# Beijing Union College Hospital Enhances Productivity and Quality of Medical Services with Motorola's Enterprise Mobility Solution

"The healthcare industry in China is in the process of migrating from a paper-based manual driven workflow to a paperless data transmission workflow. Solutions like Motorola's Enterprise Mobility Solution have become a critical part for the IT infrastructure of domestic hospitals."

- Professor Li Baoluo, Director of Information Center, Beijing Union Hospital.

## Company Overview

China's premier healthcare facility, the Beijing Union College Hospital, was founded in 1921. More than 3,600 physicians, nurses and staff provide a variety of medical services to thousands of patients daily. The hospital is also a leader in medical research with the world renowned Research Institute of Clinical Medicine and Center of Emerging and Serious Diseases.

## The Challenge: Ensuring Real-time Access To Accurate Patient Information And Improving The Quality Of Medical

Most hospital information systems in China were built in-house. The Beijing Union College Hospital is no exception. These systems did not track a patient's data throughout its lifecycle. Information about the patient and their treatment is scattered in various places including in handwritten notes. Patient identification was manually done and prone to errors. Doctor's prescriptions were not keyed into a centralized database, making it difficult for the nurses to follow through or to track if a patient had received medication or not. Nurses were also spending too much time on paperwork. It was also common for nurses to have to walk between patients' bedside to the nurses' station to check on their records or a doctor's prescription, and in the process mistakes on orders were inadvertently made. Even accurate billing was an issue as there was no way to check if a patient had in fact received medical treatment.

The Hospital needed an efficient end to end system to track the treatment of patients and to reduce the workload of the nurses so they could focus on care giving.

**Customer Profile**

**Company**
Beijing Union College Hospital

**Industry**
Healthcare

**Challenge**
Ensuring real time access to accurate patient information and improving the quality of medical services

**Solution**
MC50

**Solution Features**
Bar code scanning, mobile computing, wireless networking and mobility management software

**Benefits**
Enhanced employee productivity.
Enhanced mobility by enabling rapid access to medical and patients  data.
Lowered rate of error through the paperless data transmission workflow.

## The Solution: Implementing A Motorola Mobile Solution With Enterprise Digital Assistant And Barcode ID

The Hospital wanted a state-of-the-art medical information management solution that also integrated with the hospital s current HIS (Hospital Information System).

Motorola s Enterprise Mobility solution deployed at Beijing Union College Hospital included the use of patient barcode ID wristbands to accurately identify patients and the MC50 — Enterprise Digital Assistant (EDA), to enable access to patients medical records at their bedside. This solution enables the hospitals and healthcare centers to receive and input information more accurately about their tasks and minimized mistakes by the caregivers.

Patients wear barcode ID wristbands which stores information like the patient s name, age, gender and allergies. This helps in preventing any identity mix-ups and also ensures that they receive appropriate treatment from their nurses and doctors The EDAs contain up to date information about the patient s condition, medical history and doctor s instructions, and prescriptions. Real time access to this information using Motorola s MC50 not only saves money and time, but also saves lives under emergency situations.

## The Benefits: Enhanced Mobility And Productivity

In the first phase, Professor Li plans to deploy EDA in 60 wards, with each ward having at least 4 EDAs.

Said Professor Li,  Mobile and barcode technology from Motorola will allow nurses to execute doctor s advice accurately.

Secondly it tracks the entire healthcare service process, the progress of the patient as well as the individuals involved in the process. Thirdly it provides an objective basis for evaluating the quality of services by individual medical staff. The ultimate goal is to reduce error rate, and improve healthcare quality.

Usually, there are several nurses working in one ward at the same time. The Motorola Enterprise Mobility solution was designed to offer the ability to provide concurrent processing of multiple EDAs, so that the information on each patient is unique and documented in real time so that different nurses do not administer the same instruction multiple times to a patient thereby bringing accuracy into the processing of patient information.

Finally, the use of Motorola s technology also translates to having a more accurate and efficient billing process. As nurses also update EDAs on instructions that have been executed, it tracks treatment given, consumables to ensure that the correct bill is presented to the patient upon discharge. This is provided by the  Lock and Unlock Sharing  capability, which was specially designed for this purpose.

Paper worksheets with illegible handwriting and signatures have been replaced by electronic worksheets and signatures.

The Motorola Enterprise Mobility solution has greatly improved the overall quality of medical services at Beijing University College Hospital. The system has greatly minimized medical errors, ensures that the right treatment is given to patients at the right time, and monitors the lifecycle of the treatment of the patient and progress real-time. Symbol has made manual data and inaccuracies a thing of the past.

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