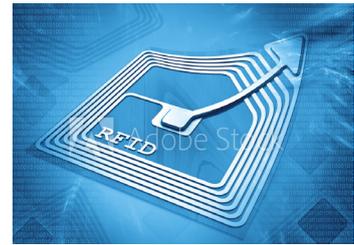# Data-based Evidence Drives Efficient Cath Lab Inventory Management

A team looking to increase efficiency in inventory management among VA medical centers has advice for healthcare facilities. A closer look at RFID and enterprise-wide analytics is central to more effective and automated management of inventory.

—**Mary C. Tierney, MS**

The team studied eight Department of Veterans Affairs (VA) medical centers and 35 VA community health centers in New England. The report, *Ten Actions to Improve Inventory Management in Government: Lessons from VA Hospitals*, was authored by Northeastern University professors Gilbert N. Nyaga, an associate professor of supply chain management, Gary J. Young, a professor of strategic management and healthcare systems, and George (Russ) Moran, executive professor. They found that the inventory processes are fragmented, duplicative and often lacking in the training and oversight to track inventory effectively.

"It's time for healthcare to get on top of inventory management—in both the private and public sectors," Nyaga says. "Healthcare needs accurate, reliable data to anticipate and plan demand."

The report lays out 10 recommendations to streamline inventory management, including the application of predictive analytics to ensure adequate supply. This can provide greater visibility into usage and significantly reduce inventory across a hospital or system. Yet, tracking data and tracking data in real-time are still two different things across healthcare.

The study found few VA facilities currently use the radio-frequency identification (RFID) technology the private sector is adopting. "RFID has the potential to greatly improve inventory performance," Nyaga says. Other benefits include the potential for cost savings, reduced errors through elimination of manual processes, support of patient safety initiatives, optimized inventory stocking levels, and reduced waste.

Currently, the quality of healthcare data is poor and often wrong, Nyaga points out. "Sometimes items cannot be located, while other times hospitals are overstocked. The same with variability, since understanding demand is difficult. RFID brings a way to measure, look at what needs to be moved, what is expiring."

Full visibility and control of inventory in healthcare facilities is priority one, echoes John Roy, vice president and general manager of Cardinal Health Inventory Management Solutions. Some hospitals and health systems have adopted automated inventory management, but the market is largely underserved, even in interventional cardiology departments where stents, valves, pumps and devices can cost upwards of $30,000 apiece.

Inventory management systems ensure facilities can get "the right product, at the right place, at the right time, without excess, and at the lowest cost possible," Roy says. These systems bring data-based evidence to control costs, eliminate non-efficient stocking, reduce variation, and improve efficiency.

"Right now, there's nothing better to capture device data," Roy notes. "RFID gives providers the most cost-effective and workflow efficient technique for managing high-value medical devices, capturing data along the clinical workflow, and feeding it into a central system."

"RFID and predictive data can help people make decisions they are otherwise not necessarily equipped to make," Roy offers. The role of clinicians is taking care of patients, not managing inventory. "Every minute that clinical resources spend managing supplies is time robbed from patient care."

As healthcare moves into the era of cost bundling, providers need to be especially focused on ensuring delivery of optimum patient care the first time, at the lowest cost per case. Roy says, "Being able to capture data at multiple levels—point of use, patient, physician, and product category—and comparing that to other cases across an IDN shows where different choices may enable a high level of care at a lower cost."

"Cost is the bull's eye," Nyaga says. "We can reduce cost and waste. We need to seriously push the conversation of more automation in inventory management in healthcare." **CVB**