Leeds Teaching Hospitals NHS Trust deploys Zebra Printers and Wristbands for a Patient ID to GS1 Standards as part of Scan4Safety

ABOUT LEEDS TEACHING HOSPITALS NHS TRUST (LTHT)

Leeds Teaching Hospitals NHS Trust is one of the largest Trusts in the UK and has one of the largest teaching hospitals in Europe. Its focus is to provide world class care to the population of Leeds and the surrounding area. It is also the provider of the largest number of regional and national specialist commissioned services in the UK. The Trust has approximately 2,000 inpatient beds and employs over 17,000 staff across 7 hospitals on 5 sites, treating around over 1.5 million patients a year with an annual budget of over £1.2 Billion. It had been using Zebra HC100 printers prior to the launch of the Scan4Safety initiative and uses over 250,000 wristbands every year.

ABOUT SCAN4SAFETY

The Scan4Safety programme was launched in 2016 and is currently being piloted at six demonstrator sites across the UK. These hospitals are using barcode technology previously used in industries such as aerospace and retail to trace NHS patients and their treatments, manage medical supplies and monitor the effectiveness of equipment. The world-leading scheme is not only enabling staff to quickly and easily track each patient through their hospital journey and to enhance the quality of care they can provide, it is also reducing unnecessary waste and allowing effective management of medical stocks. Early results from the six pilot projects show that Scan4Safety has the potential to save lives and save up to £1 billion for the NHS over seven years. Zebra Technologies has a varying range of solutions deployed in every one of these six demonstrator sites.

CHALLENGE

LTHT wanted to adopt barcode technology to use with their patient identification systems to improve patient safety and to comply with GS1 standards as part of the Scan4Safety programme

“The key to the success of Scan4Safety has been the interaction with our Suppliers and Technology providers. Working with the market we have been able to achieve change in a very limited timeline.”
Mark Songhurst, Information Analyst, LTHT
SOLUTION
Following these trials, Zebra Technologies again came out as the leading technology provider to enable positive patient ID. Indeed, although LTHT was the first NHS Trust to deploy the HC100 printers and Z-Band Ultrasoft Wristbands, numerous other Trusts, including Plymouth Hospitals NHS Trust, North Tees and Salisbury, have now either deployed the printers, or are trialling a combination of the printers and the Z-Band Ultrasoft Wristbands.

Dakota Healthcare assisted LTHT in creating bespoke programs to take feeds from its Patient Administration Systems (PAS—CSC Clinicom) and Accident and Emergency System (Symphony) to reformat patients’ wristbands to comply with GS1 standards, as it had done with numerous other NHS Trusts. This ensures the wristbands are printed with the patient’s NHS number, hospital number, name, date of birth and two barcodes—one linear and a 2D Data Matrix code—for GS1 compliance. This data matrix barcode is scanned at various points of care in the hospital—for example, on entering theatre or the radiology department. The information held in the barcode allows for accurate tracking of the patient throughout their care, to ensure patients always receive the right treatment and undergo the correct procedures.

Following the successful implementation of the new solution, Dakota has also collaborated with LTHT to enable neonatal and infant wristbands to be GS1 compliant. This has required work on the information that is held in the trust systems. Similarly LTHT has created links with its Accident and Emergency systems to enable wristbands to be printed for all patients entering the hospitals. The result of this work is that all patients entering LTHT requiring a wristband will be given a GS1 compliant wristband regardless of the route of their admission.

RESULTS
The HC100 printers are perfectly suited to the hospital environment; they are built with genuine healthcare plastics to support the Trusts’ infection control regime and the power supplies are certified to meet IEC 60601-1 standard. This reduces the risk of electric shock to patients and staff in this environment. User feedback has been very positive; the printers are easy to use with fast load cartridges that totally remove the complexity of media loading associated with traditional barcode printers, have a small footprint and are reliable and robust. The Z-Band Ultrasoft bands are one of the softest and most comfortable direct thermal wristbands on the market. Resistant to hand sanitisers, the text and barcodes are clearly printed and can be scanned for up to 14 days.

Zebra Technologies manufactures both barcode printers and the media that runs through the printers. This ensures both components are optimised for trouble free use and legibility of the printed media. The media conforms to the Clinical and Laboratory Standards Institute CLSI and International Society of Blood Transfusion ISBT. Zebra also manufactures Mobile Computers, Scanners and RFID technology designed for the Healthcare environment.

Following this successful deployment at LTHT, Zebra now has its technology present in every NHS Scan4Safety Demonstrator Site. LTHT is compliant with the Scan4Safety programme with regard to patient ID and the patient ID solution will be rolled out to further hospitals across the country.