

RedCell Technologies overcomes the complex challenges of the healthcare environment to provide Avanté with pervasive wireless for electronic health records and resident and guest Internet access.

Avanté is a chain of skilled nursing and rehabilitation centers in locations throughout the Mid-Atlantic and Southeastern U.S. The Avanté centers are committed to improving the quality of life and quality of care for seniors through their core values of community, integrity and service. These values are evident in each of Avanté's centers, which are small enough to provide a home-like setting and personalized care but large enough to provide the latest treatments and technologies.

Avanté recently implemented an electronic health records (EHR) system, which eliminates the need to maintain paper medical charts. Notes and records that were once handwritten are now entered directly into the EHR, which integrates with all components of clinical practice. Among the many benefits are increased staff efficiency, improved communication, faster access to information and the reduction of medical errors.

To gain maximum value from its EHR, the Avanté centers needed to be able to access the system from anywhere. However, their wireless LAN infrastructure was not up to the task of supporting facility-wide access to a mission-critical application.

"Residents tend to be more technologically advanced now, so we had some Wi-Fi to provide Internet access in the building. But the solution we had wasn't very good," said Carmi Gross, Chief Technical Director, Avanté Group. "Once we made the decision to go to full-blown EHR software, wireless became a necessity."

Avanté began developing a plan to roll out a more robust WLAN to all 20 centers. After interviewing several wireless LAN providers, Gross met with Tennyson LaJeunesse, CTO of RedCell Technologies.

"I explained to Tennyson that there were two key factors after budget," said Gross. "We needed ease of use for both residents and staff. And we needed to split up the wireless LAN into two distinct networks so that our residents and guests couldn't access the corporate network. After speaking with Tennyson, I had no doubt that RedCell Technologies could deliver the solution we needed."

20 Buildings in Six Weeks

Gross was well aware of the challenges of implementing a wireless network in a medical facility. The healthcare environment is filled with RF-blocking obstacles, including masonry and concrete walls and highly mobile metal objects such as medical equipment, beds and carts. There is also RF interference from microwaves, monitoring equipment and medical devices that share the same 2.4GHz spectrum as Wi-Fi.

Overcoming those challenges was a critical success factor for the project. For example, a key feature of Avanté's EHR system is the tracking of medication. In addition to pervasive coverage, Avanté needed the wireless access points to provide seamless handoffs as medication carts and other wireless devices moved through the building.



Challenge:

- Lack of pervasive wireless in challenging healthcare environment

Solution:

- Engineering, end-to-end implementation and ongoing support of a robust WLAN that delivers seamless connectivity

Benefits:

- Maximized value of mission-critical electronic health records system
- Differentiated services through wireless Internet access for residents and guests
- Capital preservation through WLAN-as-a-Service model

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— Carmi Gross,
*Chief Technical Director,
Avanté*

“A skilled nursing facility is much more complex than an assisted living facility. And some of our buildings are 20 or 30 years old — as I like to say, they’re built like bunkers,” Gross said. “We needed coverage everywhere. Our nurses need to be able to walk into any resident room, any area of the building, and have wireless access. And if you get a company that doesn’t know what they’re doing, you don’t get that kind of coverage.

“RedCell Technologies went in and did the site survey properly. And in the three or four years that we’ve had this network, I’ve not had one complaint from any of our nurses saying that they lose connection anywhere in the building.”

Gross threw another challenge at RedCell Technologies — a short project timeline. Because Avanté had already begun its EHR rollout, the WLAN deployment needed to be completed across all 20 buildings in six weeks.

“And Tennyson said, ‘No problem.’ We were able to do all 20 buildings in less than a two-month span,” Gross said. “And RedCell Technologies handled everything — I literally did not lift a finger throughout the process. They even had a relationship with a cabling company. I have a very

small IT department for a very large company, so anytime I don’t have to get my hands dirty it’s a real benefit.”

End-to-End Solution

RedCell Technologies continues to support Avanté’s WLAN. The firm provides 24x7 monitoring and management to ensure that the network is always available.

Avanté is also taking advantage of RedCell Technologies’ WLAN360 solution in three new assisted living facilities. WLAN360 includes enterprise-class wireless LAN equipment and comprehensive design, engineering and managed services, all for a low monthly fee per access point.

“Wireless requires a significant capital outlay, particularly over multiple buildings,” Gross said. “With WLAN360 we get a new platform that doesn’t cost a penny up front, site survey included. We just pay a monthly fee per access point and the price point for that is fantastic. We’ve seen a lot of success in the buildings where we’ve deployed it.”

More significantly, the WLAN engineered by RedCell Technologies has given Avanté a competitive advantage. Gross says that many other healthcare providers struggle with less-than-adequate wireless networks.

“I was at a conference for our EHR software and a guy actually said, ‘Mark an X on the floor where the wireless service works best so the nurses know where to stand to get the access that they need.’ That doesn’t work. I don’t want to put an X on the floor. I want our staff to be able to go wherever they need to be to do their work. RedCell Technologies has been able to provide that capability and we have not had an issue,” he said.

Today, wireless is an integral part of Avanté technology infrastructure, providing end-to-end support for its EHR system. The WLAN is also a key differentiator, giving Avanté the ability to offer Internet access to its residents and guests. Gross does not hesitate to credit RedCell Technologies with the success of the wireless initiative.

“I recommend them to anybody I talk to,” he said. “I have no problem putting Avanté’s name and my name behind RedCell Technologies, and saying, ‘These are the guys you want to use. These are the guys who will do the best job possible for you.’”

ABOUT REDCELL TECHNOLOGIES

RedCell Technologies is a highly focused professional services firm specializing in the integration of enterprise mobility solutions. The company offers a broad portfolio of services based upon an unparalleled combination of experience and extensive research data on the

industry’s most effective solutions for mobility. The ability to analyze and interpret each business’ unique needs and deliver cost-effective and efficient technology solutions to meet those needs makes RedCell Technologies the clear choice for enterprise mobility.