

Mobile medical management reduces errors at patient bedside



Enterprise: Becton Dickinson

Industry: Healthcare

Application: Medication management and specimen validation system

Profile: Becton Dickinson, a Fortune 500 company, manufactures and sells over \$3 billion worth of healthcare products annually, including well-known products such as ACE bandages and VACUTAINER blood collection tubes.

Each year, in hospitals across America, more than 100,000 fatalities result from preventable medication errors; some two million injuries are caused by mistakes in the medication process. What's more, the total annual cost of these inefficiencies and errors in our nation's healthcare facilities exceeds \$4 billion.

Becton Dickinson, www.bd.com/bdid, is working to change that. With over 8,000 drugs to choose from at nearly 5,000 hospitals nationwide, it's crucial that mobile healthcare workers have timely access to critical drug and patient information. BD developed the Rx and Dx systems to dramatically improve the management of medication administration and specimen collection at the patient's bedside.

Both solutions utilize the Symbol SPT 1740 handheld device, based on the Palm Computing® platform, coupled with Riverbed Technologies' ScoutSync 3.0 software. This Palm Computing solution provides barcode scanning capabilities, along with pick lists and pull-down menus for data capture; and the software provides simultaneous, two-way communication between multiple Symbol devices and the BD Rx/Dx Server.

The Rx System lets healthcare providers access vital dosage and drug interaction information before administering a drug. Using the Rx System, nurses scan barcode labels on unit-dose medications and patient wristbands to ensure that the right drug is given to the right patient at the right time. Built-in management reporting tools track missed doses, misidentification, and other errors.

Designed for the collection stage of the specimen management process, the Dx System ensures that the patient is positively identified and verifies important collection data. It prints the correct barcode specimen label at the collection point, eliminating the need to manually write the date, time, and caregiver's name on each tube, and ensuring that the right label is affixed. BD estimates the average hospital may save as much as \$200,000 to \$300,000 annually by installing the Dx System.

Now, from anywhere in the hospital, healthcare providers can send and receive the most up-to-date critical patient information from BD's powerful Rx/Dx Server. At the server level, the Rx System interfaces with the hospital's pharmacy information system, and the Dx System with the hospital's laboratory information system — a solution which leverages the enterprise capabilities of the Palm Computing platform.

According to Walter Kalmans of BD, "The Rx and Dx Systems are designed to significantly reduce errors in medication administration and specimen collection. This has a huge impact on our healthcare system, significantly reducing injuries, improving quality and lowering costs." Kalmans estimates that BD's systems will pay for themselves in less than two years.

Rx and Dx are the first BD solutions in a suite of applications which will automate near-patient transactions to ensure streamlined, error-free clinical processes. By extending critical information to mobile healthcare workers, the BD Rx and Dx Systems ultimately provide a better, safer healthcare system — for hospitals and patients alike.

Mobilize Your Enterprise

One of a series that profiles real-world handheld computing solutions on the Palm Computing® platform.

