eMAR Design Standards to Improve Patient Safety

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Message #1: Design for Nurses
Design for Nurses

• 3.6 million nurses in the U.S.\(^1\)
  • Most work in acute care, long term care
  • National health IT focus to date has been on ambulatory care and supporting physicians
• Nurses are closest to patients
  • Transform design to person-centered HIT
• First line of defense for patient safety
  • A main role is monitoring patient status
  • Supporting nurses is a vote to supporting patients and their safety
• Nurses’ information needs are unique with some common elements

\(^1\) Personal Communication P. McMenamin, ANA Health Economist, personal communication, August 30, 2016
Message #2:
Design for the Ecosystem
eMAR Current Process
Current Process

Silo’ed with a thread of orders

Ordering provider

Pharmacist

Nurse

Patient
Silo’ed... with disconnected information
Design for the Ecosystem

Understand the interdisciplinary work, provide cognitive support, integrate processes
Message #3:
Design for Situation Awareness
eMAR Current Process

Nurse

Patient

Orders
eMAR Current Process

Nurse forages for information

Handoff Info

Med Info

Patient Status

Patient & EHR Info (labs, vital signs, etc.)

Orders
Design for Situation Awareness

• Support situation awareness
  • What is my patient’s status now?
  • What is the status of my patient’s meds now?
  • What is pertinent information?
    • For this activity?
    • For this unit, patient, setting?
  • What is the intersection?
Start with Workflow and Best Practices
Design for Situation Awareness

Data Visualization
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