

Continuing Education Disclosures

Commercial Support or Sponsorship – None

Speaker or planner conflicts of interest – None

For nursing contact hours or attendance certificate:
Completion of on-line evaluation.

Link to evaluation:

<https://www.surveygizmo.com/s3/3297787/February-2-2017-LSQIN-New-Look-at-Managing-Falls>

Thank you!

The participant is responsible for determining if the educational activity is acceptable to meet CE requirements to renew licensure in their state

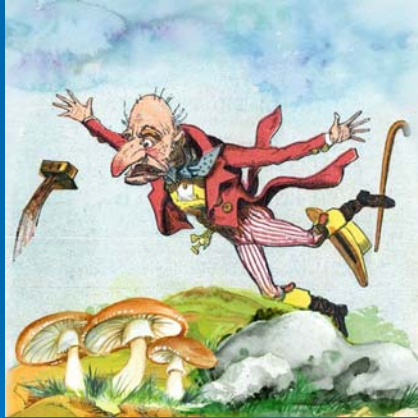
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New Look at Managing Falls

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February 2, 2017





Objectives

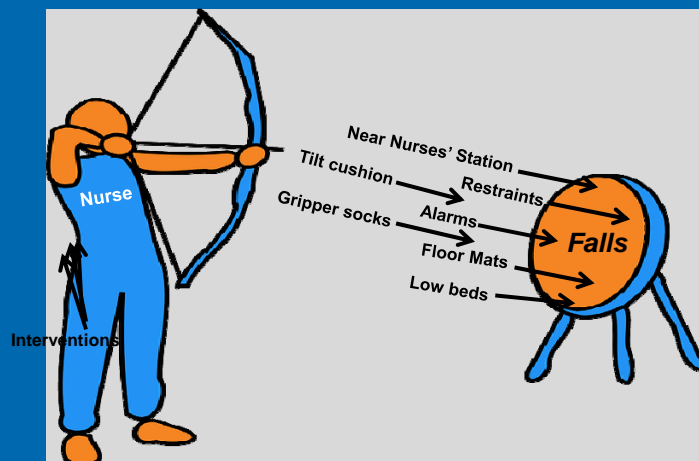
1. Utilize root cause analysis in the investigation and prevention of resident falls
2. Analyze the internal, external, and systemic conditions and operations that may contribute to the causes of resident falls
3. Identify the appropriate interventions for the causes of the falls

Definition of Falls

- Unintentional change in position coming to rest on the ground, floor or onto the next lower surface (e.g., onto a bed, chair or bedside mat). The fall may be witnessed, reported by the resident or an observer, or identified when a resident is found on the floor or ground. Falls include any fall, no matter whether it occurred at home, while out in the community, in an acute hospital or a nursing home. Falls are not a result of an overwhelming external force (e.g., resident pushes another resident).
- An intercepted fall occurs when the resident would have fallen if he or she had not caught him/herself or had not been intercepted by another person – this is still considered a fall.

- MDS 3.0 RAI User's Manual 2010, Page J-27.

History of Fall Prevention Interventions



**“I did then what I knew then,
but when I knew better,
I did better.”**

- Maya Angelou, writer



Faulty Assessment and Incorrect Root Cause to Preventing Falls

When a resident moves
= they fall down

Prevent movement or
mobility = then you
prevent the fall

No!

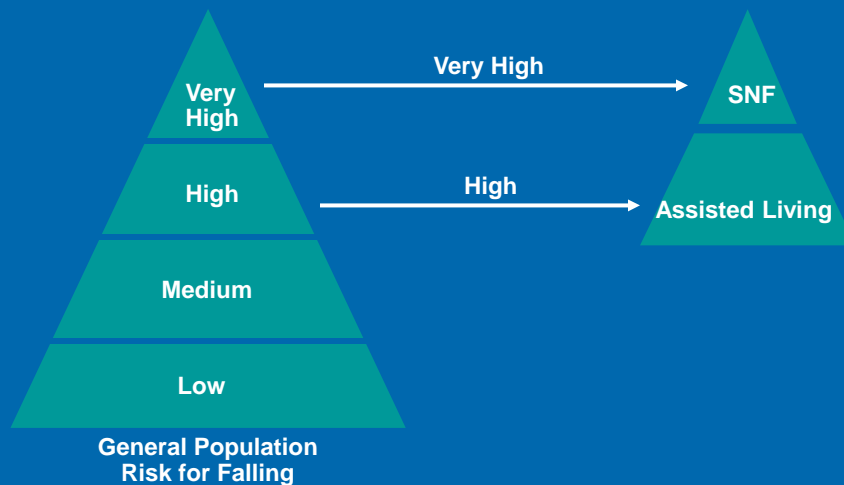
Improved Assessment & Correct Root Causes to Preventing Falls

A resident has needs = and their needs set them into moving = and because they are weak = they fall down

Yes!

Address the resident's needs = get them physically active (prevent immobility) = and you reduce their falls

Who Is At Risk for Falling . . . When Everyone Is?



Who Is At Risk for Falling?

- **Low Risk:** 5 – 25 years old, physically active, mentally alert, few diseases, and debilities
- **Medium Risk:** 25 – 45 years old, less physically active, less mentally alert, experiencing diseases and debilities
- **High Risk:** 45 – 65 years old, less physically active, less mentally alert, experiencing more diseases and debilities
- **Very High Risk:** Over 65 years old, less physically active, less mentally alert, experiencing more diseases and debilities

Person Centered “at risk” for Falls On Admission

- Mrs. HG, 88 y.o., early stage Lewy Body Dementia, symptoms increasing, can no longer be cared for in her AL setting
- Mr. LB, 76 y.o., active, alert, visually impaired due to macular degeneration, slipped and fell on ice getting out of his friend’s car, fx elbow & shoulder

Falls Admission Risk Assessment

1. On admission document the following statement, “Everyone is at high risk for falling. This resident, Ms. Guildermann, is at a high risk for falling because _____.”
2. Identify the individual’s specific risk factors for being at a high risk for falling.
3. If the person has a recent history of falls, determine the predisposing causes or triggers for the falls
4. Consider psychological / emotional factors; grief, depression, self imposed restriction of activity
5. Focus on lower-extremity balance and strengthening status
6. Individualize admission interventions: “to keep the resident safe and minimize falling.”

On Admission “Moving In” Fall Prevention Interventions



- Slow, careful orientation to room, apartment, routines
- Create room that most closely represents the client’s previous home environment, e.g., what side of the bed did they exit at home? Placement within room duplicates home BUT prevent clutter!
- Identify individual room so that residents will know it is theirs, e.g., items, pictures, name, own bedspread & curtains
- Adapt rooms to residents’ physical limitations, e.g., bed, door, nightstand, equipment placement, bed in relation to bathroom
- Create contrast, e.g., items to background area, toilet seat, call light
- Reduce uneven floor surfaces (rugs) especially at thresholds
- Set bed height to be correctly heighted to resident – mark it

What Is Root Cause Analysis?

RCA is a process to investigate what happened, why it happened, and to determine what can be done to prevent it from happening again.



Root Cause Analysis

- Aiming performance improvement operations at root causes is more effective than merely treating the symptoms of problems.
- Problems are best solved by eliminating and correcting the root causes, as opposed to merely addressing the obvious symptoms with "scatter-gun approaches" to solutions.

3 Areas to Focus the Investigation and Assessment for Root Cause Analysis

- 1. Internal / Intrinsic conditions**
- 2. Environmental / Extrinsic conditions**
- 3. Operational / Systemic conditions**

Apply the Same Principles of Assess & Treat to Falls As We Do to Other Clinical Areas

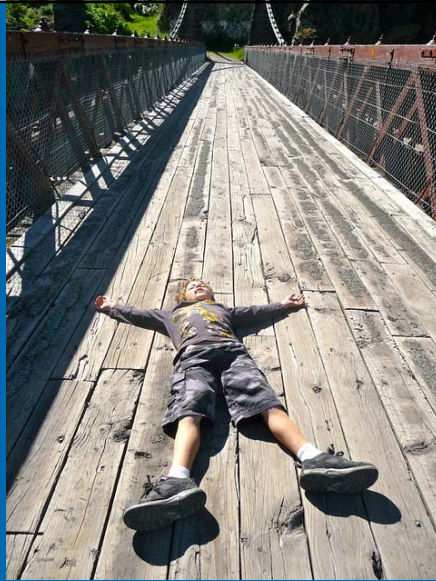
- Incontinence: causes & treatments**
- Pain: causes & treatments**
- Falls: causes & treatments**

Care Plan Falls As You Do Other Clinical Conditions

- We Care Plan according to the assessed and identified causes & conditions of the falls, e.g., disorder, outcomes, symptoms of the diagnoses, need to move, VS, meds
- We select interventions that specifically match the identified causes of the falls



What might be the root cause(s) of his fall?



What might be the root cause(s) of her fall?



What might be the root cause(s) of her fall?

Would You Use the Same Interventions for Their Falls?



Why Do RCA After a Fall?

- **Q:** “It’s a single event and won’t happen that way again?”
- **Q:** “No one, including that resident, will ever fall that way again?”
- **A:** If the brakes failed in your car on an icy road, don’t figure out “why” or tell the manufacturer because that accident will never happen that way to you or anyone else again. **WRONG!! NOT!**

Steps to Root Cause Analysis: Step One → Step Two → Step Three

1. What happened: Gather the clues and evidence by observation, examination, interviews, and assessment.
2. Why did this happen? What conditions allowed this problem to exist? Investigate, assess and deduce. Determine the primary root causes or reasons for the fall based upon the aggregate data tracked.
3. Implement corrective actions and interventions to eliminate the root cause(s) of the problem. What can be done to prevent the problem from happening again? How will it be implemented? Who will be responsible to do what? How will it be audited and evaluated?

Step 1: Gather clues, evidence, data

- Observation skills are critical!
 - It's easy to miss something you're not looking for when we are task focused not person centered
- Gather the clues:
 - Look, listen, smell, touch
 - Question, interview, re-enact, huddle – immediately
 - Note condition of resident, surrounding environment, and operational conditions
- Protect the area around the incident:
 - Secure the room/equipment immediately
 - Observation and recording begins immediately – while things are still fresh

Internal Evidence & Clues

- What was the resident doing or trying to do just before they fell?
 - Ask them
 - All residents, all the time
- Place of fall:
 - At bed, chair 5 feet away > 15 feet
 - ↓ ↓ ↓
 - Orthostatic, Balance/gait, Strength/endurance
 - In bathroom/at commode: ✓ contents of toilet
 - Urine or feces in toilet/commode? Urine on floor?

Internal Evidence & Reasons

- Medications
 - Side effects, adverse drug reactions, Black Box Warnings
 - Cascading medications
- Wandering vs. Pacing
 - **Wandering:** without a goal, usually provides comfort
 - **Pacing:** a need not met, rhythmic or repetitive
- Grabbing vs. Pushing
 - **Grabbing:** due to dizziness to stop from spinning – don't move, hold on to resident.
 - **Pushing:** to get away from being startled/attacked – slowly back away from resident.
- Cognitive Abilities & Mood Status

Internal Needs “4 Ps” Not Met

- **Position:**
 - Does the resident look comfortable?
 - Ask the resident, “Would you like to move or be repositioned?”
 - Ask the resident, “Are you where you want to be?” Report to the nurse.
- **Personal (Potty) Needs:**
 - Ask the resident, “Do you need to use the bathroom?”
 - Ask if they’d like help to the toilet or commode. Report to the nurse.
- **Pain:**
 - Does the resident appear in to be uncomfortable or in pain?
 - Ask the resident, “Are you uncomfortable, do you ache or are you in pain?”
 - Ask them what you can do to make them comfortable.
 - Report to the nurse.
- **Placement:**
 - Is the bed at the correct height?
 - Is the phone, call light, remote, walker, trash can, water, urinal, tissues, all near the resident?

Place them all within easy reach.

Tools to Determine RCA

RCA:

- Check, Call, Care
- “10 Questions”
- Nurse Assessment
- Post Fall Huddle
- Staff Interviews
- Reenact

Fall Scene Investigation
(FSI) Report

- FSI Report, Staff Input
- 4Ps Results
- MDS, QM/QI Report

Falls Committee
Meeting

When You See a Resident Who Has Fallen, Do the Following:

“Check, Call, Care”

1. Immediately go to the resident, stay with the resident
2. If you are not a nurse, call for a nurse
3. Encourage the resident not to move, “Are you OK?”
4. Ask them, “What were you doing just before you fell?”
“What were you trying to do just before you fell?”
5. Get answers to the “10 Questions”
6. Stay for the fall huddle, assist in getting a fall huddle started



10 Questions at the time a resident falls. Stay with resident, call nurse.

1. Ask resident: Are you ok?
2. Ask resident: What were you trying to do?
3. Ask resident or determine: What was different this time?
4. Position of Resident?
 - a. Did they fall near a bed, toilet or chair? How far away?
 - b. On their back, front, L side, or R side?
 - c. Position of their arms & legs?
5. What was the surrounding area like?
 - a. Noisy? Busy? Cluttered?
 - b. If in bathroom, contents of toilet?
 - c. Poor lighting – visibility?
 - d. Position of furniture & equipment? Bed height correct?
6. What was the floor like?
 - a. Wet floor? Urine on floor? Uneven floor? Shiny floor?
 - b. Carpet or tile?
7. What was the resident's apparel?
 - a. Shoes, socks (non-skid?) slippers, bare feet?
 - b. Poorly fitting clothes?
8. Was the resident using an assistive device?
 - a. Walker, cane, wheelchair, merry walker, other
9. Did the resident have glasses and/or hearing aides on?
10. Who was in the area when the resident fell?

Nurse's Assessment at the Fall

- Vital Signs + Pain
- Neuro checks
- Lab results
- Medications (side effects)
- Diagnoses
- Vision and hearing conditions
- Cognitive, confusion, mood status
- Recent changes in conditions



Fall Huddle

- Performed immediately after resident is stabilized
- Charge nurse has all staff, working in the area of the fall, meet together to determine RCA
- Review “10 Questions” with staff
- Also ask staff:
 - “Who has seen or has had contact with this resident within the last few hours?”
 - “What was the resident doing?”
 - “How did they appear? How did they behave?”



Re-enact or “Show & Tell”

- The persons involved in the fall or incident are asked to re-create what happened – “do exactly what you did when the fall happened the first time.”
- Use the same people, same equipment, same room, same time of day

Fall Scene Investigation (FSI) Report

- Data collection tool used to investigate and determine RCA
- Completed soon after the fall occurs and/or during the fall huddle
- Completed by nurse in charge on duty at time of the fall



Fall Committee Meeting

- Meets weekly at same time and day
- All appropriate departments represented
- Charge nurse & nurse aide from fall site are “ad hoc”
- Have all relevant information available; FSI report, MAR, resident’s chart, fall huddle findings, hourly roundings
- Agenda:
 - New falls;
 - Review FSI report, huddle findings, review RCA
 - Review interventions – Do they match the RCA? Are they weak, intermediate, or strong interventions? Suggestions?
 - Status of residents from previous falls and interventions?
 - Are systems and operational changes needed?
- Status reports and audits; alarm reduction, med reduction, wake at will, Fall Summary, QI/QM reports, falls per 1000

Reasons for Residents’ Falls

- Root Causes:
 - External
 - Internal
 - Systemic



Causation Findings Identified from Fall Prevention Program

- External causes: Noise, busy activity, lack of environment contrasts, placement of furniture, equipment & personal items, floor coverings
- Internal causes: Poor balance/ immobility, sleep disturbance/ fragmentation, medications (type & amt), orthostatic B/P, endurance/strength
- Systemic causes: Lack of RCA, time of day, shift change, break times, days of week, location of fall, type of fall, routine assignments, staffing levels, policies & procedures

External Lesson Learned

If We Can Stop the Noise,
Then We Can Reduce
the Falls.



Internal Lesson Learned

**If We Can Stop Disturbing Sleep -
If We Can Increase Mobility -
Then We Can Reduce the Falls.**



Systemic Lessons Learned

- Operations and management of systems, processes and procedures have the greatest impact and effect on fall reduction
- Align policies, procedures, systems to support residents' needs e.g., turn/toilet q.2.h ?, meds q.4.h ?, meals/ bedtimes at resident's preferred times.



Interventions

- Definition of Medical Interventions: patients receive treatments or actions that have the effect of preventing injury, illness and/or prolonging life.
- Interventions must match the causative agents of the injury, illness, disease, and/or conditions.

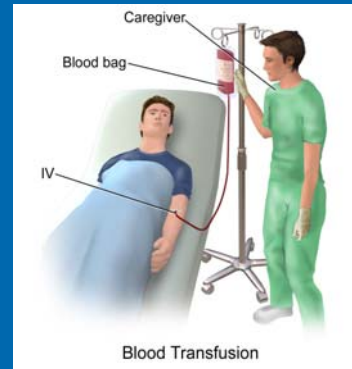


Image citation: Blausen.com staff. "Blausen gallery 2014".
Wikiversity Journal of Medicine.

Implement Interventions / Solutions

- What will you do to prevent this fall from happening again?
- Do the interventions / solutions match the causes of the fall?
- How will it be implemented? Who will be responsible for what?
- How will the interventions effect other operations or people in your nursing home?
- What are risks to implementing the solutions?
- Move from weak to strong interventions.

Noise



- Where is it?
 - Nurses stations, kitchens, dining areas
- What's causing it?
 - Staff, alarms, pagers, TVs
- When is it noisy?
 - Shift change, meals, rounds

Personal Alarms: Definition

Personal alarms are alerting devices designed to emit a loud warning signal when a person moves.

The most common types of personal alarms are:

- Pressure sensitive pads placed under the resident while they are sitting on chairs, in wheelchairs or when sleeping in bed
- A cord attached directly on the person's clothing with a pull-pin or magnet adhered to the alerting device
- Pressure sensitive mats on the floor
- Devices that emit light beams across a bed, chair, doorway

Architectural alarms are not an issue

Advance Guidance for Appendix PP: Position Change Alarms, CMS 7/28/15

Alarms in Nursing Homes: Some nursing homes use various types of position change alarms as a fall prevention strategy or in response to a resident fall. Evidence does not support that alarm use effectively prevents falls. Alarms may also have adverse consequences for residents and the facility environment.

The Centers for Medicare & Medicaid Services (CMS) has revised the guidance to surveyors in Appendix PP under F221/222 and F323 to discuss the appropriate role of position change alarms in resident

Environment with a Lack of Contrast



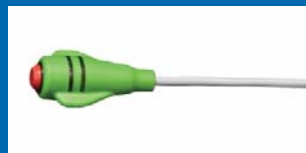
Which One Can You See More Easily?



“Aging Research, Design Education, and the Perceptual Limits in Seniors Housing Design: Development of a Research-Based Design Model for Better Aging Environments,”
Steven J. Orfield, Orfield Laboratories, Senior Housing & Care Journal, Vol. 21, No. 1, pp. 136 -144. 2013.

Contrast the Environment

Make it easier to see through contrast:



Contrast the Environment



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Mats on Floor Reduction

United States Department of Veterans Affairs, Falls Tool Kit, Floor Mats:

[Tips and Tricks for Selecting a Bedsize Floor Mat.](#)

-- Applegarth, S.P.

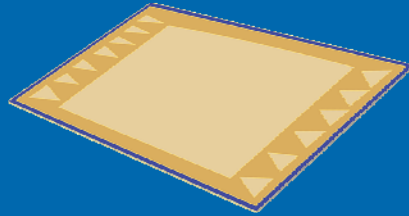
Website:

http://www.patientsafety.gov/SafetyTopics/fallstoolkit/resources/other/Tips_and_Tricks_for_Selecting_a_Bedside_Floor_Mat.doc

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Mats on Floor Reduction



- Mat creates an uneven floor surface
- Mat does not go full length of bed
- Mat is confusing to dementia residents
- Efficacy of mats has not been proven: VA study
- Presence of floor mat creates a fall hazard
- Staff, families and residents trip over mat

Hip Protectors

- Used by all residents with diagnosis of osteoporosis, hip/pelvis fractures, osteoarthritis
- Check Veterans Administration – Hip Protector Implementation Tool Kit
- VA tested efficacy of hip protectors – some found to be significantly less effective than others

Hip Protectors with Highest Rated Efficacy

- ComfiHips: www.comfihips.com
- Hip Saver: www.hipsaver.com
- SAFEHIP: www.safehip.com

Correct Footwear

- No crepe soles, careful use gripper socks
- Fully enclosed, no open backs
- Correctly fitting – easy on, easy off!
- Footwear is color contrasted to floor color



Unnecessary Medications

- What makes a drug “unnecessary”?
- CMS F329 Unnecessary Drugs –
- General Drugs: Any drug when used;
 1. In excessive dose; or
 2. For excessive duration; or
 3. Without adequate monitoring; or
 4. Without adequate indications for its use; or
 5. In the presence of adverse side effects, which indicate the dose should be reduced or the drug discontinued; or
 6. Any combinations of the reasons above.

Reasons for the Use of Unnecessary Meds

- Resident’s condition changes
 - need help / desire to help / unable to help
- Overestimate of effectiveness of drugs; believe drugs will produce desired results
- Underestimate the side effects of drugs
- Lack of training in non-pharmacological approaches to treatment
- Patient/family demands
- Influences of media and drug manufacturers



“Balance Exercise Reduces Risk of Falling”

- *“Strength training alone may not effectively reduce falls since impaired balance is a stronger reason for falls than poor muscle strength.”*
- *“The greatest effect in preventing falls were seen with exercises that challenged balance.”*
- ~ Journal of the American Geriatrics Society,
December 2008
- Create opportunities to stand and reach
- Incorporate balance into current activities & ADLs & newly created TR programs

Standing, Reaching and Turning with ADLs

Encourage Mobility:

- Reach for towel at sink
- Turn to get toilet paper and do self hygiene
- Turn and reach for clothing items once set up
- Lift arms and lift head to assist with dressing
- When offering something to resident have them reach — meds, toothbrush, tissues, snack
- Encourage self propel wheelchair

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Strong Interventions to Prevent Falls

- Match the Interventions to Reduce the Causes
- Root Cause Analysis – done by all staff
- Reduce Noise: staff, alarms, TVs, paging
- Alarm & Restraint Elimination
- Contrast Environment
- Appropriate Footwear
- Reduce Floor Mats
- Reduce Unnecessary Medications
- Provide Opportunities to Move and Balance
- Increase Activities of Engagement at Day Times
- Provide Undisturbed Sleep at Night

National Nursing Home Quality Care Collaborative Change Package

Change Concept: Provide exceptional compassionate clinical care that treats the whole person - Strive to prevent problems and treat when necessary.

Change Package:

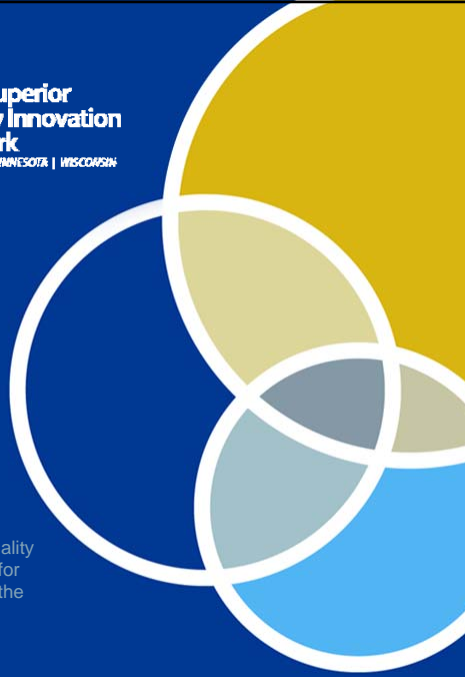
<https://www.lsqin.org/wp-content/uploads/2015/03/NH-ChangePackage-032615-Final-508.pdf>





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