



SAINT ELIZABETH REGIONAL MEDICAL CENTER



Saint Elizabeth Regional Medical Center in Lincoln, Nebraska, employs 2,100 people and is nationally ranked for its cardiac ER care and burn center. The hospital has been recognized for three years as one of the nation's "100 Top Hospitals" by Solucient and awarded Magnet status for its nursing excellence.

OBJECTIVE

Saint Elizabeth needed to enable seamless cellular voice and data communications for patients, visitors, physicians and staff, as well as EMS and police who are in the facility around the clock. Due to a recent addition of a new patient tower that blocked cellular signals, the hospital found itself with inadequate coverage and needed a solution that would compensate for this structural shortcoming.

"Our physicians need to be accessible to nurses and their own office staff as urgent situations develop, not compromising patient care as communication can be immediate," says Kim Springer, communications coordinator for Saint Elizabeth.

"We had dead spots in critical areas and often had trouble communicating between the first and second floors."

SOLUTION DESCRIPTION

Saint Elizabeth worked with Pierson Wireless to implement a comprehensive repeater system throughout the hospital. The multiband fiber optic distributed antenna system has 75 indoor antennas located throughout the facility. The system is engineered to handle both A and B cellular bands, one PCS carrier and the 800MHz SMR public safety band, but it can be expanded or modified at any time to add additional carriers or frequencies. Current service providers include Sprint Nextel operating both CDMA2000 1X and EV-DO, as well as Alltel and Cellular One operating CDMA2000 1X. The city of Lincoln operates an analog trunking system for public safety radio.

The repeater implementation took less than three months and was rolled out in July of 2005. The system supports all public voice and data communications.

"With the addition of full cellular voice wireless coverage, we can now use our voice systems more robustly," admits Springer.

Saint Elizabeth Regional Medical Center

www.saintelizabethonline.com

COMPANY

- Saint Elizabeth Regional Medical Center in Lincoln, Nebraska employs 2,100 people and has been recognized for three years as one of the nation's "100 Top Hospitals" by Solucient.

OBJECTIVE

- Enable seamless cellular voice and data communications for patients, visitors, physicians and staff, as well as EMS workers and police
- Provide instant staff access to patient information

SOLUTION

- Sprint Nextel operating both CDMA2000 1X and EV-DO and Alltel and Cellular One operating CDMA2000 1X
- 75 indoor wireless antennas with repeaters

RESULTS

- Reduced overhead costs through staff reallocation
- Guaranteed instant and immediate contact with key staff
- Increased staff mobility
- Reduced the call load into IT support
- Improved overall patient care and worker safety



ALIST™
Finalist

The repeater solution has enabled Saint Elizabeth to better reach its physicians and RNs with guaranteed instant and immediate contact for all the people the hospital needs to reach.

“We can send pages out to nurses communicating patient needs within seconds,” Springer explains. “We can also send group pages if there is an emergency situation such as a fire or an Amber alert.”

Real time is everything in the hospital environment. This wireless implementation enables us to maximize that. Our level of coverage is unique for a hospital. Everything is converging and this is an important step for us to stay at the forefront.

*Kim Springer
Communications Coordinator
Saint Elizabeth Regional Medical Center*

RESULTS

The 3G deployment has delivered both tangible and intuitive results. Through staff reallocation, the hospital has reduced its overhead costs. Staff mobility has also increased and calls for IT support have been reduced significantly.

“Real time is everything in the hospital environment. This wireless implementation enables us to maximize that,” Springer claims. “Our level of coverage is unique for a hospital. Everything is converging and this is an important step for us to stay at the forefront.”

The implementation has also improved workforce safety. Now workers can go anywhere within the facility with complete communications accessibility. This enables them to contact, or be contacted by, fire and other safety personnel in the event of an emergency.

Saint Elizabeth Regional Medical Center

Saint Elizabeth Regional Medical Center is a 2006 finalist for the 3G A-List Award in the Non-Profit Organization category.

The 3G A-List Awards recognize the leading builders of successful wireless data solutions based on 3G CDMA (CDMA2000 1X, EV-DO, and UMTS/HSDPA) technology. **To learn more about the A-List, please visit www.3galist.com**

SUPPORTING PARTNERS

The A-List also recognizes supporting partners for their enabling role in assisting winners with their wireless data deployments.

