

Bringing hospital alerting up to date

Reference report: Epsom and St Helier University Hospitals, London, England

Just a few short weeks before the wave of Covid-19 (coronavirus) infections began to hit the United Kingdom in early 2020, a high-performance on-site paging system by Swissphone entered service at two major National Health Service (NHS) hospitals in London's southern suburbs.

Working closely with their Premier UK Partner, Maintel, Swissphone's system replaced an outdated paging installation from another manufacturer. The new network – at Epsom and St Helier hospitals, locations some 10 km apart – was very soon supporting both sites as they faced a medical emergency on an unprecedented scale, as well as all the day-to-day emergencies that the NHS deals with. Connecting more than 800 pagers and dozens of emergency teams of clinical staff and backstage personnel, the Swissphone system has been playing a key part in bolstering the hospitals' ability to meet this new and unforeseen threat.

«The Swissphone paging network delivers exactly the functionality that Epsom & St Helier NHS Trust was looking for – simple, effective and fast delivery of voice and data messages, that helps the staff to deliver excellent care to their patients.»

Simon Yapp, Sales Director Public Sector at Maintel

«A resilient paging system is important to ensure that our critical emergency teams get to the right place at the right time, as quickly as possible», explains Simon Owen, Head of Telecoms for the two hospitals. Though some may regard pagers as old-fashioned in a world of 4G and 5G telecoms, Mr Owen believes firmly that there is still no

adequate alternative to on-site paging. «I'm actually the chairman of the national performance advisory group for NHS telecoms», he says. «And other colleagues agree: there is no direct replacement available for on-site paging at the moment.»

Crisis management

Principal users of the system are the various emergency teams. «We'll have a cardiac arrest team at Epsom Hospital, a cardiac arrest team at St Helier», he continues. «We have adult fracture teams and trauma teams at both sites, paediatric teams, all the different types, as well as your normal fire team and security teams, major incident teams.»

Some NHS organisations seeking to modernize their communications have been attracted towards using smartphones with an app as their emergency callout device. But smartphones rely on adequate mobile and Wi-Fi networks being in place – and that, Mr Owen emphasizes, is not always the case. Simon Yapp, Sales Director – Public Sector at Maintel noted. «The Swissphone paging network delivers exactly the functionality that Epsom & St Helier NHS Trust was looking for – simple, effective and fast delivery of voice and data messages, that helps the staff to deliver excellent care to their patients. The functionality complements many of the other critical communication solutions that Maintel deliver to the Trust.»

Furthermore, the cost of a smartphone and possible replacement units must be allowed for, as well as the need to charge a smartphone every day. A pager, on the other hand, will last for 4-6 weeks on a single battery.

«Whilst a smartphone is on charge, it's not really available as a mobile device», he warns. «And you're relying on the Wi-Fi or GSM networks. But if you've got your own on-site paging providing great indoor coverage and resilience in case of a network outage, I don't think there's a better way of doing it than that.»

An upgrade with benefits

Initially, the two hospitals simply wanted a direct replacement for their old paging systems. These had been progressively weakened by failures and breakage of the portable devices, and maintenance support was no longer available. The basic requirement was to be able to mobilize people to a place, by relaying a spoken message. But the new Swissphone installation, with its s.QUAD personal pagers – an all-in-one voice and POCSAG data package – also brought some desirable enhancements. «It's imperative that we get the right team to attend to an emergency in the right place as quickly as possible», comments Mr Owen. «But it's great to have the ability to send text messages of up to 512 characters to individual pagers, teams or groups. That's something we never had before – that's new functionality and it's great functionality!»

Other attractive features of the pagers include their multiple alerting signals, with coloured LED indicators and a vibrating alert as well as an audio sounder that can play customized .WAV files. At the same time, users can now be confident of a dependable system that works every time the button is pressed. Users have welcomed the new system, commenting on how much they like the s.QUAD and how sturdy it is. «The key words that come through so often are 'robust', 'quality', 'reliable'», continues Mr Owen. «It's still relatively early days for us, but the system provides all of those things.»

«It's also nice from my perspective that the units are water-resistant. I've actually seen a unit sat in a jug of water for more than two hours at one of our meetings – I had a colleague who was keen to demonstrate the water resistance!»

Resilience and redundancy

The paging system is fully independent of the on-site telephone network, and it derives additional resilience from its redundant alarm servers and transmitters. To ensure solid radio coverage, Swissphone carried out full signal strength surveys at both hospitals. «I was seriously impressed with the coverage surveys», Mr Owen says. «We have a 25 watt output now as opposed to our old 2-3 watt output. What this has meant for us is that it has totally negated black-spots. We probably cover 99.9 per cent of all our sites.»

For the future, the hospitals may consider integrating their existing alarm monitoring system with the paging network, and perhaps adding Swissphone's lone worker application as part of the same solution. «This is the beauty of a modular system, in that it can be added to when the time is right», comments Mr Owen.

How happy has Mr Owen been with the system so far? «Oh, seriously happy», he answers. «I'm happy with everything, and my comments are genuine. Swissphone are a great bunch of people to work with. And it would be nice to see that in anything printed! All the guys I've worked with from Switzerland, they were fantastic. So I'm really happy with everything and I'm doing whatever I can to spread the word.»

Components of the Swissphone solution

Hardware

- s.QUAD
- I.SEARCH



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