RTLS: A No Brainer to Enhance Top-Line Revenue and Drive Clinical and Financial Improvements

By Deborah Tuke Bahlman RN

Real time location systems (RTLS) are underutilized in the health care domain. I consider myself and my organization fortunate to have access to this technology and can't imagine what life would be like without it.

Just a little over a decade ago, our periop staff, surgeons and anesthesia teams spent considerable time using the phone to determine the patient's physical location and stage of care. Communicating this information by phone is inefficient and a waste of precious patient care time, resulting in numerous phone calls, potential delays to surgery and an environment not conducive to healing and quiet.

At our two large flagship facilities in Oregon, we have more than 75 operating rooms. We have been able to accommodate growth by eliminating inefficiencies -- like multiple phone calls -- and can now find equipment quickly at the click of a mouse.

To accomplish this, we installed a real-time tracking system, ORTracker™, from Awarepoint®. We spent 18 months analyzing workflow and working with the vendor to design the application. We piloted the system in 2002, starting with asset tracking and then expanded it to track patients. This gave us the ability to locate people and equipment in real time, and improve workflow, communication, patient throughput, and care delivery efficiency. The ability to instantly locate needed equipment also had a positive impact on the bottom line by reducing unnecessary purchases and rentals.

The benefits have been impressive. There are three key ways a hospital can optimize clinical performance, workflow, revenue, operations, and patient safety with RTLS:

- **Tracking**: Being able to quickly identify and track any tagged equipment, staff or patients anywhere within a facility equates to on-time procedures and efficient use of nurses' valuable time. It helps staff easily locate assets, maintain an accurate inventory, and adhere to regulatory requirements. RNs typically spend about one hour per shift looking for missing equipment, additional staff or the actual patient! This unnecessary time contributes to delays in 30 percent of all scheduled surgeries.
- **Rentals**: The average U.S. hospital owns or rents at least twice as many mobile medical devices (pumps, vents, wheelchairs, etc.) than it actually needs. RTLS provides visibility into inventory that enables facilities to better match supply with occupancy and acuity needs, eliminating excess inventory, which can result in significant cost savings.
- **Preventive maintenance**. RTLS improves the timeliness of preventive maintenance by providing data that helps hospitals identify process inefficiencies in equipment management including

cleaning and sterilization. Up to 25 percent of mobile assets are not properly cleaned between patients, resulting in hospital-acquired infections that can adversely affect a hospital's bottom line now that insurers have stopped coverage for those conditions.

- It is astounding that only 10 percent of hospitals have implemented RTLS, which can quickly boost top-line revenue. With health systems wrestling with declining reimbursement rates and increased regulatory mandates and quality improvement initiatives, the pressure to improve operational efficiency and care has never been greater. For Providence St. Vincent Medical Center and Providence Portland Medical Center, RTLS has been a true asset. We plan to further maximize our RTLS investment by integrating it with our new EMR. The integration will streamline access to lab results, medication lists, and other critical data, positioning us to meet the challenges of the rapidly changing health system.

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