eMAR Design Standards to Improve Patient Safety

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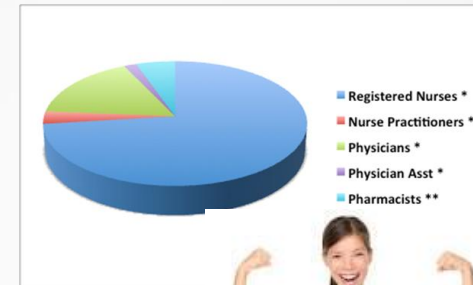
Nurses' UX Paint Points

Staggers, Elias, Makar, Hunt, Alexander, 2016

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

Registered Nurses *
Nurse Practitioners *
Physicians *
Physician Asst *
Pharmacists **

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

Orders   Orders   Orders

Design for the Ecosystem

Silo'ed… with disconnected information

Ordering provider

Pharmacist

Nurse

Patient

Orders   *Orders*   *Orders*

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

Patient Status

Nurse   Patient

Orders

Design for Situation Awareness

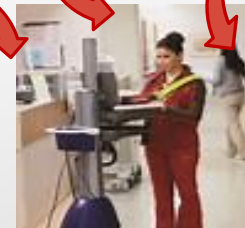- Support situation awareness
    - What is my patient's status *now?*
    - What is the status of my patient's meds *now*?
    - What is pertinent information?
        - For this activity?
        - For this unit, patient, setting?
    - What is the intersection?

Handoff Info

Med Info

Patient Info (labs, vital signs, etc.)

Patient Status

Nurse   Patient

Orders
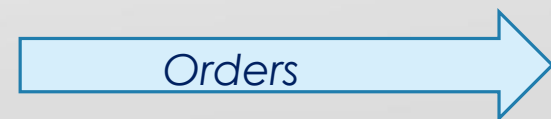
Start with Workflow and Best Practices

Design for Situation Awareness

Data Visualization

Contact Information

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