

Shands HealthCare brings new life to its communications with campus-wide wireless networks.

When one of the Southeast's top healthcare institutions wanted to make sure their medical staff and nurses could communicate safely, quickly and reliably, they turned to Sprint Converged Network Solutions.

Challenge

Florida-based Shands HealthCare is comprised of nine not-for-profit teaching hospitals, a network of more than 80 primary and specialty practices, and a medical staff of more than 1,500 University of Florida faculty and community physicians and 12,000 employees — 2,800 of whom are nurses. With the well-being of over a million patients on the line each year, Shands needed to increase the speed and effectiveness of communications for its personnel.

The Shands Hospital at the University of Florida saw several ways campus-wide cellular networks could answer their needs. For example, Shands was interested in the possibility of replacing paging with text messaging. Previously, Shands used pagers and wall phones to communicate, resulting in "paging tag", an inefficient process in which a nurse located a phone, dialed a physician's pager number, and then waited minutes for a response. Sometimes this process would have to be repeated. With text messaging, this latency period could be greatly reduced; calls and responses could be made instantly from anywhere. And since nearly all personnel already carried cell phones, the management at Shands predicted it would be easier to get everyone comfortable with a cellular solution.

There were several concerns, however. Shands at UF felt it might be too difficult to build out a comprehensive and secure campus-wide wireless network. There was also the potential for electromagnetic interference (EMI) from mobile devices that could disrupt sensitive medical equipment. Finally, there was the worry that network outages and upgrades would interfere with critical communications and user productivity.

Solution

An institution known for innovation, Shands HealthCare found the perfect partner in Sprint. From the beginning, a dedicated team of Custom Network Solutions (CNS) professionals worked to design and install complete in-building solutions at multiple Shands locations throughout Florida, making the complex task of implementing wireless networks that cover a total of 2.5 million square feet a reality. CNS was able to deploy the in-building solutions at no cost under an agreement that Shands would purchase a specified number of Sprint Nextel handsets over the coming years.



A private, not-for-profit healthcare system, Shands HealthCare, began in 1958 with a single academic medical center affiliated with the University of Florida.

Shands at UF is often first in the state of Florida, region, or nation to pioneer complicated medical procedures. Their transplantation center is nationally ranked as one of the nation's busiest and most successful. Shands was also ranked among the nation's top hospitals by U.S. News and World Report.

Annually, Shands HealthCare and HomeCare average:

- > 1,114,658 hospital outpatient visits
- > 216,215 emergency room visits
- > 88,519 patients served through admissions

For more information, visit:
www.shands.org.

To mitigate the negative effects of EMI, the Sprint CNS team partnered with Craig Bakuzonis, UF Director of Clinical Engineering, Shands. "Sprint was the only carrier who was willing to work with us...to engineer a solution that allows their handsets to work so efficiently that there is no disruption of our monitoring machines," said Bakuzonis.

To ensure continuity, Sprint technical experts provide around-the-clock monitoring and management, including network monitoring and outage notification, to reduce the impact of upgrades or maintenance.

Bottom Line

As the medical center came alive with wireless coverage, physicians, nurses and other personnel began to use their Nextel phones from Sprint to communicate—with text messaging and group call capabilities, they were able to more rapidly respond to emergency situations. The new service was so complete that Sprint phones even worked inside the elevators. Adoption, as predicted, spread rapidly as the benefits became apparent.

Because of their critical need for rapid response, the Anesthesiology department was the first to adopt the Sprint devices—shortly afterwards, users in the Anesthesiology department expressed excitement about the new service saying there was no way they could do their job as effectively without them. For safety reasons, an anesthesiologist needs to be present in the operating room before surgeons can proceed with a case—the Sprint solution lets them respond more quickly, allowing procedures to begin sooner and resulting in greater patient safety. The CNS solution has improved not only the overall patient experience, but also the workers' quality of life. The end result is that caregivers had faster access to colleagues, allowing them to provide the innovative, high-level of care for which Shands is known.

With the success of the program, Shands HealthCare continues to expand CNS solutions into more of their hospitals and clinics. Shands was happy with their Nextel service and decided to include the Sprint network. Additionally, Shands is also in the process of piloting a program to access patient data using handheld devices and the Sprint Power VisionSM high-speed wireless data network.

"The Sprint Custom Network Solutions team has been great to work with. Larry Benton, Director of Communications for Shands HealthCare, said. "When new areas needing coverage have been identified, Sprint has responded within hours to ensure complete coverage."

*– Larry Benton
Director of Communications
Shands HealthCare.*