



Interoperability between EMR and Medication Dispensing Cabinet Nursing Workflow Impact

Marie Kozel, MBA, BSN, RNC-BC



Introduction

Methodist Health System
Omaha, Nebraska



3 Acute Care Facilities

- Methodist Hospital (423 beds)
- Jennie Edmundson Hospital (206 beds)
- Methodist Women's Hospital (112 beds)

Medication Cabinets History

- 1995-Initial Medication Dispensing Cabinets
- 1998-Cartless Model for First Dose Dispensed
- 36 Anesthesia Workstations



Project Goals

- Interoperability with EMR
 - Improved nursing workflow
 - Increase nursing satisfaction
 - Seamless integration with EMR
- Improved vendor support model
- Maintain/Improve Pharmacy features
- Alignment with ACO
- Financial model improvements

Implementation Overview

- End User involvement in selection
 - Nursing and Pharmacy
 - Analysis during 3 vendor fares
 - Hands on evaluation with review
 - 2 Site visits
- 5 facilities (3 hospitals and 2 clinics)
- 85 patient locations, 108 pieces of equipment
- Rolling implementation over 6 weeks



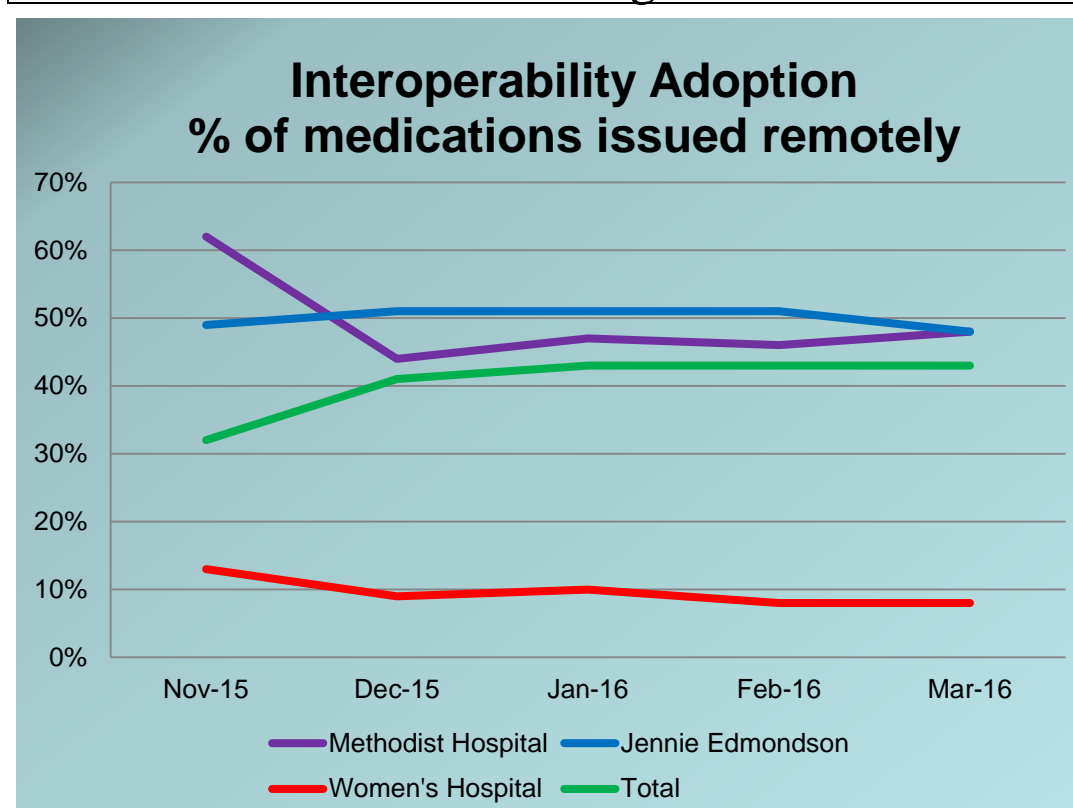
Workflow



Adoption

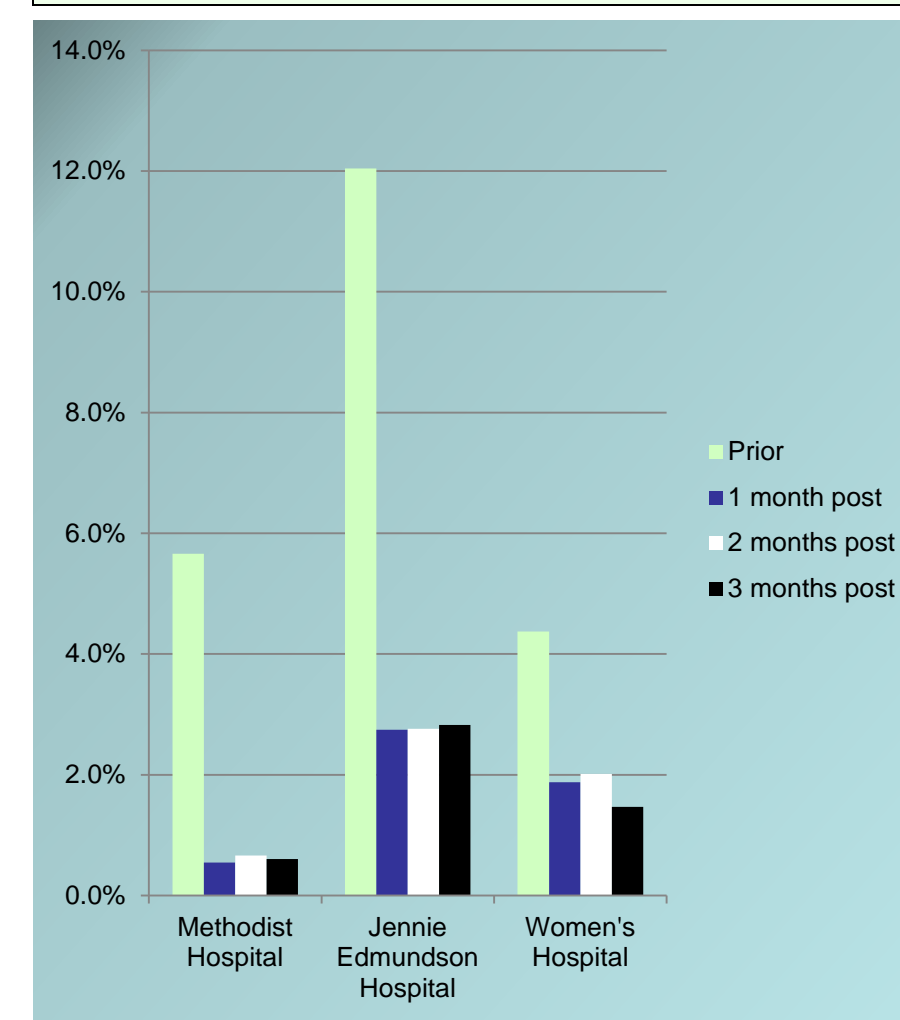
Interventions

- Working with both vendors to improve performance
- Slow to load M-Page
 - Slow to send issue message to cabinet

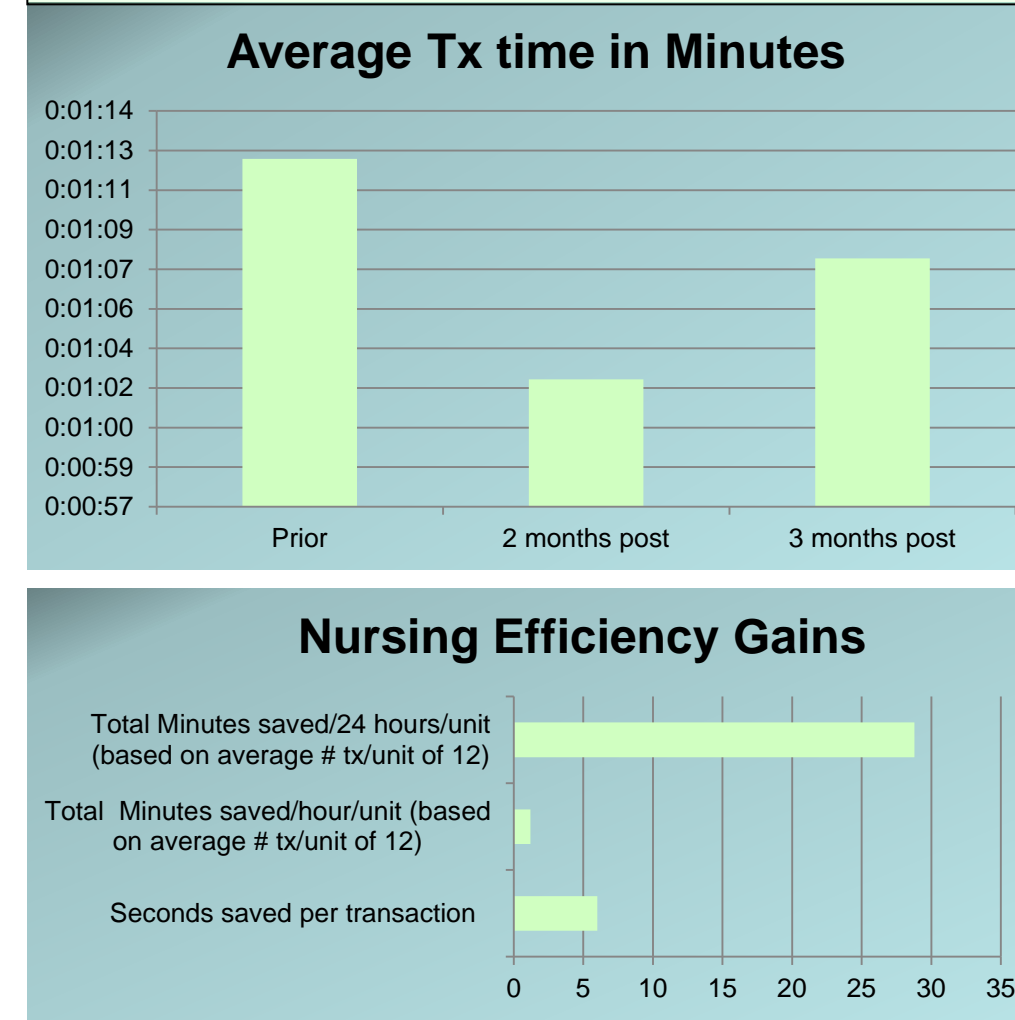


Workflow Impact Analysis

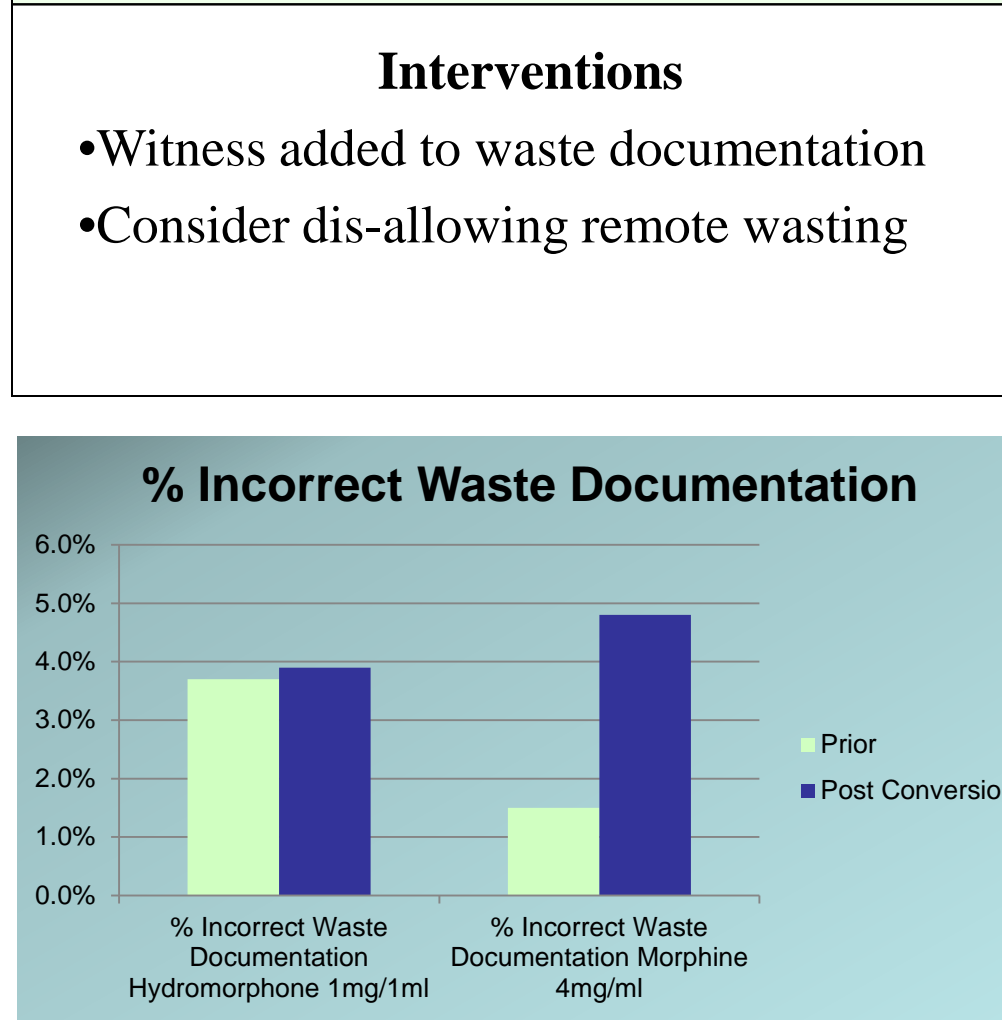
Over-Ride Removal



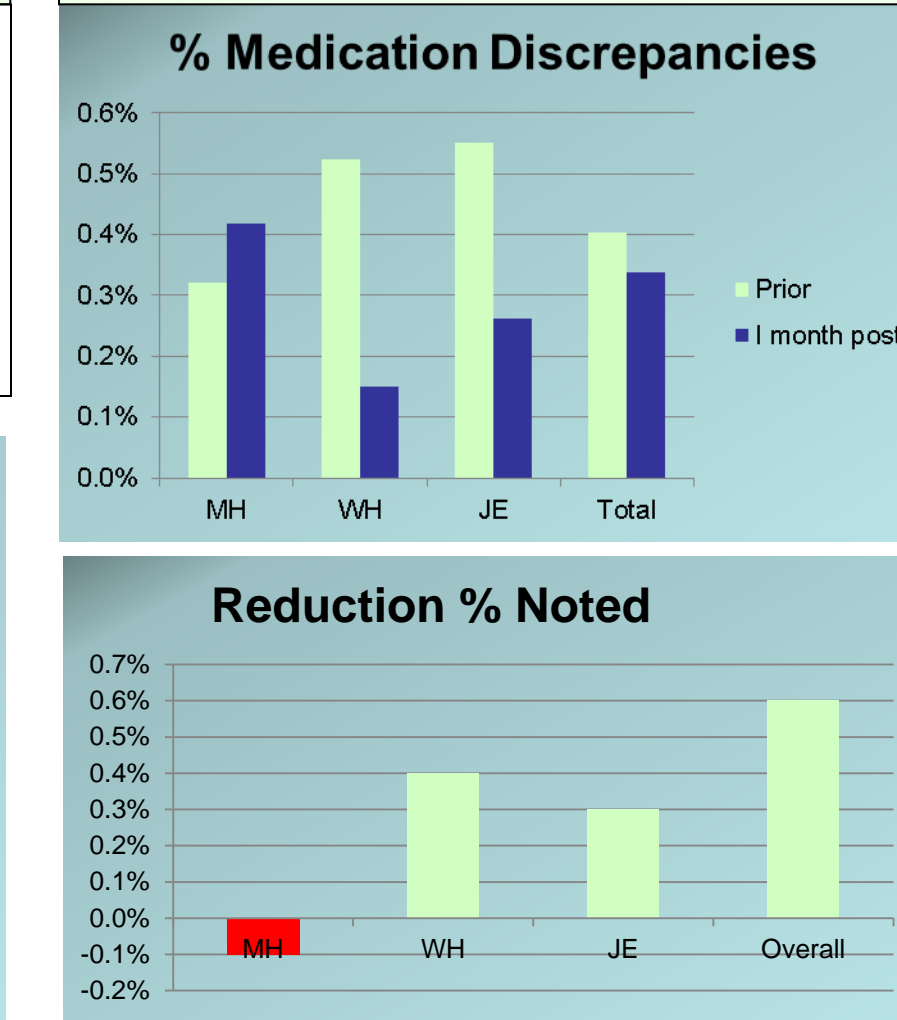
Transaction Time



Waste Documentation



Discrepancies



Looking Forward

- “No Longer a Pharmacy System – Now a clinical system that impacts pharmacy, nursing and IT”
- Ergonomics-shelves too high/too low
 - Overhead lighting limits clarity of cabinet lighting notification
 - Pharmacy change Control and Standardization
 - Password reset timing increased to 120 days
 - ED Over-ride process streamlined