

A Healthy ROI

Our special report on RFID in healthcare makes it clear that hospitals can achieve a return on investment in the technology.

By Mark Roberti

Oct. 24, 2004—There has been a great deal of discussion about what exactly the business case is for deploying RFID in a lot of industries. Given tag prices today—25 cents and up for a simple license plate UHF tag—it's a challenge to find a return on investment (ROI) in many industries. Healthcare is not one of them.

Many of the assets used in the health-care industry are expensive. It's obvious that if hospitals can improve the utilization of a \$3,000 defibrillator or an ECG monitor, they can achieve a healthy return on investment. But in our three-part series on [RFID in Healthcare](#), authors Brad Sokol and Sapan Shah reveal that the real ROI comes with tracking objects in a hospital that cost as little as \$95.

"The majority of an operation's inefficiencies are found at a micro level (one wheel chair: \$500)," the authors write. "Tagging items at this value level will help improve the actual individual caregiver's efficiency, regulatory compliance, organizational confidence and patient safety. The current projects don't address the overall outcome due to their limited scope and concentration on only high-valued assets."

This might seem counterintuitive at first, but Sokol and Shah back it up with numbers based on the real costs hospitals have today and the real prices for RFID tags and readers, installation and data integration. The authors recommend that hospitals create a deployment plan by looking at their departments and breaking that down even further by procedures within each department.

"By dividing each department into a matrix of horizontal boxes representing medical devices and vertical rows representing procedures, one can track the reusability (repetitive use) of one item/device through the organization's multiple departments," the authors write. "This visual matrix shows how to maximize asset and operational planning of each tracked item, increasing the resulting ROI through gained asset and operational efficiencies, thus yielding the items true utility (value)."

The benefits to deploying RFID according to the authors' "micro-modular" approach are broken down across a number of areas, including labor savings, inventory reduction, regulatory compliance, threat detection (the costs incurred due to hazards from various surgical instruments), even taxes (many states offer tax credits to hospitals that upgrade their information systems).

Using RFID in healthcare is different from using it in, say, the consumer packaged goods industry. The healthcare industry is highly regulated and patient safety is a critical issue (fortunately, no one dies if a pallet of Cheerios is sent to the wrong distribution center). But the micro-modular approach proposed by Sokol and Shah could well be used in other industries, such as automobile and airplane manufacturing. And even if you're not in these industries, end users who read the report should, at the very least, come away with the knowledge that the ROI from RFID is not always found in the obvious places or by taking the obvious approach.

Mark Roberti is the founder and editor of RFID Journal. If you would like to comment on this article, click on the link below.

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