

Mobile and Wireless Technology in Healthcare Sector

Overview

The Healthcare Industry is experiencing many changes in the way that health and medicine are practised and is continually seeking to improve patient care whilst containing costs.

The adoption of mobile applications and wireless technology is providing a powerful solution to healthcare workers. By implementing real time data access - it is bringing instant, up-to-date information and improving productivity throughout the health organisation by improving communications.

Now more and more healthcare organisations are deploying wireless and mobile technology integration including seamless roaming capabilities as part of their long term strategy, to ensure quality and continuity of patient care at lower costs.

Facing The Challenge

One positive move in creating and maintaining excellence in quality of service is by adopting Seamless Roaming as part of the mobile data strategy.

Hospitals are complex places and typically spread over large areas where it can be difficult or dangerous to run cable. This can also be costly. The use of WLAN technology will be very beneficial to the healthcare and the importance of seamless roaming will boost the usefulness of WLAN implementations.

Reliability and ease of use is king when deploying any mobile computing solution. Brand helps remove any obstacles and ensures the user stays part of the organisation, both reliably and securely.

The Technology

Brand's Apollo solution, matured over 14 years of successful deployment, is making mobile data a reality for business-critical data applications using Seamless Roaming for organisations across the world. Providing a secure connection for the mobile user whilst travelling from location to location, it removes the uncertainty of using a wireless network to transfer vital information by transparently integrating GSM, GPRS and Wifi networking with LAN environments, both within the enterprise, and in the field and provides automatic recovery from dropped connections with out repeating any data transactions and assures that data is never lost, corrupted or compromised.

Brand's mobile data solutions offers mobile users the added benefits of high compression levels, fast packet loss recovery and dynamic seamless roaming between Wifi, GPRS, 3G and other bearer networks depending on availability during the same transaction.

Another major concern for the healthcare organisations would be the security of data information and network security. Brand provides significant protection to the network and data by using authentication and encryption security which complies with all the standards.

Practical Solutions

District Nurse

The District Nurse is visiting an elderly patient at their home. By using a handheld device connecting to a HQ LAN via GPRS, the nurse can access the patients' records and update them in real time whilst with the patient. She also notices that the elderly person now requires a specialist piece of mobility equipment which she can place an order request immediately, rather than returning to office to fill in paperwork to be processed.

The whole mobile data experience has made the district nurse more responsive to patients' needs and actions then in a more effective and efficient manner.

Orthopedic Surgeon

An Orthopedic Surgeon is visiting a patient on the ward. Using a Tablet PC and the internal hospital Wifi technology, he can instantly read the patient's records on the way to ward and assess the situation before he arrives. On arrival he updates the records with the assessment made and changes the drugs prescribed and this is instantly sent to the hospital pharmacy ready for immediate dispatch.

This process has been made more efficient by the surgeon being able to access and update the patient's records instantly whilst on the move - for a more efficient and faster service.

Summary

Mobile Data represents an important step towards a new way of working within healthcare organisations. Both the organisation and workforce benefit from the implementation of mobile technologies; as it makes the working process more effective and efficient. In addition, patient service is dramatically improved by information being made available when and where the treatment is being served and insuring records are accurately updated.

Brand's solutions are deployed in many organisations across the world and Brand specialises in implementing mission critical wireless strategies. Brand's Apollo solutions make mobile data a reality using session management. It removes the uncertainty of using a wireless network to transfer vital information and ensures compatibility with almost all data devices and networks resulting in a future-proofed investment for any healthcare organisation, allowing access to all IP-based applications from the hospitals, patient's homes or in GP's surgeries.