

Shrewsbury & Telford Hospitals improve bed management with RFID tracking



With the help of an RFID Discovery system, Shrewsbury and Telford Hospital NHS Trust (SaTH) has improved the management of beds and other medical devices at its two 400-bed acute hospitals. SaTH is using active RFID to track the movements of a total of 1309 medical devices including 846 beds at the Royal Shrewsbury Hospital and the Princess Royal Hospital in Telford.

The challenge

Prior to the implementation of RFID, keeping track of beds and other medical devices at SaTH used to be a real challenge. With the trust affected by the same acute bed shortages seen across the NHS, locating beds quickly for maintenance and repair is of utmost importance to ensure the maximum number of beds is available at any one time.

In addition, staff in the two manned medical equipment libraries – one at each hospital – found it difficult to keep track of loan equipment. At times, devices would be found sitting in cupboards requiring time and effort for technicians to locate via sketchy manual records. Clinical staff were also spending a lot of time looking for devices which may have been borrowed by other wards.

The solution

RFID Discovery provides SaTH with the ability to locate assets quickly. Each bed or device is fitted with an active RFID tag broadcasting its unique ID at regular intervals. Signals are picked up by fixed readers as well as mobile handheld readers used by clinical technicians to audit the wards. Information is then sent back to a central database which shows the location where each asset was last 'seen' by the system.

Currently the main ward blocks in the two hospitals are covered by fixed readers, with all other areas being covered by daily mobile scanning. With data from the fixed readers plus the use of a total of four mobile readers – two per hospital – the team regularly captures the locations of 95% of all tagged equipment.

“ RFID Discovery enables our technicians to locate beds and other mobile devices quickly and so they can focus on their core tasks of servicing and repair. ”

Nigel Watkinson, Medical Engineering Manager

Benefits

Thanks to RFID Discovery SaTH technicians can locate beds and other mobile devices quickly, so they can focus on the primary tasks of servicing and repair. After some initial doubts, clinical staff really like the system as it helps to locate devices faster so more time is available to deliver patient care.

Utilisation levels of devices have improved, which has re-established the trust of clinical staff that equipment is available when needed. This reduced staff storing away devices for later use which often exacerbated the issues of device availability.

RFID brings advantages for patient safety, too: In case of an outbreak, the infection control team can now see where a particular bed or device has been, so it can be replaced before further spread occurs. Similarly, if any beds or devices are reported as faulty it's now much easier to identify and replace them to avoid any failure whilst they are in use. To ensure that beds are maintained according to schedule, the system flags up service dates, which helps avoid potentially dangerous oversights.

Thanks to the traceability provided by the system, the amount of damage to equipment has reduced noticeably, as users are aware that the medical engineering knows where equipment has been.

Future plans

Due to the success of the system, SaTH are extending the network of fixed readers to a total of 58 across the two hospitals which means that even more equipment movements will be detected automatically and in real-time.

Plans also include to make RFID tracking available to other departments, i. e. Estates, X-ray and even IT. This means that these departments will be able to tag their equipment and view location information on the central RFID software.

The Trust is currently looking at the requirement for GSI compliance and considering the use of RFID enabled asset labels for all medical devices, to allow for quick and accurate auditing.



Key Benefits

- Improved maintenance efficiency
- Time saved looking for devices
- Helps achieve and maintain compliance
- Increased patient safety
- Improved infection control

Why RFID Discovery?

RFID Discovery is the recognised brand name for radio frequency identification solutions from Paragon ID, a global leader in identification solutions. Used in a growing number of hospitals across the UK and beyond for over 14 years, RFID Discovery is the number one choice for active and passive RFID systems.

Paragon ID is largest manufacturer of passive RFID labels in Europe and accredited to ISO 9001.



“ The system enables us to have the right equipment available without delay, which is great for patient safety. ”

Michael Woffindale, Bed Technologist