

Anne Arundel Medical Center

Annapolis, Maryland USA

they are looking at real-time results of where that asset is located at the moment." This requires accuracy, the cornerstone of the Versus solution.

Versus was very willing to assist AAMC and keen to demonstrate that asset tracking was an attainable goal. Versus was also willing to prove the system using AAMC's existing sensory and wireless networks. In fact, Versus added only radio frequency (RF) sensors to increase communication and reporting capabilities and asset tags for the equipment.

The pilot was highly successful in that it:

1. Demonstrated that the existing Versus sensory and nurse call networks could be leveraged for additional functionality.
2. Proved accurate and easy to use.
3. Provided the data and time savings AAMC had been desiring to capture all along.
4. Underscored the importance of matching the technology to the desired outcome. *Wi-Fi is for communicating data—even Versus uses it for that. Locating and process improvement require accuracy, which is obtained through the Infrared component.*
5. Was backed by the technical expertise and outstanding professional services of Versus' experienced team.

Works Like a Charm!

"We tried several location systems on our wireless network, but we couldn't get them to work correctly. We'd seen several systems fail, so I was very leery going into our asset tracking pilot with Versus, but the system worked like a charm. We tried to get the system to fail, but could not."

Richard Constantineau, Manager
Biomedical Engineering

A decision was made to take the Versus Asset Management solution system-wide. "I was really impressed with Versus," Constantineau says. "With most vendors, you expect that when you say 'Go' they're going to want to start installing immediately and move on to the next sale. Versus wasn't like that. Understanding our desired outcomes and immediate and long-term goals was very important to Versus' implementation process." The system was installed and activated in October 2008. AAMC is currently tracking 1,750 assets in and between the AAMC Acute Care, Clatanoff and Edwards pavilions.

Versus also proved to be flexible and able to adapt to AAMC's revised goals. Constantineau explains, "The tracking initiative began with mobile medical equipment such as hospital beds, but we discovered within a week of the asset tracking software going live that nurses and escorts really need to find specialty items that biomed would never consider, such as recliners, walkers, and bariatric commodes."

Intended for Nurses—But Everyone Loves It!

"Asset tracking with Versus is unique at AAMC in that, first and foremost, we're using this as a solution for our nursing staff, rather than the typical maintenance tool," says Constantineau. "Our immediate goal is to increase efficiencies for nursing staff, and to help them find the items they need quickly. Before Versus, it could take up to an hour or two per day, per nurse or escort to find equipment shifted across the expansive medical center. Now, it takes 5 minutes."

Additional positive outcomes include:

- **Increased equipment visibility and sharing between 3 separate pavilions.**
- **No longer charged for lost equipment (e.g. \$10K for wound vac).**
- **Nurses are happier: more time with patients and fewer frustrations.**
- **Patient satisfaction improved with quicker equipment request turnarounds.**

Constantineau explains that AAMC has never had an issue with Versus, and that everyone, especially the nursing staff, love it. Nurse Deirdre Robinson agrees, noting "It could take a whole day to find a single piece of equipment that lots of people are using. Things like mobile lab printers—they're critical, but they're expensive and we don't have that many, so we have to share them." Even third-party service technicians, like those who arrive from Kinetic Concepts, Inc. (KCI) to service and pick up equipment love the Versus solution with one tech commenting, "I wish everyone we work with would get one of these systems!"

Making a Difference: ROI

With the asset tracking system fully supporting nursing needs, AAMC decided to extend tracking to complement specific Biomedical Engineering goals. This included:

- **Establishing equipment baselines for clinical areas,**
- **Conducting an equipment flow study, and**
- **Creating a model for equipment storage.**

For example, oft repeated requests for additional ultrasounds in the Clatanoff Pavilion spurred a location and utilization study. The study indicated existing ultrasound units were not being effectively utilized. AAMC decided to relocate all ultrasounds to the Medical Center to maximize usage of individual units. **Projected capital savings equal \$250,000** (just in non-fulfillment of this one-time purchasing request).

The Future at AAMC

AAMC plans to conduct a Patient Tracking Pilot with automatic and passive data collection to monitor patient progression. This pilot will include real-time bed management and automated reporting for CMS. The next step will be to add staff locating to automate processes and enhance communication among caregivers. Finally, AAMC plans to integrate the Versus solution to a new nurse call system to automate nurse registry/call cancellation and direct patient calls according to acuity (with escalation timers).