

CASE STUDY

DOROTHY HOUSE HOSPICE CARE



South West Communications Group provides Dorothy House Hospice Care with a cutting edge, single provider VoIP telephony, local area network, nurse call and access solution.

Dorothy House Hospice Care provides 24-hour hospice care from an in-patient unit in Winsley, Wiltshire. This **extensive facility** and 200+-plus members of staff provide care to both in-patients and day patients. Dorothy House also provides nurse care in the community and at its outreach centres in Midsomer Norton and Chippenham. This free care is partially funded by 19 charity shops, as well as from income generated from its conference suite situated within its Winsley base.

Dorothy House's 10-year-old telephone system lacked the functionality they required with no further development possible. The same was true of its existing nurse call system. They needed a scalable, resilient but uncomplicated, **feature-rich telephony solution** that could be seamlessly integrated with a new nurse call system and access control solution, and an existing security and fire alarm systems. They also wanted to extend the telephony solution to its outreach centres, where there was no telephony service in existence, and to integrate their 19 shops.

At first, Dorothy House was looking for several providers to meet these differing requirements, but following a meeting with **swcomms**, they realised all their requirements could be met by a **single provider**.

They issued an invitation to tender from which we were selected to deploy the entire solution leveraging an exemplary reference from St Margaret's Hospice.



An Alcatel-Lucent Business integrated Communications Solution (BiCS) now provides a highly functional, resilient and scalable VoIP telephony solution from a power-saving, cost-effective, virtual server environment to fulfil Dorothy House's immediate and future requirements.

IPTouch handsets were deployed across the local area network (LAN) and to the 19 shops, connected to the network via the Hospice's existing broadband links, to integrate them with the main system for seamless, **cost-effective calls between all sites**. DECT handsets allow nurses to work throughout the Hospice's buildings and garden and give both staff and patients the ability to make and receive calls regardless of their location. Patients had previously shared a single mobile phone between them. Specialist analogue handsets, with anti-microbial protection to maintain infection control, were deployed within the patients' bedrooms.

Centralised management is facilitated by the Alcatel-Lucent OmniVista 4760 Management Platform. This enables the IT team to administer the system quickly and easily from any location. The Hospice can **monitor the cost of calls** from each extension via its embedded accounting application.

Unified communications were facilitated by the Alcatel-Lucent Instant Communications Suite to provide a PC or mobile device client to integrate click-to-dial options into their Microsoft Outlook, single number routing options to redirect callers depending upon who is calling, the time of day and the day of the week, and a presence tool to convey their availability and ability to communicate

Remote working was introduced for staff working in patients' homes, who had previously had limited access to patient records and their only means of voice communication had been via mobile phones. They can now access records at the Hospice via a virtual private network (VPN), as well as being able to make calls using headsets connected to their laptops.

Voicemail and unified messaging operates as a single solution enabling both types of messages to be left within Microsoft Outlook. They can be played back as sound files via the media players on PCs and laptops.

An Aid Call Touchsafe Professional Nurse Call solution was installed so patients can alert staff or request immediate assistance. Bedside push points and bathroom pull cords notify staff via monitors in the nurses' station and office. Audio visual indicators clearly illustrate where assistance is required. **swcomms** enhanced this functionality by integrating these alarms with the telephone solution and DECT handsets, so nurses can go directly to the patient's room rather than detouring to the nurses' station or office, therefore **saving valuable time and improving care**. The fire alarm has been integrated too to provide a vital safety notification facility.

A Paxton Access control solution, including swipe cards, electronic locks, keypads and door phones, was also integrated with the telephone system so the DECT handsets ring when the door bell is rung and users can remotely unlock the door.

A new managed network Alcatel-Lucent LAN, capable of supporting all of the above, replaced a mismatch of legacy manufacturers and technologies. Dorothy House had experienced several faults that caused periods of unacceptable downtime, so they were keen to eliminate any future failures that could jeopardise operational ability. We designed and installed a **LAN with no single point of failure**, featuring two core switches installed at separate locations to provide resilient high-speed gigabit to the desktop connectivity.

The Hospice's IT team manages the LAN and has created virtual LANs (VLANs) to support the multi-media facilities required by patients, visitors and delegates. The use of VLANs and quality of service (QoS) is crucial to maintain a high speech quality for calls. The call experience is on a real-time basis with no delay or interference. The VLANs are totally secure and can be used by guests without compromising the Hospice's own data integrity. Wireless LAN (WLAN) capabilities were achieved with the installation of an Alcatel-Lucent wireless infrastructure to provide wireless voice and data coverage throughout the Hospice. Nursing staff and health professionals can use

their laptops and tablets to access patient medical record while patients, visitors and delegates can access the Internet. The use of the WLAN is protected by a user authentication login process.

A meticulous attention to detail was required due to the critical nature of the Hospice's day-to-day operations. The entire solution was pre-staged at swcomms' headquarters and was tested in the presence of a Dorothy House representative. The installation was carried out at time that would cause the **least disruption to staff and patients** while continuing to run the legacy LAN and telephone and nurse call systems simultaneously to ensure no downtime.

Ongoing support and maintenance is provided as an integral part of the solution giving Dorothy House a **single point of contact for all their communications requirements**. Our service desk takes full responsibility for any problem that should arise and can call upon a team of 40 field engineers to ensure a swift response to any faults.

Mr Lennard added: "Within our inpatient unit, nurses are able to use one cordless phone to receive service and emergency calls from the bedrooms, receive and respond to the intercom entry speakers to admit visitors and, of course, answer phone calls!

"The majority of our nursing and care, however, is outside in the community and the new telephone system has allowed our nurses in the community much greater flexibility to communicate with patients, families, carers and colleagues."

"Our communication systems were in need of updating and we had some general ideas of what we were seeking, but swcomms was able to offer us a range of opportunities which has improved our communications significantly."
Peter Lennard, director of finance