

Royal Freemason's Benevolent Institution

Wi-Fi technologies increase the human touch in elderly care.



Business Profile

Employing 1,200 staff, the non-profit Royal Freemasons' Benevolent Institution provides assisted-living and nursing care to 2,000 elderly residents in 22 residential care homes in New South Wales and the Australian Capital Territory.

Challenges

- Continually improve the safety and quality of care for 2,000 elderly residents with widely varying needs—from self-care, to assisted living, to fully supervised care.
- Improve productivity of staff, freeing them to spend more time with residents.
- Provide more services, convenience, and comfort to foster a home-like environment for residents.

Deployment Summary

- Converged and integrated wireless telephony, nurse call, clinical notes (EHR), medication management, and real-time location systems on Meru WLAN.
- Established a reliable, scalable infrastructure in all 22 facilities that doesn't need onsite technical support.

Benefits

- Multiple initiatives to provide a safe, more comfortable home-like experience for residents, such as RTLS and physician exams in residents' rooms.
- Voice over Wi-Fi care collaboration, resulting in improved clinician productivity, care provider responsiveness and resident satisfaction.
- Rapid deployment and rollout of new timesaving technologies that enhance staff productivity and the quality of care.
- Networks in 22 locations, serving 1,200 staff and 2,000 residents, all managed remotely by one person.

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More productive nursing staff leads to improved care and safety

Established in 1880, the Royal Freemason's Benevolent Institution (RFBI) has a long history of providing "succor in distress and relief in necessity," as its founding philosophy promises. Today, in keeping with that philosophy, RFBI is putting Meru wireless networks in all its 22 residential care homes for the elderly for one reason—improving care. "Our number one concern is improving outcomes for our residents. "We are making a significant investment in wireless technologies so we can optimize the time our staff spend with residents, enhancing their safety and well-being," says Andrew Alpe, RFBI CIO. "I view the Meru network as the underpinning of everything else that we are going to deploy as an organization. If you don't have a solid wireless network, you can't deploy anything else. If it's not reliable, you can't run your services."

An ecosystem of Wi-Fi technologies enhances care

To replace single-purpose technologies, such as its DECT phone system, RFBI envisions an ecosystem of technologies that utilize a common Wi-Fi infrastructure. On this infrastructure, the organization is integrating new technologies to streamline workflow so that staff can spend more time with residents. "By putting a Meru wireless network in, we can run a number of different applications that free up a significant amount of time for our staff," says Alpe.

For example, enabling nurses to access the iCare aged care electronic health record (EHR) on a mobile device by a resident's bedside is improving clinician productivity. Staff is able to spend more time with residents, providing care, instead of walking back and forth to the nursing station to locate physical charts and make clinical notes. RFBI is also implementing an iCare medication management system



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that relies on the Wi-Fi, designed to save time as well as reduce the risk of errors.

With a reliable wireless network in place, RFBI also has plans for a real-time location system (RTLS). "We want to open our facilities without exposing our high-care residents, such as those with dementia, to any risks. Looking at their movements, with their permission, of course, would help us understand how to accomplish this," Alpe explains.

RFBI also wants to integrate RTLS into the nurse call system so that residents can call for assistance anywhere within the facility, and the staff will know exactly where they are. That hasn't been possible without pressing a wired call point on a wall, which may be out of reach to residents with limited mobility.

These and other wireless technologies provide numerous opportunities to improve care and staff efficiency, but they require a wireless network with exceptional reliability. For RFBI, that network is Meru.

Ultimately, the wireless network will enable visiting physicians to examine and care for residents in their own rooms, instead of coming to examination rooms. Physicians will have the convenience of using their own mobile devices to review and update the EHR from the resident's bedside.

"We never forget that the aged care facility is the resident's home. Anything we can do to make it more comfortable and home-like is very important. It comes back to the key ethos of our organization, which is having person-centered care," says Alpe.

Wi-Fi enables new services for residents

In addition to streamlining work processes and optimizing care by the staff, a reliable and predictable wireless network allows RFBI to offer new services to residents.



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“The expectations of residents are starting to change, and I think we’ll see the changes accelerate with the transition in Australia to consumer-directed care. We’re starting to see the first wave of Baby Boomers come into aged care. They’re accustomed to using email and having access to the Internet. We need to be in a position to provide those services to them,” says Alpe.

Alpe shares the reaction of a 100-year-old resident to the news that Wi-Fi was coming to his facility. “Fantastic, he said. ‘I can join my laptop and my iPad to the network and speak to my relatives.’ It opens your mind to the possibilities when someone his age wants to do that.”

RFBI has introduced iPads for residents to use for communicating with friends and family. “We are starting to encourage this,” says Alpe. “Our staff will take an iPad to a resident so he or she can read and reply to email messages, alone or with help.” At the pilot facility, where RFBI first rolled out the wireless network, residents are now using Skype in the privacy of their own rooms to communicate with relatives overseas. “Last week a resident was able to talk to her sister in South Africa. She hadn’t had that opportunity before we installed the Meru Wi-Fi network,” says Alpe.

The unique architecture of the Meru solution will allow RFBI to layer radio-frequency channels and isolate resident and guest use of the network from the systems and applications that the staff uses, so there will be no disruption or delay in care.

RFBI pilots Meru in its most challenging facility

As of June 2013, Schepisi Communications had installed Meru wireless networks in eleven of RFBI’s 22 facilities. Schepisi was selected by Telstra, Australia’s leading telecommunications carrier and information services provider, to deliver a total end to end communications solution to RFBI.

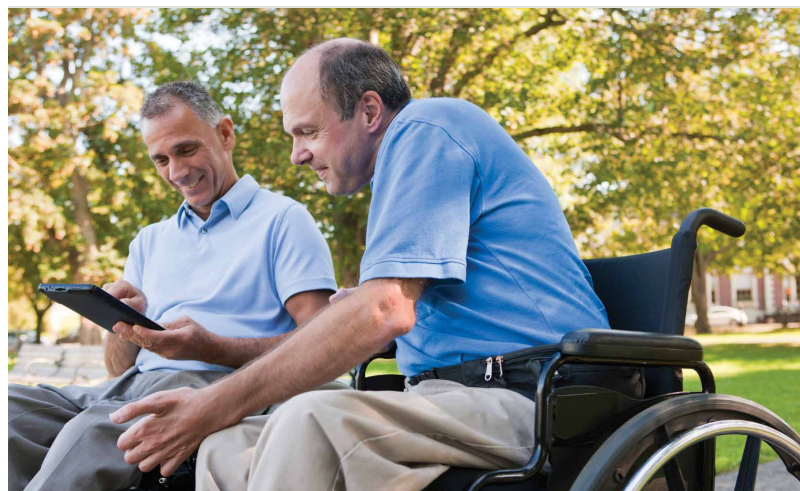
“To position itself at the forefront of the aged care industry, RFBI has committed to upgrading all its technology,” said Ben Giblett, business development manager for Schepisi and project manager. “Part of the scope of that effort is implementing an enterprise-grade wireless network, and it was clear from the start that

Meru was the right vendor. Our customers can do so much with this network.”

During RFBI’s evaluation of several Wi-Fi vendors, Meru’s winning value proposition emerged early as the clear winner, but the decision was hardly a snap one, as Alpe recalls. “We worked with a partner to do an industry evaluation of Wi-Fi options and Meru came up very favorably. We also spoke to Meru customers who were all very happy with the network. So we decided to go forward with a pilot of the Meru solution.”

For the pilot, Alpe and Giblett selected one of RFBI’s most challenging locations. It was a 60-bed residence with a staff of 50. “We picked a facility that would be making a leap from a low level of technology. They didn’t have any wireless technology, not even DECT telephones,” says Alpe. A Meru controller and 40 AP1020 access points were installed for the pilot. Then the nurse call system, clinical notes and medication management systems, and new Spectralink Wi-Fi handsets were integrated on the wireless infrastructure. “We threw the staff into the deep end with the technology and the Meru network worked flawlessly,” Alpe is pleased to report.

RFBI is in the process of analyzing the results of this first implementation, documenting the outcomes for residents





and staff and evaluating additional wireless applications they may want to incorporate on the Meru network.

Meru architecture speeds deployment

In the meantime, full-scale deployment is proceeding apace in a rolling fashion. Schepisi has the process down to a science and is completing one or two new sites a month. "The coordination and teamwork between RFBI, Schepisi, Meru, and Wavelink (Meru's distribution partner in Australia) have been extraordinary," says Giblett.

Giblett expects to complete the rollout to all RFBI residential facilities by the end of 2013. By that time, an estimated 1,000 access points will be installed.



"The single channel architecture is one of the key reasons why we chose Meru. It's made the deployment of the Meru networks so simple," says Alpe. "With Meru, the planning stage for deployment is very short because you're not having to worry about co-channel interference when you're looking to place your access points. So that's been a great advantage," adds Giblett.

Easy management conquers geographical distance

Simplicity of management has been another plus for the Meru solution, according to Alpe. RFBI supports a

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staff of 1,200 in 22 locations with an IT team of four, and the furthest RFBI facility is a 14-hour drive away. "We are managing all sites deployed so far from a central location and we are not experiencing any problems managing that wireless network at all. It's amazing that such a small group is able to manage such a large network," reports Alpe.

RFBI takes the lead in aged care

RFBI hasn't fully analyzed the outcomes from the new Wi-Fi technologies. "We can already see, however, that Meru wireless network is helping reduce errors in data entry and increase the time that staff spend with residents. That was our most important objective," Alpe concludes.

Aged care is changing in Australia, becoming more consumer-directed in the coming years. Instead of the government assessing needs and making the placement decisions, clients who need residential care will have more say and more choices about where to live. At the same time, Baby Boomers are beginning to move into aged care, bringing with them higher expectations for their care than previous generations. In this new, more competitive marketplace, the Royal Freemason's Benevolent Institution intends to be a leader in providing quality care and services. A reliable Meru wireless infrastructure in all its facilities enables RFBI to increase staff productivity and optimize their time with patients, ultimately leading to improved care, enhanced safety, and higher resident satisfaction.

About Meru Networks

Meru Networks (NASDAQ: MERU) designs, develops, and distributes virtualized wireless LAN solutions that provide enterprises with the performance, reliability, predictability and operational simplicity of a wired network with the advantages of mobility. Meru Networks eliminates the deficiencies of multichannel, client controlled architectures with its innovative, single channel, virtualized network architecture that easily handles device density and diversity. Meru wireless LAN solutions are deployed in major vertical industries including Fortune 500 businesses, education, hospitality, healthcare and retail supply chain. Founded in 2002, Meru is headquartered in Sunnyvale, Calif., with operations in North America, Europe, the Middle East and Asia Pacific. Visit www.merunetworks.com or call (408) 215-5300 for more information.

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