

Technology comes of age



A secure environment for aged care residents

A state-of-the-art intelligent housing solution provides non-intrusive support, 24 hours a day, and more economical services for residents of SwanCare.

A secure future

Located in Perth, Western Australia, the SwanCare Group (formerly Swan Village of Care) is a non-profit and non-denominational organisation which provides quality care for the elderly. SwanCare Group is home to approximately 1,100 residents and provides a community of continuing care, from independent housing to fully accredited low and high care residential accommodation.

A key concern for the SwanCare Group is safeguarding the health and wellbeing of their residents, while providing a quality lifestyle. Achieving these objectives while maintaining a sense of privacy for residents and remaining financially viable can be a challenging proposition.

William Marshall, CEO SwanCare Group, comments: “Like other organisations across Australia, we are experiencing rising demand for aged care services and facilities as the baby boomers move into retirement. This generation is much more discerning and generally accustomed to services such as high-speed Internet access and high quality voice, video, security and monitoring services. There is always pressure on the availability of government funding, so we need to find new and economical ways to accommodate resident requirements as well as working smarter with the resources we already have.”

By deploying a Cisco intelligent information network, Mark Lapins, Chief Information Officer at SwanCare in Bentley Park, has been able to improve outcomes for the residents, provide comprehensive network-delivered services, increase staff efficiency, and at the same time provide an additional income stream for services delivered.



“The system instantly generates an alert if lights, the oven or water are left on for abnormal periods of time. Should the network detect a running tap, for example, it will alert care staff who immediately contact the resident.”

Mark Lapins, Chief Information Officer,
SwanCare Group

Intelligent housing

In 2004, SwanCare installed HPM’s iControl Automated Housing solution in conjunction with a Cisco converged network in its Bentley Park residential estate. A programmable interface monitors the use of electricity, lights, water or any number of digital devices in aged care residential units and, using Vieo Systems software, issues alerts to staff if there is irregular use, which may indicate that a resident requires assistance.

An intelligent monitoring solution enables families to reside in their own homes for much longer so that couples who might otherwise be split into separate healthcare facilities can stay together, as the monitoring system can provide varying indicators depending on who needs help.

Mark Lapins explains: “The system instantly generates an alert if lights, the oven or hot water are left on for abnormal periods of time – which can be as brief as 20 minutes for hot water. Should the network detect a running tap, for example, it can be programmed to send an alarm or, if required, automatically turn it off and alert care staff who immediately contact the resident.

“It was important that help, support and care are on hand for residents whenever they need it, however we also wanted to provide a solution that offered all the services of an aged care facility without being intrusive. An important factor as it allows residents to feel secure while enjoying living here.”

The system can also be programmed to turn on the bathroom light when residents get out of bed at night, making it easy to see where they’re going. Push button controls on their phone handset let them adjust lighting and heating from their bedside.

All of these intelligent solutions provide residents with better care, improved monitoring by healthcare staff and more importantly peace of mind for residents, which ultimately improves their well being.

The Vieo Systems and HPM Technologies monitoring solution running over a Cisco converged network has also enabled SwanCare to deploy several reassuring security options. The entry gate releases at the complex are networked, along with a surveillance camera, so that when a visitor presses the buzzer, residents can clearly see on their televisions (and soon on their colour phone handsets) who is at the door, before opening the gate by pressing a button on their phone.

If necessary, residents can wear a personal emergency button on their wrists or a pendant, which they can activate wirelessly to prompt a live response via intercom over their phones. Another technology Mark Lapins is keenly interested in deploying is Radio Frequency Identification (RFID). RFID can monitor a resident’s location on campus and can be programmed to prevent high-care residents and residents with dementia from leaving sanctioned care areas, while alerting care staff. An important consideration for the resident’s safety while still providing them with reassurance.

Deployed in each unit, the Cisco IP-based telephones have large pixel-based displays – an important feature for the residents, many of whom have diminishing sight. They display date and time, calling party name, calling party number, and digits dialled, making it easy for residents to see who is calling and enjoy rich media features, such as voicemail, address books, etc.



“The Board quickly identified a number of benefits generated by the converged network and, as CEO I too, am delighted by the outcomes.”

Bill Marshall, Chief Executive Officer
SwanCare Group

SwanCare is also currently trialling use of videoconferencing from the residential care facilities to provide consultation with medical practitioners. Accessing a resident’s doctor in a timely and convenient fashion can substantially improve the resident’s health outcomes, often avoiding the necessity for admission to hospital.

In SwanCare’s high-care facilities, a robust wired and wireless infrastructure will provide further support for emergency and healthcare staff, resulting in safer, higher quality care for patients with serious health concerns. The solution also means that healthcare staff monitoring these serious cases always will have access to real-time information about their patients, regardless of the patient’s location.

“Every time a member of our health care staff writes something down and has to enter it into another system or hand it to someone else, the possibility for error increases,” says Lapin. “By amalgamating data-entry devices across one network, we will eliminate a lot of potential for error, so our residents will receive safer, higher-quality care.”

“Our staff are also happier because they’re more productive. Now they can come in every day and do what they were trained to do and what they love to do: care for patients.”

SwanCare also publishes useful information on the IP phone handsets such as billing information, resident directories, logging maintenance requests, events, cinema screenings, weather, home food delivery and laundry services. And as new applications are released, they can be added from a central console, by simply sending software updates to each phone via the network.

The IP phones enable SwanCare to offer telephony services to their residents at a lower cost than they could obtain externally, which provides the company with a revenue stream to offset their investment. Each unit also has a secure broadband connection to the Internet, giving residents fast access to email and web browsing. Again, this service is provided at competitive rates, while still returning income to the SwanCare Group.

William Marshall explains, “This new revenue stream, along with other operational and administration savings, has provided us with a rapid Return On Investment. Initially, when I met with the Board to present this technology solution, they were sceptical that it could provide the high level of service required and save on costs. However, once deployed, the Board quickly identified a number of benefits generated by the converged network and, as CEO I too, am delighted by the outcomes.”

As well as improving the quality of care, the Cisco intelligent network has reduced many of the inefficiencies, duplication of effort and resource limitation that can affect aged-care facilities. It connects resident housing, administration and amenities in one converged infrastructure, streamlining network management and delivering services and applications that improve lifestyles, security and health.

Replacing separate voice and data networks with a single Cisco converged network saved SwanCare thousands of dollars in cabling costs. The operational savings have also been significant with just one network to administer. One infrastructure monitoring solution continuously evaluates and reports the operational health of the converged IP network and IP telephony implementations. Installation and configuration of handsets is an inhouse task carried out by Mark Lapins’ team



Cisco Systems

Healthcare and aged-care facilities can

improve patient care, lower operating expenses, meet regulatory requirements and maintain information securely with a Cisco intelligent network. With an integrated health system, they can enable new applications and provide the right information and services to the people who need it, when they need it.

saving installation costs of thousands of dollars. And Internet account activation for residents takes minutes, compared to over an hour per activation using traditional methods.

Mark Lapins explains: "When residents move in, we just add a Cisco IP phone to their unit and update their details in CallManager. The whole process takes no longer than 10 minutes."

The Cisco intelligent housing solution at SwanCare has proved an invaluable, scalable solution enabling SwanCare to add new features and upgrade services as and when they're needed. One project underway is the design of newly constructed units, which will include greater network capability to accommodate services expansions in the future.



Vieo Systems

Vieo Systems provides unified communications

solutions across converged IP networks for aged care residential facilities. Vieo Systems also provides hardware and business intelligence systems for organisations wishing to streamline the implementation and delivery of technology in all levels of residential facilities from independent living units to high and low care accommodation. www.vieosystems.com

Mark Lapins comments: "We're able to deliver this high level of service across a converged network thanks to the three way initiative between Vieo Systems, Cisco Systems and HPM Technologies. Vieo Systems is providing the back-end intelligence systems, Cisco the converged infrastructure and HPM Technologies the building automation systems."

** The Vieo Systems solution is being offered as a packaged solution to other aged care facilities and the wider community. The solution will enable residents to remain in their own homes longer in line with government objectives, while still providing the reassurance of high-level, non-invasive monitoring and support.*



HPM

HPM is a global manufacturer and distributor of more

than 7,000 electrical products including light switches and dimmers, industrial connection and switching systems, safety earth leakage devices, ceiling exhaust fans, lighting; and sophisticated home and building automation systems.

The company employs in excess of 1,000 people with eight factories in Australia and two in New Zealand and exports products to more than 30 countries in Asia, the Pacific, Europe and North and South America.



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