

The Use of Mobile Technology to Improve Patient Safety



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Top 6 Healthcare Industry Issues



1 Patient Safety

Medical errors are the 5th leading cause of death
FDA Bar Code Regulation now in effect
48,000-98,000 preventable deaths caused by errors each year
(IOM Report)

2 Staffing Issues

Nursing shortage / pharmacist shortage

3 Demographics

Baby boomers place more demand on the system

4 Skyrocketing Costs

In US, 40% paid for by Medicare / Medicaid and growing
Increased drug prices and newest medical devices have
substantial price tags

5 Compliance

JCAHO, HIPAA, Legislative

6 Electronic Medical Records

Realization that EMRs may be able to reduce costs
by eliminating duplicate tests
Only 15% of hospitals have full electronic medical records;
RHIOs starting to allow sharing of information





ENTERPRISE MOBILITY

2008 Enterprise Mobility Market Barometer



Healthcare Review

*Motorola Enterprise Mobility business (EMb) Market Intelligence
February 2008*



Key Findings



- **Mobility continues to rise in importance in healthcare** driven by industry challenges such as the rise in medication delivery errors, the inability to locate supplies & equipment and a lack of real-time access to records. An overwhelmingly majority (73%) of mobility decision-makers and mobile workers (74%) stated that mobility is more important today than it was last year.
- **Mobility is viewed as key error-proofing tool as** 73% of physicians and 71% of nurses felt the usage of mobility can aid in the reduction of medical errors.
- **Key application investment drivers include medication administration, patient monitoring, records/document management and drug delivery.** Cited challenges include software and integration costs, hardware costs, security concerns, interference and performance problems, mobile device and infrastructure management, integration issues and the inability to meet compliance guidelines.
- **Healthcare mobile workers, physicians and nurses have realized immediate benefits and productivity gains due to the utilization of mobile technologies and solutions.** More than 1 in 4 (31%) of surveyed healthcare mobile workers are able to recover at least 50 minutes per day due to the utilization of enterprise mobility solutions.

The Fastest Growing Application: Barcoded Medication Administration



Dilantin®
(Extended Phenytoin
Sodium Capsules, USP)
100 mg

Protect From
Light and Moisture.
DIST BY PARKE-DAVIS
DIV OF PFIZER INC, NY, NY 10017



“The **5** RIGHTS”

Identify the **RIGHT** Patient

Confirm the **RIGHT**
Medication

Confirm the **RIGHT** Dosage

Confirm the **RIGHT** Route

And the **RIGHT** Time



Benefits:

- » Helps meet JCAHO safety initiatives
- » Reduced errors
- » Reduced costs associated with errors
- » More rapid and accurate documentation

MED ADMIN ERRORS:

↓ **64** % ('93 - '99)

↓ **86** % (2001)



**Colmery-O'Neil
VA Medical Center
(Topeka, Kansas)**



Bar-Code Enabled Specimen Collection



Components:

Specimen Container
Bar-code printer (lab and portable)
Bar-code scanner
Application Software

=

Right Specimen
Right Container
Right Quantity
Right Time
Right Patient
Right Lab Tests
Right Results

24 Ways Mobility Helps Hospitals



- Positive Patient ID**
- Medication Administration**
- Laboratory Specimen Collection**
- Transfusion Verification**
- Review of Lab Results**
- Near / Bedside Patient Testing**
- Infusion / Syringe Pump Programming**
- Pharmacy Orders By Doctors**
- Review of Pharmaceutical Profiles**
- Taking Vital Signs**
- Breast Milk Tracking**
- Nursing Orders**

- Nurse Call**
- Wireless VOIP Communications**
- Charge Capture By Doctors and Nurses**
- Dietary**
- Supply Management**
- Medical Record Tracking**
- X-ray Tracking**
- Asset Tracking**
- Patient Tracking**
- Biomedical Engineering**
- Instrument Tracking**
- Alerts**



12 Wide Area Mobile Applications



- Positive Patient ID**
- Medication Administration**
- Laboratory Specimen Collection**
- Review of Lab Results**
- Vital Sign/I&O Recording**
- Procedure Capture**
- Supply Charging**
- Inventory Management**
- Routing**
- EMS Documentation**
- Mass Casualty Management**
- Time Sheet Management**





Patient Monitoring 

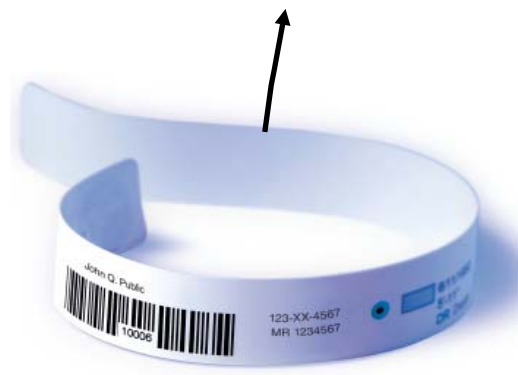


Nurse Call



Software Solutions

VoIP MC70 Soft Client



Event Notification System





Workflow Optimization

Thank You



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