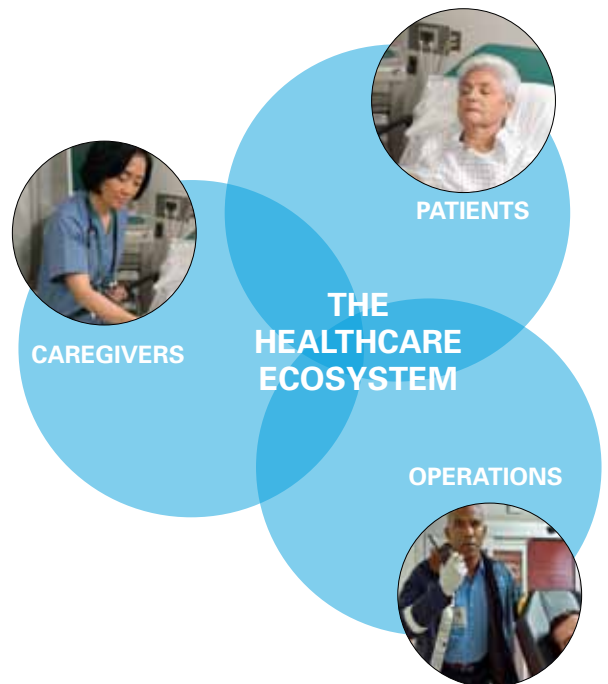# Administering Mobility Solutions to Patient Care

Providing quality patient care at the highest standard your patients deserve

In the healthcare sector, safety, speed and accuracy are of essence. Healthcare workers need rapid access to patient information, medical records and resources. Emergency Services and Ambulance personnel need resilient wide area communications, and integrated communication tools to respond to critical situations. Hospital and pharmacy supplies must be readily located and available. Staff must be deployed effectively and timely to optimize the limited pool of caregivers. Paperwork can be minimized to reduce manual errors and provide caregivers with more time to focus on their core responsibility: saving lives.

Healthcare organisations are faced with life and death situations on a daily basis. Such critical environment requires the best-in-class products and technology so caregivers can safely and effectively focus on their duties, providing quality medical treatment for patients.

Healthcare providers can leverage enterprise mobility solutions to offer optimum patient care, while reducing the risk of human errors in the hospital, laboratory, and pharmacy. Wireless technology connects physician offices with doctors, patients with nurses, and supplies can be readily tracked and located and redeployed. The result is increased safety while limiting risk, without adding more resources.

Here are some solution areas that harness the strengths of Motorola's devices with industry leading partner applications to ensure a high quality of healthcare for patients, empower caregivers with the right mobility solutions to carry out their duties safely, and boost operational productivity for healthcare users.

PATIENTS

THE HEALTHCARE ECOSYSTEM

CAREGIVERS

OPERATIONS

Ensuring Quality Healthcare for Patients

Patient Admissions

Enhance and speed up patient admission and check-in with a personalized experience. The patient should be at the centre of the healthcare organization's activities. As the principal recipient of healthcare services safety, the patient's experience and satisfaction is of outmost importance. The admission process can be streamlined with barcode scanning technologies to provide positive patient identification (PPID), and deliver a more pleasant admission experience for the patient.

Specimen Collection

Improve accuracy and speed diagnosis. False test results can cause a negative experience for patients and caregivers alike – causing a patient anxiety, and adding costs for repeat testing. Mobile computers, scanners, and bar code technologies are powerful solutions that help increase the precision of sampling, labelling and analyzing specimens, and reduce the chance of collecting the wrong specimen from the wrong patients in the wrong way or at the wrong time.

Administering Medication

Less mistakes lead to increased clinical safety. Ensuring that the right patient is administered with the right medication at the right time, with the right dosage, through the right route, what we call the 'Five Rights' of clinical safety (see right box story) is often a critical aspect of healthcare. Mistakes involving wrong administration of drugs could lead to dire and costly consequences.

Results from national surveys of hospital leaders indicate an increased need for information technology solutions that can address patient safety and reduce errors in medication administration.

By combining ruggedized handheld mobile computers with scanning capabilities, wireless local area network (WLAN) and bar code technologies with medication administration applications from leading clinical solution providers, we can ensure that the 'Five Rights' of clinical safety are correctly enforced at point of care.

Empowering Caregivers

Hospital/Nurse Communications

It is critical to maximize nurses' and physicians' ability to respond to patients who need urgent and immediate treatment. Advanced collaborative devices that allow both voice calls and punch in of data on keypads on mobile computers will help shorten the lead time for nursers to respond to critical situations, thus maximizing productivity.

VOIP technology facilitates faster nurse response times when a patient presses the call button. Mobile communication technology with PBX integration allows nurses to place or receive calls from outside the facility, and doctors can be paged, so that caregivers can quickly relay patient diagnosis and treatments.

The interoperability between two-way radios used by Ambulatory Services and communication devices used by caregivers in the hospitals also allow for better preparation efforts to receive patients in an emergency response situation.

FOUR PILLARS OF HEALTHCARE MOBILITY

Patient Safety:
Administering Medication and Specimen Collection

Operational Efficiency:
Patient Admissions and Asset Management

Secure Communications:
Remote Patient Monitoring and Staff Communications

Seamless Connectivity:
Wireless Infrastructure

CHALLENGES FACING HEALTHCARE ORGANIZATIONS

Digitization:
Transforming paper-based documentation to digital information and reducing manual mistakes and inaccuracy.

Interoperability:
Ensuring compatibility between systems within a healthcare facility and between different healthcare organisations. Establishing standards in electronic health records, workflow and operating processes.

Adoption:
Making technology easy to use encourages caregivers to use devices in their daily work.

Information Access:
For all functions and roles within a healthcare agencies with proper authentication while maintaining data security and privacy.

THE FIVE "RIGHTS" OF CLINICAL SAFETY

1. Identify the RIGHT Patient

2. Confirm the RIGHT Medication

3. Confirm the RIGHT Dosage

4. Confirm the RIGHT Route

5. Administer at the RIGHT Time

DID YOU KNOW?

- 98,000 deaths occurred annually due to medical errors in U.S. hospitals

- 7,000 of these deaths involved medication errors!

- Estimated associated economic burden of medication administration errors was approximately $77 billion

*According to a study published by The Institute of Medicine in 1999.

Monitor Patients, not Paperwork

Staff shortages and multiple shifts are common in healthcare environments, where doctors and overburdened nurses must continue to provide quality care to patients. Wireless patient monitoring allows caregivers the freedom to keep tabs on multiple patients without being tethered to a single monitoring location. Staff can remotely program monitors and pumps, and even be alerted instantly to changes in a patient's condition.

Hospitals who empower their caregivers with ruggedized mobile devices that are connected to a wireless infrastructure, are better equipped to provide quality and responsive medical treatment, even when there is a shortage of caregivers.

Nurses can scan a barcode on a patient's wrist, confirm the time, dosage and prescription at the patient's bedside, reducing mistakes and increasing patient safety.

Technology for Optimal Operational Efficiency

Critical Radio Communications for Emergency Services

Do not underestimate the need for radios. There are usually the communication lifeline, analog or digital, used in most emergency situations. Instances where there are mass casualties that involve the coordination of multi-agency, radio communications network, such as the TETRA system, provides the critical link between resources at the incident and the rest of the first responders.

It is also the same communication platform that allows communications interoperability with other agencies, which include – police units, paramedical services and first responders unit.

Manage Assets to Minimize Costs

Asset management solutions for healthcare combine bar code technology, handheld computers and WLAN connectivity with software from industry-leading partners help hositals to better track assets both internally and externally.

The result is time savings in locating and stocking of medical supplies such as heart monitors to infusion pumps and wheelchairs. By capturing, moving and managing data, these mobility devices help ensure hospital staff locate the medical devices when they are needed and ensure they are clean, working and ready for use.

Mobility Solutions for Healthcare

Motorola helps enterprises make the most of their current and future technology investments. Motorola's offerings coupled with our Healthcare Partners' solutions serve to address healthcare providers' needs in the areas of Patient Safety, Operational Efficiency, Secured Communications and Seamless Connectivity. Our solutions aim to help caregivers deliver better quality patient care and positively transform the patients' experience, today and tomorrow.

If you are interested in finding out more about Motorola's Enterprise Mobility Solutions for Healthcare, please visit: http://ap3.motorola.com/healthcare/index.asp