New Directions in Fall and Fall Injury Prevention

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Objectives

- Discuss essential elements and guidelines for fall and injury prevention programs
- Summarize synthesized literature for fall and injury reduction and surveillance in hospitals and long term care
- Translate actionable elements of a Fall Prevention Program: Prevention, Protection, Surveillance
- Segment high-vulnerable populations to protect from fall related injury
- Expand Post Fall Process

My Goals

- Challenge and Inspire you to add precision to your patient safety practices and redesign fall prevention clinical practices to protect patients from Injurious Falls as your organization's Primary Outcome

5 Essentials to Protect from Fall Related Injury (FRI)

Programmatic Shift

Change in assessment structures: add risk for FRI and Hx of FRI

Change in interventions: Environmental Redesign

Assess to protective interventions

Organizational Support

Patient Harm... remember the news?

- IOM: To Err Is Human, Shaping the Future of Healthcare (1999)

- 48,000 perhaps as much as 95,000 die each year in hospitals as a result of medical errors that could be prevent

Dr. J. James 2013 Update

- Provided updated estimate of patient harm
- Examined studies 2008-2011
- MDs had to concur on final adverse events then classify the severity of harm
- True number of premature deaths associated with preventable harm estimated at more than 400,000/year
- Serious harm 10-20 fold more common than lethal harm

Patient Safety America, Houston, TX. A new, evidence-based estimate of patient harms associated with Hospital Care (2013). Journal Pt Safety, 9: 122-128.

Conclusions

- Epidemic of patient harm in hospitals must be taken serious if to be curtailed

- Fully engage patient and their advocates during hospital care

- Systematically seek the patient voice in identifying harms

- Transparent accountability for harm

- Intentional correction of root causes of harm

Do you agree?

- *The action and progress in patient safety is frustratingly slow*
- *These estimates cause outcry for overdue changes and vigilance*
- *We can do better*

Falls: The Big Picture

- \> 1million patient falls occur annually
- 20% of all hospital inpatients in US fall @ least 1X during hospital stay
- 30% result in injury
- 10% result in serious injury—fracture, head trauma
- Over 95% of hip fractures are caused by falls
- Patients >75 years now comprise 22% of hospital admissions

Must Reads:

Clinics in Geriatric Medicine, Nov. 2010.
- D. Oliver, et al. Falls and fall-related injuries in hospitals. (2010, Nov). *Clinics in Geriatric Medicine*. 645-692

Levant, S., Chari, K., & DeFrances, C.J. (2015). Hospitalizations for patients age 85 and over in the United States, 2000-2010. NCHS Data Brief. No. 182. Available at: hppt://www.cdc.gov/nchs/data/databriefs/db182.htm.

AHRQ: Making Health Care Safer II: An Updated Critical Analysis of the Evidence for Patient Safety Practices, Number 11. 2013

Nursing Economics, July/August 2016
Votruba, L., et al, "Video Monitoring to Reduce Falls and   Patient Companion Costs for Adult Inpatients."

Aging Hospital Population: 2010

- 45% of the inpatient hospital population in the US was 65 years of age and older

- among whom 19% were ages 75-84, and

- 9% 85 and older

Levant, S., Chari, K., & DeFrances, C.J. (2015). Hospitalizations for patients age 85 and over in the United States, 2000-2010. NCHS Data Brief. No. 182. Available at: hppt://www.cdc.gov/nchs/data/databriefs/db182.htm.
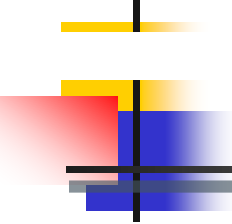
The Scope of Patient Risk "What's the Problem"

- While much effort and attention has been focused on reducing hospital adverse conditions, patient fall with injury, harm still occurs

- Need to "step up our game" and move at a more robust pace

- Share success stories; spread solutions

Sept 28, 2015: TJC Sentinel Alert: Preventing Falls and Fall Injuries

- Lead efforts to raise awareness of the need to prevent falls resulting in injury
- Establish an interdisciplinary falls injury prevention team or evaluate the membership of the team in place
- Use a standardized, validated tool to identify risk factors for falls 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

Suggestions con't

- 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.

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

- 30% to 51% of falls result with some injury
- 80% - 90% are unwitnessed
- 50%-70% occur from bed, bedside chair (suboptimal height) or transferring between the two; whereas in mental health units, falls occur while walking
- Risk Factors: Recent fall, muscle weakness, behavioral disturbance, agitation, confusion, urinary incontinence and frequency; prescription of "culprit drugs"; postural hypotension or syncope

Most effective, fall prevention interventions should be targeted at both point of care and strategic levels

- **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
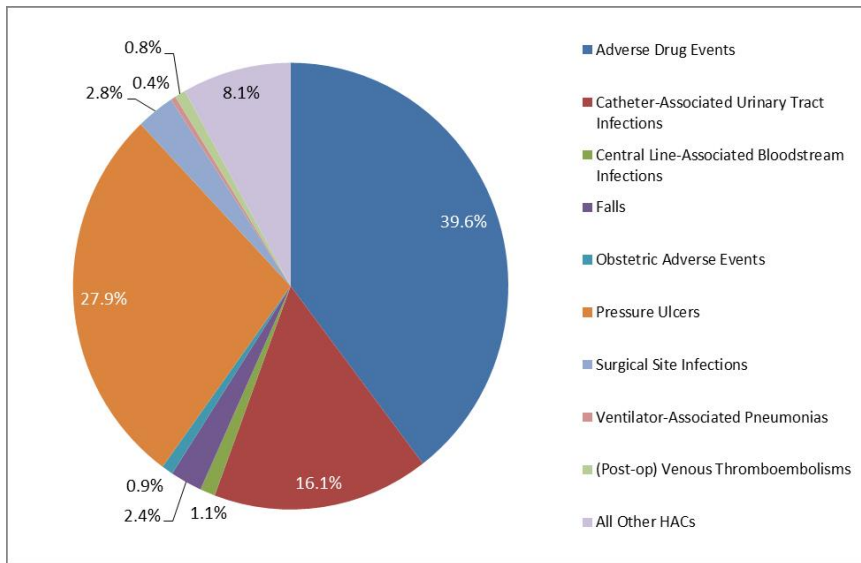 - Interventions to reduce risk of injury to those people who do fall

(Oliver, et al., 2010, p. 685)

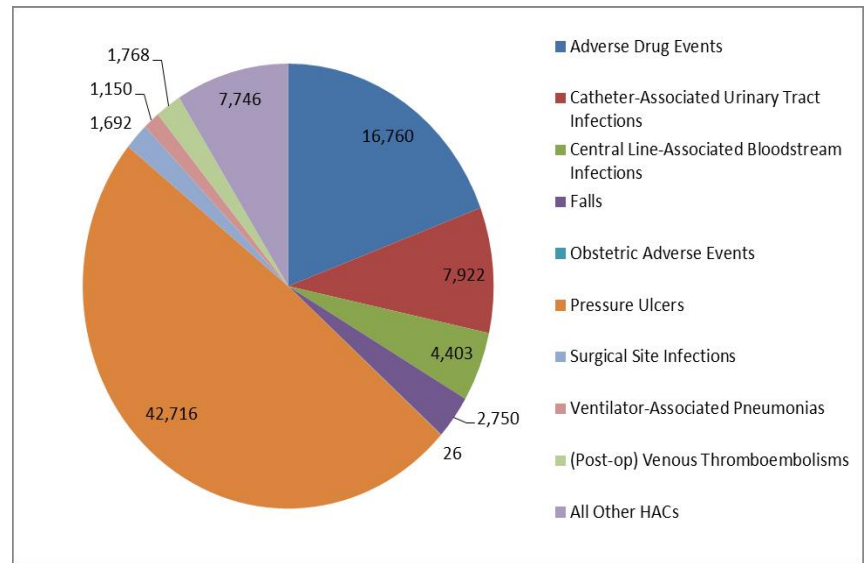# HELP! I'VE FALLEN
AND I CAN'T GET UP!

Final 2014 AHRQ National Scorecard Data on HACs

2.4% decrease in falls but more work to do

0.8%	
0.4%	8.1%
2.8%	
	39.6%
27.9%	
	16.1%
0.9%	
2.4% 1.1%	

Legend:
- Adverse Drug Events
- Catheter-Associated Urinary Tract Infections
- Central Line-Associated Bloodstream Infections
- Falls
- Obstetric Adverse Events
- Pressure Ulcers
- Surgical Site Infections
- Ventilator-Associated Pneumonias
- (Post-op) Venous Thromboembolisms
- All Other HACs

2,750 lives saved but we can save more

1,768	7,746
1,150	
1,692	16,760
	7,922
42,716	4,403
	2,750
	26

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What are we doing? Why?

- Risk Screening vs. Assessment
  - Over reliance on screening tools
- Differential Diagnosis
- Individualized Care Planning
- Identify fallers from non-fallers
- Identify those with injury hx or at risk for injury
- Protect Patients from Injury
- Implement Surveillance / Detection Methods
- Redesign use of:
  - Bed Alarms
  - Sitters
  - Intentional / Purposeful Rounding

Reminder Dialog Template: VANOD Fall Risk

OTHER RISK FACTORS

┌─Other risks (choose 1 or more)─────────────────────────────────

☑ History of falling (if 'yes' response to Morse Fall Scale Q1)

  ┌─Answer both questions─────────────────────────────────

  1. Obtain additional fall history:
         contributing factors to falls
         frequency of falls in the last three months
         any other pertinent history

    Fall History:
    *

  2. Did patient/resident have a history of injury with prior falls?

    ☐ No

    ☐ Yes - Injury with Fracture

    ☐ Yes - Injury without Fracture

    ☐ Unknown history of injury or injuries

☐ Secondary Diagnosis (if 'yes' response to Morse Fall Scale Q2)

☐ Neither of the above (no history of falling and no secondary diagnosis)

[Visit Info]   [Finish] [Cancel]

FALL RISK ASSESSMENT

OTHER RISK FACTORS
  History of Falling

What About?

- The 85 yo who says "No" to a history of recent falls?
- The patient who gets admitted because of a fall?
- The patient who falls in our care?
- Rules? Screening intervals

Current Interventions

- Are not working
- Are not individualized
- Can be reconsidered to revise your clinical practices and toolkits for prevention
- Can be refocused to increase your safety net at the point of care

Measuring Orthostatic Blood Pressure

1. Have the patient lie down for 5 minutes.

2. Measure blood pressure and pulse rate.

3. Have the patient stand.

4. Repeat blood pressure and pulse rate measurements after standing 1 and 3 minutes.
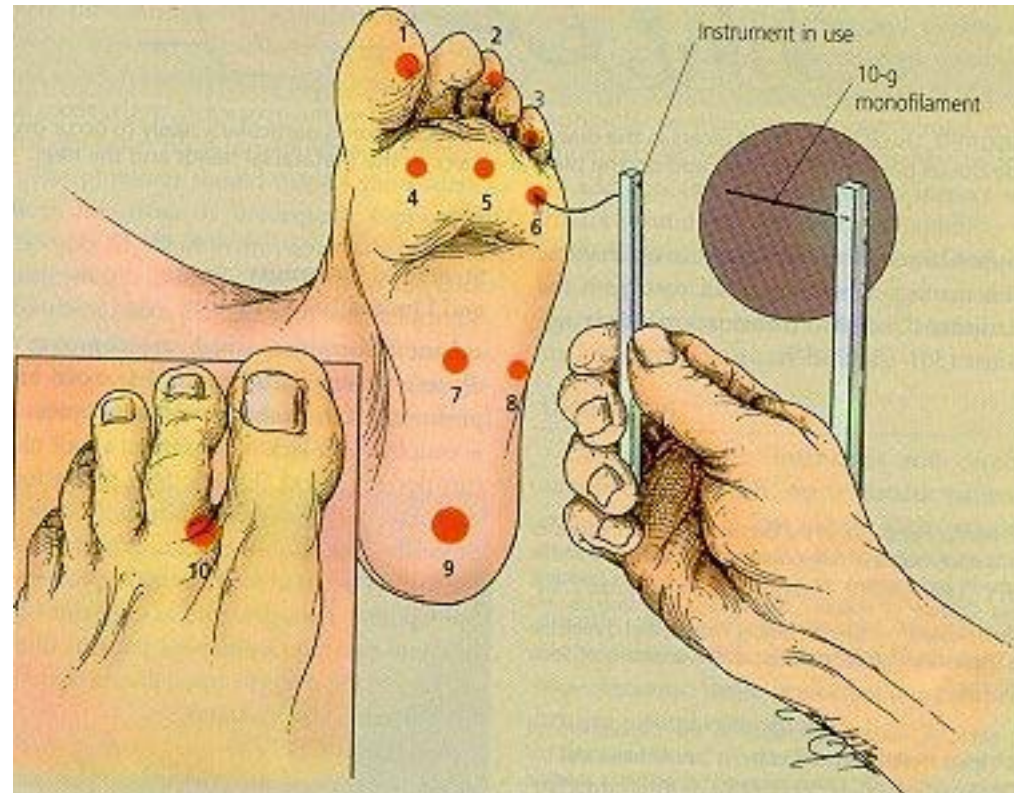
A drop in bp of ≥20 mm Hg, or in diastolic bp of ≥10 mm Hg, or experiencing lightheadedness or dizziness is considered abnormal.

Lying Down		5 Minutes	BP _____ / _____ HR_____	
Standing		1 Minutes	BP _____ / _____ HR_____	
Standing		3 Minutes	BP _____ / _____ HR_____	

For relevant articles, go to: **www.cdc.gov/injury/STEADI**

Sensory Monofilament Exam

- Determine if can feel pressure when eyes are closed

Targeted Interventions: Prevention + Protection + Surveillance

Prevention

- The act of preventing, forestalling, or hindering.

Plus Protection

- Shield from exposure, injury or destruction (death).
- Mitigate or make less severe the exposure, injury or destruction.

Plus Surveillance

- Detection, interaction, response - supports both prevention and protection.

Protection from Injury

Protecting Patients from Harm

Our Moral Imperative

Moderate to Serious Injury: A, B, C, S

- Those that limit function, independence, survival
- Age
- Bones (fractures)
- Bleeds / AntiCoagulation (hemorrhagic injury)
- Surgery (post operative)

Universal Injury Prevention

- Educates patients / families / staff
  - Remember 60% of falls happen at home, 30% in the community, and 10% as inpts.
  - Take opportunity to teach
- Remove sources of potential laceration
  - Sharp edges (furniture)
- Reduce potential trauma impact
  - Use protective barriers (hip protectors, floor mats)
- Use multifactorial approach: COMBINE Interventions
- Hourly Patient Rounds (comfort, safety, pain)
- Examine Environment (safe exit side)

Age: > 85 years old

- Education: Teach Back Strategies
- Assistive Devices within reach
- Hip Protectors
- Floor Mats
- Height Adjustable Beds (low when resting only, raise up bed for transfer)
- Safe Exit Side
- Medication Review
- Criteria for Surveillance

Bones

- Hip Protectors
- Height Adjustable Beds (low when resting only, raise up bed for transfer)
- Floor Mats
- Evaluation of Osteoporosis
- Criteria for Surveillance

Bleeds/AntiCoagulation

- Evaluate Use of Anticoagulation: Risk for DVT/Embolic Stroke or Fall-related Hemorrhage
- Patient Education
- TBI and Anticoagulation: Helmets
- Wheelchair Users: Anti-tippers
- Criteria for Surveillance
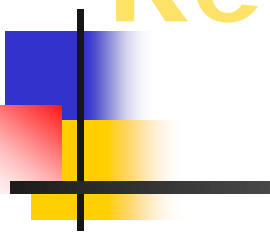
Surgical Patients

- Pre-op Education:
    - Call, Don't Fall
    - Call Lights
- Post-op Education
- Pain Medication:
    - Offer elimination prior to pain medication
- Increase Frequency of Rounds
- Criteria for Surveillance

Real Time Surveillance

- Value of Virtual Surveillance
- Non-intrusive
- Interactive
- Vigilance
- Data Precision
- Witness to Events
  - What do you see?

Biomechanics of Fall-Related Injuries

Understanding the "rate of splat" and its impact on injury

Falls from High Bed: Head First

Falls from High Bed: Foot First

Protect from Injury

- Remember:
- Protection from Injury is
  - separate and distinct
  - from fall prevention

Injury Protection

- Floor Mats
- Hip Protectors
- Helmets
- Eliminate Sharp Edges, esp. bathrooms
- Safe Exit Sides

Bedside Mats – Fall Cushions
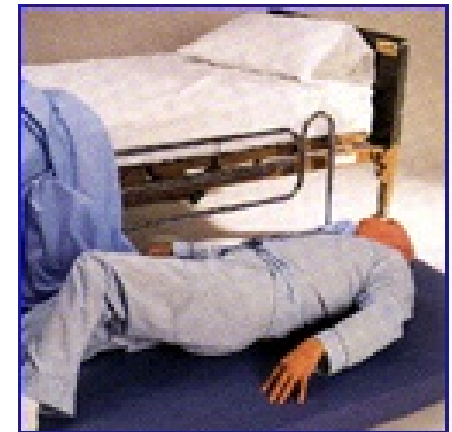

bedside fall cushion

Floor Mat

Floor Cushion
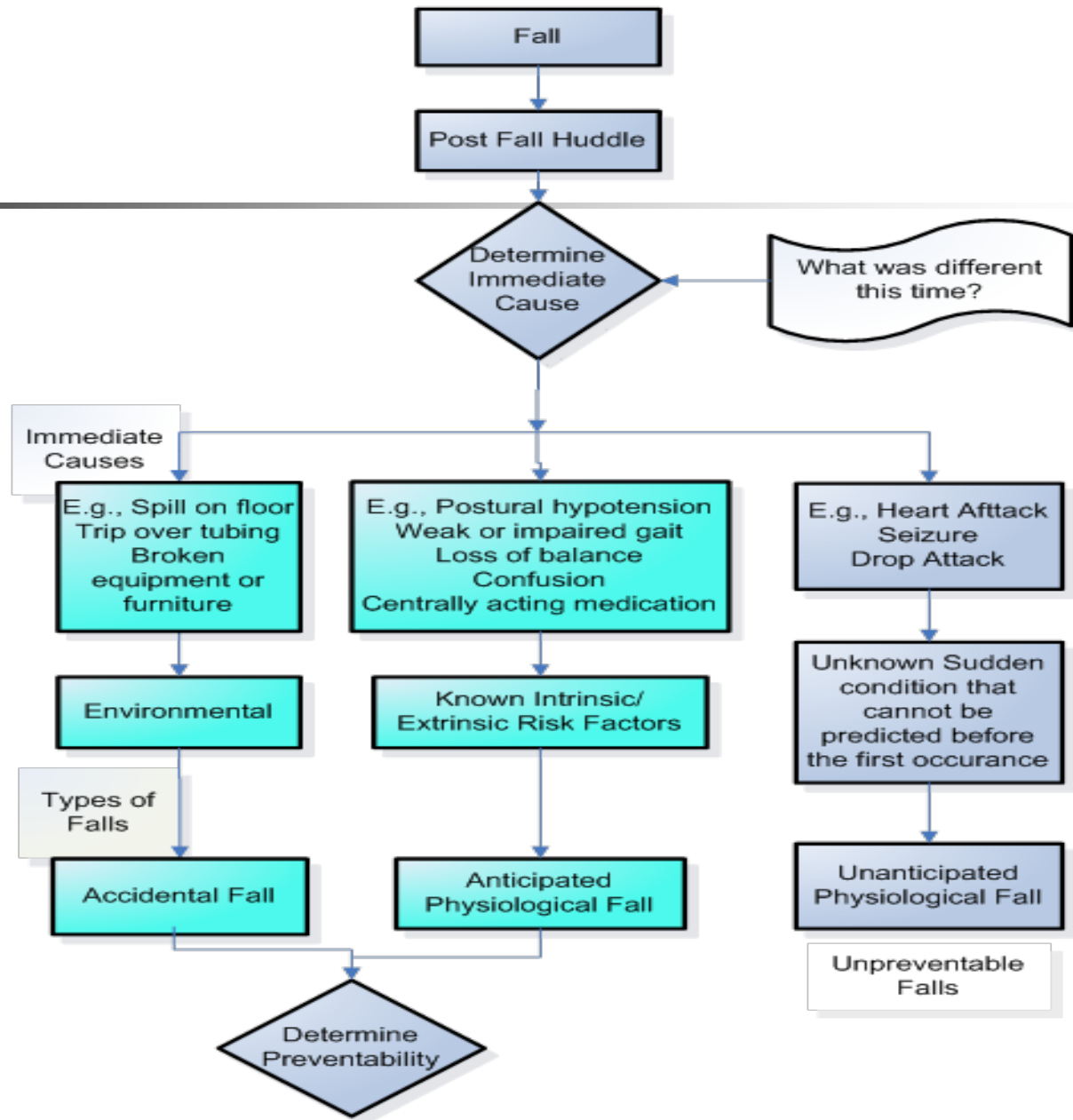

Tri-fold bedside mat

Roll-on bedside mat

Soft Fall bedside mat

Hip Protectors – Examples

Decision Tree for Types of Falls

Tuesday, April 22, 2014

Fall

Post Fall Huddle

Determine Immediate Cause

What was different this time?

Immediate Causes

E.g., Spill on floor
Trip over tubing
Broken equipment or furniture

E.g., Postural hypotension
Weak or impaired gait
Loss of balance
Confusion
Centrally acting medication

E.g., Heart Afttack
Seizure
Drop Attack

Environmental

Known Intrinsic/ Extrinsic Risk Factors

Unknown Sudden condition that cannot be predicted before the first occurance

Types of Falls

Accidental Fall

Anticipated Physiological Fall

Unanticipated Physiological Fall

Unpreventable Falls

Determine Preventability

Steps to the Post Fall Huddle

1. TL makes announcement

2. Convene within 15 mins with the pt/resident in the environment where the patient/resident fell

3. Conduct Analysis; Determine Root Cause of the Fall; if injury, Determine Source of Injury; Determine type of Fall

4. TL summarizes information gleaned from PFH and intervention(s) for prevention of repeat fall are decided by the huddle team.

5. TL completes of the Post-Fall Huddle Form and processes the form according to medical center policy and procedure.

6. Modifies the fall prevention plan of care to include interventions to prevent repeat fall

7. Communicate updated plan of care in patient/resident hand-off reports.

8. Complete EMR Post Fall Note

"Teach Back"

- **"Teach Back" Testing**: what are the trends in patients' difficulty to understand what is taught ?

    Ask the patient to describe or repeat back in his or her own words what has just been told or taught. Return demonstration is a similar technique used by diabetic educators, physical therapists, and others. When the health professional hears the patient's description in her/his own words, further teaching can be accomplished to correct misunderstandings. Never ask whether patients understand; they always say "yes".

When "Teach Back" Is Especially Important:

- **New medications**
- **A new diagnosis**
- **Instructions for calling for help to BR**
- **Instructions for self care**
  - e.g. ask, "How can you stay safe from falling in the hospital?"
- **Patients are cautioned on how to prevent falls in the hospital**
  - e.g. young male patients who suddenly have high doses of pain meds but want to toilet themselves. Ask, "How will you best prevent yourself from falling when you are given this powerful drug for pain that is known to cause falls?"

Ask Me 3

- Ask Me 3 materials are available at:

  http://www.npsf.org/askme3/
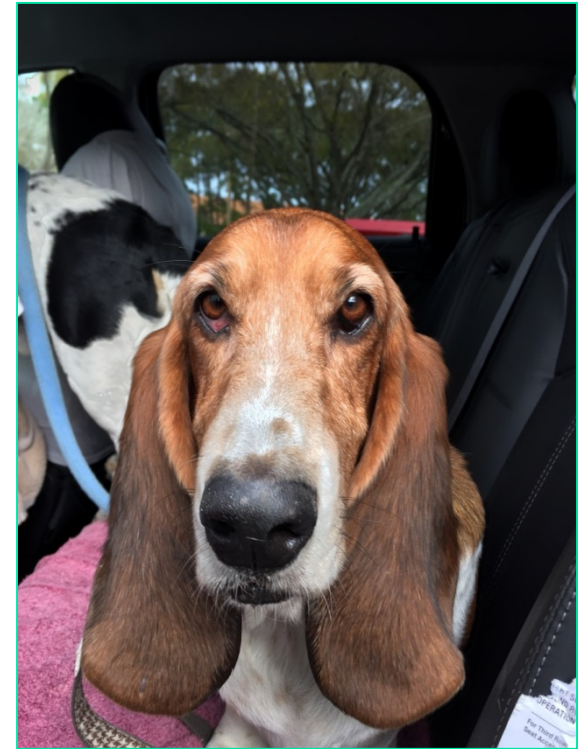
Successful Implementation and Adoption

- Plan Implementation
- PDSA Cycle
- Track results of PDSA Cycle
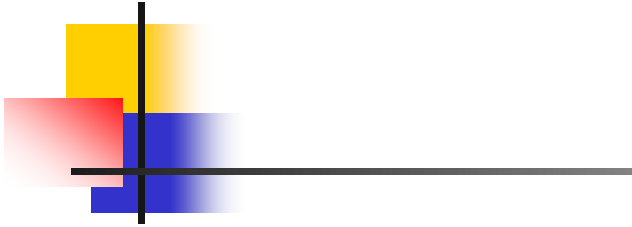- Measure Structure and Process Changes – expand data specific to your safety net!

I Fall A lot! Why?

Jethro and Mr. Goober

Oreo

What to do When you Fall...

VISN 8
Patient
Safety
Center
Tampa, FL

You Can Always Reach Me!

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