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HQIC Office Hours

Post-Fall Management: Getting to Types of Falls, Repeat Falls and Determining Preventability

June 8, 2023

Logistics – Zoom Meeting

To ask questions, click on the **Chat** icon. At the end of the presentation, you will also be able to unmute to ask a question verbally.

You may adjust your audio by clicking the caret next to the **Mute** icon.

Resources from today's session will be shared after the call.

Today's Presenter

Pat Quigley, PhD, MPH, APRN, CRRN, FAAN, FAANP, FARN

Nurse Consultant

My Hope

- Change your post-fall management practices to differentiate **post-fall huddle** as an essential and core intervention
- Increase precision in your application of your post-fall huddle to mitigate and eliminate causes of falls and injury

Post-Fall Management

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Objectives

1. Examine post-fall practices as a key intervention to reduce repeat falls

2. Differentiate:
   - Post-fall huddles
   - Post-fall management
   - Post-fall documentation

3. Appy QI principles to expand outcomes

Burden of Falls

- Falls affect between 700,000 - 1,000,000 patients each year
- Fall rates: 3-5 per 1,000 patient days
- More than 1/3 of in-hospital falls result in injury
- Ranked among the most reported incidents in hospitals and other facilities
- Falls can lead to severe injuries, hip fractures and head trauma

AHRQ, Patient Safety Network [PSNet], Patient Safety Primer: Falls. Updated Sept. 2019

Polling Question

Which post-fall practice(s) do you currently have in place? *(Select all that apply)*

A. Pre-shift safety huddles to discuss patients at risk for falls (as well as other safety topics)

B. Post-fall huddle

C. Post-fall assessment/analysis (root cause analysis)

D. Analyze repeat fallers

E. Analyze cause of repeat falls

Post-Fall Practices

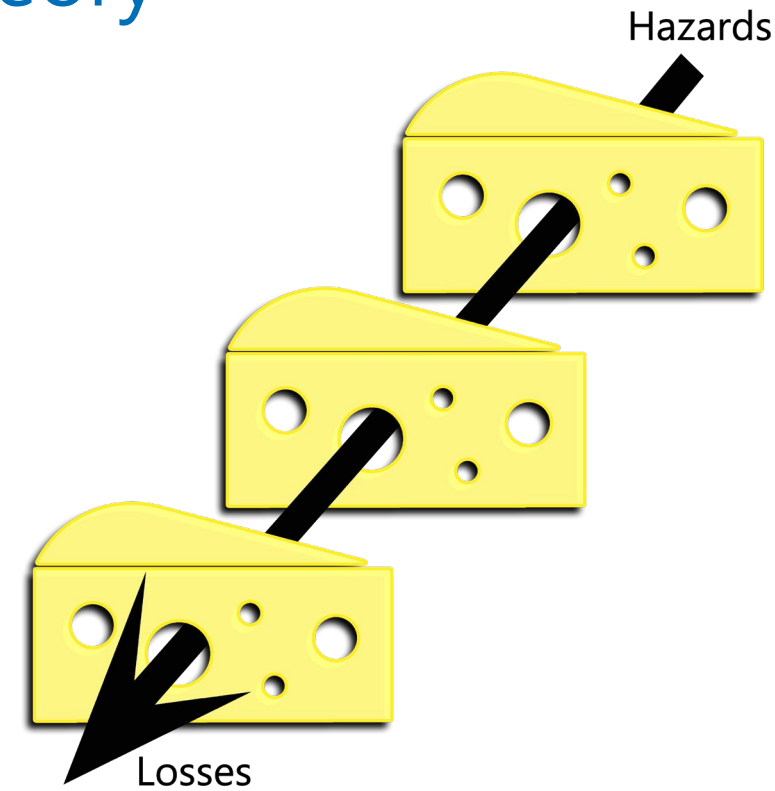
- Post-fall huddle
- Post-fall assessment
- Patient/resident/family education
- Staff education

How Many Huddles Are You Doing?

Safety Huddles

- **Pre-shift huddles**
- **Post-fall huddles**
- Conducted with the patient/resident where the fall occurred within 15 minutes of the fall
- Post-fall analysis
  - What was different this time?
  - When?
  - How?
  - Why?
  - Prevention: Protective action steps to redesign the plan of care

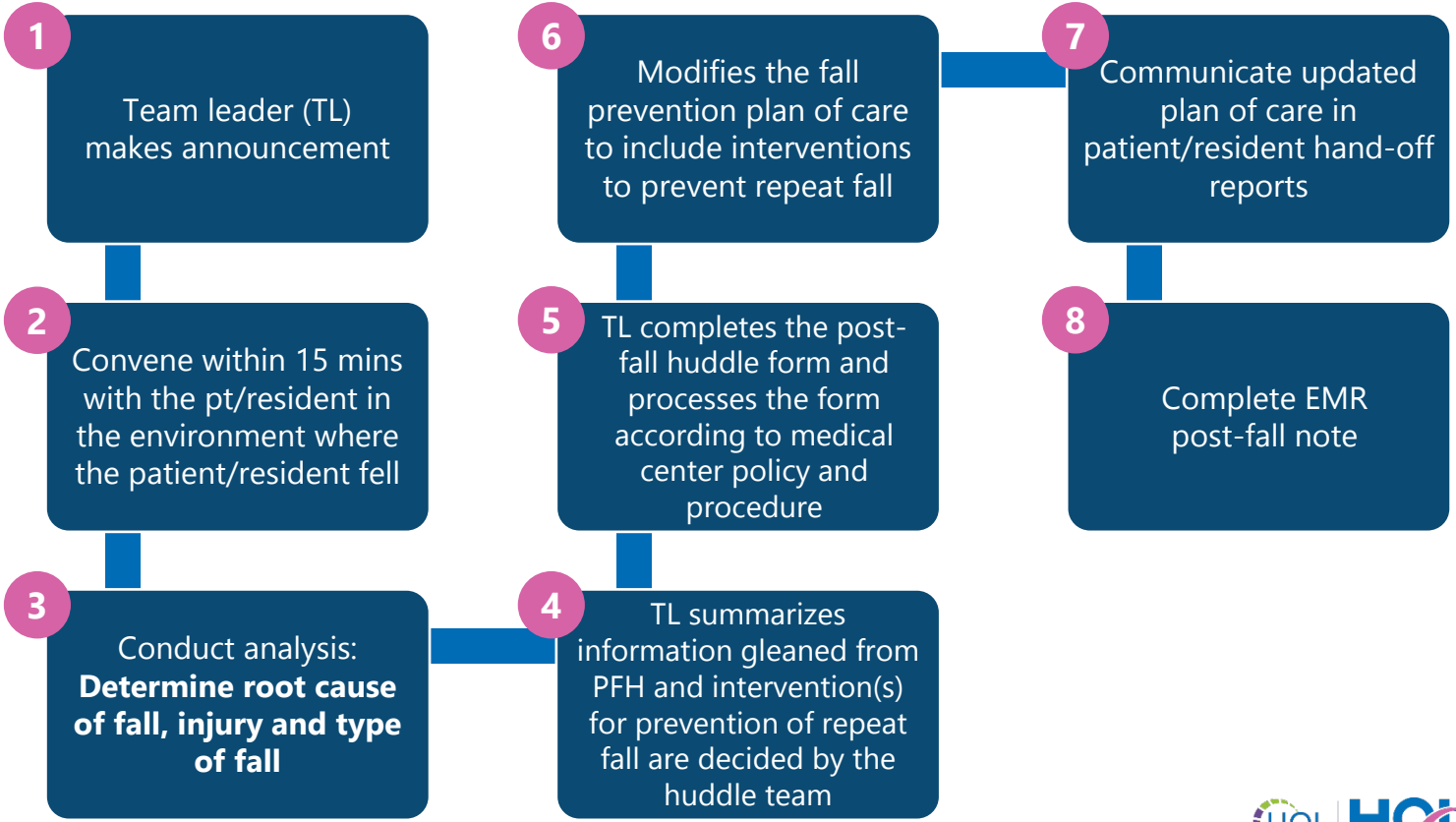
Accident Theory



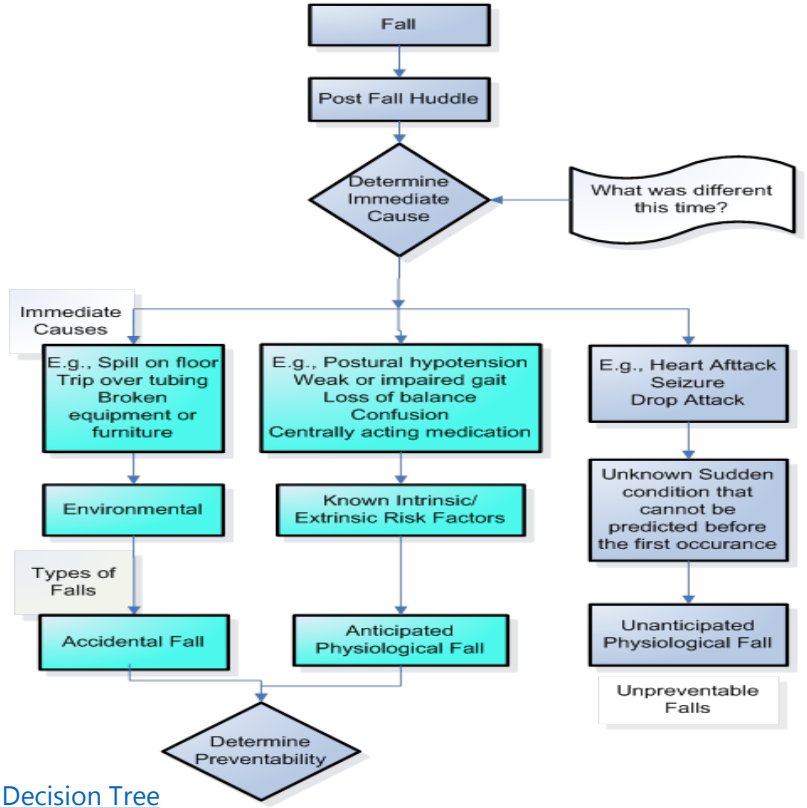
Post-Fall Huddle (PFH): Essential Components

- A brief staff gathering, interdisciplinary when possible, that immediately follows a fall event
- Convenes within 15 minutes of the fall event
- Clinician(s) responsible for patient/resident during fall event leads the PFH
- Involves the patient/resident whenever possible in the environment where the patient/resident fell
- Requires “group think” to discover what happened
- Utilizes discovery to determine the root cause/immediate cause of the fall (Why the patient/resident fell)
- Guiding question to ask: **What was different this time compared to all the other times you performed the same activity (and did not fall), but this time you fell?**

Steps to the Post-Fall Huddle



Decision Tree for Types of Falls



VHA National Center for Patient Safety-Falls Decision Tree

Determine Preventability

Step 1: Conduct the post-fall huddle

Step 2: Determine the immediate cause of the fall

Step 3: Determine the type of fall

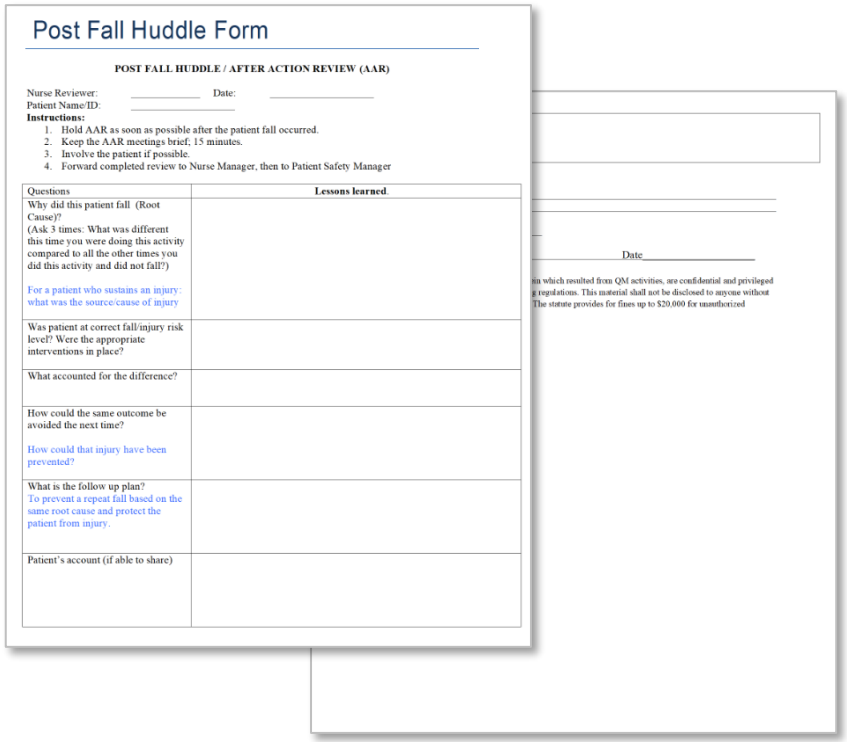
Step 4: If accidental and anticipated physiological falls, determine preventability:

Could the care provider (direct care provider) have anticipated this event with the information available at the time?

- If the answer is **NO,** the fall is not preventable
- If the answer is **YES**, the provider must ask another question: Were appropriate precautions taken to prevent this event?
  - If **no**, the fall was clearly or likely preventable
  - If **yes**, the call was clearly or likely unpreventable

Levinson, D. R., (20I10, Nov). Adverse events in hospitals: National incidence among Medicare beneficiaries. DHHS. OEI-06-09-00090

Post Fall Huddle Form



Post Fall Huddle Form

POST FALL HUDDLE / AFTER ACTION REVIEW (AAR)

Nurse Reviewer: _____ Date: _____
Patient Name/ID: _____

Instructions:

1. Hold AAR as soon as possible after the patient fall occurred.
2. Keep the AAR meetings brief; 15 minutes.
3. Involve the patient if possible.
4. Forward completed review to Nurse Manager, then to Patient Safety Manager

Questions	Lessons learned
Why did this patient fall (Root Cause)? (Ask 3 times: What was different this time you were doing this activity compared to all the other times you did this activity and did not fall?) For a patient who sustains an injury: what was the source/cause of injury	
Was patient at correct fall/injury risk level? Were the appropriate interventions in place?	
What accounted for the difference?	
How could the same outcome be avoided the next time? How could that injury have been prevented?	
What is the follow up plan? To prevent a repeat fall based on the same root cause and protect the patient from injury.	
Patient's account (if able to share)	

Date

[Post Fall Huddle Form]

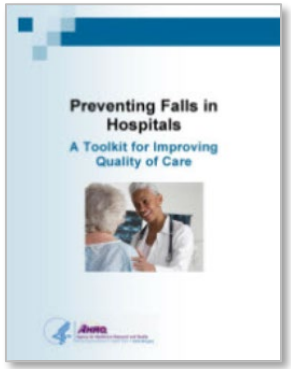
Outcomes of Post-Fall Huddles

- Specify root cause (proximal cause)
- Specify type of fall
- Identify actions to prevent reoccurrence
- Change plan of care
- Involve patient/resident (family) in learning about the fall occurrence
- Prevent repeat fall
- Reduce repeat fall rate

Post-Fall Huddle Resources

[VHA National Center for Patient Safety]

[Falls Toolkit (Post Fall Huddles)]



[Preventing Falls in Hospitals: A Toolkit for Improving Quality of Care]

Tools

- Post-Fall Huddle Process
- Decision Tree
- Post-Fall Huddle Form
- Determine Preventability
- Case Study Exercises
- Audit Tool

My Audit Tool

Post Fall Audit Tool - For Reliability of the Protocol	Protocol	Type of Measure	Reliability of the Protocol		Quality Improvement Data	Notes
Steps of the Post Fall Huddle	Actions during each step					
Step 1:Announcement			Yes	No		
	Staff Member in charge of the patient makes an announcement to convene the post fall huddle	Process			List Leader (RN, CN, etc)	
	Staff Member becomes the Team Leaders of the Huddle	Structure				
Step 2: Gathering	3-4 members of the clinical team who know the patient gather for the huddle	Structure			List Who Attends	
	The huddle includes the patient/resident	Structure				
	If family present, family is included in the huddle	Structure			List Who Attends	
	The huddle occurs where the patient fell	Structure			Identify Location of Fall	
	The hudded convenes within 15 minutes of the fall	Process				
Step 3: Analysis	Team analzyes the fall event to determine root [illegible] of the fall	Process			Document Root Cause	

Formative Measures

Structures:

- Who attends: Nursing and others – count them
- Changed plan of care
- Add actions to your run-chart: Annotated run chart; Capture interventions

Processes:

- Timeliness of post-fall huddle (number of minutes)
- Timeliness of changing plan of care
- Time to implement changed plan of care

Summative Outcome

- Prevent repeat fall: same root cause and same type of fall
- Reduce costs associated with falls and fall-related injuries

Building Evidence About Post-Fall Huddles

- Two-year demonstration project (quasi-experimental study)
- 16 small rural hospitals (26 beds average)
- Determine associations between conducting post-fall huddles on repeat fall rates and perceptions of teamwork and safety culture

(Jones, Crose, et al., 2019)

Study Purpose

Collaboration and **Proactive Teamwork Used** to **Reduce** (CAPTURE) **Falls** purpose was to decrease the risk of falls in small rural hospitals by using a multi-team system (MTS) to implement evidence-based fall risk reduction practices.

MTS: Core team, contingency team, coordinating team

Results

- 308 pts; 64% had PFH; 347 falls; 223 falls after PFH
- Aggregate mean repeat fall rate 1.12 (1.00-1.45) [12% chance of a repeat fall]
- Results demonstrate that the greater the proportion of falls in a hospital that are followed by a post-fall huddle, the lower may be the repeat fall rate
- Staff perceptions of teamwork were consistently high regardless of participation in a post-fall huddle

Comprehensive Post-Fall Assessment

Includes:

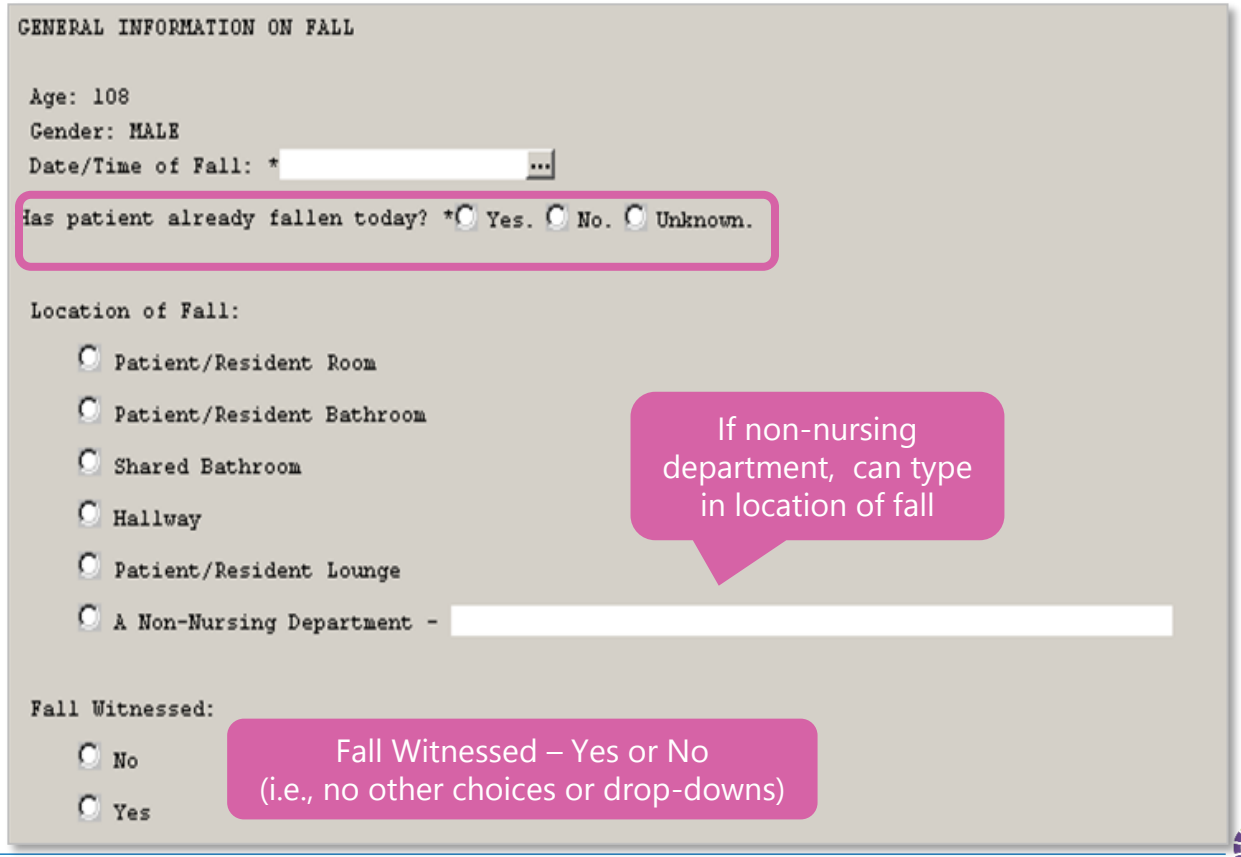
- General information about the fall
- Subjective and objective falls documentation
- Patient/resident assessment – vital signs, visible signs of injury (type and pain scores), glucometer (if diabetic or facility policy), Glasgow Scale (if suspected brain injury) and Morse Fall Scale
- Interventions based on fall risk scale/Morse Fall Scale
- Facility personnel and family notification

Post-Fall Assessment: Review of Systems

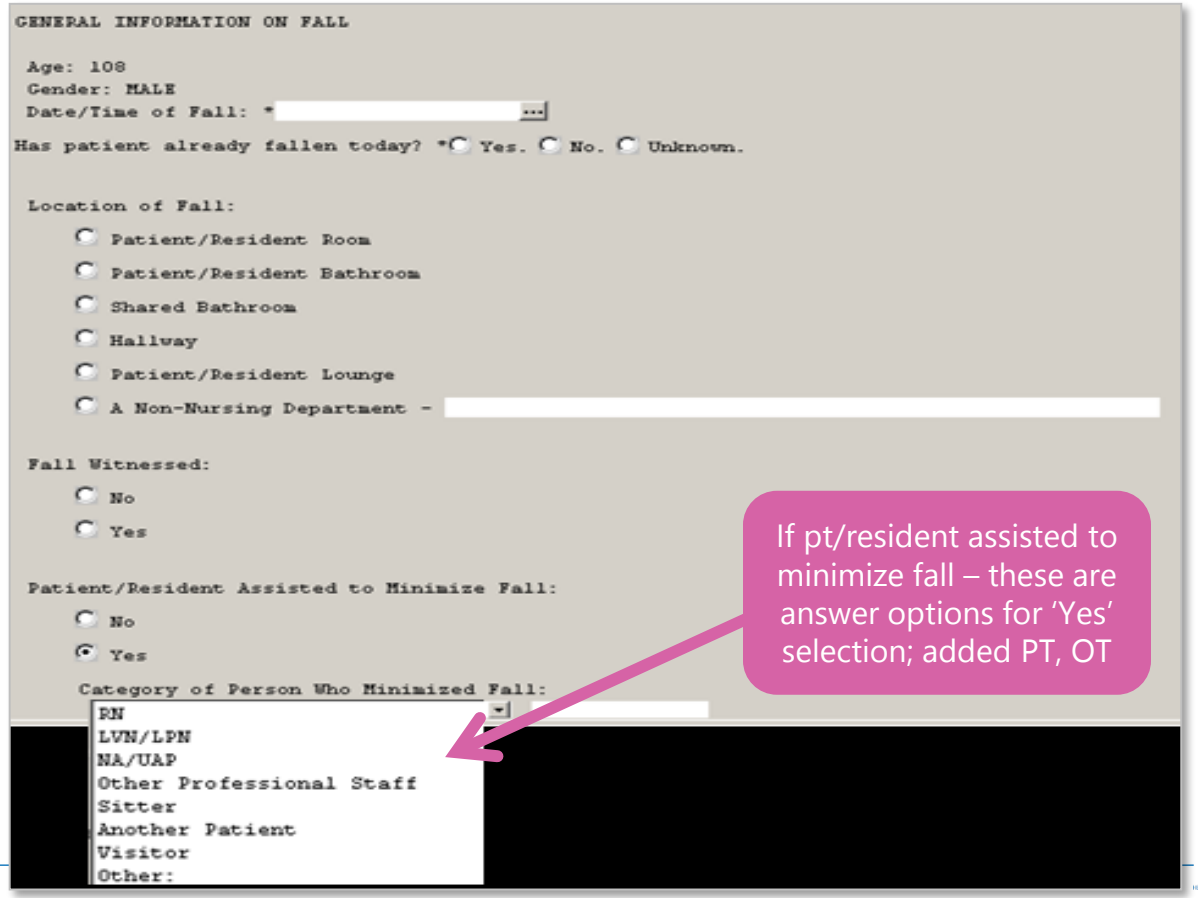
Review patient symptoms to elicit history linked to risk factors

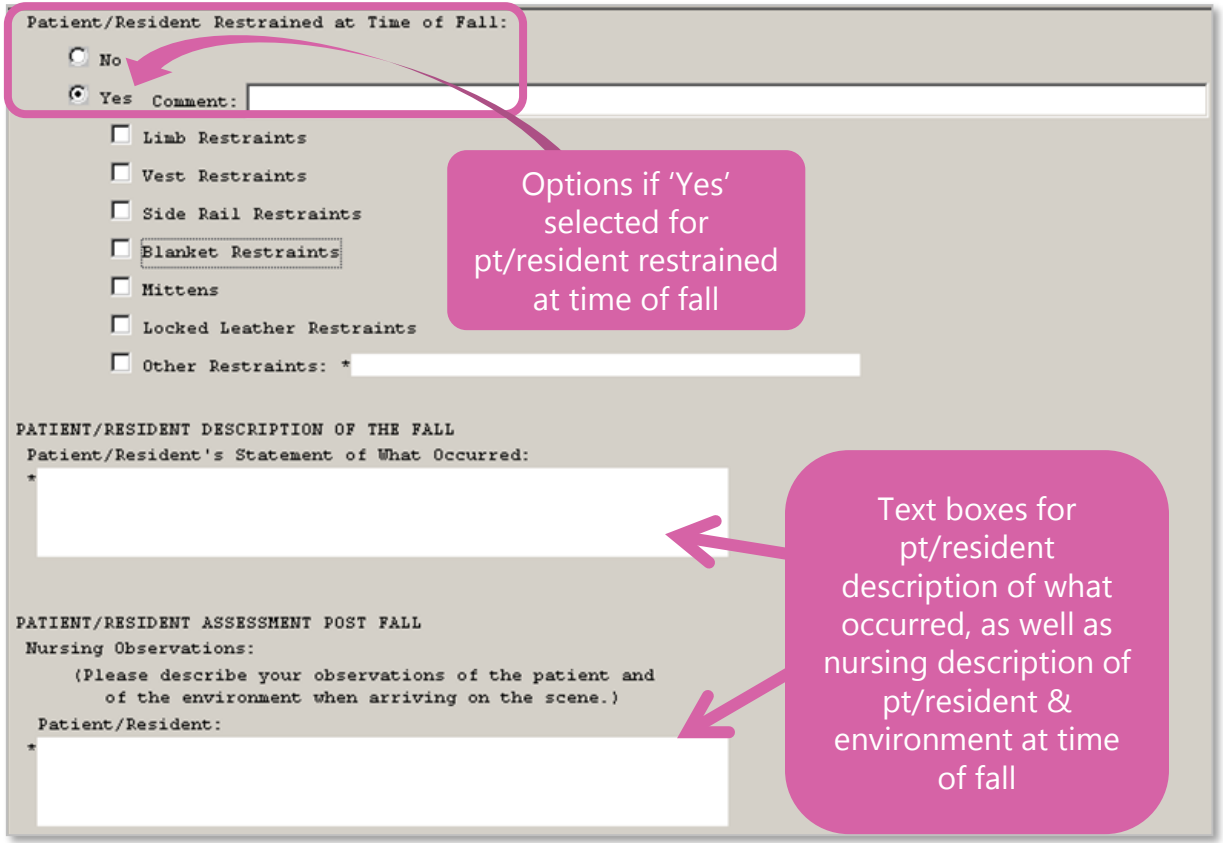
Symptom	Fall Risk Factor
Visual disturbance (double vision, blurry vision, loss of vision)	Visual impairment?
Dizziness/lightheadness	Orthostatic hypotension? Abnormal vital signs?
Leg weakness	Gait or balance instability?
Urinary urgency or frequency	Urinary incontinence?
Syncope/loss of consciousness	One or more chronic diseases

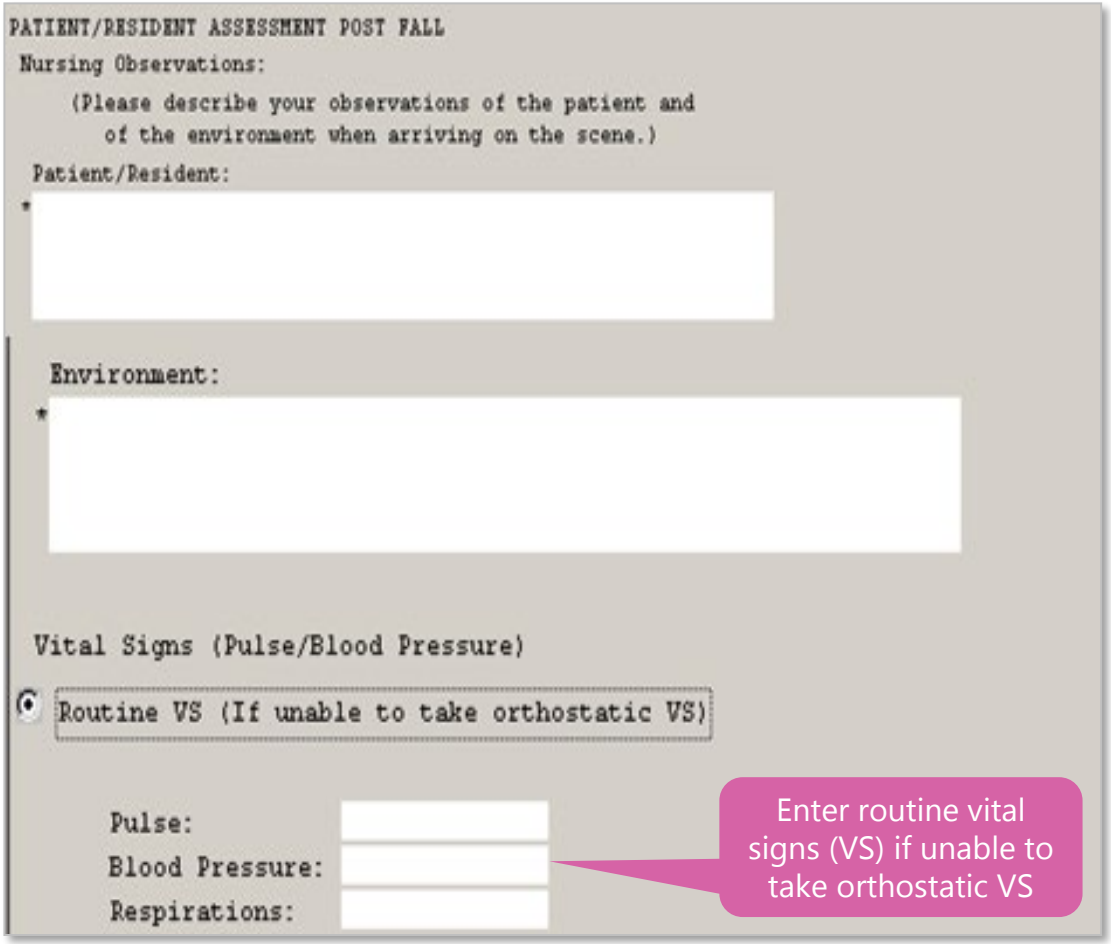
Post-Fall Note (EMR)

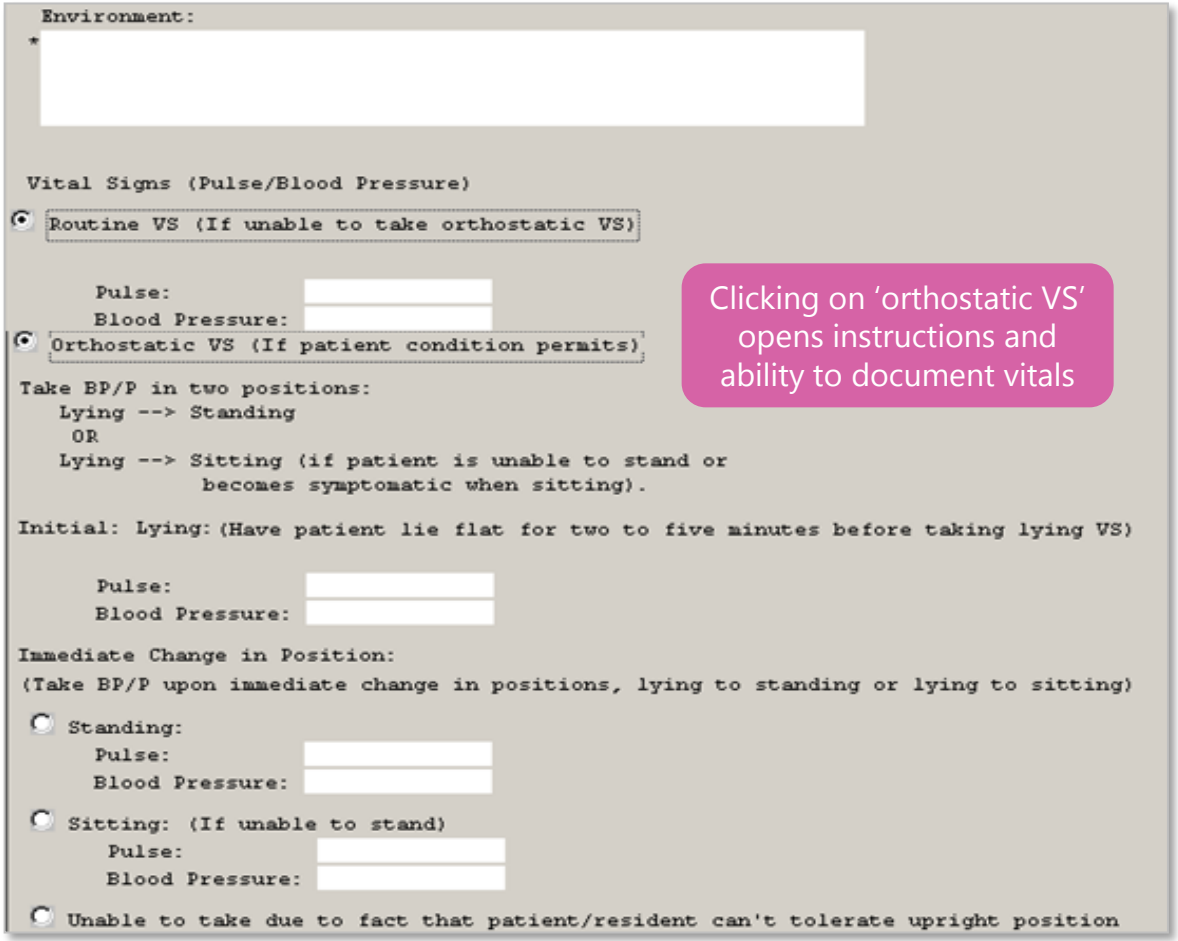


General Information

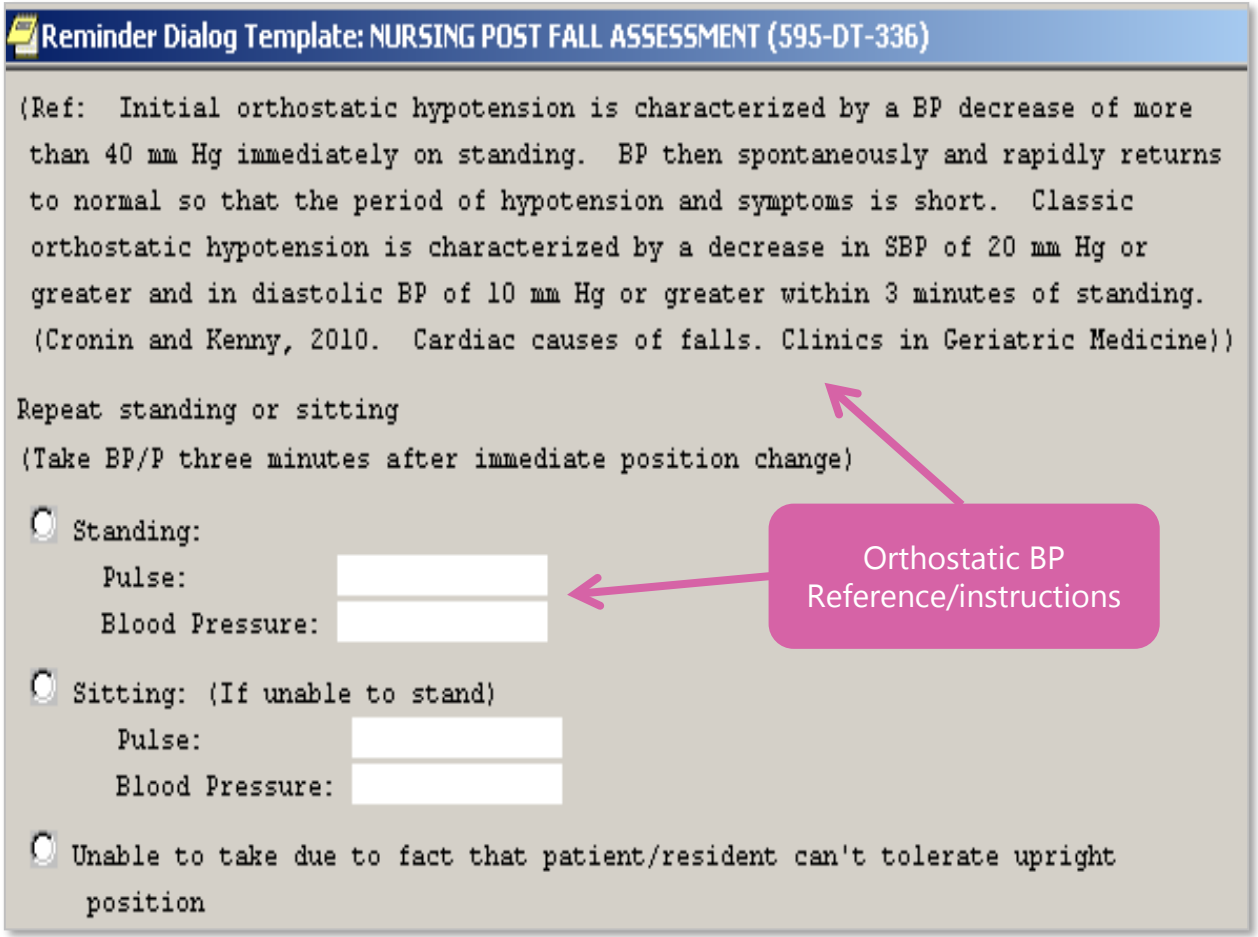


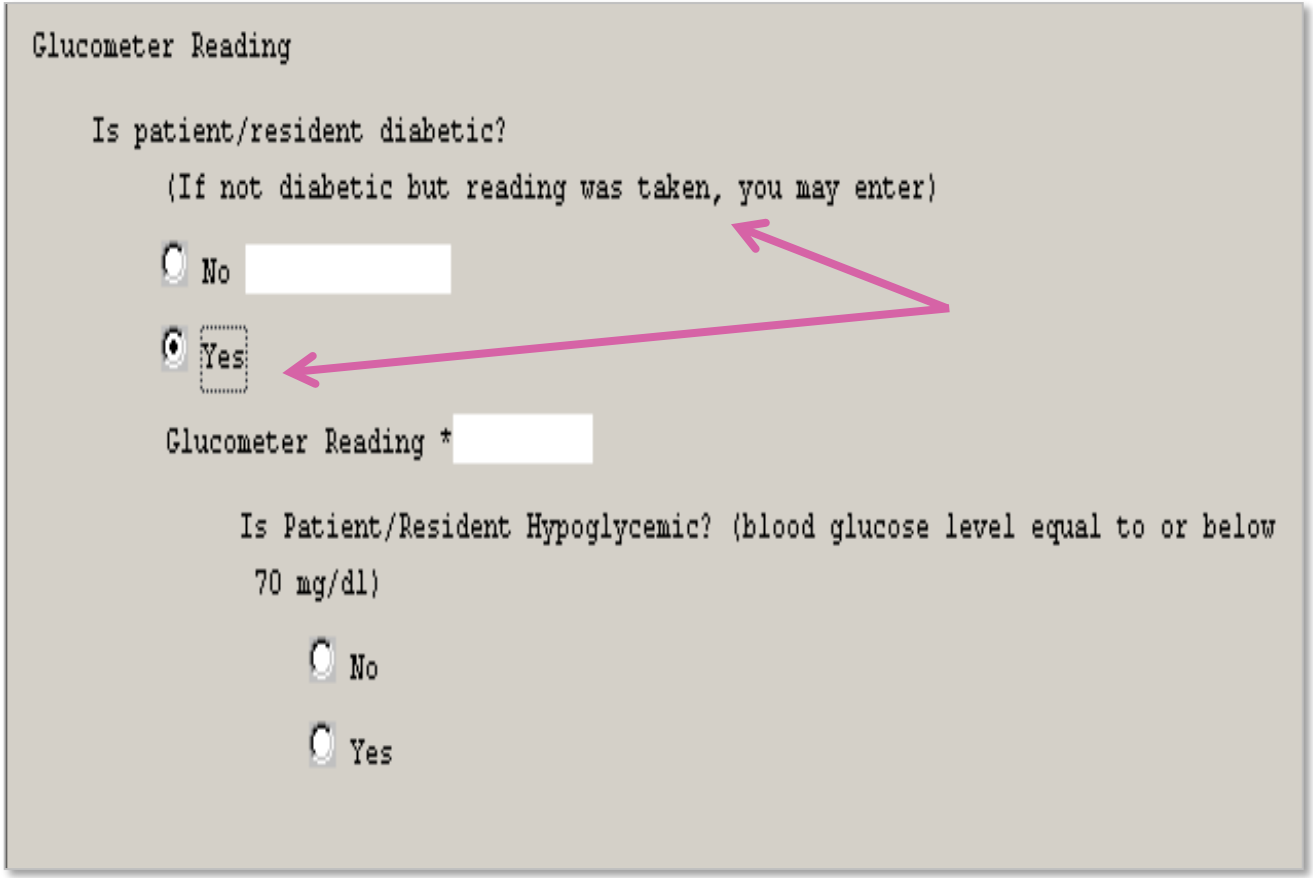

Patient/Resident Restrained at Time of Fall:
No
Yes
Comment:
Limb Restraints
Vest Restraints
Side Rail Restraints
Blanket Restraints
Mittens
Locked Leather Restraints
Other Restraints: *
PATIENT/RESIDENT DESCRIPTION OF THE FALL
Patient/Resident's Statement of What Occurred:
*
PATIENT/RESIDENT ASSESSMENT POST FALL
Nursing Observations:
(Please describe your observations of the patient and of the environment when arriving on the scene.)
Patient/Resident:
*
Options if 'Yes' selected for pt/resident restrained at time of fall
Text boxes for pt/resident description of what occurred, as well as nursing description of pt/resident & environment at time of fall

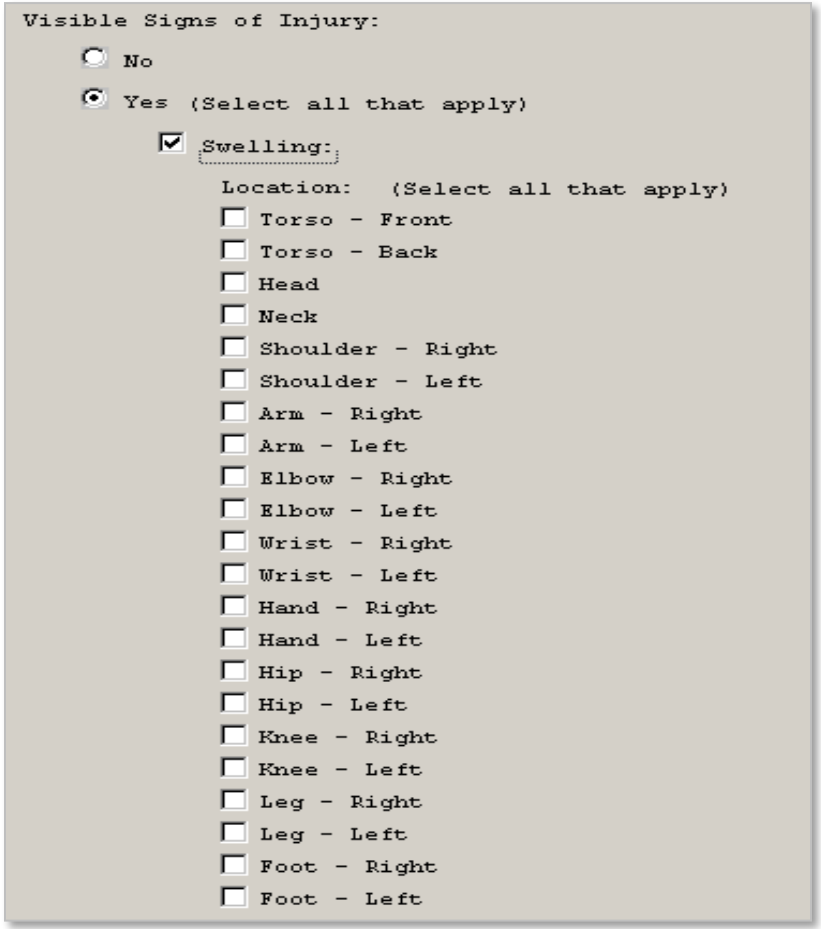

PATIENT/RESIDENT ASSESSMENT POST FALL
Nursing Observations:
(Please describe your observations of the patient and of the environment when arriving on the scene.)
Patient/Resident:
*
Environment:
*
Vital Signs (Pulse/Blood Pressure)
Routine VS (If unable to take orthostatic VS)
Pulse:
Blood Pressure:
Respirations:
Enter routine vital signs (VS) if unable to take orthostatic VS



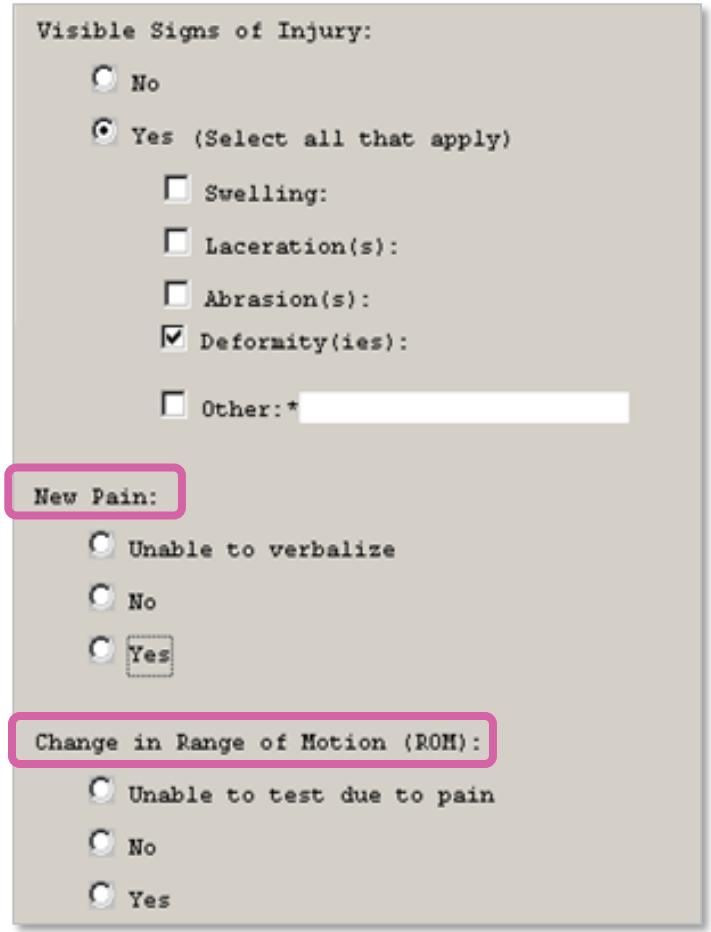
Clicking on 'orthostatic VS' opens instructions and ability to document vitals


Reminder Dialog Template: NURSING POST FALL ASSESSMENT (595-DT-336)
(Ref: Initial orthostatic hypotension is characterized by a BP decrease of more than 40 mm Hg immediately on standing. BP then spontaneously and rapidly returns to normal so that the period of hypotension and symptoms is short. Classic orthostatic hypotension is characterized by a decrease in SBP of 20 mm Hg or greater and in diastolic BP of 10 mm Hg or greater within 3 minutes of standing. (Cronin and Kenny, 2010. Cardiac causes of falls. Clinics in Geriatric Medicine))
Repeat standing or sitting
(Take BP/P three minutes after immediate position change)
Standing:
Pulse:
Blood Pressure:
Sitting: (If unable to stand)
Pulse:
Blood Pressure:
Unable to take due to fact that patient/resident can't tolerate upright position
Orthostatic BP Reference/instructions


Glucometer Reading
Is patient/resident diabetic?
(If not diabetic but reading was taken, you may enter)
No
Yes
Glucometer Reading *
Is Patient/Resident Hypoglycemic? (blood glucose level equal to or below 70 mg/dl)
No
Yes



If yes to visible signs of injury, type of injury can be selected (e.g., deformity); selection prompts nurse to select location on pt/resident body



Physical assessment – New Pain or Change in Range of Motion – If selection is 'Unable to Verbalize' or 'No', can go on to next question (includes list of locations, including other as comment with pain rating)

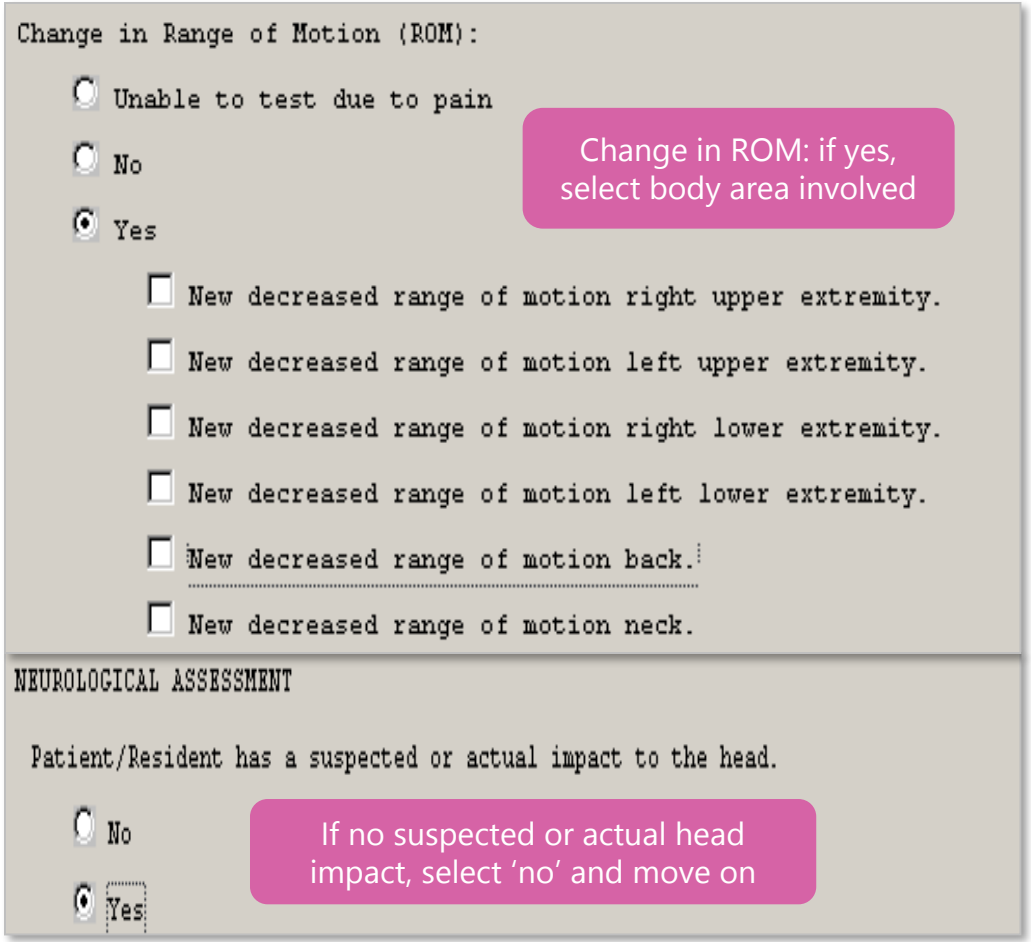
New Pain:

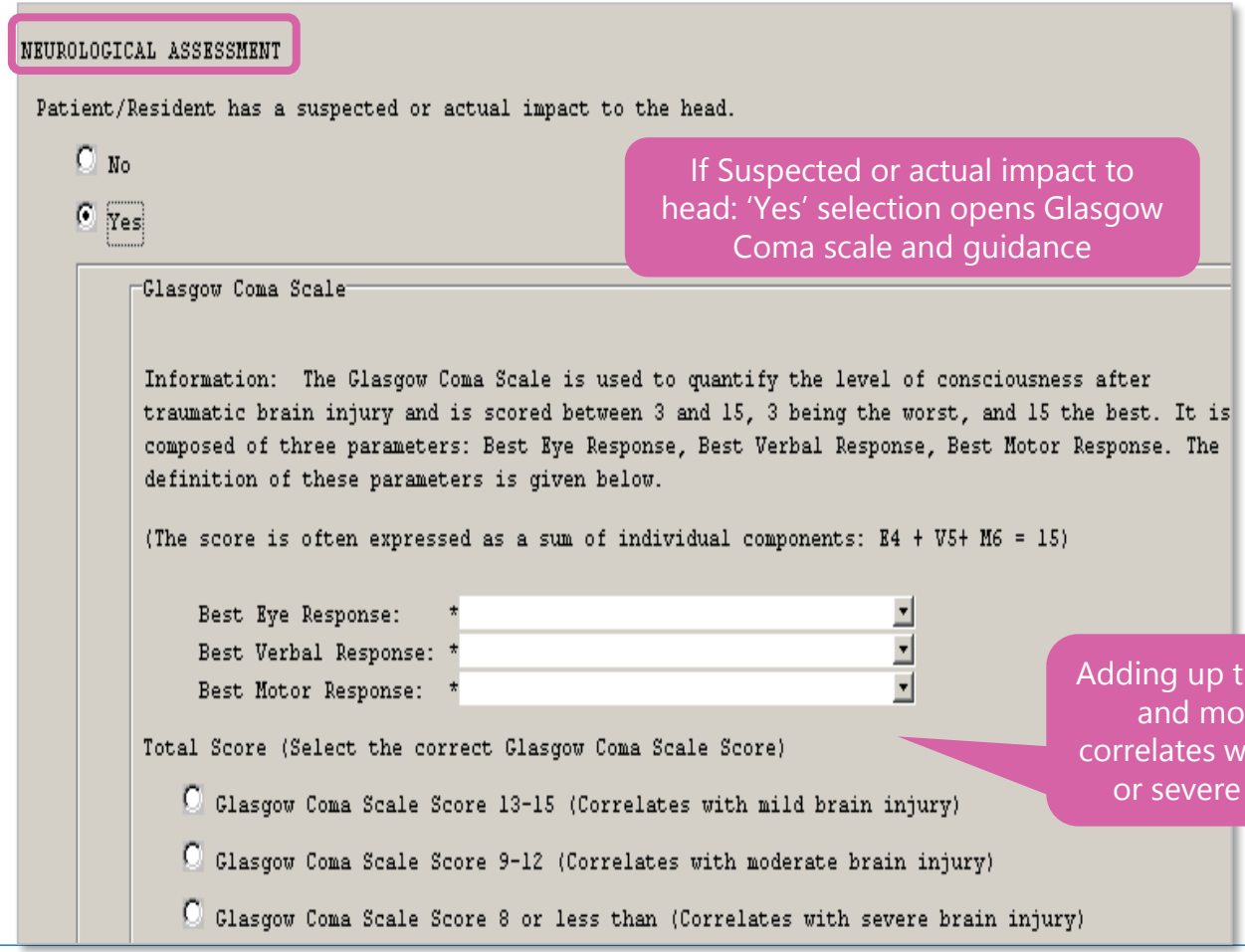
- ○ Unable to verbalize
- ○ No
- ◉ Yes

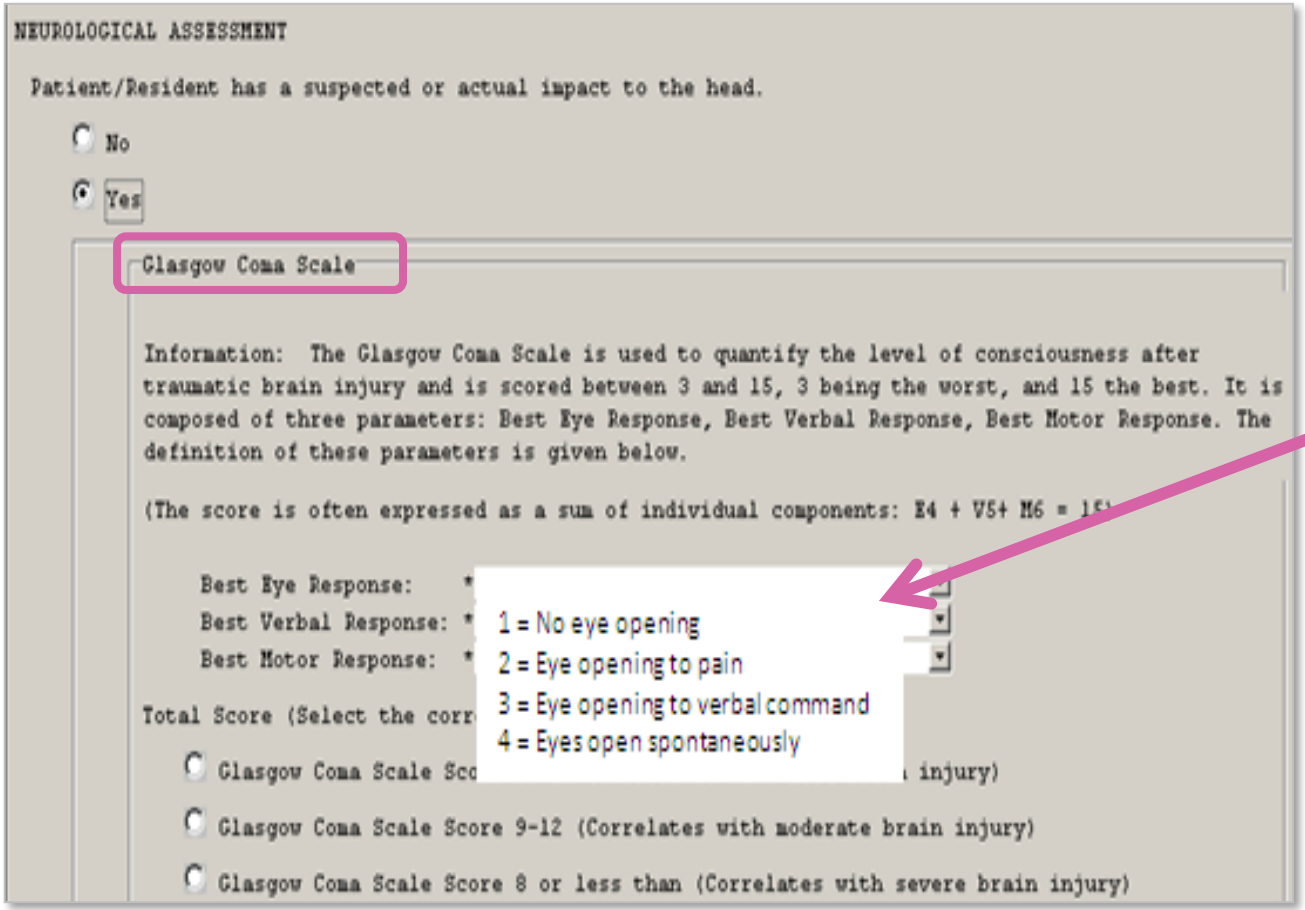
Location: (Select all that apply)

☐ Torso - Front	Pain Rating: *	
☐ Torso - Back	Pain Rating: *	
☐ Head	Pain Rating: *	
☐ Neck	Pain Rating: *	
☐ Shoulder - Right	Pain Rating: *	
☐ Shoulder - Left	Pain Rating: *	
☐ Arm - Right	Pain Rating: *	
☐ Arm - Left	Pain Rating: *	
☐ Elbow - Right	Pain Rating: *	
☐ Elbow - Left	Pain Rating: *	
☐ Hand - Right	Pain Rating: *	
☐ Hand - Left	Pain Rating: *	
☐ Hip - Right	Pain Rating: *	
☐ Hip - Left	Pain Rating: *	
☐ Knee - Right	Pain Rating: *	
☐ Knee - Left	Pain Rating: *	
☐ Foot - Right	Pain Rating: *	
☐ Foot - Left	Pain Rating: *	
☐ Other: *	Pain Rating: *	

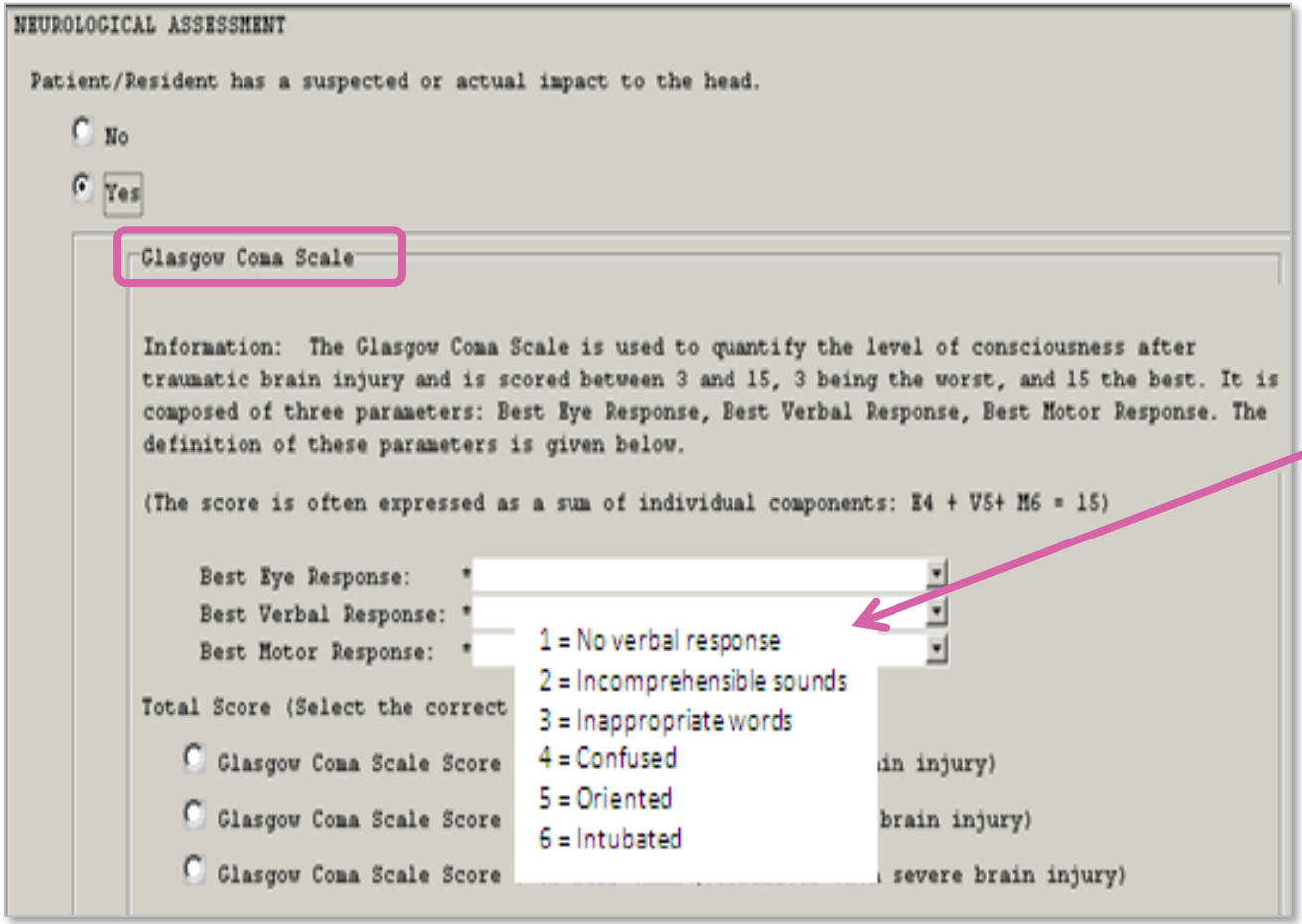
New Pain – if yes, can select location and pain rating for that location (1-10) scale


Change in Range of Motion (ROM):
Unable to test due to pain
No
Yes
New decreased range of motion right upper extremity.
New decreased range of motion left upper extremity.
New decreased range of motion right lower extremity.
New decreased range of motion left lower extremity.
New decreased range of motion back.
New decreased range of motion neck.
NEUROLOGICAL ASSESSMENT
Patient/Resident has a suspected or actual impact to the head.
No
Yes
Change in ROM: if yes, select body area involved
If no suspected or actual head impact, select 'no' and move on

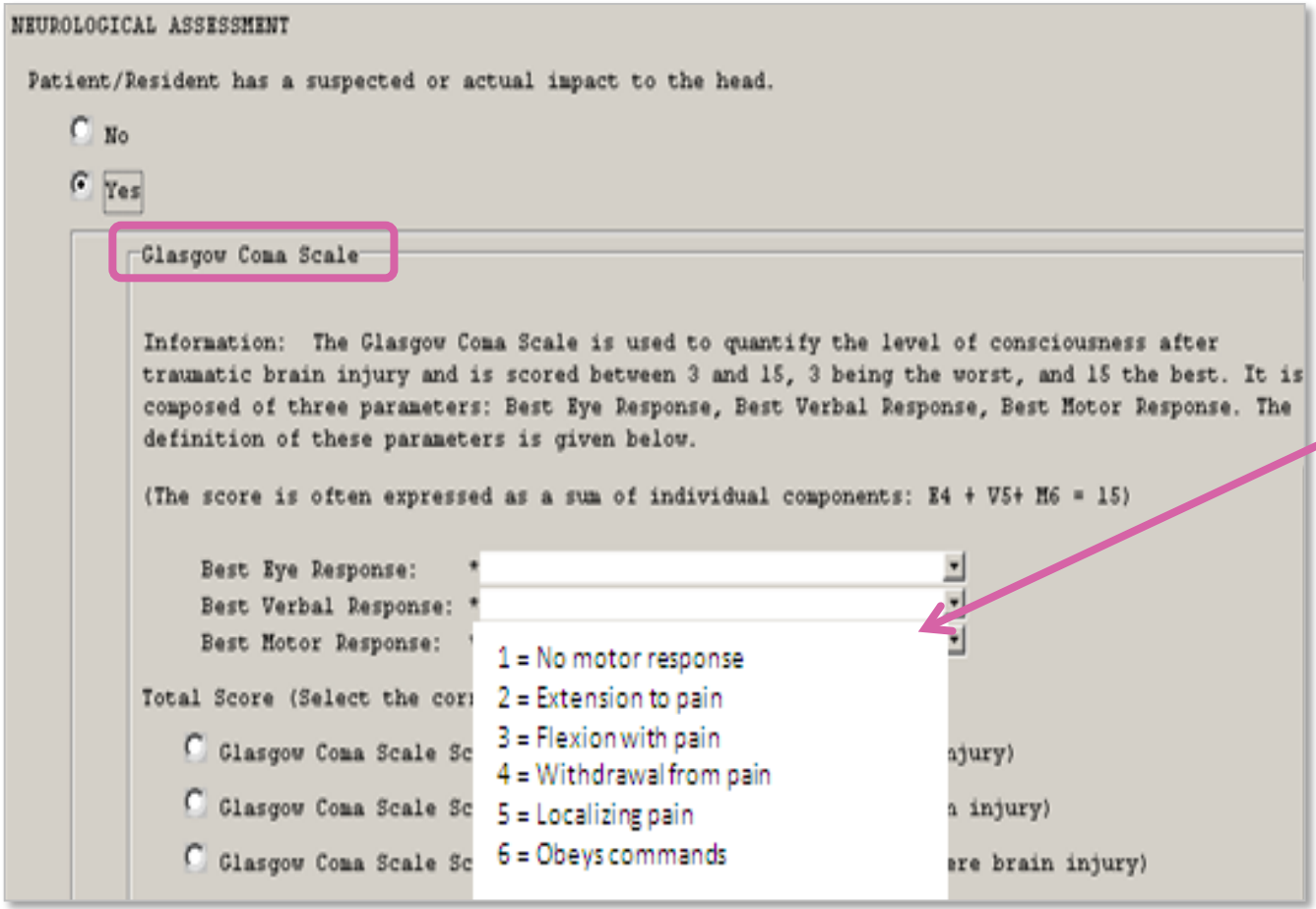

NEUROLOGICAL ASSESSMENT
Patient/Resident has a suspected or actual impact to the head.
No
Yes
If Suspected or actual impact to head: 'Yes' selection opens Glasgow Coma scale and guidance
Glasgow Coma Scale
Information: The Glasgow Coma Scale is used to quantify the level of consciousness after traumatic brain injury and is scored between 3 and 15, 3 being the worst, and 15 the best. It is composed of three parameters: Best Eye Response, Best Verbal Response, Best Motor Response. The definition of these parameters is given below.
(The score is often expressed as a sum of individual components: E4 + V5+ M6 = 15)
Best Eye Response: *
Best Verbal Response: *
Best Motor Response: *
Adding up the eye, verbal, and motor scores correlates with mild, mod, or severe brain injury
Total Score (Select the correct Glasgow Coma Scale Score)
Glasgow Coma Scale Score 13-15 (Correlates with mild brain injury)
Glasgow Coma Scale Score 9-12 (Correlates with moderate brain injury)
Glasgow Coma Scale Score 8 or less than (Correlates with severe brain injury)

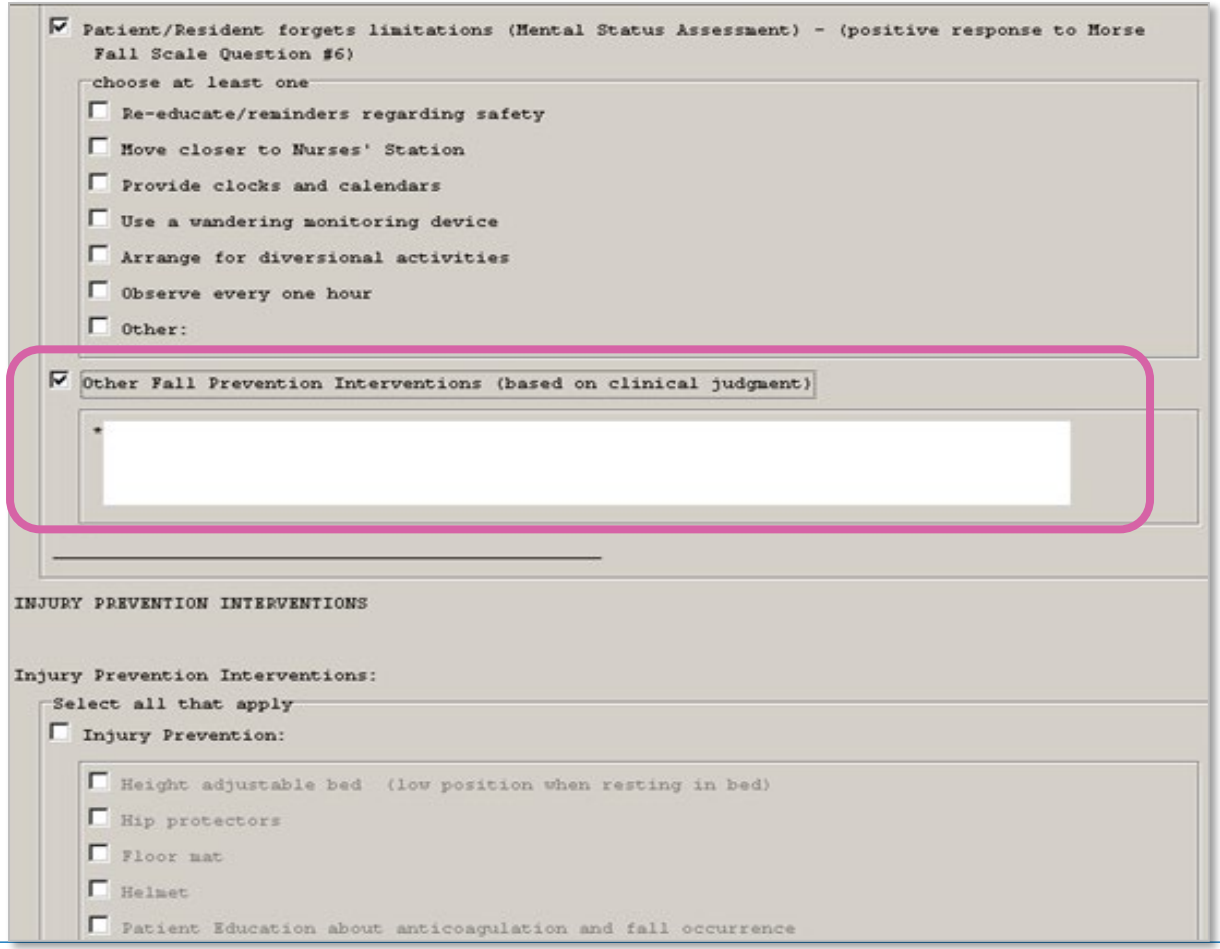


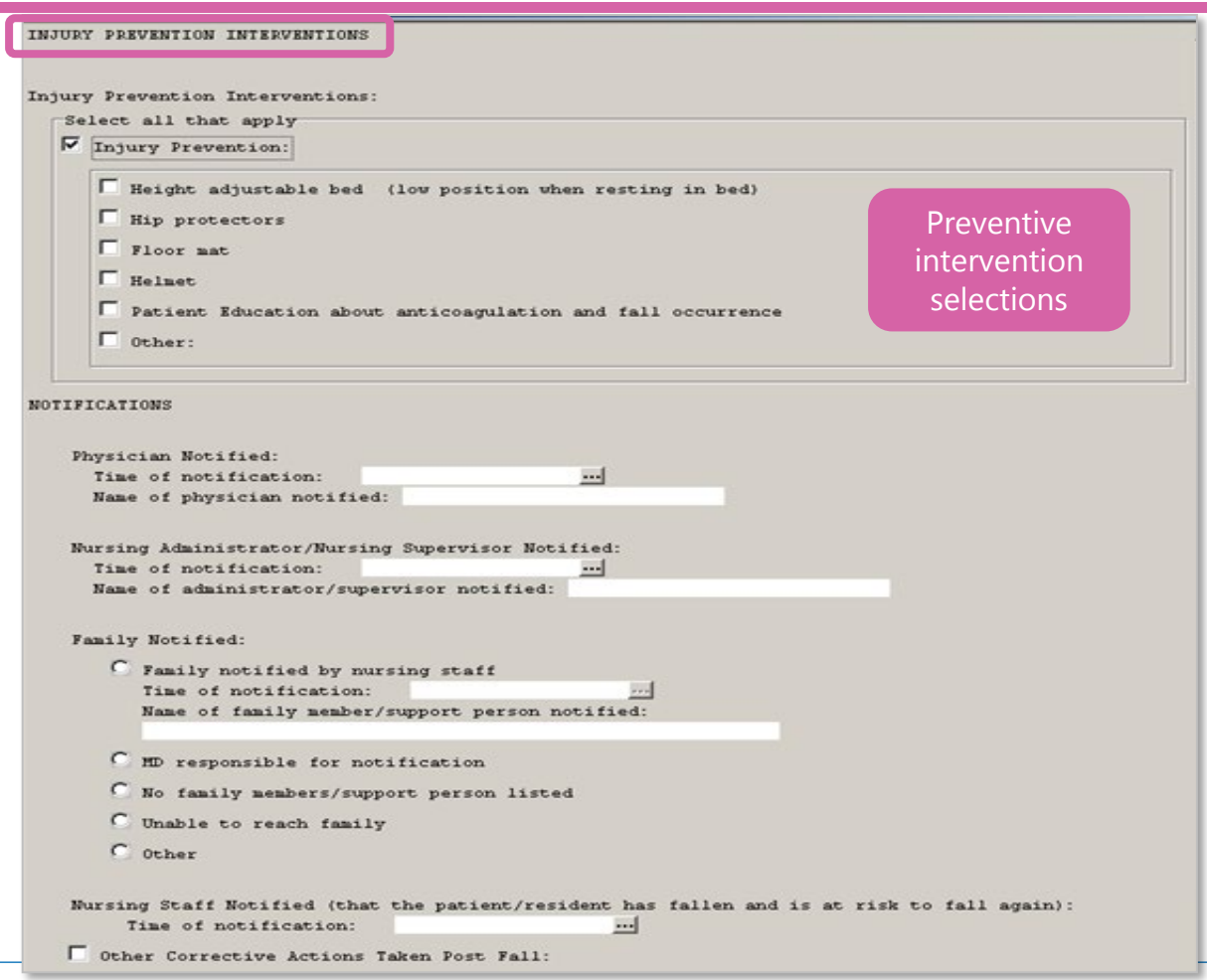
Scoring options for Best Eye Response



Scoring options for Best Verbal Response


NEUROLOGICAL ASSESSMENT
Patient/Resident has a suspected or actual impact to the head.
No
Yes
Glasgow Coma Scale
Information: The Glasgow Coma Scale is used to quantify the level of consciousness after traumatic brain injury and is scored between 3 and 15, 3 being the worst, and 15 the best. It is composed of three parameters: Best Eye Response, Best Verbal Response, Best Motor Response. The definition of these parameters is given below.
(The score is often expressed as a sum of individual components: E4 + V5+ M6 = 15)
Best Eye Response: *
Best Verbal Response: *
Best Motor Response:
1 = No motor response
2 = Extension to pain
3 = Flexion with pain
4 = Withdrawal from pain
5 = Localizing pain
6 = Obeys commands
Total Score (Select the cor
Glasgow Coma Scale Sc
Glasgow Coma Scale Sc
Glasgow Coma Scale Sc
Best Motor Response


Patient/Resident forgets limitations (Mental Status Assessment) - (positive response to Morse Fall Scale Question #6)
choose at least one
Re-educate/reminders regarding safety
Move closer to Nurses' Station
Provide clocks and calendars
Use a wandering monitoring device
Arrange for diversional activities
Observe every one hour
Other:
Other Fall Prevention Interventions (based on clinical judgment)
*
INJURY PREVENTION INTERVENTIONS
Injury Prevention Interventions:
Select all that apply
Injury Prevention:
Height adjustable bed (low position when resting in bed)
Hip protectors
Floor mat
Helmet
Patient Education about anticoagulation and fall occurrence



Preventive intervention selections

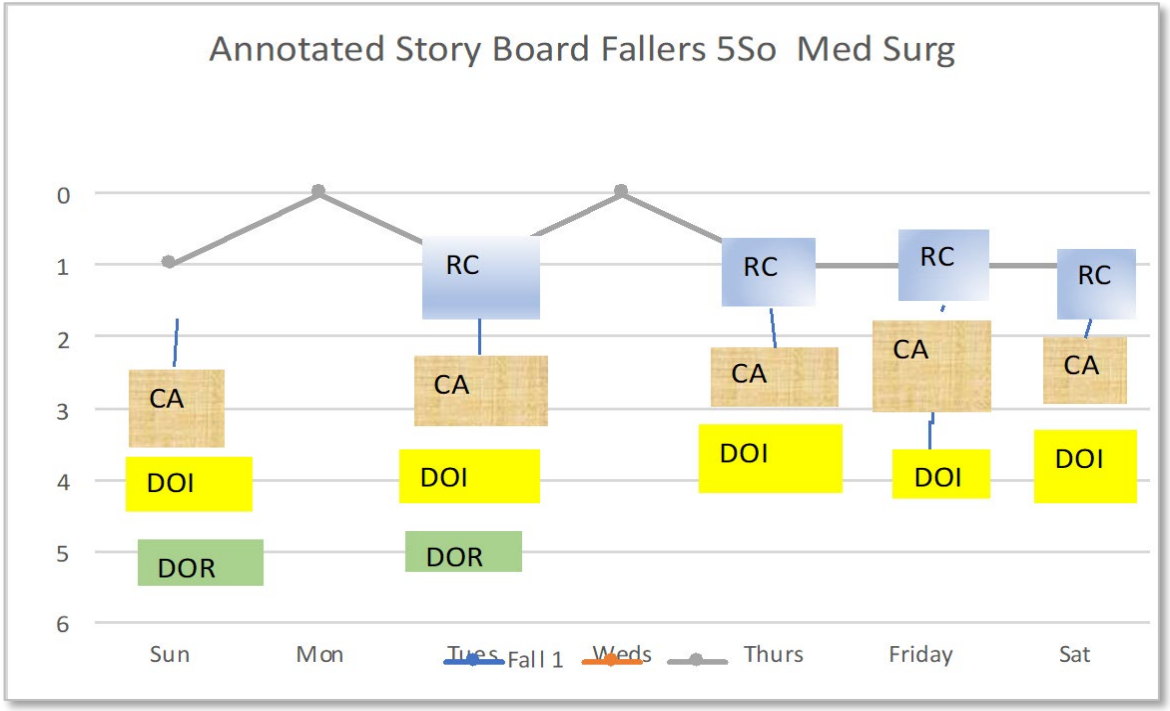
Teaching: After a Fall

- Reframe patient/resident education curricula to include "what happens after a fall"
- What can we learn from this event?
- How can we work together to prevent this again?

Staff Education

- Universal fall prevention
- Individualized fall prevention
- Injury reduction strategies
- Root cause trends of falls
- Interventions for Improvement
- Impact of changes in practices

My Unit Story Board



RC - Root Cause

CA - Corrective Action

DOI - Date of Implementation

DOR - Date of Resolution

Learn from Falls: Change Your Conversation

- Talk about and trend root causes
- Monitor interventions for mitigation/elimination of root causes
- Align interventions to type of falls
- Precision in program evaluation: Reduction
- Accidental falls
- Anticipated physiological falls
- Unanticipated physiological falls

To change practice is not for the faint of heart

It takes a lot of work:

Patience, perseverance, champions, positive approach and **data**

You Can Always Reach Me

Patricia Quigley, PhD, MPH, ARNP, CRRN, FAAN, FAANP, Nurse Consultant

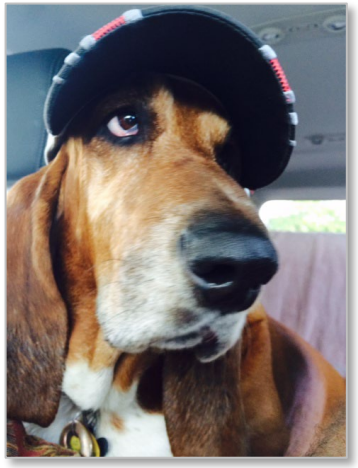
pquigley1@tampabay.rr.com

References

- AHRQ, Patient Safety Network [PSNet], Patient Safety Primer: Falls. Updated Sept. 2019). Available: https://psnet.ahrq.gov/primer/falls
- Ellis S, Mendel R, Nir M. Learning from successful and failed experience: The moderating role of kind of after-event review. J Appl Psychol. 2006;91(3):669–80.
- Jones, K.J.,. Crowe, J., Allen, J.A., Skinner, A.M., High, R., Kennel, V., & Reiter-Palmon, R. (2019). The impact of post-fall huddles on repeat fall rates and perceptions of safety culture: a quasi-experimental evaluation of a patient safety demonstration project. BMC Health Services Research. 19: 650. Available: https://bmchealthservres.biomedcentral.com/track/pdf/10.1186/s12913-019-4453-y
- Tannenbaum SI, Cerasoli CP. Do team and individual debriefs enhance performance? A meta-analysis. Hum Factors. 2013;55(1):231–45.

I fall a lot! Why?

Oreo



Jethro

Resources

- VHA National Center for Patient Safety
- Falls Toolkit (Post Fall Huddles)
- Preventing Falls in Hospitals: A Toolkit for Improving Quality of Care

HQIN Resource Center

- Simple Strategies for Fall Management
- Simple Strategies: Environmental Safety and Fall Prevention
- Simple Strategies: Fall Prevention with Medication Management
- Process Measure Audit Tracking Tool
- Nursing Home Falls Tracking Tool

July Office Hours

First Do No Harm: Our Patient Safety Initiative to Change Clinician Opioid Prescribing

Thursday, July 13 @ 12:00 p.m. EST

CONNECT WITH US

Call 877.731.4746 or visit www.hqin.org

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