

Major U.K. Hospital Trusts BlackBerry **Enterprise Software to Empower Staff for Better Patient Care**

The Organization

University Hospitals Birmingham (UHB) NHS Foundation Trust is the largest single-site hospital in the United Kingdom. As one of the highest-performing National Health Service organizations in Europe, UHB has established an international reputation for quality of care, information technology, clinical education, and training and research. Its more than 9,000 staff members serve over 1 million patients each year, including people treated in its specialist centers for cancer, renal dialysis, neuroscience, and trauma, It also houses the Royal Centre for Defence Medicine, which treats all seriously injured U.K. military personnel evacuated from overseas, and the U.K.'s only National Institute for Health Research Surgical Reconstruction and Microbiology Research Centre.

University Hospitals **NHS** Birmingham



NHS Foundation Trust

Industry Healthcare Location Birmingham, United Kingdom Employees 9,000

Products BlackBerry UEM; BlackBerry Dynamics; BlackBerry smartphones; Tango Networks; Webalo http://www.uhb.nhs.uk/



The Challenge

UHB's large campus, which includes the Queen Elizabeth Hospital, the Heritage Building, and additional ambulatory care and surgical facilities, creates tremendous challenges in staff members' ability to communicate effectively with one another. Physicians, nurses, and hospital support staff are constantly on the move as they work to meet patients' healthcare needs, which makes it very difficult to communicate urgently with one another. The consequence is an endless cycle of missed calls, voice mail messages, and call-backs (many of which produce a new cycle of missed calls and voice mails).

While smartphones have alleviated many cases of perpetual phone tag, it also means staff members are often unsure whether they should call colleagues' mobile numbers or business extensions when they need to reach them. Staff members can spend unnecessary time calling different numbers, which is a serious problem in a place where speed of communications as well as reliability and security can make the difference with the continuity of care for patients.

"Our workforce is focused on delivering the best healthcare they possibly can to our patients," says Stephen Chilton, UHB's Director of Information and Communications Technology. As such, UHB's IT goal is to support the "removal of burden and bureaucracy that exists in the hospital so that [our providers] can be focused on patient care. We're very cognizant of the fact that communications is a vital asset and has a direct link to how effectively we can look after our patients."

UHB needed a way for its staff members, from physicians to porters, to reach one another quickly and efficiently in order to increase productivity and decrease frustration compared to its legacy communications infrastructure.

The Solution

Data security is a significant issue for the healthcare industry, where any loss of patients' personal information is a serious - and potentially expensive - problem leading to loss of reputation and confidence. In order to decrease the risk of data security threats, UHB provides its staff with highsecurity BlackBerry smartphones managed by the BlackBerry UEM enterprise mobility management solution. BlackBerry UEM enables UHB's IT department to control and manage devices from a single console, providing the visibility IT needs to support secure mobile collaboration. By ensuring staff members' devices remain in compliance with approved IT policies and configurations, BlackBerry UEM helps protect devices and the patient data on them against loss or theft.

And, to maximize staff productivity, it uses Webalo, which is a BlackBerry Dynamics partner. Webalo's application development and management framework provides staff with custom enterprise apps and live dashboard reports. This not only gives employees the right tools to do their jobs well, it eliminates their need for unapproved, risky shadow IT solutions. And it also enables UHB's IT team to develop functional requirements within hours, not days or weeks, to help the physicians, nurses, porters, and other employees who are always seeking new ways to serve patients better, with fewer hassles and improved efficiency. These custom apps enable easy access to patient data with underlying security provided by BlackBerry Dynamics application management.





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- Stephen Chilton, Director of Information and Communications Technology, UHB



UHB has developed a number of apps by using Webalo, including the Pharmacy On-Call System, which enables hospital pharmacists to more easily and accurately respond to medication requests; the Neurological On-Call Referral System, which allows physicians to get real-time assistance from neurological specialists; and the Accidents and Emergencies app, which tracks key performance indicators on timeliness of care and compliance to help hospital administrators take corrective action, if required, on the spot. Its newest is a Hospital Porter Deployment app, which allows clinical staff to request help, at the push of a button, from the hospital's 129 porters who are responsible for completing 86,000 requests per year.

The apps have significantly improved UHB's productivity, but sometimes staff members need to speak directly to one another. Because of UHB's

long-established partnership with BlackBerry, the IT team turned to the company for solutions to its staff's telephone tag problems. Recently, it began deploying the Tango Networks crossplatform communications solution on its companyowned BlackBerry managed devices to improve communications efficiency.

Tango Networks optimizes mobile communications for enterprises and enables UHB's BlackBerry managed smartphones to operate effectively as dual-line devices. The technology permits employees to make and receive calls over Wi-Fi and cellular while using their switchboard extension number identity, protecting the privacy of their personal cellphone number and giving callers a single number to reach them at any location, says Chilton.

The Results

UHB's IT department trusts BlackBerry to help it improve staff productivity and efficiency. "We don't want them to be distracted by technology, so we're aggressive in our approach to making sure that technologies work, they're viable, they're secure, and trouble-free," said Chilton. That's why UHB terms BlackBerry a partner, not just a supplier. When selecting a vendor, "we often start with the premise that we're looking to develop a relationship. We are an innovative organization with an international reputation and we want to make sure that we continue to build on that. BlackBerry appreciates that."

The combination of Webalo, Tango Networks, and BlackBerry UEM-managed smartphones has proven to be a cost-effective, productivity-enhancing method to streamline and enhance patient care. For example:

- Porters are arriving on average six minutes ahead of schedule because the Porter Deployment app directs the most suitable porter to the nearest job.
- Administrators can review KPIs and receive alerts when situations need attention, improving their ability to take corrective action instantly.

- Medical care, at night and after hours, has been enhanced by linking multi-professional teams that have the full range of skills and competencies necessary to meet patients' immediate needs.
- Staff and care physicians can use their mobiles to quickly reach their patients without fear of disclosing their personal information.
- UHB has reported an increase in patient satisfaction and overall improvements in staff satisfaction and frustration levels due to improved efficiency.
- IT is confident that staff are not introducing security threats or risking loss of patients' personal health information because all of their devices are secured with BlackBerry UEM enterprise mobility management software.

Chilton's IT team at UHB recognizes that the gains they've made with mobility are only the beginning, and their roadmap is very full, Chilton said. One plan is to use Internet of Things technologies to tag hospital equipment with location services so people can easily find what they need through an app on their smartphone.



They're also working with BlackBerry Professional Cybersecurity Services to protect patient data on mobile devices and connected medical devices. "A lot of these medical devices also contain patient data, and we need to be aware of what data is on there and make sure that they are not chinks in our armor against spilling that patient information," said Paul Jennings, UHB's head of Technical Operations & Infrastructure.

They're also building "virtual clinic" capabilities, allowing doctors to consult with homebound or remote patients through a videoconference on their smartphone, tablet, or PC, and minimizing the number of times patients have to travel to the hospital for regular medical care.

As it executes and extends its roadmap, Chilton said, "we see the overall BlackBerry portfolio increasingly helping us as we go develop and mature our roadmap," both because of the trusted relationship they've developed, and the enterprise software company's deep hooks within the entire secure mobility landscape.













