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Who Are We?

- Located in Houston, Texas
- A leader in **Pediatric, Women's Health,** and **Maternal-Fetal Medicine**
- Over 630 beds
- 31,000 Inpatient Visits/year
- 110,000 EC Visits/year
- 2500+ Inpatient Nurses & RTs
- EMR Rollout Timeline:
 - eMar (2010)
 - ED Application (2010)
 - Inpatient Documentation (2011)
 - CPOE (2011)
 - **Mobile BCMA Solution (2015)**



Informatics @ TCH

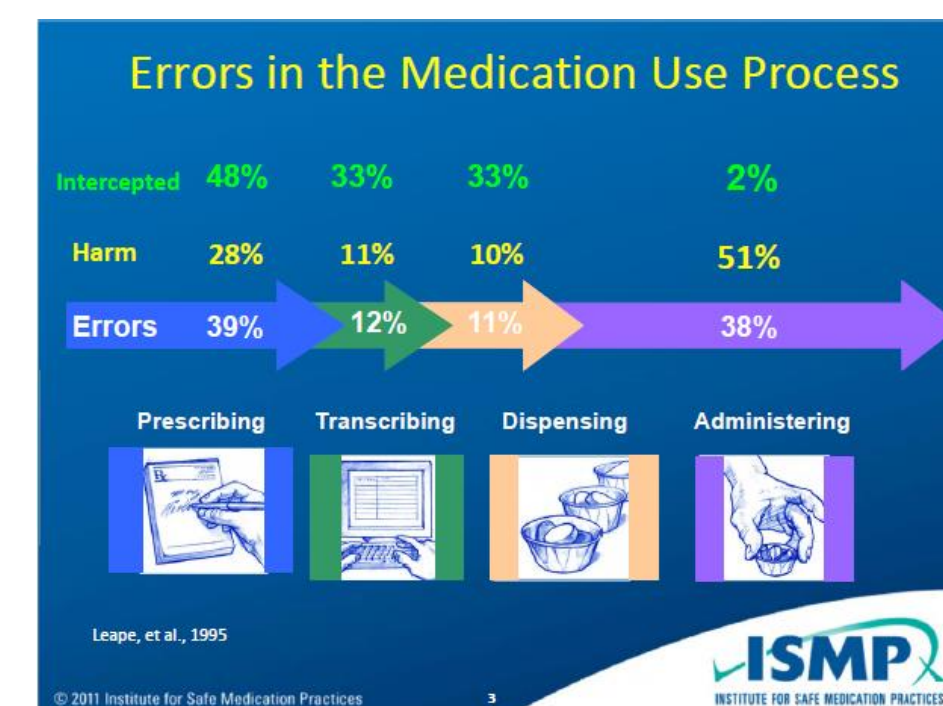
- **Clinical Informatics** functions as an innovative partner to deliver technology and redesign workflows to translate best practices into clinical operations
- Created in 2013, we are a team of eight. All informaticists are registered nurses with a variety of informatics experience

Planning

- The primary **Strategic Imperative** guiding this implementation at TCH was to improve **Patient Safety**
- **Governance Structure:** Executive Steering Team (EST) and Project Steering Team (PST)
- Informatics nurses participated on both project steering teams
- **Resources** were identified from several interprofessional groups
- What was our **Scope?**
 - All inpatient care areas using the inpatient MAR
 - Nurses and Respiratory Therapists

Analysis

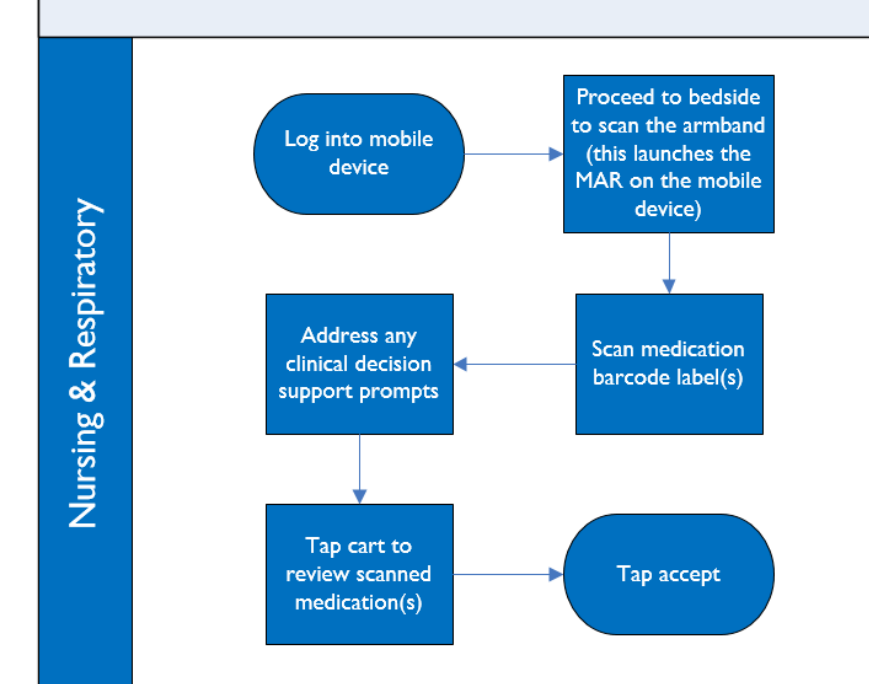
- **Site Visit** was conducted with a similar Pediatric facility in Texas
 - This visit influenced the decision to implement a mobile solution for BCMA rather than tethered scanners fixed to mobile workstations
- Informatics modified and validated existing **Current State Workflows** for medication administration and the associated clinical documentation



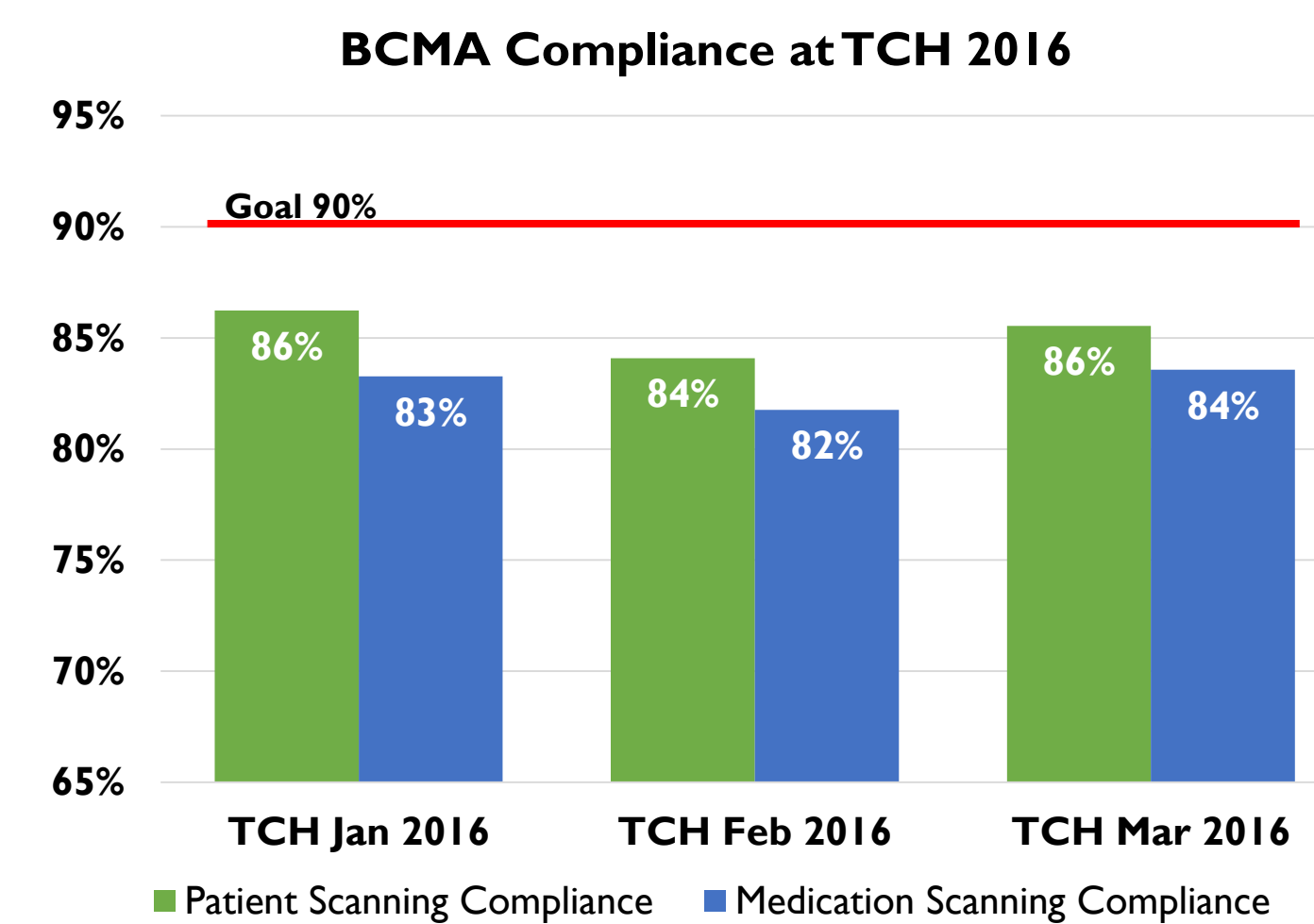
Design

- Informatics documented the **Future State Workflows**
- Developed **Communication Plans** including:
 - Nursing Council(s) presentations
 - Nurses' Week Poster Presentation
 - Nurses' Professional Development Day
 - Updates in Quarterly Informatics Newsletter
 - Updates via TCH intranet site

Mobile Medication Scanning: Basic Workflow



- Facilitated a **Clinical Subgroup** to make decisions on workflow, design, and the operational implementation plan
- Nursing Informatics led the development of the **Training Plan** and coordinated resources to participate in **Integrated Testing**

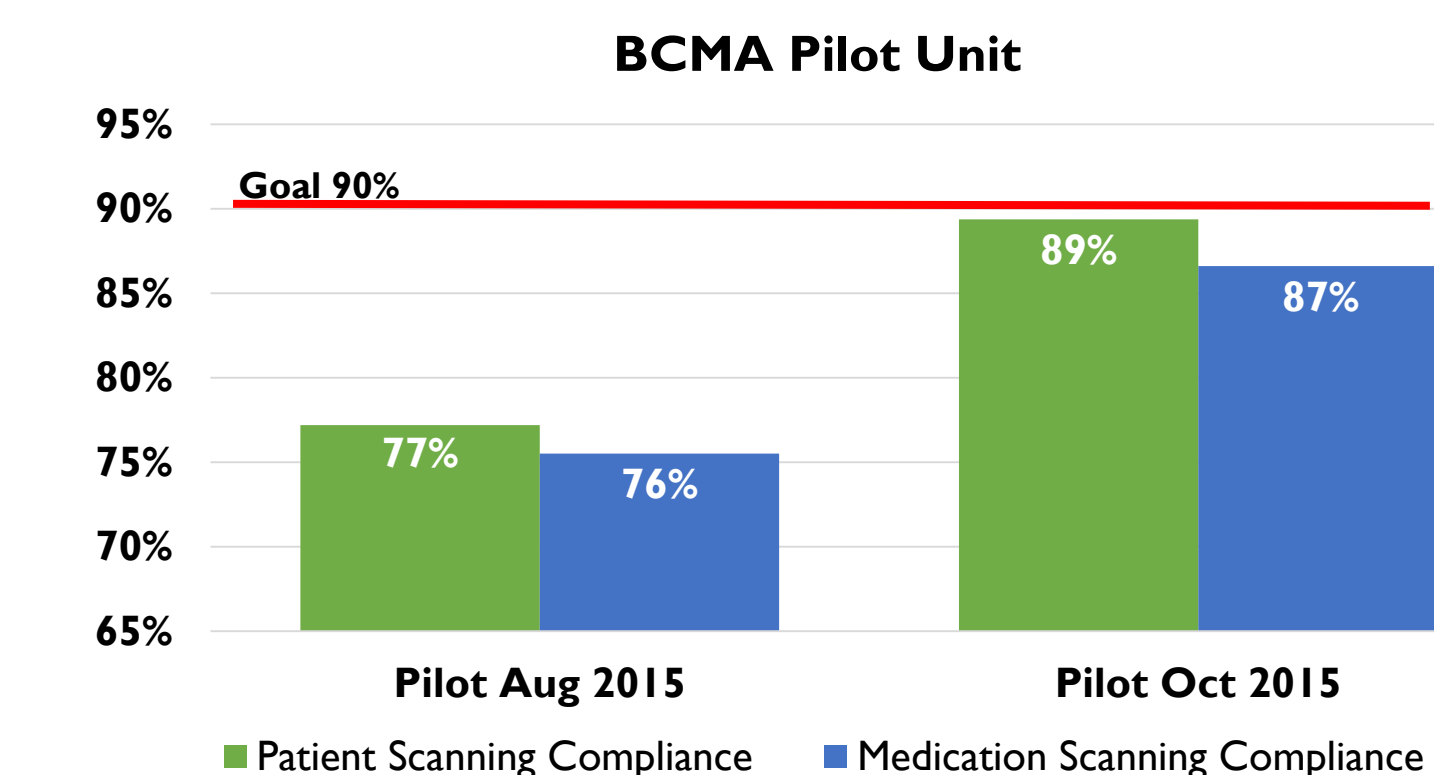


Implementation

- **Pilot** lasted two weeks and was in an area transitioning from handheld tethered scanners to the mobile solution
- Following the pilot, BCMA was implemented in a **Phased Approach:**
 - Eight separate go-lives over eight weeks
 - Similar units (3-4) were combined into groups for go-lives
- Nursing Informaticists staffed the **Command Center** and provided **Floor Support** around the clock for the first three days of each go-live
- Facilitated technical, application, and workflow **Issue Resolution**

Metrics

- Pre-implementation metrics were available from Pilot location
- Implementation goal: **90% Scanning Compliance**
- Daily, weekly, and monthly **Reports** available to clinical leadership
- Identify **Trends** and review with leadership



Lessons Learned

- Awareness of implementation **Timelines**
- **Go-Live Plan:** Big-Bang versus phased approach
- Challenges with ongoing **Support** during subsequent roll outs
- Ensuring an adequate **Communication** strategy amongst workgroups
- Unit-based strategy for **Device Management:**
 - Check in/Check Out
 - Battery swap/replacement
 - Broken devices
- Impact of **Connectivity** on clinical workflows
- Challenges with **Override** workflows and automatic dispensing systems (ADS)
- Consider **ID Badge Scanning** to provide easy access to the device
- Identify and prioritize **Reporting Needs**

The Future

- Monitor ongoing **Scanning Compliance** to achieve and maintain an overall combined goal of 90% or higher
- Address workflow and systems issues through **PDSA Cycles**
- Implement additional mobile scanning projects for:
 - Breastmilk and Formula feedings
 - Mother Baby Matching
 - Lab Specimen Collection
 - Blood Product Administration