Coaching Session: New Directions in Fall and Fall Injury Prevention Webinar

Pat Quigley, PhD, MPH, ARNP,
CRRN, FAAN, FAANP
Nurse Consultant
pquigley1@tampabay.rr.com

Coaching Webinar Objectives:

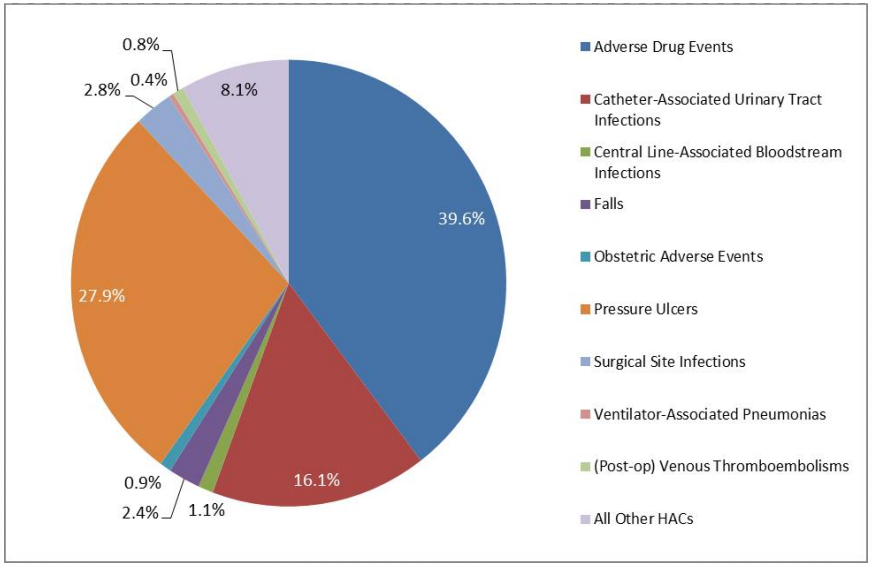
- Extend application of fall and fall-injury prevention interventions to specific populations
- Restate critical program elements to reduce repeat falls and preventable falls
- Create open forum as your community of learning

Falls: The Big Picture

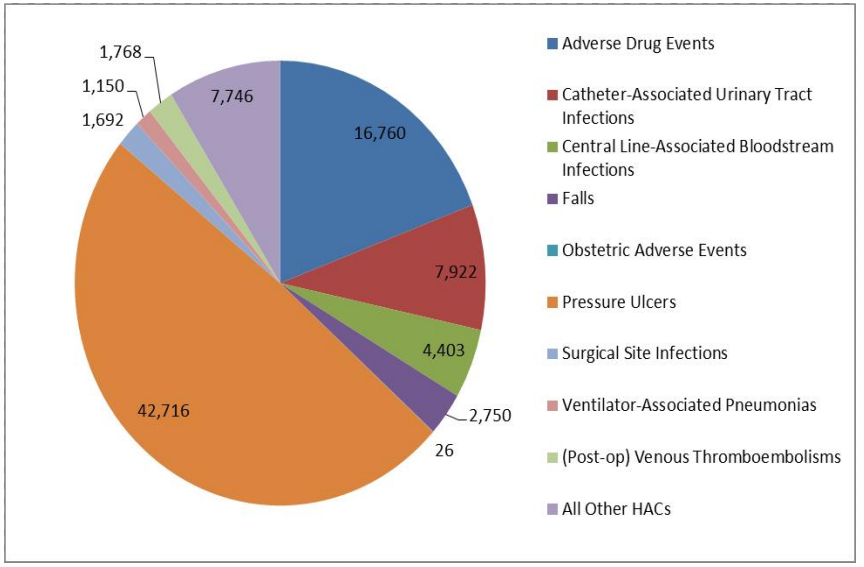
- > 1million patient falls occur annually.
- 20% of all hospital inpatients in the US fall at least 1X during hospital stay.
- 30% result in injury.
- 10% result in serious injury—fracture, head trauma.
- Over 95% of hip fractures are caused by falls.
- Patients >75 years now comprise 22% of hospital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

Final 2014 AHRQ National Scorecard Data on HACs

2.4% decrease in falls but more work to do



2,750 lives saved but we can save more



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

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,"

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)

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% were 85 years 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.

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
- 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.

Let’s Share

- Did you have a chance to find this sentinel alert and review it in detail?
- Any comments or questions you would like to share?

Current Interventions

- Are not working
- Are not individualized
- Can be reconsidered to revise your clinical practices and toolkits for prevention
- Can refocus 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** _____	

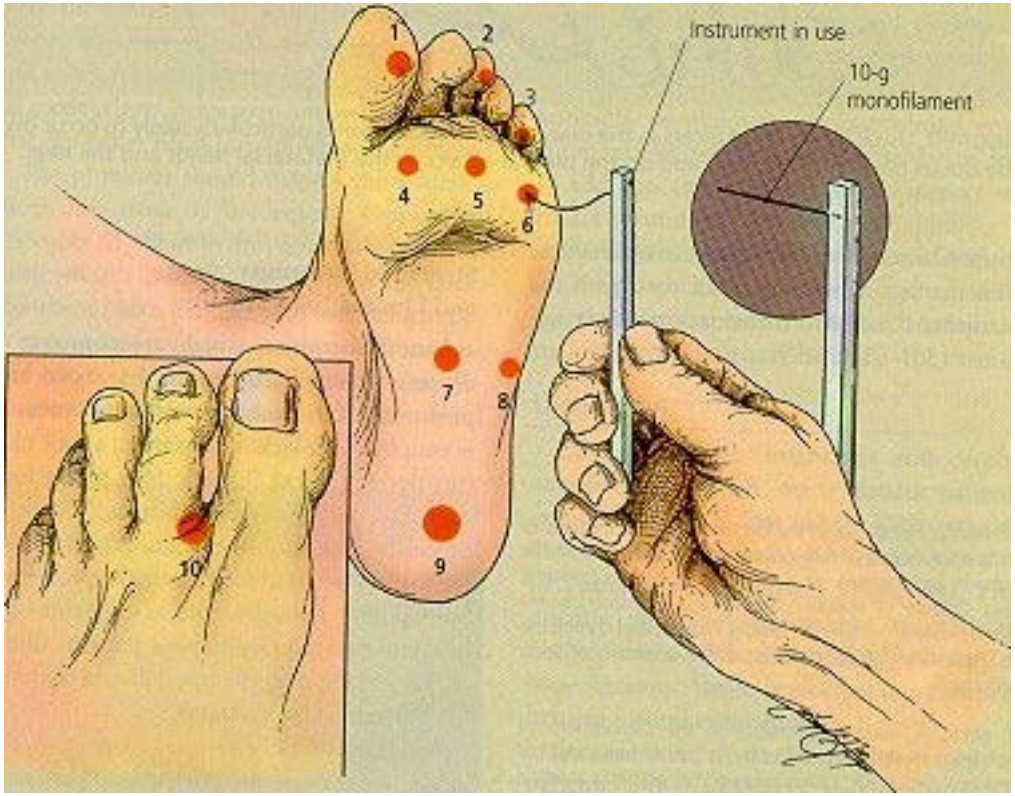
For relevant articles, go to: **www.cdc.gov/injury/STEADI**

Let’s Share!

- Have you talked with a peer about practice for assessing?
- Have your changed your practice?
- Did you access the patient education brochure from CDC’s STEADI program?

Sensory Monofilament Exam

- Determine if can feel pressure when eyes are closed



Let’s Share!

- Have you ask a patient who’s diabetic about changes in lower extremity sensation?
- Have your changed your practice?

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.

Protecting Patients from Harm

Our Moral Imperative

How's your environment?

- Did you have a change in practice?
- Evaluate a patient's ability to navigate the BR and manage the toilet during the admission process?
- Access the MHA toilet safety program?
- https://www.mnhospitals.org/Portals/0/Documents/ptsafety/falls/CreatingASafeEnvironmenttoPreventToiletingRelatedFallsReport.pdf

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

Let's Share!

- Actions Taken since conferences to plan and implementation A,B,C, or S
- Experiences with integrating injury risk and history into assessment protocols
- Experiences using the IHI Fall and Injury Risk Matrix
- Lessons learned to increase adoption and spread

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

Protect from Injury

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

Injury Protection - Did you explore:

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

Bedside Mats – Fall Cushions

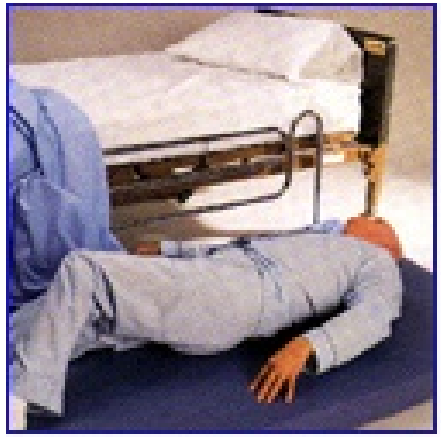
bedside fall cushion

Floor Mat

Floor Cushion

Tri-fold bedside mat

Roll-on bedside mat



Soft Fall bedside mat

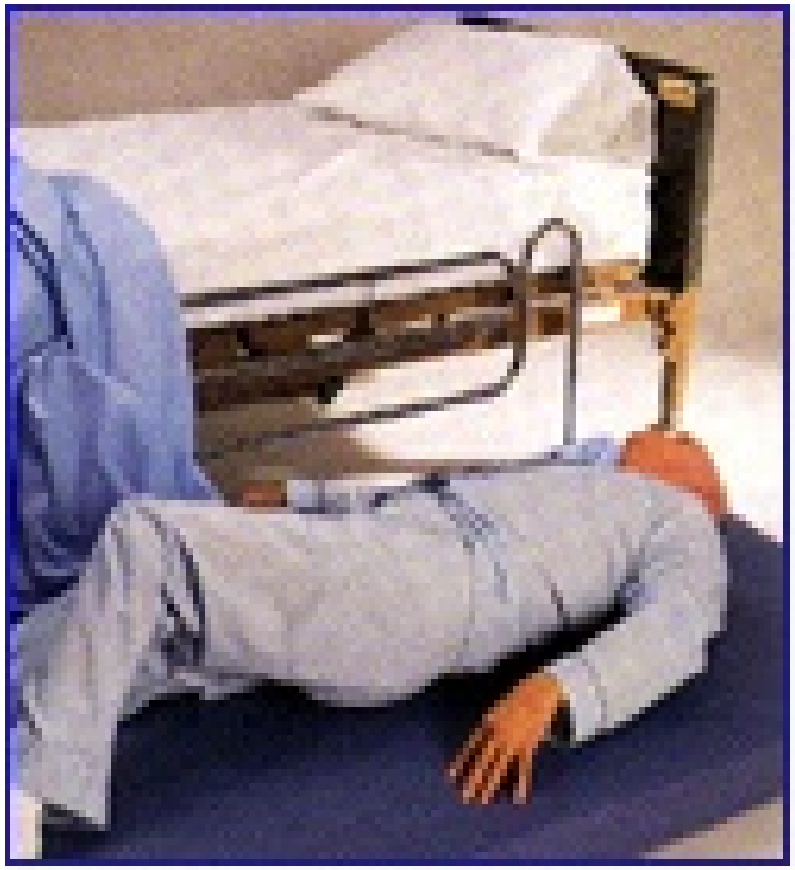
Summary of Results

Feet First Fall from Bed

No Floor Mat fall over top of bedrails: ~40% chance of severe head injury

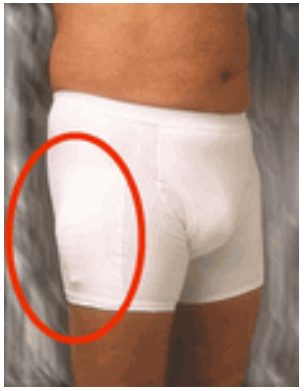
No Floor Mat, low bed (No Bedrails): ~25% chance of severe head injury

Low bed with a Floor Mat: ~ 1% chance of severe head injury

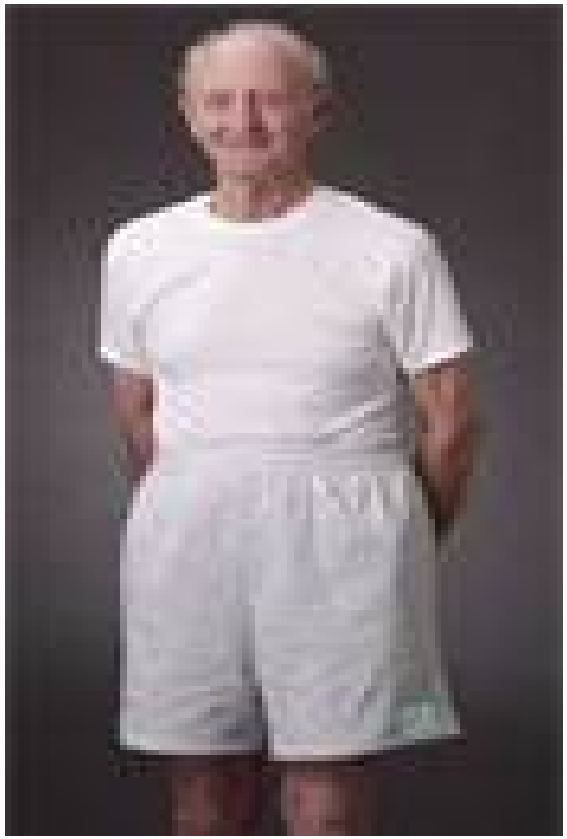


- Bedside floor mats protect patients from injuries associated with bed-related falls.
- Targeted for VA providers, this web-based guidebook will include: searchable inventory, evaluation of selected features, and cost.

Hip Protectors – Examples



Hip Protectors

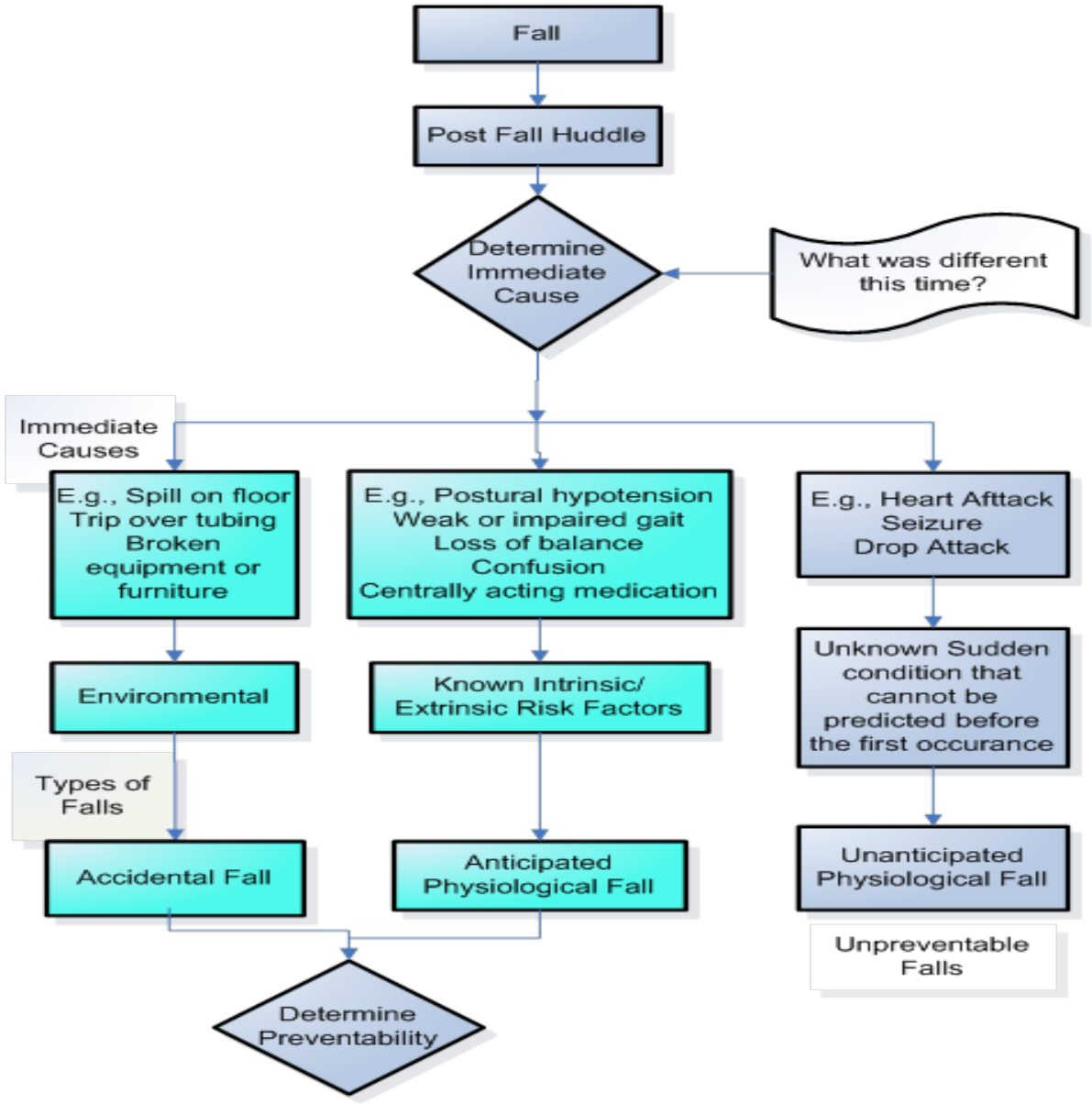


My Wishes

- You will implement floor mats
- You will explore use of hip protectors
- You will talk to patient about hip protectors
- You will add hip protector education to your patient education portfolio

Decision Tree for Types of Falls

Tuesday, April 22, 2014



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

Let's Share!

- Actions taken to plan and implement post fall huddles
- Experiences with involving the patient
- Experiences with PDSA cycles: barriers and facilitators to implementation and/or change
- Lessons learned to increase adoption and spread

Changing Your Conversation with Patients

- Do you label Patients / Caregivers: Non-Compliant?
- What does Non-Compliant Mean to You?
- How do you measure your effectiveness?
- How do you evaluate effectiveness of your teaching?

What to do When you Fall...

VISN 8
Patient
Safety
Center
Tampa, FL

You Can Always Reach Me!

- Patricia Quigley, PhD, MPH, ARNP, CRRN, FAAN, FAANP, Nurse Consultant
- pquigley1@tampabay.rr.com