

# The nurse who won't give up on falls



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# HANYS EQIC Virtual Conference: Navigating the New Normal

## I Thought We Fixed That? Chronic Issues in Fall Prevention

Innovations in Fall and Fall Injury Prevention and  
Reduction Strategies Within Hospitals

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# My Goals:

*Challenge and inspire* you to enhance your fall and fall injury prevention program's clinical relevance and impact to improve patients' function, safety and well-being.

*Affirm our Moral Imperative* to reduce fall risks through individualized fall prevention management that promote patients' health, independence and quality of life.

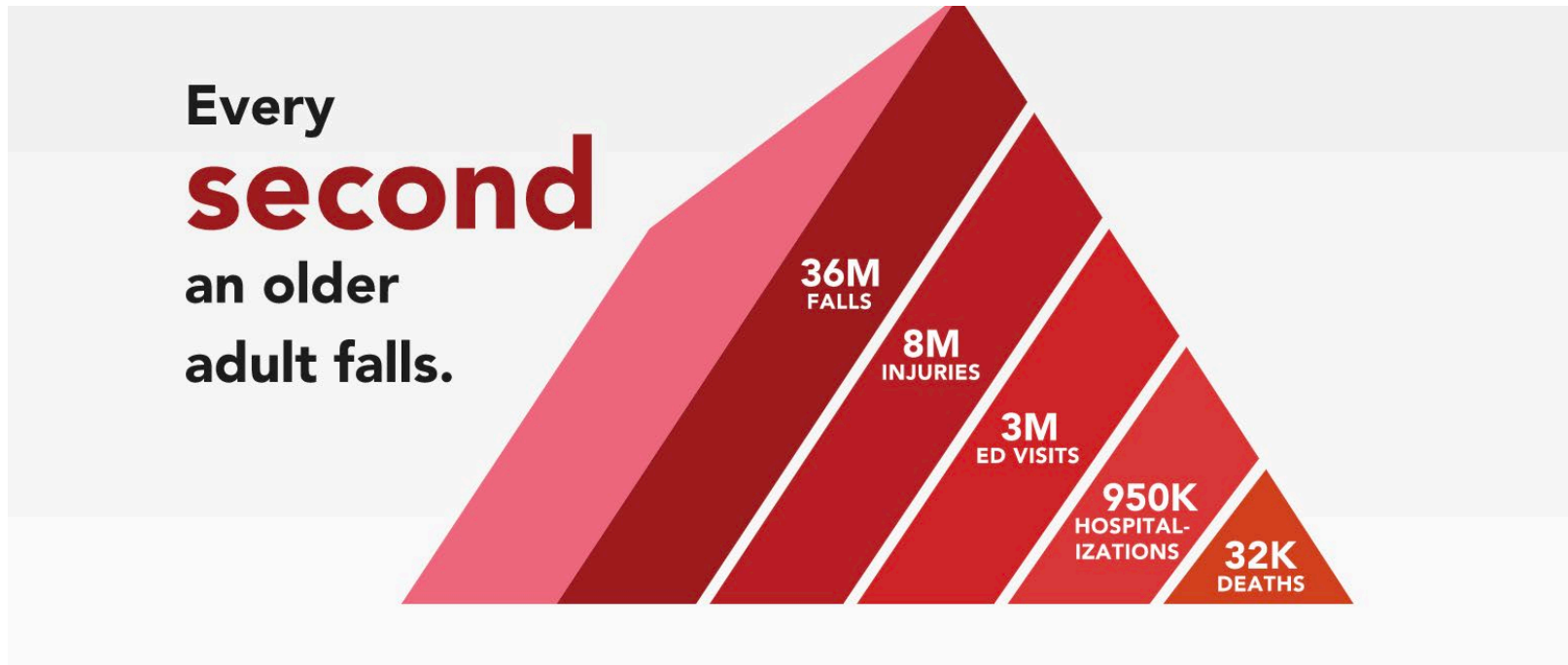
# Learning outcomes

- Differentiate clinical practice for fallers vs. those at-risk for falls, with emphasis on the ER.
- Discuss essential elements and guidelines for preventable fall and fall injury prevention programs.
- Examine expected fall and fall injury prevention program attributes.
- Identify opportunities to enhance fall and fall injury prevention program infrastructure, capacity and how to sustain improvements.



# The Problem of Falls: Chronic (Orphan) Issue in Patient Safety

# The Burden of Falls



2018 <https://www.cdc.gov/steady/provider-training/index.html>

# Fall Risk Screening and Assessment

- Every Older Adult who enters the ED should have a Fall Care Plan Started:
  - Screen – History
  - Assessment
  - Functional Assessment (for those who can, when stable and at appropriate level of care)
- ***Navigate Pathway of Care***

# ER Admission to Home

- ER clinical staff reviews ER findings
- Continues with Multifactorial Assessment: Fall and Injury Risk
- Initiate Individualized Care Plan
- Monitor Patient Response to Care Plan and modify based on patient's response and change in conditions
- Patient/Caregiver Education and Partnership
- Patient provided discharge plan for follow-up mitigation strategies with their PCP
- Referrals to appropriate providers (PT, OT, etc.) when applicable based on risks
- Home Safety (STEADI Resources)
- Follow-up phone call: Recurrent Fall
- Patient engages with orders, educational materials and continues to monitor fall risk with PCP throughout the year



# ER to Admission: Patient Presents To ER due to a Fall

- Determine Etiology of the Fall (OH, BS, Balance Loss, MI, Slip/Trip, etc.)
- If urgent/emergent, treatment; or
- Triage . . . Screen for Fall Risk Factors (Hx of Previous Falls, Medications, Mental Status, Balance, Continence)
- Prepare for admission – Handoff (see Handoff Tool)
- Signage: Known Faller

# Hospital Falls: D. Oliver, et al. Falls and fall-related injuries in hospitals. (2010, Nov). *Clinics in Geriatric Medicine*.

- Best Practice Approach in Hospitals:
  - Implementation of safer environment of care for the whole patient cohort (flooring, lighting, observation, threats to mobilizing, signposting, personal aids and possessions, furniture, footwear)
  - Identification of specific, modifiable fall risk factors
  - Implementation of interventions targeting those risk factors so as to prevent falls
  - Interventions to reduce risk of injury to those people who do fall  
(Oliver, et al., 2010, p. 685)

# National Guidelines Have Shifted

- Reduce individual fall and injury risk factors (Individualized Care)
- Integrate injury risk/history on admission
- Implement universal injury reduction strategies
- Implement population-specific fall injury reduction intervention
- Reduce harm from Falls

# September 28, 2015: TJC #55 Sentinel Event Alert: Preventing Falls and Fall Injuries

- Lead efforts to raise awareness of the need to **prevent falls resulting in injury**.
- Establish an **interdisciplinary fall injury prevention team** or evaluate the membership of the team in place.
- Use a standardized, validated tool to identify risk factors for falls, assess fall and injury risk factors.
- Develop an individualized plan of care **based on identified fall and injury risks**, and implement interventions specific to a patient, population or setting.

# TJC Sentinel Event Alert 55 continued

- Standardize and apply practices and interventions demonstrated to be effective, including:
  - A standardized hand-off communication process
  - One-to-one education of each patient at the bedside
- Conduct **post-fall management**, which includes: a post-fall huddle; a system of honest, transparent reporting; **trending and analysis of falls, which can inform improvement efforts**; and reassess the patient
  - Conduct a **post-fall huddle**
  - Report, aggregate and analyze the contributing factors on an ongoing basis to inform improvement efforts

# Program Evaluation Process

- Process by which individuals work together to improve **systems and processes** with the intention to improve outcomes.\*

\*Committee on Assessing the System for Protecting Human Research Participants. *Responsible Research: A Systems Approach to Protecting Research Participants*. Washington, D.C.: The National Academies Press: 2002.

How do you measure Program Effectiveness?

# Program Effectiveness: Fall Prevention

- Organizational Level: Expert interdisciplinary fall team, population-specific fall prevention, leadership, environmental safety, safe patient equipment, post-fall huddles, Unit-based Champions
- Unit Level: Education, communication-handoff, universal and population-based fall-prevention approaches, patient engagement, technology integration, individualized fall prevention care planning
- Patient Level: Exercise, medication modification, orthostasis management, assistive mobility aides, teach-back, patient teach back

# Program Effectiveness: Protection from Serious Injury

- Organizational Level: Know your population – risk adjust; determine capacity/readiness to protect from injury: available helmets, hip protectors, floor mats, height-adjustable beds; elimination of sharp edges
- Unit Level: Education, adherence to interventions, communication-handoff includes risk for injury, intention to protect from harm
- Patient Level: Adherence with hip protector use, helmet use; understands purpose of floor mats



# Reconsider Overall Falls (Fall Rate) as Outcome

- Shift focus from fall rates to measure **preventable** falls (accidental and anticipated physiological falls).
- Also, measure effectiveness of interventions to **mitigate or eliminate fall risk factors** (remember Oliver article, recommendations 2 and 3):  
Number (and type) of modifiable fall risk factors modified or eliminated upon DC.

# Nationally Adopted Interventions to Reduce Preventable Falls and Fall-related Injuries

- Identify and address each patient's specific fall and injury risk factors (LeLaurin & Shorr, 2019)
- Integrate new systems and devices (webcams, video tele-sitter technology) that better predict and prevent falls than bed alarms (LeLaurin, et al; Quigley, et al, 2019)
- System-based interventions work: Toileting (i.e. wake em, take em; timed toileting; assist in and out of bed) (Resnick & Boltz, 2019)

May, 2019, *Clinics in Geriatric Medicine*

# Nationally Adopted Interventions to Reduce Preventable Falls and Fall-related Injuries

- Interventions to increase physical activity (motivate and engage patients in activity) increase function and mobility (Resnick & Boltz, 2019)
- Function-focused care – increases physical activity (Resnick & Boltz)
- Frequent medical review minimizes the effects of treatments (ACE units; Acute Care for Elders) (Resnick & Boltz)

May, 2019, *Clinics in Geriatric Medicine*

# Implementation Science

The evidence supports **opportunities** to enhance fall and fall with injury prevention program infrastructure.

What will you do to ***Change Practice, Environments?***

That's **Implementation Science**

- Focus on risk factors
- Focus on preventing injury
- Learn from falls that occur in your care

# Focus on Identifying **Risk Factors** and Activating Interventions to Address Each Risk Factor **by Population**

Identify high risk or **vulnerable populations** to conduct a multifactorial assessment

- Patients admitted for a fall
- High risk for injury – A,B,C,S
- Known faller

Complete 65 and older, pre-mobility admission assessment

Known faller status to EMR banner

# Identifying **Risk Factors**: Activating **Interventions** to Address **Each Risk Factor**

- Medication review
- Urinary catheter or IV discontinuation ASAP
- Mobility aids and assistance with walking
- Scheduled toileting - individualized
- Appropriate footwear – not non-skid socks
- Individualized rounding
- Patient engagement and partnership in identifying risks, consequences of a fall and needed safety interventions

# Focus on Preventing Injuries from Falls

- A,B,C,S - select a population at injury risk

## Interventions –

- Use floor mats, hip protectors, helmets, gait belts
- Assess and mitigate unsafe environmental hazards: thresholds, sharp edges, hard surfaces, water on floors

Interventions to protect patients from injury are separate and distinct from fall prevention

# Focus on Learning From Falls/Fallers

Post-Fall Huddle - Do You Have Confidence that no patient falls again due to the same reason as the first fall?

Or

Falls from Bed/Chair Unassisted

- **Interventions:** Repurpose alarms as position-sensing devices – set a new goal to increase number of Assisted Bed Exits (new idea!)
- Establish criteria for toileting supervision based on clinical criteria: arms length, foot in the door, help staff stay on task



# Opportunities to Enhance Fall and Fall with Injury Prevention Program Infrastructure and Capacity

- Select a model
- Set goals
- Conduct baseline assessment
- Identify gap between what is expected and what exists in practice
- Prioritize opportunities for improvement
- Develop a strategic plan
- Develop implementation plan
- Determine feasibility: Continue or terminate
- To continue, develop strategies for sustainability and enculturation
- Celebrate success

# Preparation Phase

- Assess effectiveness of current team and change membership and/or leadership to bring fresh ideas
- Reinvent your team if needed
- Select unit-based champions for local accountability (subgroup of falls committees)
- Safe environment checks and opportunity to catch hazards; clutter rounds
- Determine data to be collected and data collection and analysis tools

And much more.....

# Always Set Goals

- Reduce preventable falls by 50% in 1 year
    - Accidental
    - Anticipated physiological falls
  - Reduce fall-related injuries by 60% in 1 year
  - 100% completion of post-fall huddles in 4 months
- Remember**, goals have a measurable outcome and a timeframe for accomplishment

# Accidental Falls Due to Falls from **Low Beds**

- Structure Goal: Develop a safe bed program (height-adjustable beds, safe exit side, concave mattresses)
- Outcome Goal: Reduce bed-related patient falls due to suboptimal height by 70 % on rehab unit within 1 year
- Set up your Task Force

# Anticipated Physiological Falls due to **Postural Hypotension**

- Structural Goal: Implement a postural hypotension program (P&P, EMR templates; patient assessment and care management) by 5 months
- Outcome Goal: Reduce falls due to OH on a med/surg unit by 80% in 12 months (7 months of evaluation)
- Set up your Task Force

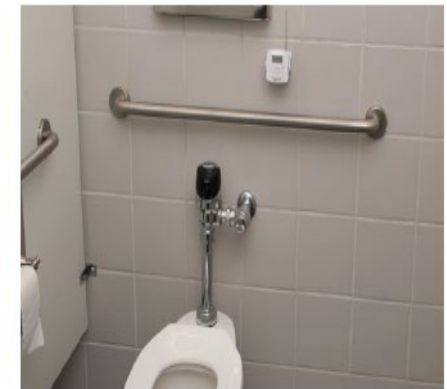
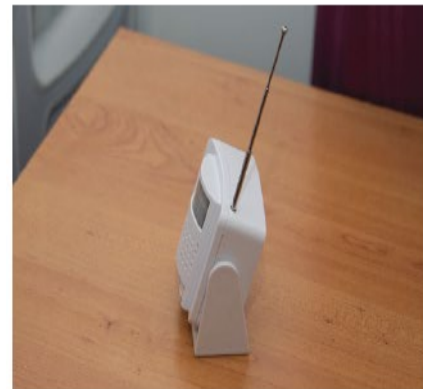
# Decreased Falls **Related to Toileting**

- Structure Goal: Implement a Safe Assisted Toileting Program (Population-Selection, Scheduled Toileting Program, Sensor Technology, pilot test, P&P development, EMR template, staff education, patient education) by 8 months
- Outcome Goal: Within 1 year, 50% decrease in toileting-related falls
- Set up your Task Force

# Curbell Toileting Solutions

## Wireless Motion Sensor

- Will alarm to notify staff if the patient enters the toileting area unattended or can be positioned to be used when a patient is getting off the toilet without assistance
  - Cordless solution
  - Mounts to wall or can be set on a shelf
  - Replaces traditional toilet seat sensors
  - Aligned to Nurse Call Systems when paired with Curbell's BC600 monitor
  - Eliminate False Alarms



# Injury Prevention: Bedside Mats/Fall Cushions

- Bedside Fall Cushions
- Floor Sensor Cushions
- Floor Sensor Mat
- Tri-Fold Bedside Mat
- Roll-On Bedside Mat
- Soft Fall bedside Mat
- New Innovative Floor Mat – HD Nursing
  - SenseAi





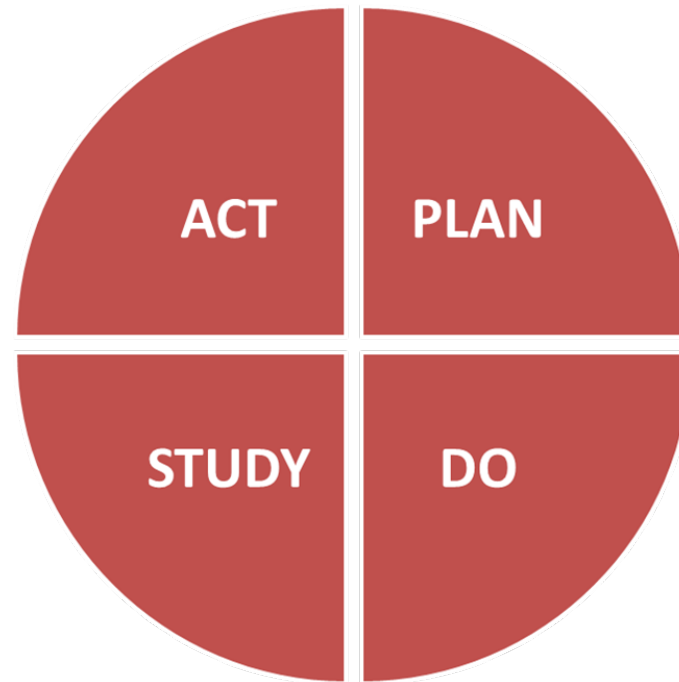
# Implement the **Post-Fall Huddle**

- **Structure Goal:** Post-fall huddle processes implemented in P&P, via clinical education program, debrief for preventability, and QI
- **Outcome Goal:** Within 4 months, 100% of falls will have a post-fall huddle completed
- **Set up your Task Force**

# Ready To Pilot Test

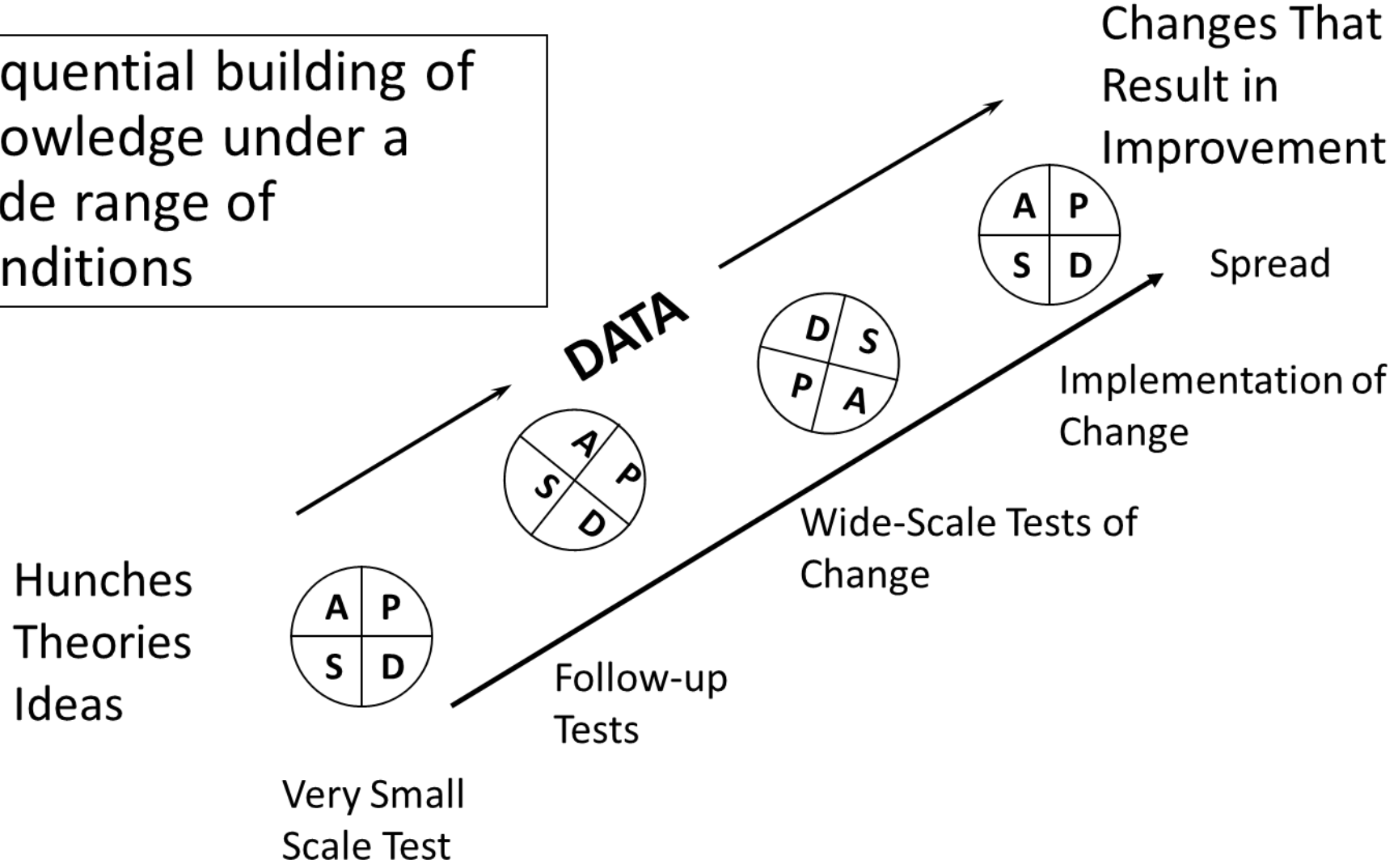
- Have others that have some knowledge about the change review and comment on its feasibility.
- Test the change on the members of the team that helped develop it before introducing the change to others.
- Conduct the test in one unit/shift or with one group of patients.
- Conduct the test over a short time period.
- Test the change on a small group of volunteers.

# Get Ready for Action: PDSA CYCLE



# Model for Improvement - PDSA

Sequential building of knowledge under a wide range of conditions





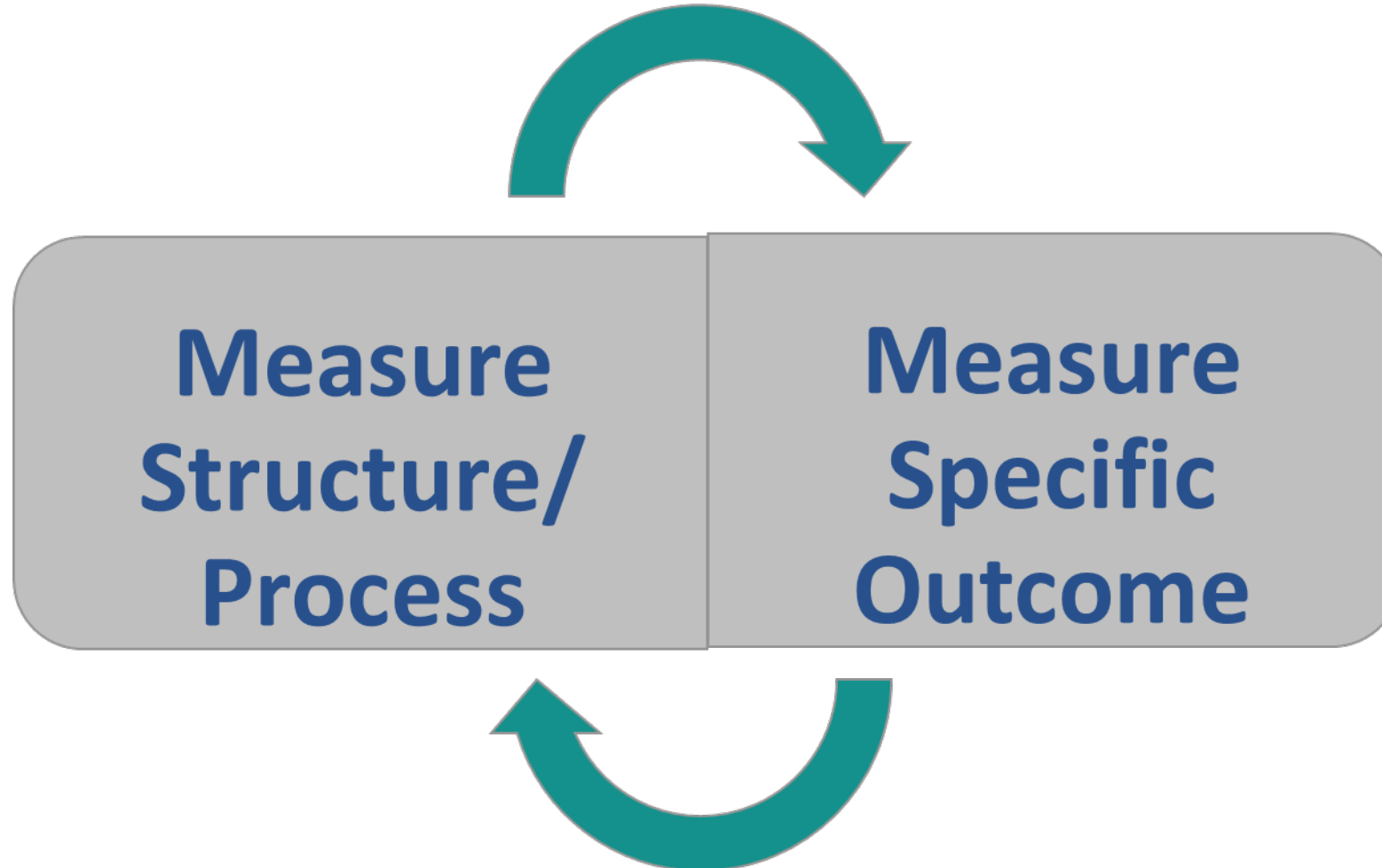
**What are we trying to accomplish?**

**How will we know that a change is an improvement?**

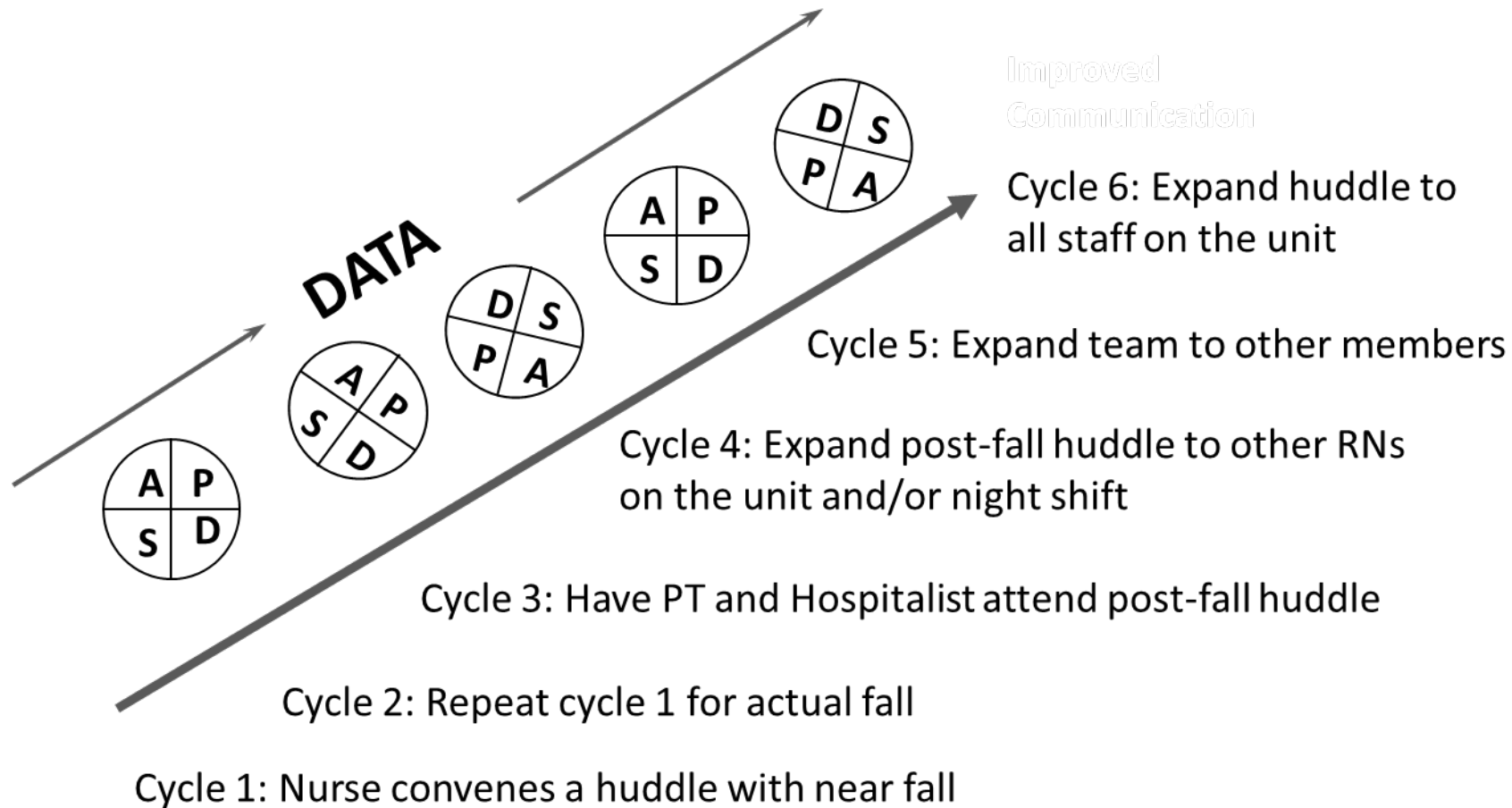
**What change can we make that will result in improvement?**

# A Model for Improvement

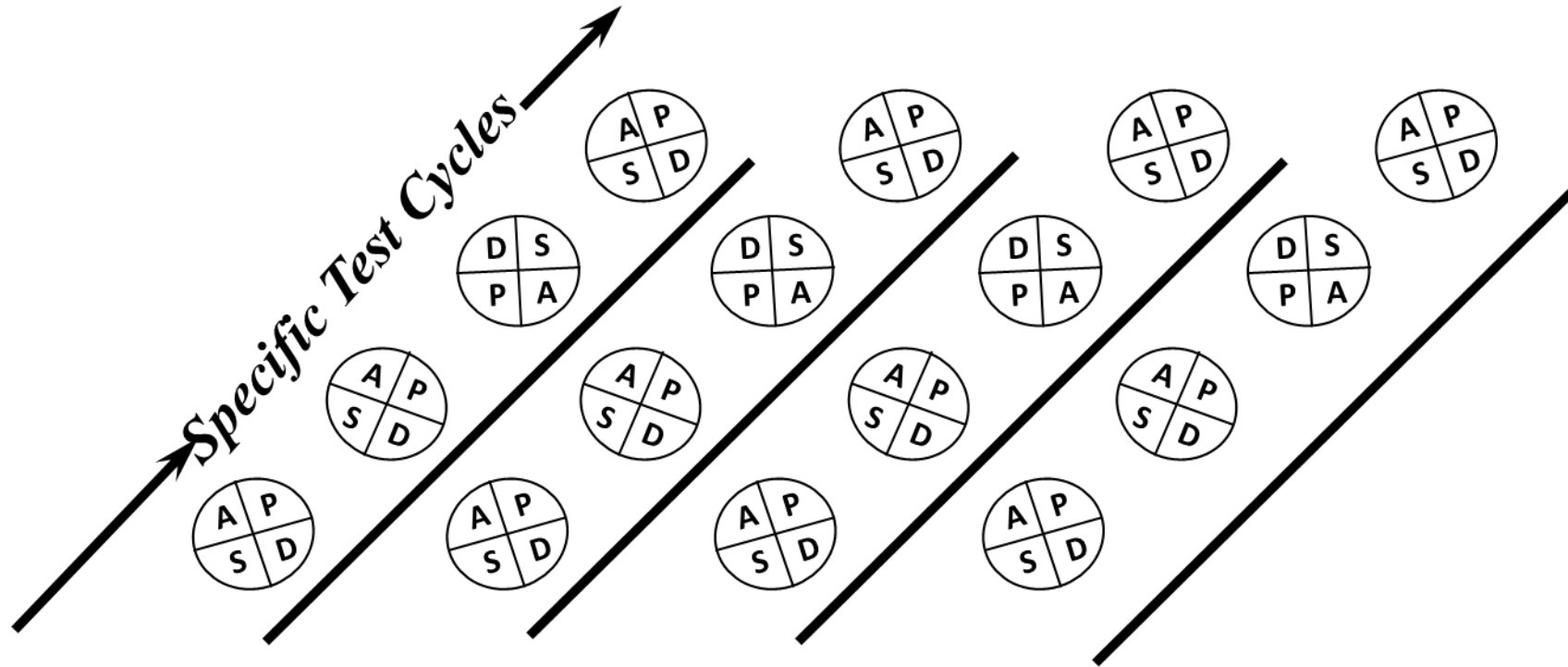
# Was the Change an Improvement?



# Aim: Implement Post-Fall Huddle on Med Surg Unit/Service



# Overall Aim: Decrease Preventable Falls Rate by 50% in 12 months



**Develop  
assess.  
protocol**

**Develop  
Knowledge  
of falls**

**Develop  
Environ.-  
mental  
Assessment:  
Accidental  
Falls**

**Develop specific  
interventions for  
fallers:  
Anticipated  
Physiological  
Falls**

**Staff and  
Patient  
Education**



# Tips for Measurements

- Seek usefulness, not perfection
- Use sampling. Ex: 10 charts per week
- Don't wait for the information system
- Report percentages & rates, not absolute numbers
- Take outcome measures at least 1x/month
- Take process measures at least 2x/month
- Plot data over time, run charts

# Examples of Process Measures

## Percentage of:

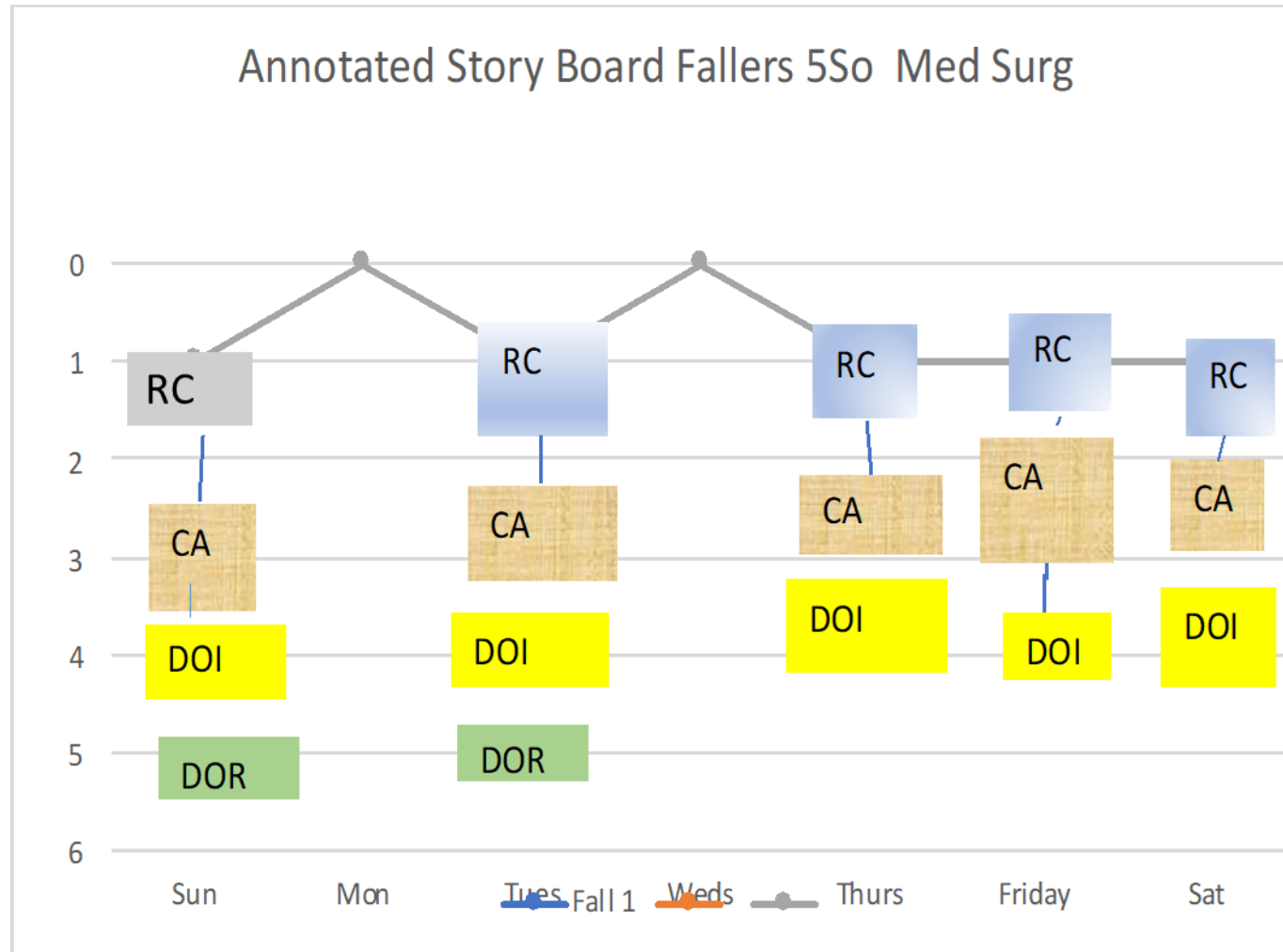
- Patients at risk for falls and fall-related injuries with interventions in place
- Patients  $\geq 65$  with OH assessed before ambulation
- Observation, chart review

**Process measures answer the question: “Are we doing the things we think will lead to improvement in outcome?”**

# Outcome Measures



# My Unit Story Board



# Rethink Zero...

- Are you still trying to get to zero fall rates?
- Rethink this.....
- Always remember the other side of the equation

# Redesign Your Fall Injury Prevention Committee: Action Oriented Toward Goals

- Plan agenda based on strategic plan
- Think quarterly workflow, analysis and support
- Meeting month 1 and month 2: Work on the task forces
- Meeting month 3 of the quarter: Task force chairs report on progress; evaluate strategic plan

# Manage Change

- Help the Implementation Team succeed
- Be Mission focused
- Monitor Structures and Processes
- Reduce Barriers and Increase Facilitators
- Celebrate Successes

# How to Sustain Improvements

- Leader
- Fall Committee Liaison
- Champion Cheer Leader
- Unit-Peer Leaders
- Role Model
- Educator/CNS
- Change Agent
- Develop Story Book of Innovation and Success



# Re-Engineer Your Committee

- Think Quarterly
  - First and Second Month – Work of Task Forces
  - Third Month – Report of Task Forces, Review Strategic Plan
- Change from Reporting Falls to Reporting Improvements in Patient Safety
- Celebrate Success!

# Continue to Learn

- Turn failures into opportunities
- Conduct tests of change
- Engage the bedside experts in small scale testing of emerging evidence-based practices
- Refine your tools
- Spread best practices
- Keep your eye on the evidence – Not all evidence is worthy of change
- Embrace Innovation

# Keep Thinking *Out of the Box!*

- Leadership: Culture of safety
- Fall rounds
- Signage
- Frequency of fall risk screening
- Measurements of effectiveness

# My Oreo and My Jethro



# Thank You and Please Share More!

- Thank you for attending, be a Champion for Change, and keep me posted – I am here for you!
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- Jennifer H. LeLaurin, Ronald I. Shorr, p273–283

**[Outcomes of Patient-Engaged Video Surveillance on Falls and Other Adverse Events](#)**

- Patricia A. Quigley, Lisbeth Votruba, Jill Kaminski, p253–263

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