Maine Medical Center Cures Wireless Security and Performance Issues

Maine Medical helps ensure the safety of its patients and the privacy of their data with AirTight Networks’ wireless security solution

Maine Medical Center (MMC) rated the fourth safest hospital in the U.S., serves as a community hospital for the people of Portland, Maine, and as the premier tertiary care center for northern New England. It has 606 licensed beds and provides comprehensive inpatient services in all medical specialties. A key to its safety record is MMC’s focus on what healthcare professionals call the five rights of medication administration: The right patient receives the right dose of the right drug at the right time via the right route.

To help deliver medication safely and efficiently, the Medical Center had deployed barcode point-of-care (BPoC) technology from VeriScan and a wireless LAN from Cisco for connectivity. Over a period of years, wireless applications at the facility grew to include over 500 BPoC units, 100 handheld scanners, 500 IV pumps, 150 mobile carts with computers, hundreds of glucose meters, and numerous wireless printers.

By early 2008, those responsible for maintaining the WLAN at MMC realized that the existing system was no longer scalable for the continually increasing demand or future needs. Looking ahead, major expansion of the facility and new wireless applications would drive the need to significantly expand the existing WLAN system.

“Our wireless infrastructure would become increasingly important as we rolled out more and more critical applications, such as wireless telephony, to more areas of the facility. It had to be reliable and scalable and it had to include a robust security solution since a breach or failure could impact performance or, more importantly the safety of our patients and the privacy of their data,” says Paul Labbe, Director of Clinical Engineering.

Searching for a secure wireless solution

MMC began an exhaustive search for a security solution that was compatible with the current WLAN system. “We had a good relationship with Cisco and wanted to retain their infrastructure, but we knew that we had to analyze where the gaps were in our coverage and performance and implement a full wireless intrusion prevention system (WIPS) for security. We felt that analysis needed to be done by a trusted third party and that security was not the core competence of Cisco,” says Labbe.
In the end, the decision was made to deploy the SpectraGuard Enterprise WIPS from AirTight Networks. “We tested other WIPS solutions side by side, but they simply didn’t have the breadth and depth of features, the scalability, or the accuracy to identify threats on our network that AirTight had,” says Labbe. “In addition, AirTight was the only vendor at the time that had an 802.11n sensor platform ready to go. Although we were not rolling out 802.11n immediately, we needed to be ready for it.”

**AirTight helps MMC map out a plan**

Optimizing, upgrading, expanding, and securing MMC’s existing WLAN would be a major commitment in both time and money. “We knew we had to get it right the first time. We couldn’t come back for more money,” says Labbe. “We needed a site survey, but we didn’t have the internal expertise or bandwidth to perform an audit.”

During its research and evaluation, MMC learned that AirTight could analyze the current system and create a plan for remediation where necessary and expansion for the future. AirTight Professional Services audited the configuration of APs and created a coverage and placement map for the new APs and WIPS sensors. Ten buildings, 68 floors—nearly 2 million square feet of space—were surveyed.

Among the findings, APs were woefully under installed, causing spotty coverage that impacted reliability, potentially affecting patient safety. In addition, the audit discovered misconfigured APs that could, at best, impact performance and, at worst, expose security holes in the network. And the survey identified rogue APs brought in by staff or vendors. Finally, the existing wireless intrusion detection system (WIDS) system was generating false alarms, both false positives and worse, false negatives, that were time consuming to track down.

With a comprehensive plan from AirTight in hand, MMC deployed 662 new APs and 223 SpectraGuard sensors between October 2008 and January 2009. “AirTight integrated nicely with our Cisco WLAN, giving us a more robust wireless intrusion prevention system,” says Labbe, director of clinical engineering at MMC.

**Reaping the benefits of a secure wireless solution**

MMC now has complete confidence it can roll out new applications, such as RFID, that are reliable and safe, avoiding dangerous-and potentially costly-drug interactions or lab events. And the advanced management capabilities of SpectraGuard enable the healthcare provider to better comply with HIPAA regulations.

“AirTight delivered on everything they said they would—technology, people, process, value, installation, follow-up, and training,” says Paul Labbe, Director of Clinical Engineering.
About AirTight Networks

AirTight Networks is the global leader in wireless security and compliance products and services, providing customers best-of-breed technology to automatically detect, classify, locate and block all current and emerging wireless threats. AirTight offers industry’s leading wireless intrusion prevention system (WIPS) and the world’s only SaaS based wireless security, compliance and Wi-Fi access branded as AirTight Cloud Services™. AirTight’s award-winning solutions are used by customers globally in the financial, government, retail and hospitality, manufacturing, transportation, education, health care, telecom, and technology industries. AirTight owns the seminal patents for wireless intrusion prevention technology with 18 U.S. patents and three international patents granted (Australia, Japan and UK), and more than 20 additional patents pending. AirTight Networks is a privately held company based in Mountain View, CA. For more information please visit: www.airtightnetworks.com.

About SpectraGuard Enterprise

SpectraGuard Enterprise is a complete, end-to-end wireless intrusion prevention solution (WIPS) that is used today by some of the world’s largest enterprise firms. SpectraGuard Enterprise is suitable for customers who want to purchase the wireless security equipment and host it at their site.

A proactive approach to wireless security

SpectraGuard Enterprise is the industry’s leading WIPS. It proactively blocks wireless threats by automatically scanning, detecting and classifying all unauthorized access and rogue traffic to your network with the industry’s most robust and accurate wireless security solution.

SpectraGuard Enterprise provides performance management and knowledge-based troubleshooting features that allow analysis and resolution of remote wireless network issues from a central location. Save time and money by avoiding the need to send network administrators to locations to fix wireless network issues.