OVERVIEW

Every day, hospitals deal with massive amounts of tools, equipment and supplies, which have to be properly inventoried, allocated, cleaned, maintained, serviced, used, returned and discarded. This is a major challenge, especially if there are vendors involved that perform part of the services beyond supplying simple consumables.

SOLUTION

RFID4U has developed the Surgical Kit Tracking System (RF-SAN) that uses RFID tags attached to the kits and software platform based on TAGMATIKS.

SOFTWARE SOLUTION

The RFID4U RF-SAN Software Platform enables:

- Automatic registration of shipping and receiving of kits
- Item assignment to kits
- Kit auditing (several stages) and resupply
- Inventory control
- Kit location
- Status update (received, autoclaved, audited, refilled, backordered, recalled, expired, etc.)
- Communication with the ERP system

Same system can be duplicated in the hospitals to track surgery kits (and possibly other items) throughout their whole life-cycle.

CUSTOMER PROBLEM

Our client is a vendor and service supplier to several hospitals in the country. Among other services, the company provides the surgery departments with one-time and reusable surgical kits that include tools and parts for surgeries (for instance in orthopedics, the kits include implants, special screws, mallets, prongs, forceps, etc.). These surgical kits are received at the hospital, autoclaved, opened, certain parts used and the kits are then returned back to our client. Upon receiving, the company has to autoclave and inventory the returned kits, audit what's missing, resupply them, and store them or send them again to back to the client hospital.
HARDWARE SOLUTION

RFID tags are attached to each kit. There are two types of tags used. For reusable non-sterile kits, rugged tags that withstand the autoclave are affixed to the kits. For single use sterile kits, printed labels embedded with an RFID tag are preferred.

Fixed RFID readers are deployed as portals at dock doors, conveyors and pick areas. Handheld RFID readers with barcode scanners are used to associate the tags with the products that are barcoded.

BENEFITS

Implementation of the RFID4U Surgery Kit Tracking System provides many advantages:

- Complete status information of each kit.
- Increased efficiency and accuracy through the multiple-stage auditing process.
- Significantly reducing human effort and corresponding errors.
- Scanning multiple tags concurrently and automatically.
- A complete visibility of the surgical kits within the supply chain. Based on the tracking information, it is easy to manage their inventory, to see which kits are in inventory and which are out at the customer.
- A complete kit history, including the time they were shipped or returned. This prevents unnecessary manual searches and increases efficiency of kit usage.
- The system also makes it possible to quickly verify that correct kits are shipped to the right customer therefore increasing shipment accuracy and customer satisfaction.