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Blazing the Trail to Pediatric Excellence
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A Nurse-Led Quality Improvement Approach to Reducing Adverse Drug Events

Using a Nursing Medication Safety Committee and "I've Got Your Back" Campaign to Change Nursing Medication Administration Practices and Behaviors

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top pediatric health system

More than 100-year history **providing care to children** from birth to adulthood.

Nearly **3,000 nurses** across the system.

2 hospitals (488 beds in Dallas, 72 in Plano) **and 50+ locations** offering specialty care in North Texas.

Magnet recognized, first achieved in 2009, with redesignations in 2013, 2018, and 2023.

Nearly **10,000 team** members care for nearly **244,000 children** a year.

Four nursing academic research partners and joint pediatric enterprise affiliation to UT Southwestern Medical Center.

Medication Error Definitions

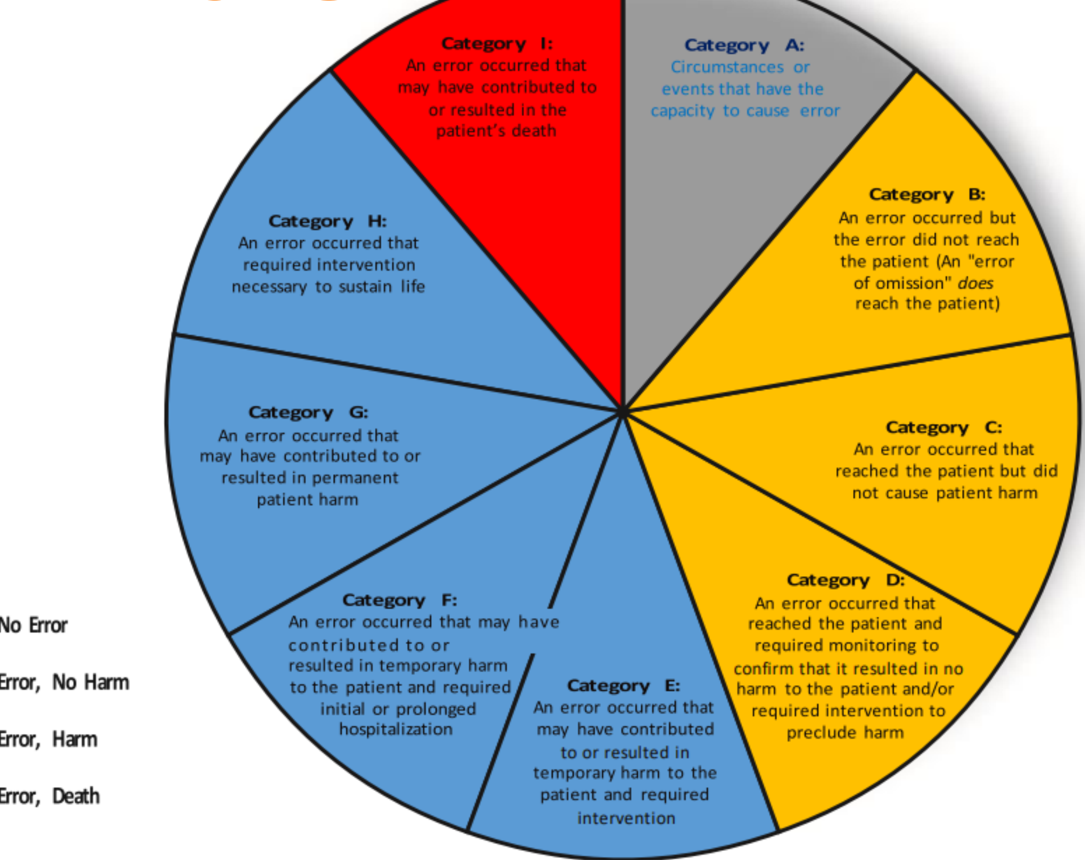
- The National Coordinating Council (NCC) for Medication Error Reporting and Prevention (MERP) defines a "medication error" as:
  - “…any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer….” (National Coordinating Council, 2024)

- The Institute of Medicine defined Adverse Drug Events (ADE) as:
  - “an injury resulting from medical intervention related to a drug” (IOM, 2000)

- ADE rate is calculated as:
  - MERP Category Level E and above / Total Number Patient Days *1000

- The Institute for Safe Medication Practices (ISMP) defines a high-alert medication as:
  - “a medication that bears a heightened risk of causing significant patient harm when used in error” (ISMP, 2017)

NCC MERP Index for Categorizing Medication Errors



No Error

Error, No Harm

Error, Harm

Error, Death

Definitions

Harm
Impairment of the physical, emotional, or psychological function or structure of the body and/or pain resulting therefrom.

Monitoring
To observe or record relevant physiological or psychological signs.

Intervention
May include change in therapy or active medical/surgical treatment.

Intervention Necessary to Sustain Life
Includes cardiovascular and respiratory support (e.g., CPR, defibrillation, intubation, etc.)

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(National Coordinating Council, 2022)

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Early Interventions

- Formed a Nursing Medication Safety Committee
- RN Orientee changes in dual verification process
- Nurse Leader Rounding
- Nursing Practice Alerts
- Added Nurses on Pharmacy & Therapeutics Committee

Nursing Medication Safety Committee

- Inception August 2022
  - Purpose:
    - To promote a culture of safe medication practices for nurses by reviewing reported medication events and recommending evidence-based practice changes to mitigate the risk of future events.
  - Reports to:
    - Quality Safety Council within Nursing Professional Governance (directly)
    - Medication Safety Committee (matrix reporting)
      - System-wide
      - Interdisciplinary
  - Members
    - Clinical nurses (chair and co-chair)
    - Unit representatives from all inpatient areas across the system

Nursing Medication Safety Committee

- Initiatives
  - Retrospective analysis of all reported medication events 2022
    - Pareto chart used to identify greatest improvement opportunities
      - Related errors back to the 8 Rights and contributing factors
        - Right dose
        - Right Time
    - Trends: High Alert Medications made up 25% of reported errors
  - Nursing Medication Safety Survey Trends: 230 respondents (13%)
    - The 8 Rights of Medication Administration was not engrained in our nursing practice
    - Bedside RNs attributed most medication errors to:
      - Partial packaged medication
      - Independent dual verification process non-compliance
      - Unfamiliarity with medications

Key Driver Diagram (KDD)

SMART Aim

Reduce Adverse Drug Event Rate from 0.14 to 0.12 by 12/31/2023

Global Aim

Eliminate medication administration errors, reducing patient harm

Primary Drivers

- Adherence to independent double check of high alert medication administration
- Consistent use of 3C's process with parental medication administration
- Reliable administration of medication: adhering to the 8 Right of Medication Administration

Secondary Drivers

Interventions

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Secondary Drivers

- Time constraint
- Trust coworker
- Interruptions
- Distractions
- Education Gap/policy gap

Adherence to clamp & confirm.

Medication left at bedside

Adherence to right time

Adherence to right dose

Interventions

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- Adherence to clamp & confirm
- knowledge gap of 3Cs

Medication left at bedside

Adherence to right time

Adherence to right dose

Interventions

- Medication Administration CBT : align with policy changes
  - Existing employees
  - Onboarding
- Medication Administration Policy Updates: co-authorship with Nursing

- Preceptor Council Collaboration
  - Medication Administration Onboarding Competencies Updated
  - Preceptor Medication Administration Checklist resource document

- Badge Buddy 8 Rights & 3Cs

- Partial Dose Rover Workflow Revisions
- Omnicell Label Printing Functionality

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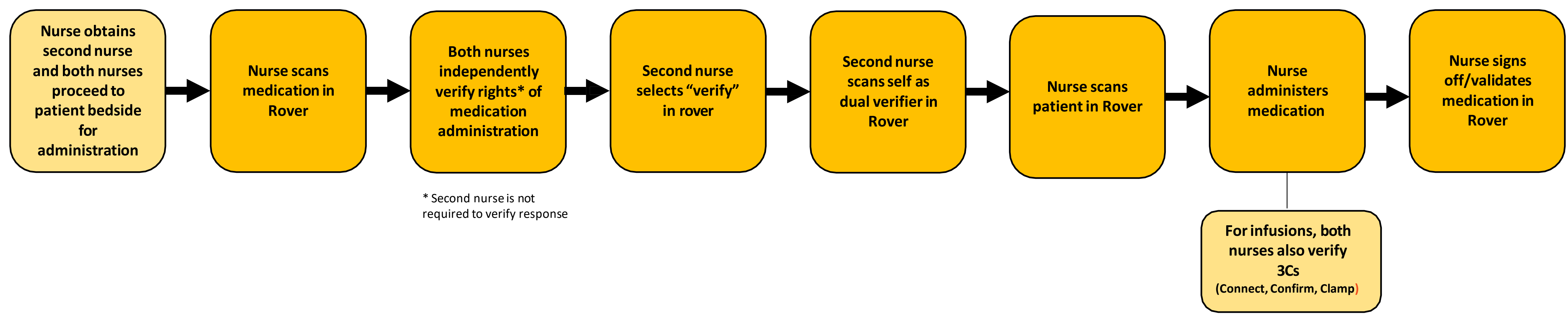
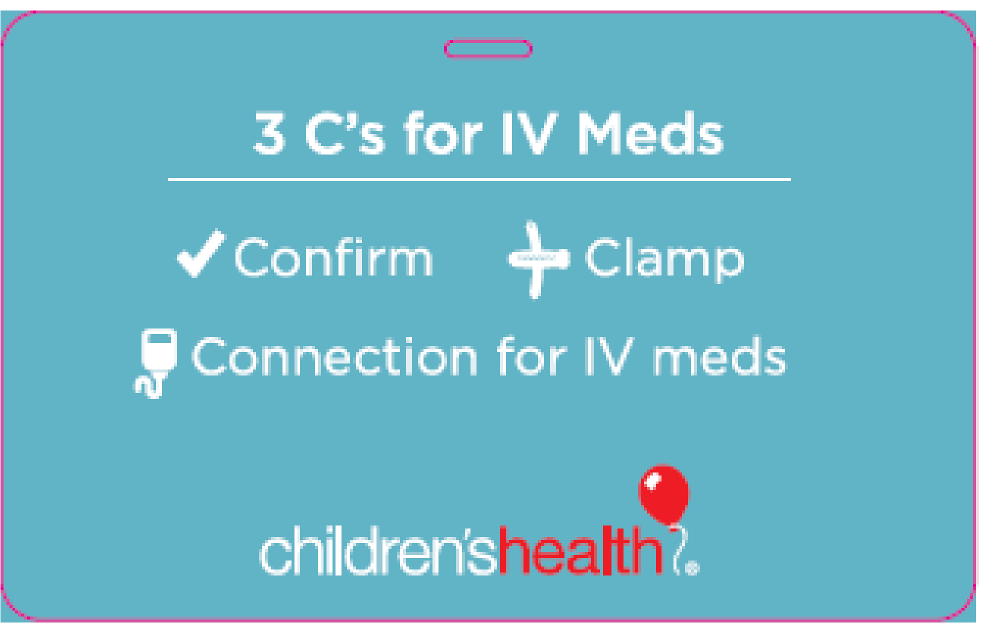
Nursing Medication Safety Committee

- High-Alert Medication Administration Practices Alignment
  - Partnered with Clinical Practice Policy Committee, Nursing Excellence & the Learning and Leadership Institute
    - Medication Administration Policy: co-authorship with Nursing, included nursing practice updates/clarifications
    - Created high-alert computer-based training module administration to align with policy changes



Nursing Medication Safety Committee

- Initiatives Continued
  - Badge Buddy
    - Committee members partnered with the Marketing Department to design a medication badge buddy
    - Coordinated with all unit leaders to facilitate ordering and delivery



Nursing Medication Safety Committee

- Initiatives Continued
  - Partial Dose Rover Workflow Revision
    - Bedside nurses recognized medication error risks with new, streamlined workflow upgrades
    - Committee member partnered with Medication Safety Officers & Clinical Informatics Committee to redesign workflow, mitigating medication error risk
  - Omnicell programming improvements
    - Enabled Omnicell override label printing functionality

Collaborative Partnership Initiatives

- Medication Safety Committee: Omnicell Programming Improvements
  - Implemented a 5-character requirement for all override pulls (pro-active)
  - Aligned Omnicell override medication lists to policy and best practice recommendations (pro-active)
- Preceptor Council: Define orientee/preceptor medication administration roles
  - Reviewed onboarding practices
  - Competency revisions
  - Preceptor Medication Administration Checklist resource document

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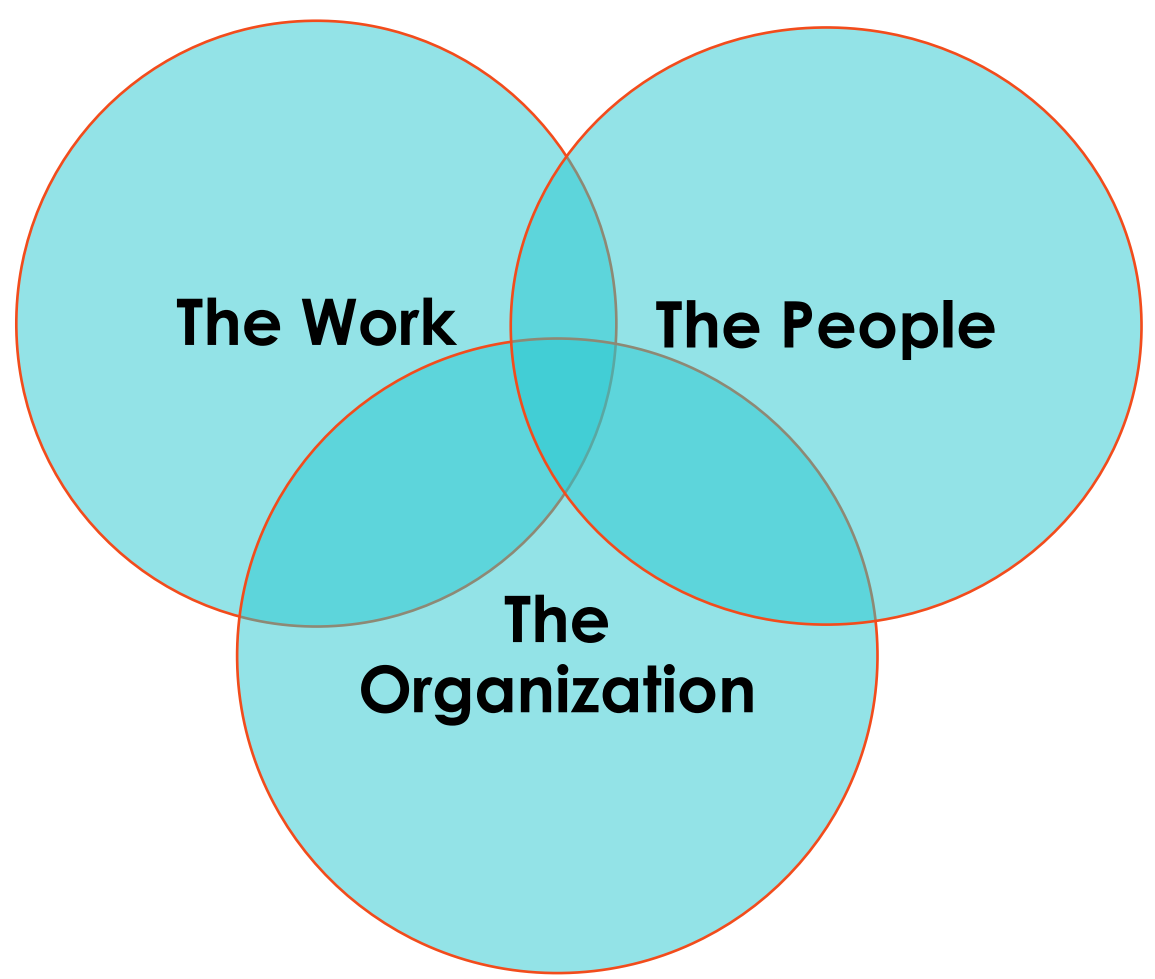
- I've Got Your Back Campaign (April 2023)
  - Campaign launch April 2023
  - Nursing Grand Rounds
  - Podcast
  - Medication Jeopardy with prizes

Human Factors: Making it easy to do the right thing and hard to do the wrong thing



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Understanding the behavioral WHY

Skill

Consciousness

Inattention
Distraction
Habit Intrusion, reflex
Spatial disorientation
Bored, fatigue

Rule

Critical Thinking
Compliance
Communication

Situational awareness
Failure to validate
Mindset
Tunnel vision
Indifference
Shortcut
Reckless
Communication

Knowledge

Communication
Competency

Incorrect assumption
Misinterpretation
Information overload
Unformed skills/habits
Normalized deviance
Inadequate knowledge

(Reason, 1990; HPI, 2011)

I’ve Got Your Back Campaign

I've Got Your Back Campaign: Cognitive Reframing

- Appreciation of risk
- Preoccupation with failure
- Understanding of the purpose and importance of shared ownership and accountability

~~I TRUST YOU~~ I CARE ABOUT YOU

I’ve Got Your Back Campaign

- Engagement of nurses in local education and dissemination
  - Nursing Professional Governance
    - Core Councils
    - Unit Practice Councils
    - Nursing Medication Safety Committee
    - Preceptor Forum
    - Team Leader Forum
- Nursing Grand Rounds
- System-wide unit rounding with Medication Safety Jeopardy
- Socialization through nursing practice conversations and presentations

Challenges/Lessons Learned

Unfreeze

Change

Refreeze

Next Steps

- Sustainment efforts
  - Transisiton to the frontline experts through Nursing Professional Governance
  - Implementation of ADE Safety Card
- Ongoing system improvement
  - Eliminate "yellow man" for nurse verify
  - Alaris interoperability adoption
  - Partnership with Drug Error Reduction System efforts to maintain updated Alaris guardrails

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