

Rush University Medical Center Deploys BridgeWave's Gigabit Wireless Links To Quickly And Reliably Transfer Patient Data

Located in Chicago, Ill., Rush University Medical Center is home to one of the first medical institutions in the Midwest and is one of the nation's premier medical organizations. Founded nearly 170 years ago, Rush University Medical Center was named a "Top-Performing Hospital" in 2007 by the University HealthSystem Consortium (UHC), and is widely known as a national leader in academic medicine.

As Rush University Medical Center is a non-profit organization, the IT staff strives to incorporate cost-effective initiatives utilizing emerging technology, to further benefit their patients. Rush University's Medical Center was expanding into a new facility and needed to connect remote leased space to the campus LAN in the main building. The connection was needed to handle sensitive financial and patient medical information, so a highly secure and reliable network backbone was required. Eric Schoedel, voice manager at Rush University Medical Center, and his IT team needed to find a quick and secure LAN data connection which also addressed the following:

- A high-capacity network solution less costly than installing leased fiber, as estimated costs for fiber was more than \$500,000.
- Provide the necessary bandwidth required to support the transfer of sensitive patient data, including medical records, claims and financial information.
- HIPAA-compliant security to support the transmission of sensitive financial and medical information from the outpatient care facilities to the main campus data center.

After initial research Mr. Schoedel determined that the exorbitant costs associated with installing fiber would be out of Rush University Medical Center's budget for the project. Installing fiber would have also required additional time for the trenching.

CONSIDERATIONS FOR GIGABIT WIRELESS SOLUTIONS

Deploying a highly reliable network connection required careful consideration of the technologies available, that would strike a balance between performance (throughput, distance, and system availability) and overall implementation costs. While fiber offers high capacity, reliability and security over long distances, this is true only when it is physically present at the required locations and can be leased or can be constructed at an acceptable price point. Gigabit wireless radios, on the other hand, are now being adopted by several businesses for reliable, scalable and secure high bandwidth connectivity.

In February 2008, Rush University Medical Center installed BridgeWave's license-free 60 GHz, GE60 radios to connect the outpatient care facilities to the main campus data center.

"BridgeWave's gigabit wireless links were up in a day. Additionally, the network backbone has securely supported the financial and medical data to and from our data center and the links have five nines reliability despite several storms and frequent inclement weather."

The Medical Center achieved complete ROI on its gigabit wireless installation in approximately 5 months, while also obtaining ample bandwidth for their current expansion project. Given the dramatic decrease in cost by using BridgeWave's gigabit wireless solution and noting the fiber-like performance of the wireless links, Rush University Medical Center is considering purchasing additional links for the

expanded campus hospital. Because BridgeWave links are ultra-low latency, the Medical Center also plans to use BridgeWave to support the transfer of VoIP between the information services building and the outpatient care facility. The high level of security that BridgeWave's products provide has prompted Rush to plan for the transmission of patient MRI's as well, after the completion of the hospital.

"We have already saved hundreds of thousands of dollars by using BridgeWave's GigE solution instead of fiber. BridgeWave has allowed us to stay well under budget with low operating costs for the high-speed connection and better functionality." says Eric Schoedel.

For more information on BridgeWave's 60 GHz radio links, please visit www.tessco.com/go/bridgewave.