

Assuring complete tracking and tracing

Background to the Project



Vernon-Carus built their Assure facility in response to the National Strategy for Modernising Decontamination Services and the services offered are compliant with the requirements of the Medical Devices Directive 2007. An important requirement for the 3,000m² facility was the ability to track and trace customer's surgical inventory throughout the whole production cycle and on customer premises.

The use of RFID tags offered Assure many benefits in tracking and tracing, but they

needed a solution that worked in an environment in which metal and water dominated. Traditionally this environment has been difficult to work in because of the reflection and absorption of radio waves by water and metal.

During a trial at Leeds General Infirmary, Vernon-Carus and Savant successfully established the feasibility of using metal-encapsulated tags in the sterilization process and determined the user requirements for RFID tag usage on trays and instruments in sterile services, theatres and stores.

Finding the Solution

Savant were asked to determine the most appropriate solution for Vernon-Carus' Super Centre. To do so, we started by mapping the processes and data requirements for the main processes in Assure and confirming them with senior management.

The agreed process and data definitions were compared with the functionality offered by a range of decontamination tracking and tracing systems on offer in the UK. Those systems were scored in terms of the requirements matched.

When it came to RFID it was clear that only one solution, namely **EuroSDS**, had already implemented the metal-encapsulated RFID

technology that Assure needed. Further, this technology was available in the form of metal tags for instruments and plastic tags for trays. This ensured that only one reader was required for both types of tag. This simplified staff training and reduced the implementation costs for the system.

"Savant's consultant quickly developed a thorough understanding of our requirements. Choosing EuroSDS gave us a perfect match to our requirements, the system was easily and quickly implemented into Assure, allowing us to demonstrate for our MDD audit how instruments were tracked throughout the decontamination life cycle."

Val O'Brien,
Vernon-Carus Group Technical and Regulatory Manager

Services Offered

- Requirements gathering and package selection
- Supplier selection and systems integration
- Implementation support and training
- Application updates and maintenance
- Data planning, cleansing and loading

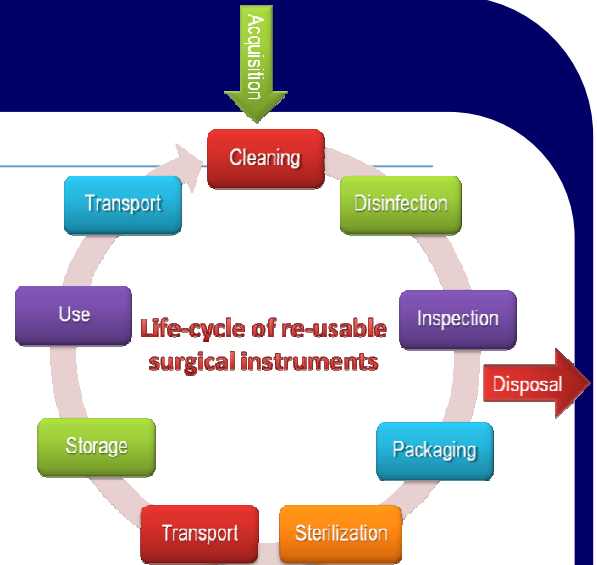
Benefits of RFID

- Can be read through tray wrap and contaminants
- Process data can be held on the tag
- Each RFID is globally uniquely identified
- Tag can hold full EAN codes
- Can be used on trays or instruments

Implementing the Solution

When it came to implementing the tracking and tracing system, we evolved the system from the much published life-cycle of re-usable surgical instruments (shown opposite). This life-cycle lays out the main stages in the decontamination and usage of surgical inventory and it became the blueprint for the layout of the physical IT system (shown below).

As the hardware was being installed, Savant began the process of training the future users of the system. We recognised that the level and range of IT involved was higher and broader than an average user would encounter. They would need to be familiar with bar code readers, RFID readers, touch screens etc. not the type of hardware many users would come across. To mitigate this

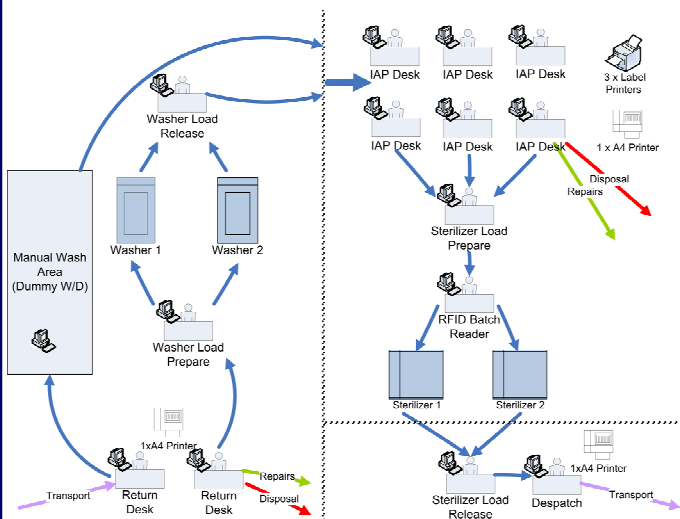


the users were given as much hands-on experience as possible, working with dummy data, the database being returned to a known state before each training session.

Integration testing was also carried out with the washers and the sterilizers leading finally to the whole solution being ready for the Accreditation Audit in April 2006.

Conclusion

Careful review of the RFID technology available, combined with meticulous requirements gathering and considered package selection means that Assure's Tracking and Tracing system matches the needs of a Decontamination Super Centre. Early end-user involvement and thorough training ensured the go-live was straightforward and the solution was compliant to the MDD. Savant's implementation was on-time and to budget, and EuroSDS now supports Assure's key business processes.



Savant is an independent, well-established IT company specialising in developing software for the clinical, medical and healthcare sector. Since 1982, Savant has been developing software, relational databases and information management systems for a range of UK clients. Our projects include PULSE, the National Blood Service's life-critical control system used to ensure the safety and availability of the nation's blood supplies and Hematos, the National IT System for NBS Diagnostic Services, designed for use by blood transfusion centres and hospital testing laboratories

Since 2001 Savant has been an employee owned company. Being employee owned and located on the edge of the Lake District results in very low staff turnover. This gives our customers an excellent service as knowledge and experience remain with Savant for the customer to call on. Savant have an enviable customer support reputation and are proud of our long-term relationships with customers, some of whom have been with us for 20 years.

Savant

For more details on EuroSDS and RFID please contact:

Glyn Jones
Business Development Manager
Savant Enterprises Limited
2 New Street
Carnforth
Lancashire

WWW: www.savant.co.uk
Phone: 01524 737300
E-mail: eurosd@savant.co.uk