

Hospital inventory problem relieved by application of RFID item monitoring ... *Celerasys Corporation RFID case study #37*

Challenge

Our hospital holds inventory items in small stock locations near where medical procedures are performed. Some inventory items are very expensive; for example spinal implants range from \$1,800 to \$7,000 an item and must be stocked in a wide variety of types and sizes. The clinical staff's main focus is clinical performance so they do not always fully account for the supplies used. When material specialists perform periodic inventory counts, supply items are often missing and the cost is absorbed by the hospital.

Solution

The solution was to place a passive RFID tag on each of the high value inventory items. The items were automatically monitored on the shelf multiple times a minute by the HM2© automated system. When an item was added to or removed from the shelf, the time was recorded and visible via the HM2© tracking portal and via the HM2© auto-alerts to materials management so reorder/replenishment could occur. When the material specialist performs the cycle count, any discrepancies can be traced to the procedures that were being performed at the time via integration with the OR scheduling system.

Result

The RFID system enabled inventory items to be tracked to the right procedure which means the patient charges were accurate and inventory levels were able to be monitored real-time. This kept unnecessary costs from being absorbed by the hospital's general operating budget. Analyzing the data reveals the accurate cost of performing a procedure and where supplies and equipment were used based on case/room schedules.

Additionally, the solution automatically shows stock levels while raising alerts when inventory levels drop to reorder for critical to care items. This ensures that items are always available to the clinical staff while keeping the amount of money tied up in inventory minimal.

Food for thought

It is not uncommon for a minimum of 5% of the value of inventory (assets) in a typical hospital is never realized due to waste, obsolescence, handling costs, and not being accounted for with respect to patient charges. This money can add up quickly. With the proper inventory control tools in place, a hospital can save money while optimizing their own efficiency where the end result is improved patient care and documentation.