

# ASHP 2003 Midyear Clinical Meeting Poster Presentation How to Implement an Automated Dispensing Machine with Patient Profiles in a 100% CPOE Environment

## Objectives

- Reduce chances of medication errors by facilitating electronic medication profile review and verification prior to medication dispensing
- Increase amount of pharmacist time available for clinical review by minimizing time spent on distributive tasks
- Decrease medication turnaround time by automating dispensing of commonly used medications



## Challenges

### Internal

- Clinical computer system without a pharmacy module
- Manual medication verification system
- Integrating a first generation CPOE system with current technology
- Lack of interface between CPOE and Pyxis systems

### External

- Pyxis MedStation® SN drawer "real estate"
- Equipment availability

## Implementation Process

### Phase I - Preparation

- Collaborated with stakeholders on process design and implementation strategy (nursing, pharmacy, finance, IT, facilities, vendor)
- Installed electronic medication verification system
- Created interface between CPOE and Pyxis systems
- Created expanded formulary to support 1:1 interface between CPOE and Pyxis systems
- Developed item number exchange table between CPOE and Pyxis systems for each selectable dose in CPOE system
- Configured and installed equipment

### Phase II - Evaluation

- Tested and modified CPOE to Pyxis product interface to ensure accuracy

### Phase III - Go Live

- Educated staff
- Monitor for quality assurance

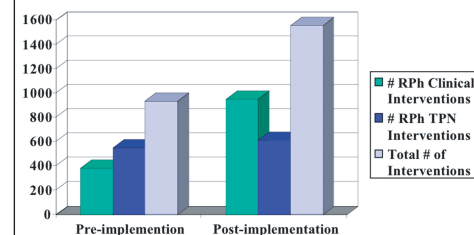
## Results

- 250% increase in pharmacist clinical interventions
- 64% increase in number of interventions per pharmacist work hour
- 94% of orders verified in less than 15 minutes
- 85% of medications available in Pyxis MedStation SN in care areas
- 450% increase in total drug cost savings

## Keys to Success

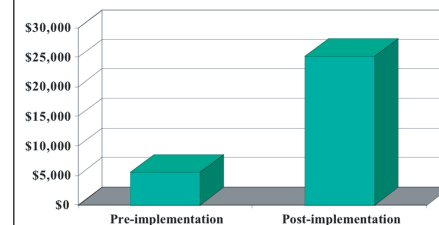
- Multi-disciplinary collaboration, dedication, teamwork
- Hospital Administration sponsorship
- Well-defined policies and procedures

## Clinical Interventions



\*Data collected 3 months prior and post go-live.

## Total Drug Cost Savings



\*Data collected 3 months prior and post go-live.