



Technology Improves Patient Care in Medical Clinics

The Healthcare industry has been an early adopter and consistent user of mobility applications due to proven productivity gains and improved patient care.

Access and Mobility

Healthcare providers need access and mobility – this is how doctors practice from multiple centres and how patients' records are able to follow them from one room to another, e.g. from blood tests to ultrasounds and consultations. This requires collaboration software, wireless technology, scanners, medical tablet PCs and integrated voice systems.

Until now, this type of technology has only been prominent in major hospitals; however it is now becoming affordable and universally available for use in medical centres and specialist clinics in which many of the same mobility and access issues need to be addressed.

In medical and specialist clinics where customer care, efficiency and cost control are key factors in operations, creating the right technology environment reduces costs and provides patients with efficient delivery of care.

These clinics can be compared to serviced offices that provide very specialised medical equipment for common use by attending specialist doctors. In this sense, doctors are often "virtual" in that they only attend on certain days. Doctors need to collaborate with others using conferencing facilities and shared patient data, and patient data needs to be easily and securely passed from one doctor to another and from one room to another. Wireless, smart telephone systems, tablet PCs and medical data are all needed to support patient care excellence and efficiency in this way.

Technology for Clinics

These technologies allow medical and specialist clinics to:

- Conduct add-ons, moves and modifications without changes in cabling. They can be done centrally which reduces cost as it takes less time.
- Voice conferencing can be initiated at any time by the doctor without operator intervention.
- Video conferencing can be initiated in the same way as voice conferencing.
- Virtual collaboration with the combination of "soft" phones and PC technology allows clients' records to be discussed with the right specialist securely whether they are resident or non-resident.
- Tablet PCs connected via wireless networking can be preset with an inpatient's medical details and passed from receptionists to the radiologist where scans are viewed and accepted, then passed onto the orthopaedic surgeon – providing the patient with a timely and efficient service.
- Paper files can be minimised as more data is online and secure from loss or damage.

Industry Research

Healthcare Industry research by Motorola (Source; Motorola Enterprise Mobility Barometer, State of Mobility in Healthcare, April 2009) has further shown that access to these technologies improves care, reduces errors and costs.

Key points of this research include:

- The benefits cited for mobility were increased accuracy and increased employee productivity due to the utilisation of mobile technologies within various clinical settings.
- Key applications driving investment in healthcare include electronic health records (EHR) driven by increasing regulations, computerised physician order entry (CPOE) and medication administration.
- Investment growth in asset tracking for asset/inventory management reflects increasing financial pressures due to the weakening economic climate.
- Use of key mobility applications attributed to a 31 percent reduction in manual errors. (Medication mistakes are among the most common medical errors.)
- Other commonly cited mobility benefits include increased employee productivity, increased compliance accuracy for quality reporting and increased order fulfilment accuracy.
- The study revealed that mobile workers within a healthcare environment utilising several key mobile applications were able to recover approximately 39 minutes per day, which lead to greater patient care and/or reduced payroll costs.

So investments in mobility technologies such as wireless, IP based phones systems and collaboration software can show clear benefits not only in the general management of add-ons, moves and changes but they also deliver clear opportunities in medical application development strategies.

GlobileNet has been providing communication solutions to the healthcare industry for over 20 years. GlobileNet are specialists in wireless, telephone systems, solutions for medical data management and understand the intricacies and unique working environment of healthcare providers.