FCRTINET.

HEALTHCARE WiFi

"Residents have a vastly better Internet experience, and thanks to reliable VoIP and Nurse Call systems, our nurses are more mobile than ever before, which directly impacts the quality of care we provide."

– Steve Cuppy
  CIO
  Oaknoll

Oaknoll

Retirement Community provides secure, high-performance Wi-Fi with ubiquitous wireless coverage

Business Challenge

Oaknoll replaces antiquated wireless LAN with spotty coverage, with HIPAA compliant 802.11ac network from Fortinet, providing complete coverage for all residences and health center.

The Situation

Oaknoll is a Continuing Care Retirement Community which provides a continuum of care from independent living to assisted living to on-site nursing care. Living in their own apartments, approximately 300 residents enjoy a hassle-free lifestyle in a safe haven with the assurance of on-site nursing care should they need it.

Among the amenities provided is a communications infrastructure which includes cable TV, phone and Internet services. As the saying goes, 70 is the new 50, and many residents are technologically savvy internet users, staying in touch with their family and friends, streaming videos and more.

Details

Customer Name: Oaknoll Retirement Residence
Industry: Continuing Care Retirement Community
Location: 10 acre campus with residence buildings, assisted living and health center. Iowa City, Iowa

Business Impact

- Able to unify wireless LAN and comprehensive security management through one console

- Dramatically boosted Internet performance and eradicated previous coverage holes

- Improved staff mobility and critical care responsiveness with VoIP and Nurse Call applications

Fun stuff aside, the wireless network also carries mission-critical traffic. It is used for voice communications by nursing staff who carry VoIP phones, and it is the conduit for a Nurse Call system, which enables residents in need of assistance to summon the nearest available nurse.

The Challenge

Oaknoll's antiquated a/b/g wireless network was causing frustration for residents and staff. It was too slow, and could barely cope with residents using Skype, let alone streaming HD video. Plus, because of the concrete and steel building construction and fire retardant drywall, there were more dead zones than Wi-Fi zones, leaving few residents with adequate signal in their apartments. The limited coverage, made it unsuitable for critical-care applications such as Nurse Call.

With a new residence building under construction, and growing numbers mobile devices in the hands of residents, a wireless refresh was overdue. In 2013 consultants Clifton Larson Allen conducted an assessment and recommended a Fortinet solution to unify secure Wi-Fi services, firewall and malware protection under a common management interface, making the Oaknoll WLAN more secure and easier to manage than before.

Fortinet Secure Wi-Fi Delivers

Oaknoll has deployed a FortiGate and 120 FortiAPs. The access points are deployed in high density in common areas, and in the residence halls, they are mounted in the hallways providing coverage for two or three apartments at a time. "Despite the steel and concrete construction of our buildings, we have eliminated all the dead zones. Residents now have plenty of bandwidth for anything they want to do"

said Steve Cuppy, CIO. The new building is wired for higher density, allowing an AP in each apartment.

With nurses using a Cerner medical records system from their laptops and tablets, Fortinet's secure Wi-Fi solution has met and exceeded the HIPAA compliance requirements. Oaknoll also uses VoWLAN and Nurse Call – two mission critical applications that must perform flawlessly alongside guest access and Skype, Facebook and streaming video use by residents.

Nurses in the 48-bed Health Center and assisted living facility carry SpectraLink VoIP phones and smartphones, which gives them complete mobility while remaining 100% reachable. When anyone pulls a Nurse Call cord it triggers an escalating series of alerts to the smartphones of CNAs and RNs, until one of them accepts and takes ownership of the call.

Because their residents live independently, Oaknoll prefers not to limit Internet access in any way. But they do use web-filtering to block access to known malicious websites. The Guest network is a little more restrictive as to where users can go and how much bandwidth they have. Steve Cuppy notes: "I like how malware protection and web-filtering is integrated with the wireless management, it makes it so easy to administer different security profiles for each SSID, and we can do everything through one console."