

CAPTURE Falls Education

Fall Risk Reduction Interventions

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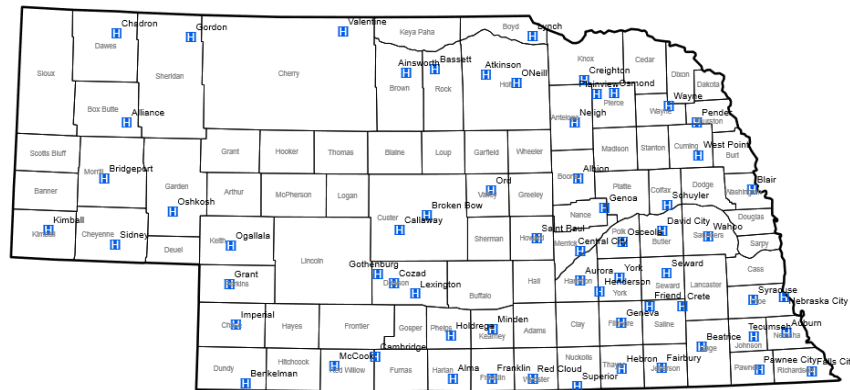


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Interventions are Informed by Fall Risk Assessment (1)



[CAPTURE Falls Roadmap Fall Risk Assessment](#)

Fall risk factors for hospitalized adult patients are often multiple and variable

- Patients often have multiple intrinsic risk factors for falls
- Risk factors vary among patients
- Risk can vary over the course of a hospitalization for an individual patient



Interventions are Informed by Fall Risk Assessment (2)

[CAPTURE Falls Roadmap Fall Risk Assessment](#)



Are all hospitalized patients at risk?

- Health has been negatively impacted in some way
- Unfamiliar environment
- Extrinsic risk factors



Interventions are Informed by Fall Risk Assessment (3)



[CAPTURE Falls Roadmap Fall Risk Assessment](#)

**Risk Factors Typically Addressed by Many Tools:
Assessed by Self-Report, Chart Review, or Observation of Patient**



History

- Fall prior to or during current admission
- Medical history (neurological, cardiovascular, orthopedic, etc)

Cognition and Emotion

- Memory Impairment
- Dementia
- Delirium
- Impulsivity or agitation
- Overestimation of ability
- Anxiety

Movement and Mobility

- Weakness
- Poor balance
- Need for assistive device
- Need for physical assistance

Medications

- Polypharmacy
- Drug Interactions
- Side effects

Risk of Injury

- Age
- Osteoporosis
- Recent surgery
- Coagulation

Sensory Impairments

- Vision
- Vestibular
- Peripheral Neuropathy
- Hearing

Continence

- Bladder or Bowel
- Urgency
- Frequency

Fall Risk Reduction Interventions: Purpose

[CAPTURE Falls Roadmap Fall Risk Reduction Interventions](#)



- Fall risk reduction interventions are actions taken with or on behalf of a patient to improve or maintain the patient's safety
- Some actions should be taken for ALL patients
- Some actions should be tailored to specific patients and their specific risk factors



Objectives

1

Discuss research evidence for fall risk reduction interventions

2

Identify fall risk reduction interventions appropriate for all patients

3

Identify targeted fall risk reduction interventions for patients with specific fall risk factors

4

Determine how to implement the delivery of fall risk reduction interventions, including strategies for staff education



Objective 1: Discuss Research Evidence for Fall Risk Reduction Interventions



“State of the Science” for Fall Risk Reduction Interventions

It is difficult to do well-controlled experimental research on this topic!

- Quality of study design
 - Parallel-group randomized controlled trials (considered the gold standard for testing interventions)
 - Historical control groups
 - Single group pre-test/post-test design (no control group)
 - Descriptions of quality improvement initiatives
- Ethics and feasibility of control groups
- Confounding variables
 - Patient factors, organizational factors, etc.



What Do Review Articles Say About the Efficacy of Interventions for Hospitalized Patients?

Mostly inconclusive and/or weak evidence for several single interventions:

- Exercise
- Medication review
- Alarms
- ID bracelets
- Low beds
- Sitters
- Rounding
- Non-slip socks

Stronger evidence for:

- Multifactorial interventions
- Patient/family education
- Staff education

- Cameron ID, Dyer SM, Panagoda CE, Murray GR, Hill KD, Cumming RG, Kerse N. Interventions for preventing falls in older people in care facilities and hospitals. *Cochrane Database of Systematic Reviews* 2018, Issue 9. Art. No.: CD005465. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD005465.pub4/epdf/full>
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Should we Stop Using These Interventions in the Absence of Well-Controlled Research? No.

Keep an eye out for new evidence that something doesn't work (or is even harmful). Be willing to change!

Also realize that **Evidence-Based Practice** includes the integration of

- the “best available” evidence
- clinical expertise
- and patient values and preferences

to support decisions related to patient and policy decision-making.



**Objective 2: Identify Fall Risk
Reduction Interventions Appropriate
for all Patients**



Interventions for Fall Risk and Fall Injury Risk Reduction: What's on the Menu? **A LOT!**



- Assistive devices/equipment
- Bed/chair alarms
- Bed in low position
- Bedside floor mats
- Call light in reach
- Declutter environment
- Delirium prevention or mitigation
- Documentation of mobility/ADL assistance
- Floor clean and dry
- Gait belt
- Handoff tool
- Handrails in bathroom, hallway, etc.
- Hearing aids
- Hip protectors
- Lighting
- Locked wheels on bed, wheelchair



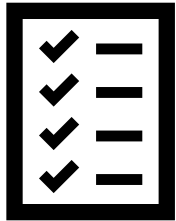
Interventions for Fall Risk and Fall Injury Risk Reduction: What's on the Menu? **A LOT!**



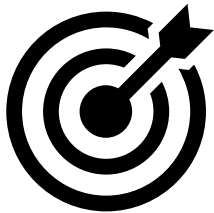
- Medication review by pharmacy
- Nonslip footwear
- Orthostatic blood pressure checks
- OT evaluation
- Pain management
- Patient close to nurses' station
- Patient/family education
- PT evaluation
- Purposeful hourly rounding
- Seating assessment
- Sitter
- Supervised mobility and ADLs
- Supervised toileting
- Top bedrails up
- Video monitoring
- Visible identification of risk
- Vision correction



Interventions for Fall Risk and Fall Injury Risk Reduction: What to Do?



Use every intervention for every patient?



Be more selective in your choice of interventions?



Are there Interventions we Should Use for Every Patient? YES!



[CAPTURE Falls Roadmap Fall Risk Reduction Interventions: Universal Interventions to Reduce Fall Risk for All Patients](#)

- **Universal Interventions**: common sense interventions for every patient all the time, regardless of risk status
- Rationale: ANYONE can fall, given the right circumstances
- Can also reduce risk for visitors and staff
- Focus largely on the physical environment, but also on how patients and staff interact



Common Universal Interventions



Bed in low position

Night lights/supplemental lighting

Call light/personal belongings in reach

Nonslip, well-fitting footwear

Declutter environment

Pain management

Floor clean and dry

Patient/family education

Handrails in bathroom, hallways, etc.

Purposeful hourly rounding

Locked wheels on hospital bed and wheelchair

Top bedrails up



Objective 3: Identify Targeted Fall Risk Reduction Interventions for Patients with Specific Fall Risk Factors



Targeted Interventions



- Provided in addition to universal interventions
- Directed at
 - 1) Patients at risk for falling
 - 2) Specific risk factors uncovered by the fall risk assessment tool or by additional clinical assessment



Targeted Interventions



Bundle

Deliver a set of interventions based on the fall risk assessment score

+ Consistency among staff, less room for interpretation or errors in judgement

- May use unnecessary interventions for a given patient; may miss something that would be of benefit



vs.

Link

Individualized interventions tied to risk factors ID'd on fall risk assessment

impaired mobility/ADLs → PT/OT referral
urinary urgency → toileting schedule

+ Better match plan to patient risk factors

- Potential for lack of consistency among staff, room for interpretation or errors in judgement



Common (and common-sense) Targeted Interventions for All Patients at Risk for Falls

(If you bundle anything...bundle these)



Visible identification of risk (e.g. bracelet, signage, sock color)



Handoff tool between staff to communicate risk



Patient/family education specific to the patient's fall risk factors



Handoff to Communicate Risk

[Agency for Healthcare Research and Quality. TeamSTEPPS Program. Tool: Handoff.](#)



Handoff = standardized method for transferring information, along with authority and responsibility. Typically includes a multitude of information, but information on fall risk should be included.



Handoff to Communicate Risk Should Include:

[Agency for Healthcare Research and Quality. TeamSTEPPS Program. Tool: Handoff.](#)



Transfer of responsibility and accountability



Clarity of information



Appropriate communication of information



Acknowledgment by receiver



Opportunity to ask questions and review



Handoff Tools: SHARQ

[Agency for Healthcare Research and Quality. TeamSTEPPS Program. Tool: SHARQ](#)



The occupational therapist is done working with a patient who is known to be at risk for falls and leaves the patient up in the bedside chair. The patient needed more physical assistance today with transfers than previously. The occupational therapist finds the patient's nurse to handoff the patient before moving on to his next patient.

- **Situation:** *“I just finished working with the patient in room 206. He is in the bedside chair. He has his call light within reach. I left the gait belt on his waist, but loosened it for his comfort”*
- **History:** *“The patient previously required only contact guard assist and no assistive device for standing pivot transfers.”*
- **Assessment:** *“Today he required minimal assistance for balance during transfers and had difficulty bearing weight with his left leg.”*
- **Recommendation:** *“When you transfer him back to bed, I recommend using the gait belt and his walker. He may need cuing to lean forward in preparation to stand.”*
- **Questions:** *“What questions do you have about his transfer status?”*



Handoff Tools: Warm Handoffs

[Agency for Healthcare Research and Quality. Patient Safety. Warm Handoff: Intervention](#)



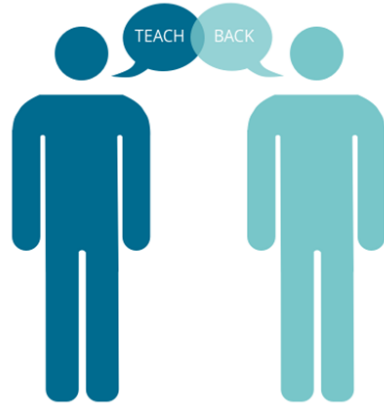
- Conducted in person between members of the health care team in front of the patient (and family if present)
- Engages the patient as a team member in his or her care
- Helps with patient education: Reinforces the patient's understanding of their plan of care and allows them to clarify or correct information exchanged



Patient/Family Education: Teach Back



[Agency for Healthcare Research and Quality. Health Literacy Universal Precautions Toolkit, 3rd Edition. Use the Teach-Back Method: Tool 5.](#)



- ✓ Allows you to confirm you have explained things in a manner the patient can understand.
- ✓ In a non-shaming way, ask the patient and/or family to explain what you have taught them in their own words.
- ✓ Re-teach as necessary.

“I just shared a lot of information about preventing falls while you are hospitalized. I want to make sure I explained things clearly. So tell me, what steps will we take to prevent you from falling while you are here in the hospital?”



Patient and Family Education: Review of Literature on Patient and Family Perspectives (1)

[References: Slide 46](#)



Patients want to know:

- Why they are at risk for falling
- What staff is doing about it
- What they can do to reduce their own risk



Patient and Family Education: Review of Literature on Patient and Family Perspectives (2)

[References: Slide 46](#)



Patients want:

- Consistent messaging from all staff
- Repetition of information
- Input on their plan of care
 - Prefer two-way conversation vs. one-way (staff to patient) flow of information
 - Do not want to be made to feel like a child or threatened



Patient and Family Education: Review of Literature on Patient and Family Perspectives (3)



[References: Slide 46](#)



Patients don't want:

- To be incontinent
 - More embarrassing than a fall
- To burden staff
 - Emphasize that you want to help
 - Don't send implicit message that you're too busy by acting rushed or impatient



Patient and Family Education: Review of Literature on Patient and Family Perspectives (4)

[References: Slide 46](#)



Patient perception of their own risk is an important factor in how they feel about fall risk reduction efforts:

- “Falls happen to other people, not me.”
- Those who recognize their risk are more likely to seek help
- Individualized information preferred to generalities
- May not understand how/why mobility status could change suddenly
- Messages are better received if focus is on achieving positive outcome (e.g. retain/regain strength; go home) vs. only on preventing a negative outcome (fall)



Linking Targeted Interventions to Specific Risk Factors



[CAPTURE Falls Roadmap Fall Risk Reduction Interventions](#)



Cognitive or
Emotional
Impairments



Difficulty with
Mobility
and/or
Activities of
Daily Living



Medications



Risk of Injury



Sensory
Impairments



Toileting
Needs



Linking Targeted Interventions to Risk Factors ⁽¹⁾

[CAPTURE Falls Roadmap Fall Risk Reduction Interventions: Cognitive or Emotional Impairments](#)



Cognitive or Emotional Impairments

- Bed and/or chair alarm
- Delirium prevention or mitigation
- Medication review by pharmacy
- Patient placed close to nurses' station
- Purposeful hourly rounding
- Sitter
- Supervised mobility and/or activities of daily living
- Supervised toileting
- Video monitoring



Linking Targeted Interventions to Risk Factors (2)

[CAPTURE Falls Roadmap Fall Risk Reduction Interventions: Difficulty with Mobility or ADLs](#)



Difficulty with Mobility or
Activities of Daily Living (ADLs)

- Assistive devices/equipment
- Documentation of mobility/ADL assistance
- Gait/transfer belt
- Medication review by pharmacy
- Non-slip, well-fitting footwear
- Occupational therapy evaluation
- Physical therapy evaluation
- Seating assessment
- Supervised mobility and/or ADLs
- Supervised toileting



Linking Targeted Interventions to Risk Factors (3)

CAPTURE Falls Roadmap Fall Risk Reduction Interventions: Medications



Medications

- Medication review by pharmacy
- Orthostatic blood pressure monitoring



Linking Targeted Interventions to Risk Factors (4)

[CAPTURE Falls Roadmap Fall Risk Reduction Interventions: Risk of Injury](#)



Risk of Injury

- Bed in low position
- Bedside floor mats
- Gait/transfer belt
- Hip protectors
- Medication review by Pharmacy
- Supervised toileting



Linking Targeted Interventions to Risk Factors (5)

[CAPTURE Falls Roadmap Fall Risk Reduction Interventions: Sensory Impairment](#)



Sensory Impairment

- Hearing aids
- Interventions to address difficulty with mobility or activities of daily living
- Night lights/supplemental lighting
- Occupational therapy evaluation
- Physical therapy evaluation
- Vision correction



Linking Targeted Interventions to Risk Factors ⁽⁶⁾

[CAPTURE Falls Roadmap Fall Risk Reduction Interventions: Toileting Needs](#)



Toileting Needs

- Assistive devices/equipment
- Call light and personal belongings within reach
- Interventions to address difficulty with mobility or activities of daily living
- Medication review by pharmacy
- Occupational therapy evaluation
- Physical therapy evaluation
- Purposeful hourly rounding
- Supervised toileting



Linking Targeted Interventions to Risk Factors (7)

[CAPTURE Falls Roadmap Fall Risk Reduction Interventions: Quick Reference Guide: Linking Interventions to Risk Factors](#)

Linking Interventions to Fall Risk Factors

Use this table to identify interventions appropriate for all patients (universal interventions) as well as those to consider for patients with specific risk factors.

Interventions	Fall Risk Factors						
	All Patients (Universal Interventions)	Cognitive or Emotional Impairment	Difficulty with mobility and/or ADLs	Medications	Risk of Injury	Sensory Impairment	Toileting Needs
Assistive devices/ equipment			●				●
Bed and/or chair alarm		●					
Bed in low position	●				●		
Bedside floor mats					●		
Cell light and belongings in reach	●						●
Declutter environment	●						
Delirium prevention or mitigation		●					
Documentation of mobility/ADL assistance			●				
Floor clean and dry	●						
Gait/transfer belt			●		●		
Handoff to communicate risk		●	●	●	●	●	●
Handrails in bathroom, hallways, etc.	●						
Hearing aids						●	
Hip protectors					●		
Locked wheels on bed and wheelchair	●						
Medication review by pharmacy		●	●	●	●		●
Night lights/supplemental lighting	●					●	
Nonslip, well-fitting footwear	●		●				
Occupational therapy evaluation			●			●	●
Orthostatic blood pressure monitoring				●			
Pain management	●						
Patient/family education	●	●	●	●	●	●	●
Patients placed close to nurses station		●					
Physical therapy evaluation			●			●	●
Purposeful hourly rounding	●	●					●
Seating assessment			●				
Sitter		●					
Supervised mobility and/or ADLs		●	●				
Supervised toileting		●	●		●		●
Video monitoring		●					
Visible identification of risk		●	●	●	●	●	●
Vision correction						●	
Top bedrails up	●						

**Objective 4: Determine how to
Implement the Delivery of Fall Risk
Reduction Interventions, Including
Strategies for Staff Education**



Implementation of Fall Risk Reduction Interventions

[CAPTURE Falls Roadmap Fall Risk Reduction Interventions](#)



Lessons learned
and anecdotes from
our work



Multiple teams have a role in intervention delivery

- Organization-wide team: Provides resources; Sets policies and procedures; Educates staff; Conducts audits
- Bedside team: Selects and delivers interventions
- Post-fall huddle team: Adjusts interventions as indicated



Can the EMR help with clinical decision making?

- Can completion of fall risk assessment tool trigger a menu of interventions?
- Consider a blend of interventions dictated for a given risk factor vs. allowing flexibility for clinical judgement.



Take advantage of familiarity with your patient population

- What interventions were needed in the past for your “frequent customers?”
- However, realize that patient health/fall risk status evolves over time.

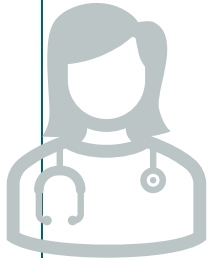
Staff Education about Fall Risk Reduction Interventions (1)



[CAPTURE Falls Roadmap Fall Risk Reduction Interventions](#)

Identify staff roles in the delivery of specific fall risk reduction interventions

- Who needs to know what?
- What interventions are appropriate for a given role? (Non-clinical vs. clinical staff; various professions, etc)
- Examples for non-clinical staff: knowledge of signage, bracelets, etc; how to answer a call light in a “No-Pass Zone”
- Examples for nurses/CNAs: purposeful rounding; supervised mobility and ADLs



New employee orientation



Annual education



Competency training



Fall Prevention Awareness Week (September)



Patient Safety Awareness Week (March)



Staff Education about Fall Risk Reduction Interventions (2)

[CAPTURE Falls Roadmap Fall Risk Reduction Interventions](#)



Link appropriate interventions to fall risk factors

- Use patient cases to allow staff to practice scoring your fall risk assessment tool followed by selection of interventions
- Select a few different cases for variability
- Have staff score the tool, develop a plan of care, compare results, and discuss rationale.
- Discuss why a certain intervention is appropriate for a given risk factor to facilitate clinical decision-making skills.



New employee orientation



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Competency training



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Patient Safety Awareness Week (March)



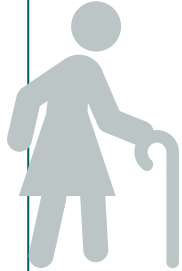
Staff Education about Fall Risk Reduction Interventions (3)



[CAPTURE Falls Roadmap Fall Risk Reduction Interventions](#)

Safely and accurately perform _____ (any hands-on skill)

- Examples: any component of assisting patients with transfers and mobility (e.g. gait belt application, use of mechanical lifts, guarding during ambulation)
- Education should not simply involve passive observation of someone performing the skill
- Allow time for hands-on practice and return demonstration of the skill



New employee orientation



Annual education



Competency training



Fall Prevention Awareness Week (September)



Patient Safety Awareness Week (March)



Summary

1

Research for hospital fall risk reduction interventions is admittedly lacking, but rigorous research design is challenging. Patient and staff education and multifactorial interventions show promise.

2

Universal interventions are appropriate for all patients, regardless of fall risk status.

3

Fall risk assessment will inform the need for targeted interventions for specific patients and their unique risk factors.

4

For staff education regarding interventions, consider role clarity, case studies, and hands-on practice.



References and Resources

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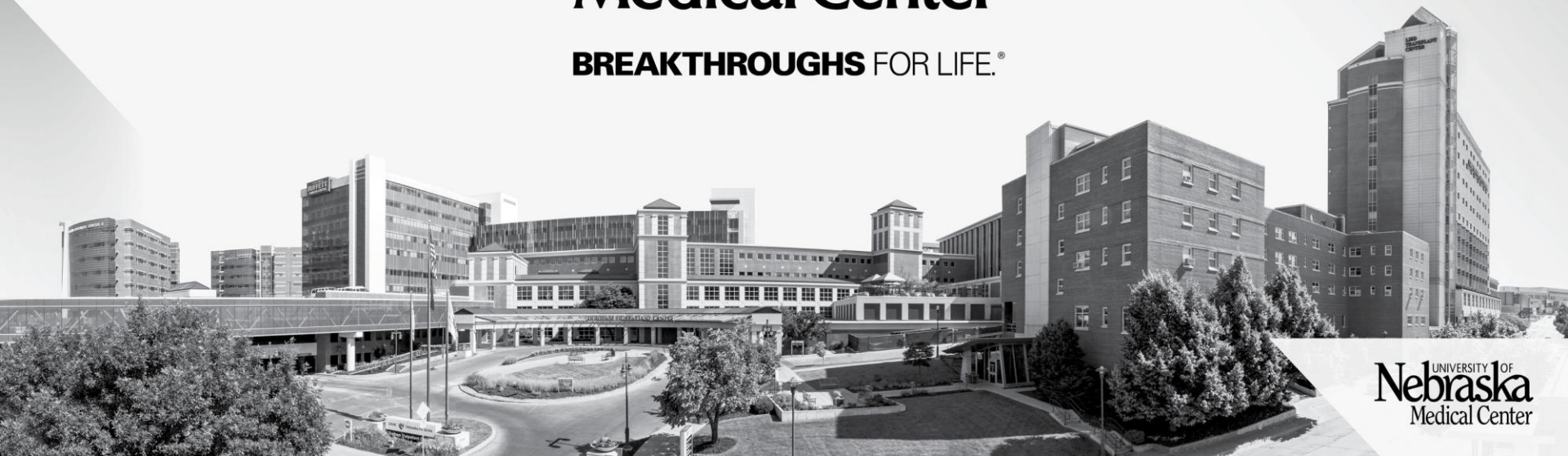
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