

People, Process, and Technology Combined to Assure Reliable Medication Practices

Janis B. Smith RN, DNP; Jana L. Wheeler RN, MSN, CPN; Ashley Sediqzad RN, BSN, CPN; Lacey Bergerhofer RN, BSN, CCRN;
Molly Boyd RN, BSN; Michele Fix RN, MSN, NE-BC
Children's Mercy Hospitals and Clinics, Kansas City, Missouri, 64108

Purposes

1. Demonstrate the power of information to create trustworthy medication
2. Describe the infra-structure required to continuously improve the medication process

Background

- Computerized medication processes have solved problems and created unintended consequences.
- Pharmacy automation, CPOE, & the eMAR hadn't eliminated problems with interdisciplinary, complex medication processes at our organization.
- Failures in the process caused care delays, work-arounds, diminished trust, & divisive team behaviors.

Initiative

Create safe, reliable medication practices by:

1. Carefully integrating people, work processes, and technology;
2. Using data from our electronic systems to provide reliable information about processes;
3. Building the infra-structure required to continuously improve.

Process Improvement Methods

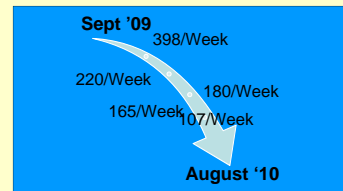
Engage essential team members in improvement efforts with:

- Unit-based surveys: simple enough to answer on the fly
- 6 Sigma: simplifying the environment, tools, & processes
- Data utilization at the unit level to drive continuous improvement

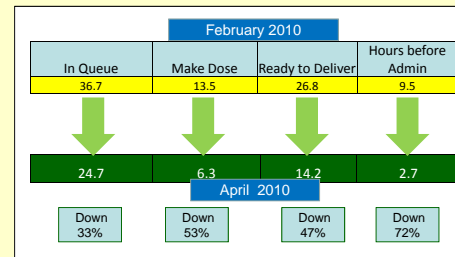
Results

Through the combination of people, process, and technology we have dramatically improved the safety and reliability of medication processes.

Decreased the incidence of 'missing' medications



Decreased pharmacy turn-around-time for order verification, preparation, and delivery



Timely medication administration



Significantly reduced automated alerts



Implemented BCMA in 75% of patient care areas



Lessons Learned

1. All members of the inter-disciplinary team are essential & accountable for safe medication practices:
 - providers to accurately order,
 - pharmacists to verify and reliably deliver, and
 - nurses to safely administer medications.
2. Strengthening each team member's effectiveness improves reliability of the entire medication process.
3. Enhanced collaboration & reliable medication information create cohesive teams with the resources necessary to continuously improve.

Next Steps

1. Sustain the gains that have been achieved and continue to improve
2. Complete BCMA implementation without unanticipated consequences to process reliability & medication safety
3. Demonstrate the business case for enhancing patient safety.