Trust.

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.