

Give Falls the Slip: TJC & CMS Hospital CoPs & Standards



03/21/2017

RELIAS
LEARNING

Speaker



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Objectives

- Describe what constitutes a fall, including how to measure the fall rate.
- Explain the intrinsic and extrinsic causes of falls.
- List evidence-based fall assessment tools used in inpatient and outpatient settings.

CDC: Falls Doubled Since 2000 for Seniors

The screenshot shows the healthfinder.gov website. The header includes the logo, a search bar, and social media links. The main content area features a news article titled "Fall-Related Deaths Nearly Doubled for U.S. Seniors Since 2000". The article text discusses a report from the CDC regarding an increase in fall-related deaths among seniors from 2000 to 2013. A sidebar on the left contains navigation links such as "Home", "Health Topics A to Z", and "Health News".

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Fall-Related Deaths Nearly Doubled for U.S. Seniors Since 2000

Researchers also report that car crashes cause 1 in 7 unintentional deaths in older Americans.

THURSDAY, May 7, 2015 (HealthDay News) -- The number of American seniors who die from fall-related injuries has nearly doubled since 2000, a new report from the U.S. Centers for Disease Control and Prevention reveals.

The observation is based on an analysis of death rate information compiled by the National Vital Statistics System between 2000 and 2013. The report specifically noted that while roughly 30 seniors in every 100,000 died following a fall in 2000, that figure jumped to nearly 57 per 100,000 by 2013.

Investigators also implicated falling as the cause of death in more than half (55 percent) of the roughly 90,000 unintentional injury fatalities involving seniors in 2012 and 2013.

Reacting to the findings, Dr. Lauren Gleason, a geriatrics medicine fellow at Beth Israel Deaconess Medical Center in Boston, said that it's important to recognize that deaths resulting from a fall "are not usually just about the fall."



Falls 1 of 34 Safe Practices by NQF

- Falls is one of the 34 Safe Practices for Better Healthcare by NQF (Updated April 2010 and March 2011)
- Safe Practice 33 is on Falls Prevention
 - Hospitals and other healthcare facilities should take action to prevent patient falls and reduce fall-related injuries by implement evidenced based interventions
- Safe Practice 4 includes falls as one of the identification and mitigation of risks in healthcare
 - Need to monitor the effectiveness of the falls programs including reduction strategies, environmental redesign, and patient/family education

34 Safe Practice Number 33 on Falls

- Have a fall reduction program
- Program must do an appropriate evaluation of the patient
- Must include interventions based on risk
- Staff must be educated on fall reduction program
- Patient and family is educated on program
- Evaluate the effectiveness of the falls program
- Remember you need organizational support for a fall prevention program!
- Source: National Quality Forum, 34 Safe Practices for Better Healthcare 2011 and revision March 2012

NQF 29 Never Events

- The National Quality Forum (NQF) initial list of serious events that should be publicly reported was published in 2002 which was updated in 2006
- Updated in 2011
- Called Serious Reportable Events in Healthcare or never events
- It identified 29 adverse events that were considered to be largely preventable
- This document would include death or disability associated with a **fall** while being cared for by the facility

CMS Hospital Acquired Conditions (HACs)

- CMS has HACs in which there will be no additional payment for Medicare payments
- This includes hospital acquired injuries, fractures, dislocations, crushing injury, burn, and **patient falls**
 - Falls is the number one HAC
- Data when this was introduced showed 2,591 cases at an average cost of \$24,962 for fiscal year 2006 when it first started
- There is a business case for falls (AHRQ, 2013)

Cost of Falls

- Another study found the cost for fallers with serious injury was \$13,316.00 more than non-fallers
 - Wong CA, Recktenwald AJ, Jones ML, et al. The cost of serious fall-related injuries at three Midwestern hospitals. *Jt Comm J Qual Patient Saf* 2011;37(2):81-7.
- One study found 31-51% of falls in hospitals resulted in some injury
 - Oliver D, Healey F, Haines TP. Preventing falls and fall-related injuries in hospitals. *Clin Geriatr Med* 2010;26(4):645-92
- Fall related injuries account for up to 15% of rehospitalizations in the first month after discharge
 - Fall and Injury Prevention, Leanne Currie 2008, AHRQ Patient Safety Handbook for Nurses

Conditions for Which Medicare Will No Longer Pay More If Acquired during an Inpatient Stay.²⁷

Condition	No. of Medicare Cases in Fiscal Year 2006	Average Medicare Payment for Admissions in Which Condition Was Present
Object left in patient during surgery	764	\$61,962
Air embolism	45	\$66,007
Blood incompatibility	33	\$46,492
Catheter-associated urinary tract infection	11,780	\$40,347
Pressure ulcer	322,946	\$40,381
Vascular-catheter-associated infection†	Unknown	Unknown \$64,894*
Mediastinitis after coronary-artery bypass grafting	108	\$304,747
Fall from bed	2,591	\$24,962

• Data are from the *Federal Register*.²⁸

• Data are unknown because a unique code for this condition was introduced for fiscal year 2008.

Rosenthal MB., *NEJM*. 2007;357(16):1573-75

* insert: Shannon RP., *AJMQ*. 2006;21(6):7S-16S – Dollar value is excess costs

Healthcare Associated Falls

- 2-20% of patients will have a fall in the hospital
- Higher rates of falls on rehab, geriatric and neurosurgery units
- Fall related injuries account for 6% of all medical expenditures for patients 65 or older
- 23-40% will have an injury an 1.5-8% will be a major injury
- Associated with increased charges of \$4,233
 - Falls and trauma in hospital is hospital acquired condition with no additional payment
- Schwendimann R, et al. Falls and Consequent Injuries in Hospitalized Patients. BMC Health Ser Research 2006;6:69
- Bates DW. Serious Falls in Hospitalized Patients: Correlates and Resource Utilization. Am J Med 1995;99:137-143

Overview

- Between 700,000 and 1 million people in the US fall every year
- About one-third of them can be prevented
- CMS has not reimbursed hospitals since 2008 for certain type of traumatic injuries that occur and many result from falls
- Fall prevention involves managing patient's underlying fall risks so look at issues specific to that patient
 - Problems with walking and transfer, medication side effects, confusion, toileting needs, etc.
 - Ganz DA, Huang C, Saliba D, et al. Preventing falls in hospitals: a toolkit for improving quality of care. January 2013. AHRQ Publication No. 13-0015-EF.

One Hospital's Approach AHA

PATIENT SAFETY

FOCUSING ON PATIENTS TO REDUCE FALLS

GUNDERSEN LUTHERAN HEALTH SYSTEM

- ◆ La Crosse, WI
- ◆ 325 beds
- ◆ www.gundluth.org

A physician-led health system, Gundersen Lutheran is comprised of a hospital, a multi-specialty group medical practices, 42 regional community clinics, four nursing homes, home care, behavioral health services, vision centers, pharmacies and air and ground ambulances. As a tertiary referral

THE PROBLEM

After examining hospital data to pinpoint opportunities to improve, Gundersen Lutheran focused on patient falls. Patient falls made up the second-largest category of reported incidents for Gundersen Lutheran, after medication events. "It was clear everyone was trying hard, but there was no systemic or organization-wide approach to falls," says Kathy Klock, senior vice president of operations.

THE SOLUTION

Gundersen Lutheran launched a formal program in 2008 to lower the number of patient falls, with an initial focus on reducing falls with home care, before

In 2007, a team of Gundersen Lutheran physicians, nurses, pharmacists, quality professionals, a patient falls expert and other hospital disciplines set out to build a systematic approach to preventing inpatient falls. Drawing on best practices from other organizations and research, it focused on five major areas that could affect the incidence of falls:

- » Medication—Pharmacy made recommendations for specific conditions, when possible, to minimize dizziness, confusion and other symptoms associated with falls
- » Patient and family education—A patient education sheet about the risks of falls and

What 5 Things Did They Do?

- **Medication**-Pharmacy made recommendations for specific conditions, when possible, to minimize dizziness, confusion and other symptoms associated with falls
- Patient and family **education**-A patient education sheet about the risks of falls and preventative measures was developed
 - A registered nurse reviews the sheet with patients and families on admission and reinforces the information each shift

5 Things to Prevent Falls

- **Safe room setup**-Includes an environment that is free of obstacles and clutter and a patient's call light and personal items are within reach.
- **Safety signage**-Caution posters that encourage patients to call for help are displayed in all patient rooms and bathrooms.
- **Rounding**-Created a log that nursing staff fills out each hour with time and initials that confirms staff checks for pain, bathroom needs and positioning.

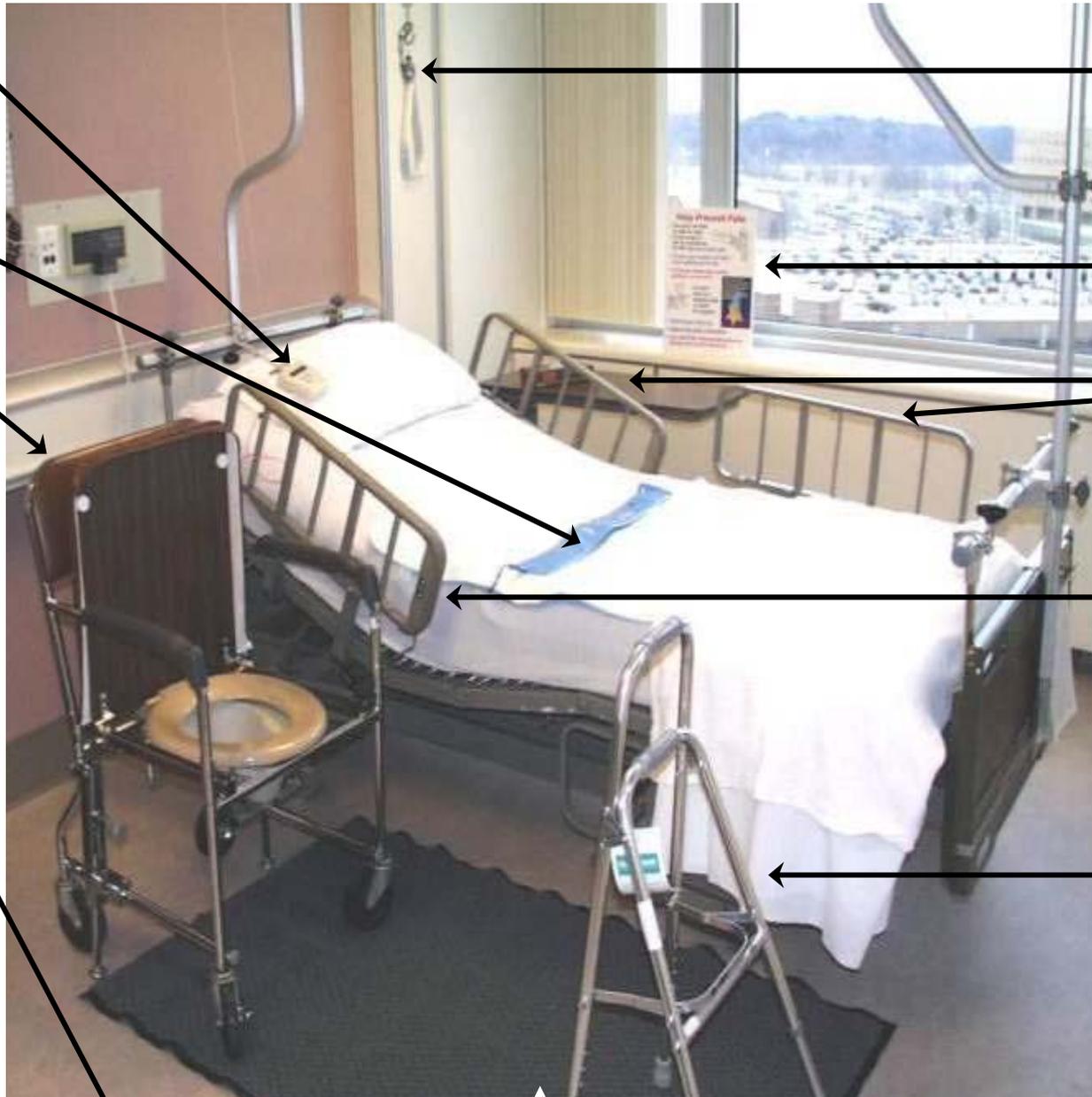
Bed controls at fingertips

Bed alarm

Bedside commode placed along-side bed (replaces urinal)

Non-skid floor

Room illuminated at all times



Bed trapeze

Falls prevention poster

Non-exit side rails up for support

Exit side head rail up for support and foot rail down at all times.

Movable hand rail (Hemi-walker) always within reach

Non-slip floor mat absorbs fluids, food, & stool, and prevents slips

More Nurses and Alarms To Reduce Falls

- Study in Journal of Patient Safety discusses hospitals in Washington State must report falls to department of health
 - 11 states must report
- Some hospitals have installed alarms to monitor patients prone to sleepwalking
- But need enough nurses and staff to respond when alarm goes off
 - Hospital reduced falls by 66% by having enough nurses
- Patients given Ambien are four times more likely to fall

More Nurse and Alarms To Reduce Falls

To Reduce Patient Falls, Hospitals Try Alarms, More Nurses

by JOHN RYAN

October 16, 2013 4:54 PM

from KUOW



Listen to the Story

All Things Considered

4 min 17 sec



John Ryan/KUOW

A bad fall in the hospital can turn a short visit into a long stay.

Is There Conclusive Evidence?

- One study found that there is no conclusive evidence that hospital fall prevention programs can reduce the number of falls or fallers
- Stated more studies are needed to evaluate the trend toward actively targeting the patient's most important risk factors
- So let's focus on both and newer studies gives us some hope where a program reduced falls
 - Coussement J. Interventions for Preventing Falls in Acute and Chronic-Care Hospitals: A Systematic Review and Meta-Analysis. JAGS 2008;56:29-36
 - Dykes PC, et al. Fall Prevention in Acute Care Hospitals: A Randomized Controlled Trial. JAMA 2010; 304: 1912-1918
 - Cameron ID. Interventions for Preventing Falls in Older People in Nursing Care Facilities and Hospitals. Cochrane Database Syst Rev 2010;20(1):CD005465

New Studies

- New studies are being published and hospitals should do periodic literature searches on falls
- Falls committee can ask librarian to send the committee any articles on fall
- For example, Mayo Clinic study found that the popular sleeping pill Zolpidem (**Ambien**, Intermezzo, Stilnox, Sublinox) for sleep is correlated with an increase risk of falls (quadruples fall risk)
 - Approximately 3% of all patients on this drug fell compared with 0.7% who did not take this drug
- Source Journal of Hospital Medicine
- Women can have chemotherapy induced peripheral neuropathy which is associated with the risk of falls
 - American Society of Clinical Oncology, news release, Jan. 11, 2016

New Studies

- Create a no pass zone
 - Any who see the call light on responds whether it is their patient or not
- Create a personalized recorded message for the call alarm
 - Helps some confused patients in an unfamiliar setting by hearing their name, the language they speak and something personal about the patient
- Put a patient board in every patient room
 - Identify if patient uses a cane, bed alarm, walker, or some other activity such as toileting and no patient walks alone

Infections Lead to Falls

- Research shows that infections can be an underlying cause of patient falls
- The Massachusetts General Hospital study found that bloodstream, urinary, and respiratory infections are the most common causes for infection-related falls
- Infections can cause patients to experience dizziness or lightheadedness, which can lead to falls and leads to patients coming to the ED
 - Not just the elderly: 20% of patients in the study were younger than 65.

AHRQ Toolkit

- AHRQ toolkit is an excellent resource available at no cost
- It is called “Preventing Falls in Hospitals; A Toolkit for Improving Quality of Care”
- It is a roadmap for preventing of falls in hospitals
- It has many excellent evidence based tools
- States a number of practices have been shown to reduce the occurrence of falls but these practices are not systematically used in all hospitals
 - <https://www.ahrq.gov/sites/default/files/publications/files/fallpxtoolkit.pdf>

AHRQ Preventing Falls in Hospitals

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You Are Here: [AHRQ Home](#) > [Research Findings](#) > [Long-Term Care](#) > Preventing Falls in Hospitals: A Toolkit for Improving Quality of Care

Preventing Falls in Hospitals A Toolkit for Improving Quality of Care

Each year, somewhere between 700,000 and 1,000,000 people in the United States fall in the hospital. A fall may result in fractures, lacerations, or internal bleeding, leading to increased health care utilization. Research shows that close to one-third of falls can be prevented. Fall prevention involves managing a patient's underlying fall risk factors and optimizing the hospital's physical design and environment. This toolkit focuses on overcoming the challenges associated with developing, implementing, and sustaining a fall prevention program.

Select for print version ([PDF File](#), 3.3 MB) ([Plugin Software Help](#)).

Select to download individual sections from the [falls prevention toolkit roadmap](#).

Prepared for:

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RAND Corporation
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ECRI Institute

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https://www.ahrq.gov/sites/default/files/publications/files/fall_pxtoolkit.pdf

AHRQ Preventing Falls Toolkit

Preventing Falls in Hospitals

A Toolkit for Improving Quality of Care



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A Roadmap to Follow!

Roadmap

Section	Action Steps	Tool That Supports Action	Who Should Use The Tool
Overview	Enlist support of senior leaders	Tool ØA, Introduction and Overview for Stakeholders	Senior manager
Section 1	Are you ready for this change?		
1.1	Assess the culture of safety in your hospital	Tool 1A, Hospital Survey on Patient Safety Culture	All interdisciplinary team members
1.2	Evaluate current organizational attention to falls	Tool 1B, Stakeholder Analysis	Implementation Team leader
1.3	Assess and develop leadership support for the fall prevention program	Tool 1C, Leadership Support Assessment Tool 1D, Business Case Form	Implementation Team leader
1.5	Identify resources that are available and resources that are needed	Tool 1E, Resource Needs Assessment	Implementation Team leader
1.7	Assess your progress on completing readiness for change activities	Tool 1F, Organizational Readiness Checklist	Implementation Team leader
Section 2	How will you manage change?		
2.1	Identify your Implementation Team	Tool 2A, Interdisciplinary Team	Implementation Team leader
2.2	Assess the current status of fall prevention activities in your hospital	Tool 2B, Quality Improvement Process Tool 2C, Current Process Analysis	Implementation Team leader, individuals designated by the

AHRQ Toolkit

- Geared at negotiating a change process at your hospital
 - Stresses it is an interdisciplinary process
 - Has a implementation guide which is organized into six major questions
 - Focused on putting preventive strategies into practice
 - Have a standing committee to oversee fall program
 - Hempel S, Newberry S, Wang Z, et al. Review of the evidence on falls prevention in hospitals. RAND Working Paper. (Prepared for the AHRQ, Publication No. WR-907-AHRQ. Santa Monica, CA: RAND; 2013)
www.rand.org/pubs/working_papers/WR907.html
-

AHRQ Falls Plan of Care

Care Plan	
GOAL: To reduce likelihood of falls while maintaining dignity and independence	State action taken below (sample provided):
Call. Ensure call bell explained and in reach. Consider alternatives for patients unable to recall use of call bell, e.g., use brass bell, move bed in sight of nurses' station.	Call bell in reach but may forget, will probably call her daughter's name instead; moved within earshot of nurses' station.
Eyesight. Ensure eyesight is checked and patient is wearing glasses if needed. Can the patient identify pen/key from bed length away? If eyesight is too poor to identify objects, ask the treating medical provider to review. Ensure glasses/hearing aid are worn or within reach.	Glasses broken in fall at home; family has ordered replacement and hopes to provide it tomorrow. Has fair distance vision without them. Have suggested that the family order a spare pair too.
Bed and bedrails. Assess the need for bedrails (refer to policy). If patient is likely to fall from bed, ensure bed is at the lowest possible height unless this would reduce mobility or independence. Consider use of special low bed.	Bedrails not appropriate as this patient can mobilize on her own, even though unsteady, and might be confused enough to climb over. Bed set at right height for safe move from sitting to standing.
Medication. Check for medication associated with fall risk, such as antidepressants, sleeping tablets, sedatives, and antipsychotics. Ask the pharmacist to review and make recommendations to treating medical provider (do not stop abruptly).	On temazepam 15 mg qhs for some years; will discuss with pharmacist.
Mobility. Determine the patient's level of mobility and whether actions should be taken to improve or maintain mobility.	Participating in supervised mobility protocol with nursing assistant. Currently able to ambulate 50 feet with front wheeled walker daily.
Interdisciplinary team. Ensure medical staff, physical therapist, occupational therapist, social worker, and others on the team are aware of the patient's risk, frequency, nature, and seriousness of falls (local protocol or pathway would cover expected actions by team members, e.g., cognitive evaluation, osteoporosis check, mobility aid review).	Treating physician aware of patient's fall risk. Physical and occupational therapy referral sent on 11/14/11. Fall risk noted on discharge plan.
Footwear. Check footwear for secure fit.	Patient does not have footwear. Provided with

Detailed Action Plan

Improvement Objective: Implement standard fall prevention practices within 6 months.

Key Interventions/Tasks	Steps To Complete Task and Tools To Use	Team Members Responsible for Task Completion	Target Date for Task Completion
	Examples	Examples	Examples
Analyze current state of fall prevention practices in this organization.	Identify strengths and weaknesses using process mapping and gap analysis. Tool 2C and Tool 2D.	Team leader, RNs	Within 6 weeks from initiative start
	Assess the current state of staff knowledge about fall prevention. Tool 2E.	Education department	Within 6 weeks from initiative start
	Set target goals for improvement.	QI department	Within 8 weeks from initiative start
Identify the set of prevention practices to be used in redesigned system.	Determine how comprehensive universal fall precautions should be performed.	Implementation Team	Within 12 weeks from initiative start
	Decide which scale or questions will be used for performing fall risk factor assessment.	Implementation Team	Within 12 weeks from initiative start
	Decide which fall prevention activities should be in your program.	Clinical staff members	Within 12 weeks from initiative start
Assign roles and responsibilities for implementing the redesigned fall prevention practices.	Determine who will complete the fall risk factor assessment on admission. Tool 4A.	Implementation Team	Within 16 weeks from initiative start
	Identify unit champions.	Team leader	Within 16 weeks from initiative start
	Determine how prevention work will be organized at the unit level, such as paths of communication and lines of oversight.	QI team	Within 16 weeks from initiative start
Put the redesigned set into practice.	Engage staff and get them excited about the changes needed.	Team leader, unit staff	Within 12 weeks from initiative start

HENS Poster How Many Days Since Last Fall

ELIMINATE HARM ACROSS THE BOARD

Days Since Last Fall

[www.hret-](http://www.hret-hen.org/index.php?option=com_content&view=article&id=5&Itemid=130)

hen.org/index.php?option=com_content&view=article&id=5&Itemid=130

FALL PREVENTION:

- Conduct fall and injury risk assessment upon admission
- Reassess risk daily and with changes in patient condition
- Implement patient-specific intervention to prevent falls and injury
- Communicate risk across the team; use handoff forms, visual cues, huddles
- Round every 1 to 2 hours for high-risk patients; address needs (e.g., 3Ps: pain, potty, position-pressure); combine with other tasks (vital signs)
- Individualize interventions; use non-skid floor mats, hip protectors, individualized toileting schedule; adjust frequency of rounds
- Review medications (by pharmacist); avoid unnecessary hypnotics and sedatives
- Incorporate multidisciplinary input for falls prevention from PT, OT, MD, RN and PharmD
- Include patients, families and caregivers in efforts to prevent falls; educate regarding fall prevention measures; stay with patient
- Hold post-fall huddles immediately after event; analyze how and why; implement change to prevent other falls



Falls Resources Partnership for Patients HHS



About the Partnership

Where Partnerships are in action

Get involved

Resources

http://partnershipforpatients.cms.gov/p4p_resources/tsp-injuriesandfallsfromimmobility/toolinjuriesandfallsfromimmobility.html

Resources

Injuries And Falls From Immobility



The information contained in these resources does not necessarily reflect the views of the Partnership for Patients, the Centers for Medicare and Medicaid Services, The United States Department of Health and Human Services, nor the United States government.

Title	Description
"CMS Improves Patient Safety for Medicare and Medicaid by Addressing Never Events" (U.S. Department of Health & Human Services, Centers for Medicare & Medicaid Services [CMS])	CMS publication. Fact sheet covering new Medicare and Medicaid payment and coverage policies to improve safety for hospitalized patients, including the initiation of new proceedings for "wrong surgery," a category of "never events."
"Serious Reportable Events: Transparency, Accountability Critical to Reducing Medical Errors and Harm" (National Quality Forum)	In 2002, NQF endorsed a list of Serious Reportable Events (SREs) to increase public accountability and consumer access to critical information about healthcare performance. In 2006, NQF updated the list of SREs. There are 28 events and each is classified under one of six categories: surgical, product or device, patient protection, care management, environment, or criminal. The fact sheet includes a list of the 2006 SREs.
"Patient Safety Indicators Resources" (U.S. Department of Health & Human Services)	User guides, technical specifications, and development

<p>"Patient Safety Indicators Resources" (U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality [AHRQ])</p>	<p>User guides, technical specifications, and development materials (such as brochure, link to software, etc.).</p>
<p>"Inpatient Quality Indicators Resources" (AHRQ)</p>	<p>User guide, technical specifications, and development materials (such as brochure, link to software, etc.).</p>
<p>"Fall and Injury Prevention," Patient Safety and Quality: An Evidence-Based Handbook for Nurses, Chapter 10 (AHRQ) [PDF, 612KB]</p>	<p>Evidence-based handbook for nurses.</p>
<p>The Falls Management Program: A Quality Improvement Initiative for Nursing Facilities (AHRQ)</p>	<p>Manual designed to assist in providing individualized person-centered care and improving fall care processes and outcomes through education and quality improvement tools.</p>
<p>"Fall Prevention and Management" (U.S. Department of Veterans Affairs, National Center for Patient Safety [NCPS])</p>	<p>Online assessment and guide to a multi-disciplinary approach to falls prevention and management using a systematic assessment for determining risk and recommended interventions.</p>
<p>"2004 Falls Toolkit" (NCPS)</p>	<p>Toolkit accompanied by introductory monograph and PowerPoint slide deck.</p>
<p>"Fatal Falls: Lessons for the Future," Sentinel Event Alert, Issue 14 (The Joint Commission)</p>	<p>Topic Library Item. Health care organizations that have experienced sentinel events due to falls have identified the root causes and risk reduction strategies included in this issue. In addition, experts have commented on the events and the related root causes and risk reduction strategies. The Joint Commission offers this information for consideration by hospitals, long-term care facilities, and behavioral health care organizations in their continuing efforts to reduce the risk of falls of their patients, residents, or individuals served.</p>
<p>"Fall Prevention in Hospitals" (Premier Inc.)</p>	<p>Comprehensive falls prevention resource page. Includes definitions & measures, causes of falls, interventions & prevention, risk assessment, prevention program, sample procedures, tools, education & training materials, and resources.</p>
<p>"Falls Prevention" (Institute for Healthcare Improvement)</p>	<p>Listing of Mentor Hospitals for falls prevention. Includes a quick reference table to find a mentor with similar demographics to the</p>

http://www.jointcommission.org/sentinel_event_alert_issue_14_fatal_falls_lessons_for_the_...

Fall Risk Assessment Pa PSA

PATIENT SAFETY AUTHORITY
Commonwealth of Pennsylvania

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Patient Safety Authority
333 Market Street
Lobby Level
Harrisburg, PA 17120

Phone: 717-346-0469
Fax: 717-346-1090

Analyzing, Educating and Collaborating for Patient Safety

Search Advanced Search

Welcome to the Pennsylvania Patient Safety Authority Site

Articles from the Advisory

Distractions and Their Impact on Patient Safety

Clinicians encounter distractions on a nearly continuous basis, and these distractions pose a constant threat to patient safety. Analysis of events reported in 2010 and 2011 identified more than 1,000 that could be attributed to distraction.

[Read More...](#)

Results of the Opioid Knowledge Assessment from the PA Hospital Engagement Network Adverse Drug Event Collaboration

To address opioid knowledge gaps among practitioners, facilities may consider assessing understanding of opioids and providing training, including assessment of patients, recognizing advancing sedation, and making timely adjustments to the plan of care. [Read More...](#)

Healthcare Outbreaks—Risk Assessment and Mitigation Based on Pathogen, Population, and Environmental Factors: The P2E Concept

Assessment of pathogen, population, and environment (P2E) may help guide infection preventionists as to which pathogens, and in which patient populations, targeted measures may be indicated to establish appropriate outbreak prevention strategies. [Read More...](#)

Current Issue

Browse by Topic

- Discipline
- Audience
- Care Setting
- Event
- Patient Safety Focus
- Hospital-Acquired Condition

What's New

Press Releases

- [Class III Obese Patients Experience Adverse Events More Frequently Than the General Adverse Event Patient Population](#)
- [The Pennsylvania Patient Safety Authority Encourages Healthcare Workers to Commit to Patient Safety](#)

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Tips for Consumers

These tips include valuable information for patients and their families to become more involved in their healthcare. [Read More... \(en Español\)](#)

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In the Spotlight

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- Address wrong-site surgery prevention principles [Read More...](#)
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[http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2012/Sep;9\(3\)/Pages/73.aspx](http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2012/Sep;9(3)/Pages/73.aspx)

Fall Prevention

It's more than fall risk assessment...



**Be Proactive –
Prevent Falls Before They Occur**

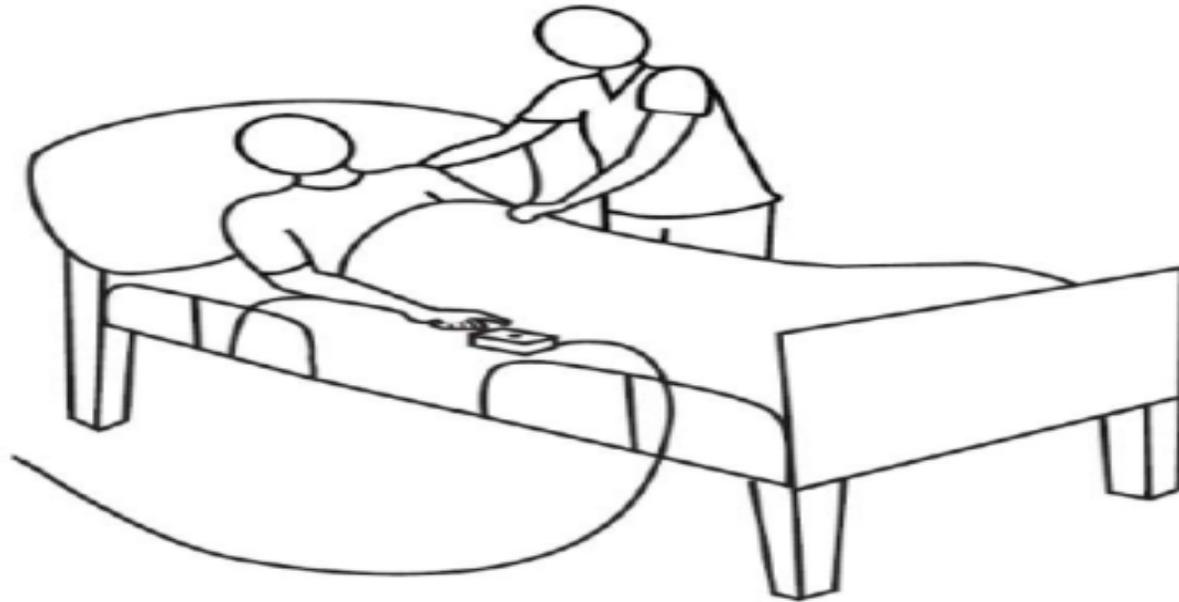
Consider utilizing the following interventions:

- Physical therapy – strengthening and balance program
- Occupational therapy – ADL/AOL management
- Home health aide referral for assistance with bathing
- Medical social worker evaluation for social support
- Maintenance exercise program
- Reduce hazards in the home
- Annual vision evaluation (if insured)
- Medication management
- Check personal vital signs
- Nutrition evaluation



Call Before You Fall Posters

Please press the call button
for your nurse to help you go to the bathroom.
We don't want you to fall and get hurt.



Available in Spanish and Somali



Falls and Mobility

- The goal should focus on prevention and severity of injury from falls and increased immobility
- We need to get patients up and moving
- Immobility causes increased LOS, delirium, pressure ulcers, functional loss, and readmissions
 - Foley catheters increase fall risk
- Study showed 30% of elderly patients had an initial order of bedrest
- Another study showed median amount of time standing or walking is 43 minutes

Falls and Mobility

- Translation means that up ad lib means 97% of the time patients are immobile or 23 hours 17 minutes
- Immobility or deconditioning may explain why so many patients fall when toileting
- Immobility creates an increased risk when patients do need to mobilize
 - Brown CJ et al. The Under recognized Epidemic of Low Mobility During Hospitalization. JAGS 2009;57:1160-1665
 - Early Ambulation and Length of Stay in Older Adults Hospitalized for Acute Illness. Arch Int Med 2010;170:1942-1943

TJC Standard

- Falls was as a Joint Commission **National Patient Safety Goal** in 2009 but moved to standard in 2010 under PC.01.02.08
- PC.01.02.08 The hospital assesses and manages the patient's risks for falls
- EP1 Hospital must assess the patient's risk for falls based on the patient population and setting (elderly, behavioral health, pediatric patients)
- EP2 Hospital implements interventions to reduce falls based on the patient's assessed risk

TJC Standard

- PI.01.01.01 The hospital collects data to monitor its performance
- EP 38 The hospital evaluates the effectiveness of all fall reduction activities including assessment, interventions, and education. (**Deleted** 7-1-2016)
 - Note: Examples of outcome indicators to use in the evaluation include number of falls and number and severity of fall-related injuries.
- However, August 1, 2016 surveyor will ask to see your falls policy and in the document review session

Joint Commission Fall Standard

- Generally a fall assessment is done as part of the initial nursing assessment
- Based on the assessment a plan of care is developed
- The patient interventions are based on what their score is on the fall tool
- Most have two or three types of interventions depending on the risk
- Joint Commission abbreviated TJC since no longer called JCAHO

Intervention Strategies

Intervention	Level of Risk			Area of Risk					
	High	Med	Low	Frequent Falls	Altered Elimination	Muscle Weakness	Mobility Problems	Multiple Medications	Depression
Low beds	X	X	X	X	X	X	X	X	X
Non-slip grip footwear	X	X	X	X	X	X	X	X	X
Assign patient to bed that allows patient to exit toward stronger side	X	X	X	X	X	X	X	X	X
Lock movable transfer equipment prior to transfer	X	X	X	X	X	X	X	X	X
Individualize equipment to patient needs	X	X	X	X	X	X	X	X	X

Why Look at Falls? TJC Data on Falls

- Falls rate high on the list of sentinel events tracked by The Joint Commission (TJC)
- 2nd leading cause of sentinel events now
- July 5, 2016 data of 12,561 SE shows 833 falls which is about 6% of all sentinel events reported
 - 95 in 2015 and 52 so far in 2016
- TJC issues “Reduce your risk of falling” as one of their Speak UP brochures and video
- Sept 2015 issues sentinel event alert on preventing falls and fall related injuries

TJC Sentinel Event Alert on Falls

Sentinel Event Alert

www.jointcommission.org/assets/1/6/SEA_55_Falls_4_26_16.pdf

**A complimentary publication of The Joint Commission
Issue 55, September 28, 2015**

Preventing falls and fall-related injuries in health care facilities

Published for Joint Commission accredited organizations and interested health care professionals, *Sentinel Event Alert* identifies specific types of sentinel and adverse events and high risk conditions, describes their common underlying causes, and recommends steps to reduce risk and prevent future occurrences.

Accredited organizations should consider information in a *Sentinel Event Alert* when designing or redesigning processes and consider implementing relevant suggestions contained in the alert or reasonable alternatives.

Please route this issue to

Falls resulting in injury are a prevalent patient safety problem. Elderly and frail patients with fall risk factors are not the only ones who are vulnerable to falling in health care facilities. Any patient of any age or physical ability can be at risk for a fall due to physiological changes due to a medical condition, medications, surgery, procedures, or diagnostic testing that can leave them weakened or confused. Here are some statistics about falls in health care facilities:

- Every year in the United States, hundreds of thousands of patients fall in hospitals, with 30-50 percent resulting in injury.¹⁻⁶
- Injured patients require additional treatment and sometimes prolonged hospital stays. In one study, a fall with injury added 6.3 days to the hospital stay.⁷
- The average cost for a fall with injury is about \$14,000.^{8,9}

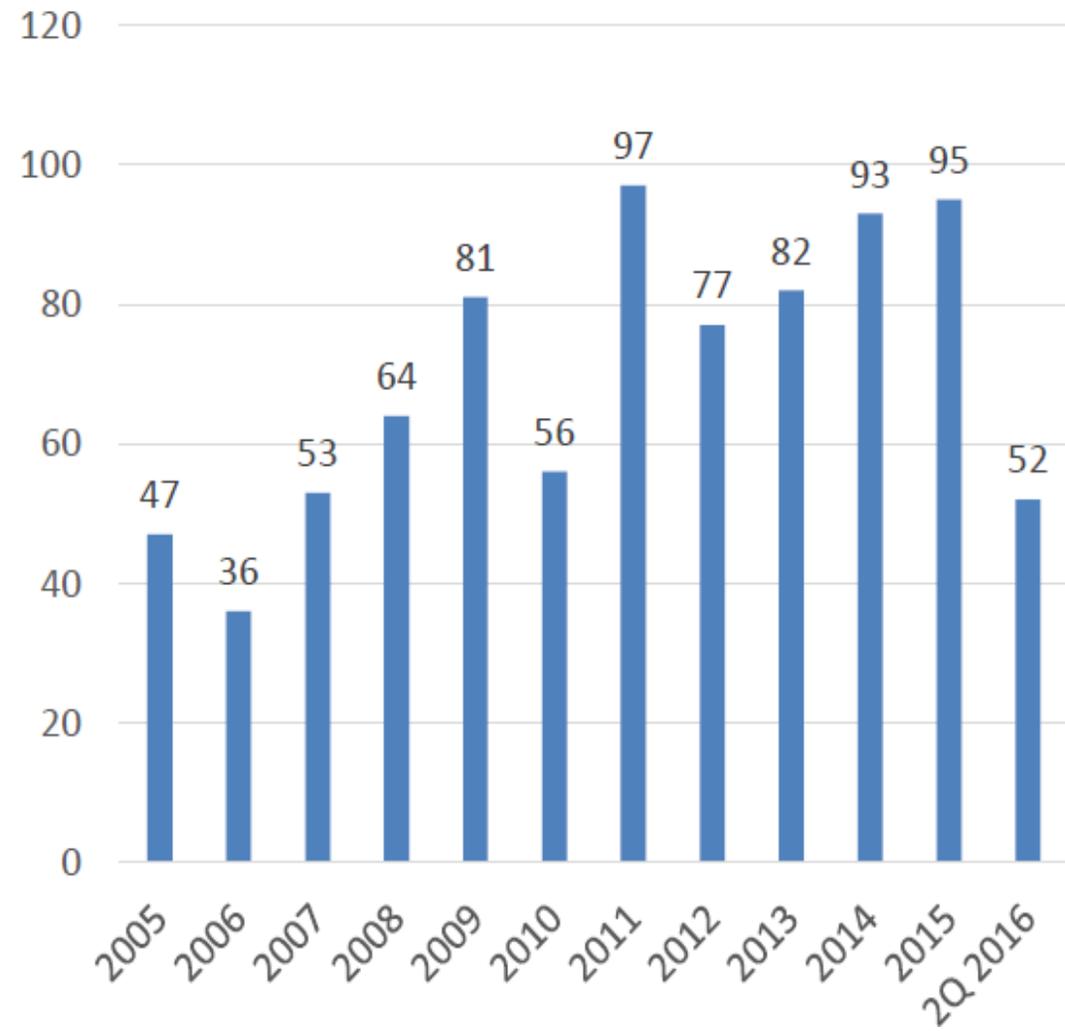
Falls with serious injury are consistently among the Top 10 sentinel events reported to The Joint Commission's Sentinel Event database*, which has 465 reports of falls with injuries since 2009, with the majority of these falls occurring in hospitals. Approximately 63 percent of these falls resulted in death, while the remaining patients sustained injuries. In addition, ECRI Institute reports a significant number of falls occurring in non-hospital settings such as long-term care facilities.¹⁰

Analysis of falls with injury in the Sentinel Event database reveals the most common contributing factors pertain to:

Patient Fall



Patient falls resulting in injury are a common occurrence in healthcare and are consistently among the most frequently reviewed Sentinel Events by The Joint Commission.



TJC Root Causes of Falls

Root Cause Information for Fall-related Events Reviewed by The Joint Commission



(Resulting in death or permanent loss of function)

2004 through 2015 (N=806) <i>The majority of events have multiple root causes</i>	
Assessment	863
Communication	672
Human Factors	639
Leadership	601
Physical Environment	335
Care Planning	167
Information Management	92
Continuum of Care	66
Patient Education	56
Medication Use	46

TJC 2016 With Targeted Solutions

Preventing Falls with Injury

Top Contributing Factors and Solutions



Contributing Factor Categories	Targeted Solutions
Patient fell while toileting	<ul style="list-style-type: none"> Implement hourly rounding with proactive toileting for all patients Implement scheduled toileting for high risk patients: get patient up for toileting on a regular schedule
Medications that increase the risk of falls combined with toileting	<ul style="list-style-type: none"> Educate patients on medication side effects and increased risk for falls Schedule medication administration for at least 2 hours prior to "bedtime"
Patient did not know, forgot or chose not to use call light	<ul style="list-style-type: none"> Educate patient on how to use and the need for using the call light for assistance at all times, especially when getting into/out of bed
Fall prevention education to patient/family not used or inconsistent	<ul style="list-style-type: none"> Revise patient/family fall precaution education packet and process. Education should be targeted and individualized to patient specific fall risks
Patient awareness and acknowledgement of their own risk for falls	<ul style="list-style-type: none"> Implement a patient agreement form to use call light for all ambulation. Emphasize risk factors during education and signing of patient agreement
Risk assessment tool is not a valid predictor of actual fall risk	<ul style="list-style-type: none"> Implement a "validated" fall risk assessment tool Implement a standardized cognitive assessment tool Integrate cognitive assessment tool results with fall risk assessment tool
Inconsistency in ratings by different caregivers	<ul style="list-style-type: none"> Standardize assessment tools used between nursing staff and physical therapy/occupational therapy/rehab staff; allow both service areas to access each other's charting detail in the Electronic Medical Record (EMR)
Inconsistent or incomplete communication of patient risk for falls between caregivers	<ul style="list-style-type: none"> Utilize white boards to communicate patient fall risks to all staff Incorporate alerts into EMR that alert staff to patients who are at risk for fall and effectively translates fall risk information into useful tasks, reports and prompts Initiate bedside shift report with patient that includes focus on fall risk concerns
Standardization of practice and application of interventions	<ul style="list-style-type: none"> Implement house wide culture messaging around fall safety for all patients

NEW! Targeted Solutions Tool for Preventing Falls



Introducing the Preventing Falls Targeted Solutions Tool®

TJC Transforming Care

- Announced results of 7 hospitals study in 2014 and released on-line targeted solutions tool (TST) for preventing falls August 2015
- Reduced falls by 35% and injuries by 62%
- Average fall patient has increased LOS of 6.3 days and costs \$14,056.
- Results of study would save 400 bed hospital 1.9 million a year and reduced injured fall patients by 133
- Created 21 targeted solutions
 - www.centerfortransforminghealthcare.org/tst_pfi.aspx

TJC Preventing Falls

- AHA Hospitals in Pursuit of Excellence and TJC released a guide to prevent falls
- 20 page document and describes factors and solutions to prevent falls
- Based on 30 RCAs and the 21 targeted solutions
- Hospitals reduced falls by 35% and falls with injury by 62%
- Helps to analyze the contributing factors that result in falls

TJC Preventing Falls 20 Pages

www.hpoe.org/Reports-HPOE/2016/preventing-patient-falls.pdf



400-bed hospital could expect 134 fewer injuries and \$1.9 million in costs avoided

Preventing Patient Falls: A Systematic Approach from the Joint Commission Center for Transforming Healthcare Project



October 2016

Top Contributing Factors to Falls

- Fall risk assessment issues such as tool not a valid predictor or inconsistent ratings
- Handoff communication issues and use ticket to ride or incorporate alerts to which patients are at risk
- Toileting issues as patients did not seek help and medications that increase risk of falling
- Call light issues
- Education and organizational culture issues and
- Medication issues as 1 or more that increase risk

TJC Sentinel Event 55

- TJC issues SEA 55 on preventing falls September 28, 2015 and is five pages long
- Discusses average cost for a fall is \$14,000
- States hundreds of thousands of patients fall every year in the hospital and 30-50% are injured
- Remains one of the top 10 sentinel events reported
- Due to inadequate assessment, communication failures, inadequate staff orientation, environmental deficiencies (toilet height, slip hazards) and lack of leadership

TJC Sentinel Event 55

Sentinel Event Alert

**A complimentary publication of The Joint Commission
Issue 55, September 28, 2015**

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Accredited organizations should consider information in a *Sentinel Event Alert* when designing or redesigning processes and consider implementing relevant suggestions contained in the alert or reasonable alternatives.

Please route this issue to appropriate staff within your

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Analysis of falls with injury in the Sentinel Event database reveals the most common contributing factors pertain to:

- Inadequate assessment

www.jointcommission.org/PatientSafety/SpeakUp/

Each year, millions of people are injured by falls. People at risk of falling include hospital patients, nursing home residents and those who are recovering from an illness or injury at home. This brochure includes tips and actions you can take to reduce your risk of falling, whether at home or in a medical facility.

The Joint Commission is the largest health care accrediting body in the United States that promotes quality and safety.

Helping health care organizations help patients



SpeakUP™



**Reduce
your risk
of falling**

Why do falls happen?

- Person is weak, tired or ill
- Person is not physically fit
- Person may have problems seeing
- Medicines may cause weakness, sleepiness, confusion or dizziness
- Slippery or wet floors or stairs
- Obstructed pathways
- Darkness

How to reduce your risk of falling

Take care of your health

- Exercise regularly. Exercise builds strength.
- Prevent dehydration. Dehydration can make it easier to lose your balance.
- Have your eyes checked. Make sure you do not have any eye problems or need a new prescription.
- Talk to your doctor if your medicine makes you sleepy, light-headed, sluggish or confused. Ask how to reduce these side effects or if you can take another medicine.

Take extra precautions

- Turn on the lights when you enter a room. Do not walk in the dark.
- Make sure your pathway is clear.
- Use the handrails on staircases.
- Sit in chairs that do not move and have arm rests to help when you sit down and stand up.
- Wear shoes that have firm, flat, non-slip soles. Do not wear shoes that do not have backs on them.
- Replace the rubber tips on canes and walkers when they become worn.

Make small changes to your home

- Install timers, “clap-on” or motion sensors on your lights.
- Use night lights in your bedroom, bathroom and the hallway leading to the bathroom.
- Keep the floor and stairs clear of objects such as books, tools, papers, shoes and clothing.
- Remove small area rugs and throw rugs that can slip. Rubber mats are a good replacement.
- Put frequently used items in easy-to-reach places that do not require using a step stool.
- Make sure your bed is easy to get in and out of.
- Apply non-slip treads on stairs.
- Apply non-slip decals or use a non-slip mat in the bathtub or shower.
- Install grab bars near the toilet and the bathtub or shower.

A home care agency, personal care and support agency, or community program may be able to help make changes to your home if you live alone and need help.

Take extra precautions in the hospital or nursing home

Many falls occur when patients or residents try to get out of bed either to go to the bathroom or walk around the room by themselves. If you need to get out of bed:

- Use your call button to ask for help getting out of bed if you feel unsteady.
- Ask for help going to the bathroom or walking around the room or in hallways.
- Wear non-slip socks or footwear.
- Lower the height of the bed and the side rails.
- Talk to your doctor if your medicine makes you sleepy, light-headed, sluggish or confused. Ask how to reduce these side effects or if you can take another medicine.

TJC Video on Reduce Risk of Falling



Speak Up: Reduce your risk of falling

Wednesday, August 03, 2011

One out of three adults age 65 and older gets injured from falls every year. But anyone can fall. Making simple changes can mean a big difference when it comes to preventing falls. Watch the latest video from the Speak Up gang, and learn how to reduce your risk of falling!

[Request Downloadable File](#)

[View Video Transcript](#)

www.jointcommission.org/multimedia/speak-up-reduce-your-risk-of-falling/

The Joint Commission Matrix for Falls RCA

- TJC requires a RCA be done for reviewable sentinel events which includes a patient fall that results in death or major permanent loss of function as a direct result
- These are the elements that must be included in the RCA
 - So RCA must include area marked such as physical assessment process, individual observation process, medication management, staffing level etc.
 - Matrix **removed** from July 2015 SE policy but still helpful
 - Available in SE policy (revised) at www.jointcommission.org/Sentinel_Event_Policy_and_Procedures/

Matrix removed from July 2015 SE policy but still helpful

Root Cause Analysis Matrix Minimum Scope of Root Cause Analysis for Specific Types of Sentinel Events – October 2005

Note: Updates are highlighted in **RED**

Detailed inquiry into these areas is expected when conducting a root cause analysis for the specified type of sentinel event. Inquiry into areas not checked (or listed) should be conducted as appropriate to the specific event under review.

	Suicide (24 hr care)	Med. Error	Procedural Complication	Wrong site surgery	Treatment delay	Restraint death	Elopement death	Assault/ rape/ homicide	Transfusion death	Patient Abduction	Unanticipated death of full term infant	Unintended Retention of foreign body	Fall related
Behavioral assessment process (1)	X					X	X	X					
Physical assessment process (2)	X	X	X	X	X	X	X				X		X
Patient identification process		X		X					X				
Patient observation procedures	X				X	X	X	X	X		X		X
Care planning process	X		X			X	X				X		X
Continuum of care	X	X			X	X							X
Staffing levels	X	X	X	X	X	X	X	X	X	X		X	X
Orientation & training of staff	X	X	X	X	X	X	X	X	X	X	X	X	X
Competency assessment/ credentialing	X	X	X	X	X	X	X	X	X	X	X	X	X
Supervision of staff (3)	X	X	X		X	X			X			X	
Communication with patient/ family	X	X		X	X	X	X			X			X
Communication among staff members	X	X	X	X	X	X	X	X	X	X	X	X	X
Availability of information	X	X	X	X	X	X			X		X		X
Adequacy of technological support		X	X										
Equipment maintenance/ management		X	X		X	X					X		X
Physical environment (4)	X	X	X	X		X	X	X	X	X			X
Security systems and processes	X						X	X		X			
Medication Management (5)		X	X		X				X		X		X

Consider Doing a Falls FMEA www.ihl.org

Failure Modes and Effects Analysis (FMEA) Tool

❖ Outpatient falls risk assessment

Littleton Adventist Hospital
 Littleton, Colorado, United States
 Hospital-Community

Aim: To decrease outpatient falls by 50% in 12 months.

Process Data

Date: 03/30/2008

Step	Description
1	Outpatient enters facility

Step	Description
2	Outpatient check in at volunteer check-in

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Volunteers can not determine if patients are at risk to fall	No assessment tool or education for volunteers	No fall risk assigned to outpatients	10	9	5	450	Inact education on fall risk

Step	Description
3	OP fills out registration form and volunteer signs the pt in for test/procedure

Step	Description
4	Patient sits in the waiting area and waits to be called by admissions

Step	Description
5	Admissions calls patient up to desk to obtain pt info

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
No info taken from patient	No tool or education to staff	Patients risk for falling	10	5	5	250	Inact falls risk tool and

Step Description

5 Admissions calls patient up to desk to obtain pt info

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
No info taken from patient specifically regarding falls risk	No tool or education to staff	Patients risk for falling unrecognized	10	5	5	250	Inact falls risk tool and education for staff

Step Description

6 Patient meets with admissions personal

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
No assessment of falls risk	No tool for risk assessment; no staff training	All patients go unassessed	10	5	5	250	Inact a falls risk assessment and education of staff

Step Description

7 Patient leaves to designated testing area

Failure Mode	Causes	Effects	Occ	Det	Sev	RPN	Actions
Patient not identified as a falls risk	No falls risk tool developed - no education of outpatient staff	High risk patients not identified as a falls potential	10	5	5	250	Inact falls risk assessment

Calculated Totals

Total Risk Priority Number for the process 1200

Occ: Likelihood of Occurrence (1-10)

Det: Likelihood of Detection (1-10)

NOTE: 1 = Very likely it WILL be detected

10 = Very likely it WILL NOT be detected

Sev: Severity (1-10)

RPN: Risk Priority Number (Occ × Det × Sev)

Annotation

None

CMS CoP Requirements

- CMS requires hospitals in the hospital CoPs to have a safe environment/setting
- CMS has this as hot spot in their Guidelines for Immediate Jeopardy
- CMS requires the health and safety of patients at risk are identified, investigated and resolved
- Having falls and no investigation would be a violation of this CoP which could come up during complaint or validation survey

Source:

http://www.cms.hhs.gov/manuals/downloads/som107_Appendicestoc.pdf

Medicare State Operations Manual

Appendix

Questions can be emailed to CMS at hospitalscg@cms.hhs.gov

- Each Appendix is a separate file that can be accessed directly from the SOM Appendices Table of Contents, as applicable.
- The appendices are in PDF format, which is the format generally used in the IOM to display files. Click on the red button in the 'Download' column to see any available file in PDF.
- To return to this page after opening a PDF file on your desktop, use the browser "back" button. This is because closing the file usually will also close most browsers

website www.cms.hhs.gov/manuals/downloads/som107_Appendixtoc.pdf

App. No.	Description	PDF File
A	Hospitals	 2,185 KB
AA	Psychiatric Hospitals	 606 KB
B	Home Health Agencies	 761 KB

Why Look at Falls

- Falls program is the standard of care
- Substandard care could be the basis of a medical malpractice suit (average cost \$70,000)
- Substandard care can be a compliance issue since billed for substandard care
 - Fraud and abuse issue with either CMS or the OIG
- In Autumn vs. CMS¹ LTC found guilty and had to pay monetary penalty of \$3,050 per day from the date of discovery of deficiency, until date of resurvey

¹ Autumn Breeze Rehabilitation Center v. CMS, the Dept of HHS, No. CR1285, March 2005

Why Look at Falls CMS CoPs

- CMS states that use of restraints for prevention of falls should not be considered a routine use of a fall prevention program (Tag 154)
- CMS states use of restraints does not reduce fall rate
- CMS states falls that occur when a patient is restrained often result in more serious injuries
- Articles were older publications

CMS Hospital CoPs

- Patient should not be restrained because he might fall (Tag 154)
- When assessing risk for falls consider if medical condition or symptom that indicates a current need for protective intervention
- History of falling without current clinical basis is inadequate
- Determine if there are other interventions that can be used to prevent the patient from falling

Why Look at Falls? CDC

- Falls are the leading cause of injury, hospitalization, and death for seniors (one third of adults over 65 each year, accessed CDC March, 2016)
- 2.2 million treated in ED for injuries related to falls and CDC says 1.8 million (CDC¹)
- 581,000 seniors were hospitalized for fall injuries and 18,000 seniors died due to fall related injuries
- CDC issues two free publications²

¹ <http://www.cdc.gov/HomeandRecreationalSafety/Falls/adultfalls.html>

² <http://www.cdc.gov/ncipc/preventingfalls/>

CDC Data on Falls Among Older Adults

Heads Up: Concussion in Sports

Falls – Older Adults

► Get the Facts

Cost of Falls among Older Adults

Hip Fractures among Older Adults

Falls in Nursing Homes

Data & Statistics

Publications & Resources

STEADI Tool Kit for Health Care Providers

Falls – Children

Water-Related Injuries

Poisoning

Fires

Playground Injuries

Bicycle-Related Injuries

Dog Bites

Injury Center Topics

[Saving Lives & Protecting People](#)

[Home & Recreational Safety](#)

[Motor Vehicle Safety](#)

[Traumatic Brain Injury](#)

Falls Among Older Adults: An Overview

Each year, one in every three adults age 65 and older falls.¹ Falls can cause moderate to severe injuries, such as hip fractures and head traumas, and can increase the risk of early death. Fortunately, falls are a public health problem that is largely preventable.

How big is the problem?

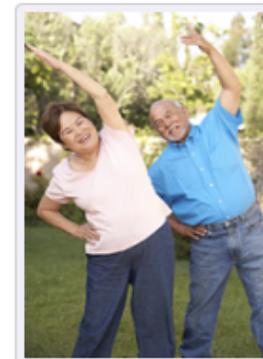
- One out of three older adults (those aged 65 or older) falls each year¹ but less than half talk to their healthcare providers about it.²
- Among older adults, falls are the leading cause of both fatal and nonfatal injuries.³
- In 2010, 2.3 million nonfatal fall injuries among older adults were treated in emergency departments and more than 662,000 of these patients were hospitalized.³
- In 2010, the direct medical costs of falls, adjusted for inflation, was \$30 billion.⁴

What outcomes are linked to falls?

- Twenty to thirty percent of people who fall suffer moderate to severe injuries such as lacerations, hip fractures, or head traumas.^{5,6} These injuries can make it hard to get around or live independently, and increase the risk of early death.
- Falls are the most common cause of traumatic brain injuries (TBI).⁵
- In 2000, 46% of fatal falls among older adults were due to TBI.⁷
- Most fractures among older adults are caused by falls.⁸ The most common are fractures of the spine, hip, forearm, leg, ankle, pelvis, upper arm, and hand.⁹
- Many people who fall, even if they are not injured, develop a fear of falling.¹⁰ This fear may cause them to limit their activities, which leads to reduced mobility and loss of physical fitness, and in turn increases their actual risk of falling.¹¹

On this Page

- [How big is the problem?](#)
- [What outcomes are linked to falls?](#)
- [Who is at risk?](#)
- [How can older adults prevent falls?](#)
- [References](#)



 [Subscribe to RSS](#)

Contact Us:

 Centers for Disease Control and Prevention
National Center for Injury Prevention and Control (NCIPC)
4770 Buford Hwy, NE
MS F-63
Atlanta, GA 30341-3717

 800-CDC-INFO
(800-232-4636)
TTY: (888) 232-6348
[Contact CDC-INFO](#)

Heads Up: Concussion in Sports

Falls - Older Adults

Get the Facts

Data & Statistics

Publications & Resources

STEADI Tool Kit for Health Care Providers

Falls - Children

Water-Related Injuries

Poisoning

Fires

Playground Injuries

Bicycle-Related Injuries

Dog Bites

Injury Center Topics

Saving Lives & Protecting People

Home & Recreational Safety

Motor Vehicle Safety

Traumatic Brain Injury

Injury Response

Violence Prevention

Data & Statistics (WISQARS)

Funded Programs

Communications

Press Room

Social Media

Publications

Falls - Older Adults



We want a society where older adults can live safe, healthy and independent lives. While falls are a threat to the health and independence of older adults and can significantly limit their ability to remain self-

sufficient, the opportunity to reduce falls among older adults has never been better. Today, there are proven interventions that can reduce falls and help older adults live better, and longer.

[Get the Facts »](#)

In the Spotlight

Publications and Resources

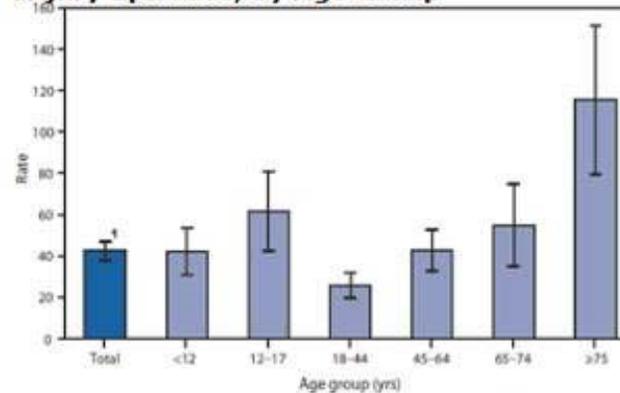
Older adult falls prevention guides for health care professionals, brochures, posters and more.

Related Resources

- Focus on Preventing Falls: A CDC Featured Topic
- Keeping Seniors Safe Podcasts
 - Listen (0:59) | (3:50)
- Concussion and Traumatic Brain Injury
- Elder Maltreatment
- HHS HealthBeat: The Shower Fall

Data & Statistics

Rate of Nonfatal, Medically Consulted Fall Injury Episodes, by Age Group



In 2010, the overall rate of nonfatal fall injury episodes for which a health-care professional was contacted was 43 per 1,000 population. Persons aged ≥75 years had the highest rate (115).

Graphic source: [MMWR Quickstats](#), 02/03/2012

[More data & statistics »](#)

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National Center for Injury Prevention and Control (NCIPC)
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MS F-63
Atlanta, GA 30341-3717

800-CDC-INFO (800-232-4636)
TTY: (888) 232-6348
[Contact CDC-INFO](#)

www.cdc.gov/HomeandRecreationalSafety/Falls/index.html

CDC Resources

- Has a fall prevention pocket guide for physicians
- Fall risk perception and risk assessment project
 - Go to Stopfalls.org
 - Bibliography database updated
 - Focus is to help the community reduce falls in their homes
- Information that a community Tai Chi fall prevention program can help



"We feel stronger when we walk frequently. And we have a more positive outlook."

Many falls can be prevented. By making some changes, you can lower your chances of falling.

Four things YOU can do to prevent falls:

- 1 Begin a regular exercise program
- 2 Have your health care provider review your medicines
- 3 Have your vision checked
- 4 Make your home safer

What YOU Can Do



To Prevent Falls



Department of Health and Human Services
Centers for Disease Control and Prevention

For more information, contact:
Centers for Disease Control and Prevention
770.488-1506
www.cdc.gov/fqjry



Falls Brochures for Patients



"It's not the broken hip, it's the nursing home I don't want. I need to be independent, so I take Tai Chi."

Leonard Jones, age 74

"People who use canes are brave. They can be more independent and enjoy their lives."

Shirley Warner, age 79

Four things you can do to prevent falls:

- 1 Begin an exercise program to improve your leg strength & balance
- 2 Ask your doctor or pharmacist to review your medicines
- 3 Get annual eye check-ups & update your eyeglasses
- 4 Make your home safer by:
 - ▶ Removing clutter & tripping hazards
 - ▶ Putting railings on all stairs & adding grab bars in the bathroom
 - ▶ Having good lighting, especially on stairs



www.cdc.gov/homeandrec/recreational/safety/Falls/stead/index.html#download

Contact your local community or senior center for information on exercise, fall prevention programs, or options for improving home safety.

For more information on fall prevention, please visit:
www.cdc.gov/injury
www.stopfalls.org

This brochure was produced in collaboration with the following organizations:



Centers for Disease Control and Prevention
 National Center for Injury Prevention and Control

Stay Independent

Falls are the main reason why older people lose their independence.

Are you at risk?



Check Your Risk for Falling

Please circle "Yes" or "No" for each statement below.			Why it matters
Yes (2)	No (0)	I have fallen in the past year.	People who have fallen once are likely to fall again.
Yes (2)	No (0)	I use or have been advised to use a cane or walker to get around safely.	People who have been advised to use a cane or walker may already be more likely to fall.
Yes (1)	No (0)	Sometimes I feel unsteady when I am walking.	Unsteadiness or needing support while walking are signs of poor balance.
Yes (1)	No (0)	I steady myself by holding onto furniture when walking at home.	This is also a sign of poor balance.
Yes (1)	No (0)	I am worried about falling.	People who are worried about falling are more likely to fall.
Yes (1)	No (0)	I need to push with my hands to stand up from a chair.	This is a sign of weak leg muscles, a major reason for falling.
Yes (1)	No (0)	I have some trouble stepping up onto a curb.	This is also a sign of weak leg muscles.
Yes (1)	No (0)	I often have to rush to the toilet.	Rushing to the bathroom, especially at night, increases your chance of falling.
Yes (1)	No (0)	I have lost some feeling in my feet.	Numbness in your feet can cause stumbles and lead to falls.
Yes (1)	No (0)	I take medicine that sometimes makes me feel light-headed or more tired than usual.	Side effects from medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I take medicine to help me sleep or improve my mood.	These medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I often feel sad or depressed.	Symptoms of depression, such as not feeling well or feeling slowed down, are linked to falls.
Total _____		Add up the number of points for each "yes" answer. If you scored 4 points or more, you may be at risk for falling. Discuss this brochure with your doctor.	

This checklist was developed by the Greater Los Angeles VA Geriatric Research Education Clinical Center and affiliates and is a validated fall risk self-assessment tool (Rubenstein et al. *J Safety Res*; 2011:42(6)493-499). Adapted with permission of the authors.

Your doctor may suggest:

- Having other medical tests
- Changing your medicines
- Consulting a specialist
- Seeing a physical therapist
- Attending a fall prevention program



Preventing Falls: What Works

A CDC Compendium of Effective Community-based Interventions from Around the World

Exercise-based Interventions



Home Modification Interventions

Multifaceted Interventions



Preventing Falls:

How to Develop Community-based
Fall Prevention Programs for Older Adults



CDC Free STEADI Toolkit

- Heads Up: Concussion in Sports
- Falls – Older Adults
 - Get the Facts
 - Data & Statistics
 - Publications & Resources
 - ▶ STEADI Tool Kit for Health Care Providers**
 - About STEADI
 - Instructional Videos
 - Webinar
 - Share Your Thoughts
- Falls – Children
- Water-Related Injuries
- Poisoning
- Fires
- Playground Injuries
- Bicycle-Related Injuries
- Dog Bites

STEADI (Stopping Elderly Accidents, Deaths & Injuries) Tool Kit for Health Care Providers

Did you realize that one out of three people 65 and older falls each year?

The good news is that health care providers can help reduce their patients' chances of falling and of suffering serious injuries like hip fractures and traumatic brain damage.

CDC's Injury Center created the STEADI Tool Kit for health care providers who see older adults in their practice who are at risk of falling or who may have fallen in the past. The STEADI Tool Kit gives health care providers the information and tools they need to assess and address their older patients' fall risk.

[Read more... »](#)

Order Tool Kits



Print copies are currently out of stock. If you are interested in a future order if/when copies are available, **please email us your name and address.**

[Download the STEADI Tool Kit materials »](#)

- Get email updates
- Subscribe to RSS

Contact Us:

- Centers for Disease Control and Prevention
National Center for Injury Prevention and Control (NCIPC)
4770 Buford Hwy, NE
MS F-63
Atlanta, GA 30341-3717
- 800-CDC-INFO
(800-232-4636)
TTY: (888) 232-6348
[Contact CDC-INFO](#)

Download STEADI Tool Kit Materials

Injury Center Topics

- [Saving Lives & Protecting People](#)
- [Home & Recreational Safety](#)
- [Motor Vehicle Safety](#)
- [Traumatic Brain Injury](#)
- [Injury Response](#)
- [Violence Prevention](#)
- [Data & Statistics \(WISQARS\)](#)
- [Funded Programs](#)
- Communications**
 - [Press Room](#)
 - [Social Media](#)
 - [Publications](#)

Make Fall Prevention Part of Your Practice



Triage Your Patients Based on Fall Risk

This tool walks health care providers through assessing a patient's fall risk, educating patients, selecting interventions, and following up.



Have Your Patients Check Their Risk of Falling

This brochure offers a checklist that patients can use to check their risk of falling.



Prevent Falls in Older Patients, Provider Pocket Guide

This small, easy-to-use tool walks health care providers through key points of fall prevention.



See Your Patient's Risk at a Glance

This checklist allows health care providers to summarize an older patient's fall risk.



Integrate Fall Prevention into Your Practice

This wall chart helps health care providers determine who in their practice will be responsible for conducting fall risk assessments, delivering interventions, and providing education to older patients.



Talk about Fall Prevention with Your Patients

This document can help health care providers comfortably talk about fall prevention with

www.cdc.gov/homeandrecreationsafety/Falls/steadi/index.html

Preventing Falls in Older Adults

- Exercise regularly
- Have doctor or pharmacist review medications
- Get adequate calcium and Vitamin D in your diet
- Do a program of weight bearing exercises
- Get screened and treated for osteoporosis
- Have eyes checked annual and update your eyeglasses
- Reduce trip hazards in home, add grab bars and railing and improve lighting in your home

The Four C's of Falls



- **Consistent** for all patients at risk for falling,
- **Cross Disciplines** means interdisciplinary approach,
- **Coordinated** from admission to discharge and continue at home,
- **Culture** from responding to errors to prevention from harm,

Introduction into Falls

- What are effective strategies or best practices for fall prevention?
- How can you reduce the fall rate in your facility?
- How can you decrease the level of injury or severity related to falls?
- Do you have a falls committee?
- How do you communicate risk factors for falls?

Introduction into Falls

- What patient and family education do you do?
- Remember you need a standardized assessment tool and injury risk assessment.
- How do evaluate and monitor falls?
- How do you ensure accountability through auditing to make sure the falls risk assessments and interventions are done correctly?

Introduction into Falls

- What equipment and unit design configuration can maximize fall prevention?
- Standardize interventions for at risk patients with attention to highest risk patients
- Is there an understanding of the definition and any inconsistencies in reporting?
 - WHO said inconsistency in reporting and did not report coming to rest on the ground
 - WHO Global Report on Falls Prevention in Older Age. Available at: whqlibdoc.who.int/publications/2008/9789241563536_eng.pdf
 - Sari AB, et al. Sensitivity of routine system for reporting patient safety incidents in an NHS hospital: retrospective patient case note review. *BMJ*2007;334(7584):79.

Introduction into Falls

- What are common risks for falls?
- What is a good incident report specific for falls?
 - One study found 44% of falls were not captured on the hospital's incident reporting system
 - Haines TP, et al. Inconsistency in classification and reporting of in-hospital falls. J Am Geriatr Soc 2009;57(3):517-523.
- Fall assessment need to be **patient specific** and do you use sitters for high risk patients?
- How do you ensure compliance with risk assessments, incident investigations and confronting problem?

Introduction into Falls

- Preventing falls requires a **multifaceted fall prevention approach**
 - Fall prevention monitoring system
 - Creation of CNS position
 - Have a good policy and make sure staff educated on policy
 - Fall incident report, post fall assessment and documentation system
 - Individualized approach to fall prevention, PI, responsibility of all staff to prevent falls, etc.

Is There A Road Map to Preventing Falls?



Road Map to a Comprehensive Falls Prevention Program



Road Map to Preventing Falls

- Falls prevention program that includes:
 - A team approach
 - Identify what group is responsible to oversee the strategic plan for falls including planning, implementation and evaluation
 - **Unit based falls champions** (very important)
 - Look at unique needs of special population
- Accurate and concurrent reporting
 - Need data on all falls
 - Need to analyze falls data for common factors and to make sure interventions are working

Road Map to Preventing Falls

- Expectations, Education, and Accountability
 - Clear expectations communicated to all including expectations on fall risk screening, assessment and interventions
 - Education for all clinical and non-clinical staff
 - Administration must provide resources and support for the falls program
 - Need to do continuing education for physicians and in new physician orientation
 - Annual training on fall prevention education

Fall Prevention Checks Include:

Fall prevention checks include:

- 2b) Check that bed alarms are in place and activated as appropriate.
- 2c) Patient beds are in the correct position.
- 2d) Ensuring safe pathways, e.g. reduced clutter, clear and well-lit pathway to bathroom, IV poles are in a safe position.
- 2e) Appropriate equipment and assistive devices, e.g. raised toilets with safety rails, commodes, shower chairs, floor mats are in use.
- 2f) Managers incorporate fall prevention checks during their observation audits and provide feedback to front-line staff on a least a quarterly basis.
- 3a) The facility has an algorithm in place to assign low-beds and floor mats to patients identified at high-risk for injury related to falls.
- 3b) Equipment to reduce risk for injury (e.g. low beds, hip protectors, floor mats) is accessible to staff.
- 4a) The facility has guidelines in place for appropriate bed alarm use, or alternatives to alarms (e.g. sitters), individualized to the patient's risk factors.
- 4b) Forcing functions (e.g. alarm reset reminders on beds) or reminders (e.g. signage) are in place for resetting alarms prior to leaving patient's room.
- 4c) Front-line staff from across the facility (e.g. therapy staff, nursing assistants) are trained on falls prevention equipment (e.g. bed alarms, chair alarms, low-bed use, floor mat placement).

Key Words Falls Prevention

- It is important that you do not attempt to get out of bed or walk without assistance. We want to assist you when getting out of bed and walking to keep you safe from falling
- We will be in your room every hour to assist you with using the restroom, to make sure your call light is within reach, and to reposition you
- Remember call before you fall. It's our job and it is not an inconvenience and we don't want you to get hurt

Definition of Falls



- One article reported that 21% of hospitals had not defined what constitutes a fall (ECRI, Oct. 2005),
- Reported also that only 82% of the facilities document in the chart the interventions chosen to mitigate the risk of falls,
- Documentation is important to provide the staff and hospital in the event a lawsuit is filed,

Definition of Falls

- Important to have a **definition** for falls and for staff to know what your definition is
- An unintended event resulting in a person coming to rest on the ground/floor or other lower level (witnessed)
- Or is reported to have landed on the floor (unwitnessed) not due to any intentional movement or extrinsic force such as stroke, fainting, seizure
- Basically an unplanned descent to the floor (NQF) or lower surface

Source: Florida Hospital Association available at <http://premierinc.com/quality-safety/tools-services/safety/topics/falls/>

Fall prevention in hospitals

Introduction and scope



Preventing falls among patients in a healthcare settings requires a multifaceted approach, and the recognition, evaluation and prevention of patient falls are significant challenges. Currently available research and data on fall prevention are from long-term care settings; however, much is applicable for all healthcare settings.

This Web site provides a summary of the issues, strategies and tools to define and measure falls, identify risks and target prevention strategies. Each fall prevention program is likely in a different stage of development, whether initiating a new program or expanding or improving an existing program.

Tool Kits for Fall Prevention

Tools for fall prevention in hospitals

General fall prevention

CDC National Center for Injury Prevention and Control (NCIPC) - Tool kits

The Centers for Disease Control and Prevention, National Center for Injury Prevention and Control has current [technical information](#) and excellent materials about falls and fall-related injuries that can be used on an individual basis or incorporated into health promotion activities aimed at reducing falls among older adults.



CDC Tool kit to prevent senior falls

Includes the [fact sheets, graphs and brochures](#) about falls and fall prevention for older adults

Hill-ROM - Morse instrument and fall scale

A comprehensive [training program](#) on the use of the Morse Instrument and Fall Scale has been made available through Hill-Rom. A copy can be requested by sending an email to safetyprograms@hill-rom.com.

Hill-ROM - Patient safety webinars

Free [webinars](#) for caregivers to achieve better outcomes, including *No Falls, Clear Lungs (prevent VAP)*, and *Safe Skin*™ Program. For more information, visit:

Hill Institute of Aging and Health Web site - Falls Toolkit

What's in Your Policy and Procedure?

Policies and Procedures

Fall Prevention/Intervention Strategies

The most common approach to fall prevention is the use of a program of multiple interventions that aims to minimize the patient's risk of falling. The following summarizes these interventions, representing best-available evidence based on expert opinion.

Assessment

Some form of assessment of a patient's risk of falling was utilized in most studies, particularly in the following situations:

- On admission to the hospital
- All confused and elderly before settling at night
- Post operative patients
- All elderly on prescribed analgesics, sedatives, anti-hypertensive, etc

Risk of Falling Diagnosis

Measurement

- How do you measure your fall rate?
- Difficult to benchmark data between facilities because definitions are different
- Also there are differences in the way facilities collect and report the data
- Problem of lack of risk adjustment
- One hospital sees twice as many elderly patients than the other hospital in town

Facility Falls Data Summary

CONFIDENTIAL DOCUMENT FOR QUALITY IMPROVEMENT ANALYSIS ONLY.
Data is not risk adjusted and should not be used to compare among facilities.

Facility _____ Month Ending _____

1. Total # of falls
2. Total # of falls with injury
3. Total # of residents who fell
4. Total # of residents with 2 or more falls.....

5. Total # of falls per resident computed only for residents who fell:
 _____ divided by _____ = _____
 (Example: (total # of falls from #1 above) 14 Falls divided by (total # of residents who fell from #3 above) 10 residents = 1.4 Falls per residents who fell.)

6. For the month, total resident days:
 _____ x _____ = _____
 Average daily census multiplied by total days in the month = resident days.
 (Example: Average Daily Census 100 x 30 days = 3,000 Resident Days.)

7. Falls per 1,000 resident days:
 _____ x 1,000 = _____ divided by _____ = _____
 Total number of resident falls in one month from #1 above times 1,000, divided by total resident days from #6 above.
 (Example: 14 falls x 1,000 = 14,000 divided by 3,000 (total resident days) = 4.66 falls per 1,000 Resident Days.)

8. Falls With Injury per 1,000 resident days:
 _____ x 1,000 = _____ divided by _____ = _____
 Total number of resident falls with injuries in one month from #2 above times 1,000, divided by total resident days from #6 above.
 (Example: 2 falls with injury x 1,000 = 2,000 divided by 3,000 (total resident days) = 0.66 falls with injury per 1,000 Resident Days.)

Note: For the purposes of this report *“injury”* means: any fracture, any sutures, any need for hospitalization or other immediate medical attention, and any changes in functional ability requiring a change in Care Plan. *Injury does not include minor skin tears or bruises.*



Measurement

- Common method is to measure and track your fall rate using the following;
- $$\frac{\text{Number of patient falls} \times 1,000}{\text{Number of patient days}}$$
- Look at the total number of eligible falls and divide it by the total number of patient days,
- Then multiple this number by 1,000 to create a rate per 1,000 patient days,
- Can also look at patients at risk, patient who fell, or falls per bed
- Used by NQF at <http://www.qualityforum.org/> and Maryland Quality Indicator Project at <http://www.qiproject.org/>

Other Fall Rate Measurements

The Number of Patients at Risk Rate

$$\frac{\text{Number of patient falls}}{\text{Number of patients at risk}} \times 1,000$$

- This rate is commonly used in
- long-term care facilities

The Number of Patients Who Fell Rate

$$\frac{\text{Number of patients who fell}}{\text{Number of patients at risk}} \times 1,000$$

- In this formula repeated falls experienced by the same person are only included once in the numerator

Other Fall Rate Measurements

The Number of Falls per Bed

- Your facility had **4 falls** last month.
- Data shows you had **900** bed days last month,
- Fall rate= (number of falls/bed days of care) X1000 BDOC=(4/900) X 1000=**4.44** per 1000 BDOC,
- In other words for every 1000 bed days of care you can expect to have about 4 falls.

What is the Fall Rate?

- Studies show fall rate of acute care hospitals to be in range of 2.5% to 3.5%,
- Valuable to trend falls per 1,000 patient days,
- Difficult to compare from unit to unit not alone hospital to hospital unless risk adjusted,
- This means consideration of population mix and types of care,
- Some units and types of care will have higher falls than others (LTC, Neuro floor, Rehab),

What is the Fall Rate?

- Literature shows difficulty in comparing studies and trying to benchmark because studies use different calculations and some were not risk adjusted
- Inpatient rate is between 1.7 to 25 falls per 1,000 patient days depending on care area with geropsych the highest (Currie 2008)
 - Morse shows fall rate as 2.2 to 7 per 1,000 bed days in acute care hospitals
 - 11.0 to 24.9 percent in long term care
 - 8.0 to 19.8 percent in rehabilitation hospitals
 - 4 to 7.5 percent result in serious injury

What is the Fall Rate Per 1000 Patient Days?

- Acute care first falls 2.2 (Magaziner et. al.)
- Neuro floor rate is 5.2
- Psychiatry at 4.1
- Rehab at 7.6 to 12.6
- Geriatrics at 7.8
- Medical surgical unit 3.6 falls (Donaldson)

Falls Injuries

- Falls are a nursing sensitive quality indicator
- Injuries are reported in 6-44% of acute inpatient falls
- Serious injury in 2 to 8% of falls (Currie, 2008) with less than 1% resulting in death

What is the Fall Rate?

- Some emergency department calculates falls per 10,000 visits
- Other calculate falls per 1,000 visit
- Fall rate is 0.288 per 1,000 visit
 - Terrell, KN; Weaver CS; Giles, BK; Ross, MJ. (2008) ED Patient Falls and Resulting Injuries; Journal of Emergency Nursing. 35(2): 89-92
- Hospital compare is 0.527 per 1,000 discharges or 5.27 per 10,000 discharges
- Others: 0.15 (Duke), or 0.45 (Alexander) per 1,000 discharges and used Kinder 1 fall tool
 - Alexander, D; Kinsley, T ;Waszinski, C (2013), Journey to a Safe Enviroment: Fall Prevention in an Emergency Dept Level I Trauma Center, Journey Emergency Nursing. 39 (4): 346-352

Kinder 1 Fall Assessment for ED

RN Performs a Fall Risk Assessment:

A patient's fall risk is assessed on admission and reassessed every shift to determine the patient's risk of accidental injury.

***For a score of 4 or more, if patient's admission is related to a fall or if the patient falls during this hospital admission, implement the fall prevention protocol**

- **Fall history to floor or ground** = 2 points
 - Fall in past year or during prior hospitalization
 -
- **Altered Mental Status** = 4 points

Examples may include:

 - Confusion/disorientation/impaired judgment
 - Unable to follow instructions, poor safety awareness
 - Positive Confusion Assessment Method (CAM)
 -
- **Mobility impaired** = 2 points

Examples may include:

 - Leg weakness, unsteady gait
 - Transfers with assistive device or supervision
 -
- **Elimination altered** = 1 point

Examples may include:

 - Incontinence, diarrhea
 - frequency, urgency, nocturia
 -
- **Other, i.e. nursing judgment, diagnosis related** = 2 points

Examples may include:

 - Sensory deficits
 - Orthostatic hypotension

Added Additional Elements

RISK	YES	NO	Fall Protocol Interventions Initiated Bracelet Triangle Exit alarm
Present to ED because of fall			
Age > 70			
Altered Mental Status Intoxicated with Alcohol or Substance Confusion			
Impaired Mobility: Ambulates or transfers with assistive devices or assist Ambulates with unsteady gait and no assistance Unable to ambulate or transfer			
Nursing Judgment (free text)			

Yes to any risk = high fall risk

Once an ED patient is deemed a high fall risk in the emergency department –the patient remains a high fall risk throughout the ED stay.

Conley ED Fall Scale

FALL TOOL	RISK ASSESSMENT FACTORS
Morse	Fall history Secondary diagnosis Ambulatory aides IV therapy/heplock Gait Mental status Orientation to own ability
Hendrich II	Recent fall history Altered elimination Confusion/disorientation Dizzy/vertigo Poor mobility/generalized weakness Poor judgment
Conley	Fall history Impaired judgment Agitation Impaired gait Dizziness Incontinence
Johns Hopkins Fall Risk Assessment tool	Age Fall History Elimination, bowel and urine Medications Patient care equipment Mobility Cognition

Conley ED Fall Scale

- Memorial Hospital ED selects as fall assessment tool
 - <http://charmcolorado.org/wp-content/uploads/2013/11/KFlarity-Fall-Prev-Forum-presentation.pdf>
 - Ask if history of fall in last 3 months (Score of 2)
 - Observed if impaired judgment or lack of safety awareness (3)
 - Observed any agitation (2)
 - Impaired gait, shuffle, unsteady walk (1), mobility device (1)
 - Asked if had any dizziness in past 3 months (1)
 - Asked if ever wet or soiled yourself on way to bathroom (1)
 - Hourly rounding, implemented interventions, and documented electronically (low 1-2, mod 3-4, high 5)



Development and Implementation of the Memorial Emergency Department Fall Risk Assessment Tool

Kathleen Flarity, DNP, PhD, CEN, CFRN, FAEN

Tina Pate, RN, BSN, CEN

Heather Finch, RN, BSN, CEN

ABSTRACT

The purpose of this study was to determine the validity and reliability of an evidence-based, emergency department (ED) fall risk assessment tool as a sensitive predictor for falls in the ED population. The overarching goal of the project was to improve patient safety and eliminate patient falls resulting in serious injury in the ED. An ED-specific tool was designed on the basis of the risk factors consistently identified in the literature: prior fall history, impaired mobility, altered mental status, altered elimination, and the use of sedative medication. The Memorial ED Fall Risk Assessment Tool was validated in two EDs (North campus and Central campus) located within a large urban health care system in Colorado Springs, Colorado. The two EDs have a combined 140,000 annual patient visits. The Memorial ED Fall Risk Assessment Tool appears to be a valid tool for this two-ED hospital system. **Key words:** emergency department, falls, fall risk, fall risk assessment tools

Available Free at www.AENJournal.com
until Dec 2013



Memorial Hospital

UNIVERSITY OF COLORADO HEALTH

What is the Fall Rate?

- VHA, Inc. reported the fall rate as **3.0** per 1,000 patient days
- Maryland Quality Indicator Project reported fall rate as **3.7** per 1,000 patient days
- California Nursing Outcome Coalition reported **3.2** per 1,000 patient days
 - Updated report issued 2009
www.calnoc.org/globalPages/mainpage.aspx
- Falls is a nursing sensitive quality indicator See AHRQ study and Evidenced Based Handbook for Nurses

Bedside Floor Mat

- VA National Center for Patient Safety has a website on patient safety
- Includes a falls tool kit
- Tool kit has tips and tricks for selecting a floor mat with total of nine pages
- Also note blood thinner pamphlet for patients who fall and are on anticoagulants

Falls and Staffing AHRQ Study

- Increase in nurse turnover increases the fall rate by 0.2%
- ANA and NQF also have falls as a nursing sensitive or quality indicator
- Also found adding one extra patient to LPN and nurse aide increased fall rate by 0.03
- Found staffing in ICU was significant to the fall rate
- Found lower falls rates with nurses satisfied with the care provided

Nurse Staffing & Quality of Care

Evidence Report/Technology Assessment
Number 151

Nurse Staffing and Quality of Patient Care

Prepared for:
Agency for Healthcare Research and Quality
U.S. Department of Health and Human Services
540 Gaither Road
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<http://www.ahrq.gov/clinic/tp/nursesttp.htm>

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Chapter 10. Fall and Injury Prevention

Leanne Currie

<http://www.ahrq.gov/qual/nursesfdbk/>

Background

Fall and injury prevention continues to be a considerable challenge across the care continuum. In the United States, unintentional falls are the most common cause of nonfatal injuries for people older than 65 years. Up to 32 percent of community-dwelling individuals over the age of 65 fall each year, and females fall more frequently than males in this age group.^{1, 2} Fall-related injuries are the most common cause of accidental death in those over the age of 65, resulting in approximately 41 fall-related deaths per 100,000 people per year. In general, injury and mortality rates rise dramatically for both males and females across the races after the age of 85, but males older than 85 are more likely to die from a fall than females.²⁻⁶ Unfortunately, fall-related death rates in the United States increased between 1999 and 2004, from 29 to 41 per 100,000 population.^{2, 7} Sadly, these rates are moving away from the Healthy People 2010 fall-prevention goal, which specifically seeks to reduce the number of deaths resulting from falls among those age 65 or older from the 2003 baseline of 38 per 100,000 population to no more than 34 per 100,000.⁸ Thus, falls are a growing public health problem that needs to be addressed.

The sequelae from falls are costly. Fall-related injuries account for up to 15 percent of rehospitalizations in the first month after discharge from hospital.⁹ Based on data from 2000, total annual estimated costs were between \$16 billion and \$19 billion for nonfatal, fall-related injuries and approximately \$170 million dollars for fall-related deaths across care settings in the community.^{10, 11} Several factors have been implicated as causes of falls and injuries; to date,

Common Risk Factors for Falling

- History of falls, age over 80
- Arthritis and balance deficit
- Cognitive impairment, confusion, and depression (impaired mental status)
- Gait deficit and impaired ability to perform ADLs (unsteady gait)
 - Use of assistive device and muscle weakness
- Special toileting needs (lack of response time)
- Connected to O2, SCD boots, foley catheter etc.

Common Risk Factors for Falling

- Visual deficit (double risk) and fear of falling
- Cardiac arrhythmias and delirium
- Dizziness/lightheadedness and fatigue
- Fluid and electrolyte imbalance
- Multiple medications and orthostatic hypotension
- Longer LOS show increased risk and patients with bleeding disorders

Home Health Nurses

- Tinetti (1986) develop risk assessment for community dwellers with nine risk factors;
- Mobility, morale, mental status
- Distance vision
- Hearing
- Postural blood pressure
- Back exam
- Medication and ability to perform ADLs

Risk of Falling for Children

- Falls are relatively rare
- What's in your policy and procedure for children?
- However Graf (2005) found risk factors to be
 - Seizure medication
 - Orthopedic diagnosis
 - IV
 - Physical/occupational therapy ordered
 - LOS (odds ratio 1.84 for every 5 days)
 - Graf E. Pediatric hospital falls: Development of a predictor model to guide pediatric clinical practice. Paper presented at: Sigma Theta Tau International: 38th Biennial Convention, 2005; Indianapolis, Indiana.

P&P for Children

- Uses many of the recommendations for adults
- Bed in low position with brakes on
- Keep night light on
- Orient patient and family to the setting
- Patients under 3 are placed in cribs
- If parent issues written release can go to junior bed
- If parent request full bed must stay with child
- Non skid footwear if ambulating etc.

How-to Guide: Reducing Patient Injuries from Falls

Transforming Care at the Bedside (TCAB) is a national effort of the Robert Wood Johnson Foundation and Institute for Healthcare Improvement designed to improve the quality and safety of patient care on medical and surgical units, to increase the vitality and retention of nurses, and to improve the effectiveness of the entire care team. For more information, go to <http://www.ihl.org/> or <http://www.rwjf.org/goto/tcabtoolkit>.

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What's in Your P&P for Children?

NURSING PROCEDURES MANUAL

FALLS PREVENTION PROGRAM (PEDIATRICS)

APPENDICES/ATTACHMENTS FOR THIS PROCEDURE

[Appendix A: SNCP: Child Identified As at Risk for Falls](#)

[Appendix B: Use of the Soma Bed Enclosure](#)

PURPOSE

To identify patients who are at risk for falling and to outline strategies used to develop patient specific or individualized plans of care to reduce inpatient falls and fall-related injuries. To involve the patient, family and caregiver in falls prevention through education.

CRITICAL POINTS

1. **Safety Precautions** are instituted on **all patients**, regardless if they have been identified as being at risk for falls or not.
2. Patients who have been identified as at risk for falls are placed on a **Fall Prevention Program**.
3. Patients are assessed for their falls risk on admission and every shift thereafter.
4. **All Infants** are placed on **safety precautions**. A falls risk assessment with the Pediatric Schmid Fall Score is not necessary in this population. However, once an infant begins to walk, then a falls risk assessment must be initiated and a fall prevention program started, if appropriate.

FALLS CATEGORIES

- A. Anticipated physiological/intrinsic: patient diagnosis or characteristics that may predict patient's likelihood of falling.
- B. Unanticipated physiological/intrinsic: unpredictable if no previous history is present and no risk factors identified from assessment

NURSING PROCEDURES MANUAL

FALLS PREVENTION PROGRAM (PEDIATRICS) *(continued)*

APPENDIX A: SNCP: (Patient Identified As at Risk for Falls)

[Click here to access online file](#)

Initiated Date/Signature	Problem	Resolved Date/Signature
	#1 Child Identified As at Risk for Falls	
Related to: Anticipated physiologic risk factors		
Expected Outcomes: The patient will not fall.		
<u>1. Ensure that all safety precautions as noted in the Falls Prevention Program (Pediatrics) procedure are followed. (Applies to ALL children regardless of Falls Score).</u>		
Nursing Interventions		
1.	Place green dot on patient armband – Falls Precaution sign outside door.	
2.	Write in Kardex, "patient at risk for falls" and communicate this at each shift change	
3.	Consider moving closer to the Nursing Station.	
4.	Staff alerted to make frequent visual checks.	
5.	Toileting schedule at least every 2 hours or more frequently if needed.	
6.	Commode at bedside.	
7.	Continuous supervision while toileting. Do not leave a patient who is at risk for falling unattended on a commode or in the bathroom.	
8.	Provide continuity of staff.	
9.	Obtain Physical Therapy and/or Occupational Therapy consult, i.e. for assistive device needs, as ordered.	
10.	Place in SOMA bed – as per Nursing Procedure: Fall Prevention Program (Pediatrics) Appendix C. Contact nursing supervisor or nurse manager to obtain bed.	
11.	Monitor lying and sitting BPs as condition warrants.	
12.	Family, friends to stay with patient, or sitter, if needed. Educate family and/ or sitter regarding fall prevention.	
<i>Comments (To add interventions after initial assessment, circle the number and make note here, e.g., “#6 Commode at bedside” added 3/2—due to frequent urination.”):</i>		

I'M SAFE Pediatric Fall Risk Assessment

Fall Risk Score Criteria (I'M SAFE)		Score if present	Score if not present	Patient's Score
I	Impairment (OT/PT service involved, orthostatic/dizzy)	1	0	
M	Medications (seizure medications, narcotics, epidurals)	2	0	
S	Sedation/anesthesia within the previous 24 hours	2	0	
A	Admitting diagnosis (neuro or ortho diagnosis)	1	0	
F	Fall History	1	0	
E	Environment of care (oxygen, IV tubing, restraints, foley, etc.)	1	0	
Fall Risk Score (total scores assigned for each criteria)				

Interventions

Interventions

- a) Interventions to consider based on assessed risk (implement any appropriate interventions)
- i) Low risk interventions (Score 0)
 - 1. Hourly rounds/care checks (include assessment of elimination needs & re-orientation to call light)
 - 2. Patient/family education regarding fall prevention
 - 3. No activity/mobility restrictions necessary
 - 4. Bed to remain in low position
 - ii) Moderate risk interventions (Score 1)
 - 1. Hourly rounds
 - 2. Provide & reinforce patient/family education regarding fall prevention
 - 3. Some assisting with activity/mobility per the patient's individualized plan of care
 - 4. Educate patient/family to request help with ambulation
 - 5. Bed to remain in low position
 - iii) High risk interventions (Score 2 or greater)
 - 1. Hourly rounds
 - 2. Assist patient with activity/mobility
 - 3. Ensure patient is placed in the appropriate bed (e.g., consider use of crib with topper "bubble top" for toddler)
 - 4. Yellow high fall risk band placed on patient
 - 5. Close observation, particularly when in a wheelchair or out of bed
 - 6. Assess need for 1:1
 - 7. Accompany patient with ambulation & transfers, especially when related to elimination needs
 - 8. Provide & reinforce patient/family education regarding fall prevention & include in the individualized plan of care

Pediatric Scoring

- Remember the goal is to eliminate all falls with injury through the fall prevention program and
- Goal to increase the percentage of patients who get an appropriate fall risk assessment and fall prevention intervention
- Risk Score
 - Low risk = 0 (all peds patients are, at a minimum, a low fall risk)
 - Moderate risk = 1
 - High risk = 2 or greater
 - Patients age 2 years & younger are scored as high risk
 - Patients admitted to the ICU are scored as high risk

Don't Forget OB Patient Fall Risks

Category:	Patient Care Services
Subject:	Fall Prevention
Purpose:	To define process and procedures related to fall prevention within the Perinatal Services department.
Policy:	See entity policy and procedure
Procedure:	<p>I: Assessment, Reassessment, and Plan of Care</p> <ol style="list-style-type: none"> 1. Upon admission, complete the <u>Hendrich II</u> Fall Risk assessment 2. Make referrals to other disciplines based on pre-identified scoring parameters found on the assessment. 3. For all patients identified at risk, complete an individualized plan of care. 4. OB patients are not reassessed after the initial admission process. 5. Ensure that patients with an epidural catheter remain on <u>bedrest</u> and assist with repositioning. 6. Assist the post delivery patient to the bathroom for the first time and remain with the patient during toileting. <p>II. Patient and Family Involvement</p> <ol style="list-style-type: none"> 1. Instruct the patient regarding risk factors present during the period of administration/recovery from spinal/epidural anesthesia and post-surgical delivery.

Don't Forget Outpatients

MORSE FALL SCALE		
Item	Scale	Scoring
1. History of falling (past year)	No 0 Yes 25	_____
2. Secondary Diagnosis (any diagnosis)	No 0 Yes 15	_____
3. Ambulatory aid Bed rest/nurse assist Crutches/cane/walker Furniture	0 15 30	_____
4. IV/Heparin Lock	No 0 Yes 20	_____
5. Gait/Transferring Normal/bedrest/immobile Weak Impaired	0 10 20	_____
6. Mental Status Oriented to own ability Forgets limitations	0 15	_____
Fall Prevention interventions will be implemented according to identified risk level of patient population in individual outpatient settings (see attachment B)	TOTAL POINTS →	_____

Fall Prevention Interventions - Check as appropriate for the patient

Interventions

- Escort or offer wheelchair assistance to a patient who is at risk for falls
- Place Fall Risk ID on patient
- Identify patient's room, stretcher, chart for fall risk
- Provide adequate lighting
- Bed/stretcher in low position with brakes locked
- While on stretcher all rails are to be raised for patient safety
- If high risk, do not place patient on examination table without 1:1 attendance
- Provide non-slip footwear when transferring from bed, chair, wheelchair
- Toilet patient regularly, especially prior to procedure. Instruct patient to use emergency call bell in restroom and keep path to bathroom clear
- While in recovery area - patient to be visible and not left alone
- All moderate sedation patients must be monitored according to hospital policy
- Review patient medications and correlate to pharmacy list for medications that place a patient at risk for falls. Educate patient if on medications that increase risk for falls.
- Provide patient/family with pamphlet on fall safety.

Don't Forget Clinic Patients

AMBULATORY CLINIC FALL RISK ASSESSMENT

This document is to be completed by the MST at the time of patient check-in to the clinic.

Patient Name		MR#	
Date of Visit		Clinic	

1	Are you feeling weak, dizzy, or lightheaded?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2	Do you ambulate with an assistive device (cane, walker or crutch(es))?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3	Do you need help standing or walking?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
4	Have you fallen within the last 90 days?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

If the patient answers "yes" to any of these questions the MST will:

1. Immediately notify a clinic nurse;
2. Place a green "Fall Risk" identification band on the patients arm
3. Place a green "Fall Risk" sticker on the front of the patient's chart.

Clinic Actions Nurse will:

Medications

- Risk is greater if patient is taking four or more types of medications
- Over the counter medication can also increase the risk of falling
- 21% of falls from recent study were involving patients taking one or more medications that influence fall rate
- Patients at risk for serious injury include those on anticoagulants (also over age 85, with prolonged steroid use, bone conditions such as osteoporosis or metastatic bone cancer)

Medications

- Half of falls due to medications like antianxiety and antipsychotics (ICSI, 2012)

Medications most frequently associated with increased risk of falling

- Serotonin-reuptake inhibitors
- Tricyclic antidepressants
- Neuroleptic agents
- Benzodiazepines
- Anticonvulsants
- Class IA antiarrhythmic medications

Medications

- Anti-hypertensives
- Diuretics
- Laxatives and patient undergoing prep for colonoscopies and other similar tests
- Nonsteroidal anti-inflammatory agents
- Psychotropics
- Sedatives and hypnotics
- Vasodilators

Fall Risk Medication Component

- One hospital added one with four risk categories of risk for medications and category 4 marked with orange sticker
- **Risk Category 1** includes anti-depressant and anti-psychotics and focuses on dosage adjustment made in past five days,
- **Risk Category 2** includes bowel prep and diuretics since these can lead to electrolyte imbalance, hypotension, and urgency related to the need to eliminate

Fall Risk Medication Component

- **Risk Category 3** included opiates, narcotics, analgesics and antihistamines since these can lead to sedation, depressed reflexes, and can effect motor coordination
- **Risk Category 4** includes Benzodiazepines and Alpha Blockers, which can be associated with sedation, dizziness, balance control, and hypotension
- Also note Beers List is medications that should not be given to the elderly as can increase the fall rate and AHRQ as a toolkit

BEERS CRITERIA

Adapted from Fick, D M, et al. Updating the Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. Archives of Internal Medicine 2003;163, DEC 8/22:2716-2724. Last updated 9/24/04.

The following medications should be avoided or used very cautiously in persons aged 65 years and over, independent of their health conditions and diagnoses.

Drug Name or Class	Comments	Severity (High or Low)
Long-acting benzodiazepines: <ul style="list-style-type: none"> • Chlordiazepoxide (alone or in combination: Librium, Librax, Limbitrol) • Diazepam (Valium) • Quazepam (Doral) • Halazepam (Paxipam) • Chlorazepate (Tramcene) • Flurazepam (Dalmare) 	These agents have very long half-lives, cause prolonged sedation and increase the risk of falls and fractures. If benzodiazepine therapy is unavoidable, use short-acting agents.	High
Short-acting benzodiazepines should rarely exceed the doses shown below. <ul style="list-style-type: none"> • Lorazepam (Ativan) 3mg • Oxazepam (Serax) 60mg • Triazolam (Halcion) 0.25mg • Alprazolam (Xanax) 2mg • Temazepam (Restoril) 1.5mg 	With rare exceptions, the agents should be used only in persons who are physically dependent or who are being treated with short-course therapy for an acute condition.	High
Meprobamate (Miltown and Equanil)	This anxiolytic is highly sedating and addictive. All use should be avoided except in individuals who are already physically dependent.	High
Barbiturates except Phenobarbital for seizures	All use should be avoided except in individuals who are physically dependent or for seizure disorder management. There are safer sedative-hypnotics available.	High
Amitriptyline (Elavil), chlordiazepoxide-amitriptyline (Limbitrol), Amitriptyline-perphenazine (Triavil), doxepin (Sinequan)	Amitriptyline and doxepin are very sedating and anticholinergic, their use should be avoided.	High
Methyldopa (Aldomet)	All use should be avoided. Methyldopa causes bradycardia and can exacerbate depression in the elderly. Safer antihypertensives are available.	High
Methyldopa-hydrochlorothiazide (Aldoril)	All use should be avoided. Safer antihypertensives are available.	Low
Reserpine at doses >0.25mg	All use should be avoided. Safer antihypertensives are available.	Low
Indomethacin (Indocin and Indocin SR)	All use should be avoided. Other NSAIDs cause CNS toxic reactions less often.	High
Chlorpropamide (Diabinese)	All use should be avoided. Other oral hypoglycemics have shorter half-lives and do not cause SIADH.	High
Propoxyphene (Darvon) and combination products (Darvocet-N, Darvon-N, Darvon with ASA)	All use should be avoided; it has little advantage over acetaminophen. Other analgesics are safer and more effective.	Low
Pentazocine (Talwin)	All use should be avoided. Other narcotics are more effective and safer.	High
Ergot Mesyloloids (Hydergine) and Cyclandelate	All use should be avoided. Have not been shown effective in the doses studied.	Low
Diphenhydramine (Benadryl)	Use only in the smallest effective dose and only for emergency treatment of allergic reactions. Causes confusion and sedation.	High

Beer's List Updated 2012!

- AHRQ has a number of other free toolkit
- One is the Beer's Criteria which is a list of medications that should not be prescribed for patients over the age of 65
- Some increase the fall risk in the elderly
- It lists the drugs or class of drugs and explains why it should not be use
- Also lists the severity such as low or high risk

Beer's List

BEERS CRITERIA

Adapted from Fick, DM, et al. Updating the Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. Archives of Internal Medicine 2003;163, DEC 8/22:2716-2724. Last updated 9/24/04.

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Short-acting benzodiazepines should rarely exceed the doses shown below. <ul style="list-style-type: none"> Lorazepam (Ativan) 3mg Oxazepam (Serax) 60mg Triazolam (Halcion) 0.25mg Alprazolam (Xanax) 2mg Temazepam (Restoril) 1.5mg 	With rare exceptions, the agents should be used only in persons who are physically dependent or who are being treated with short-course therapy for an acute condition.	High
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Diphenhydramine (Benadryl)	Use only in the smallest effective dose and only for emergency treatment of allergic reactions. Causes confusion and sedation.	High

PHARMACIST FALL RISK ASSESSMENT INSTRUMENT

Patient: _____ Date: _____
 Admission Date: _____ Doctor: _____

Circle appropriate numbers in each section

SECTION I: HISTORY OF FALLS:

SECTION I SUB-TOTAL: _____

One to two falls in a month / quarter	2	Confusion / delirium / disorientation	2
More than two falls in a month/quarter	8	Agitation / increased anxiety	2
Fall-related fracture (date): _____	5	Sensory deficits:	
Postural hypotension (orthostasis)	1	• Decreased hearing	1
Syncope/dizziness	1	• Vision	1
Unsteady or shuffling gait	2	• Aphasia	1

SECTION II: MEDICATIONS

SECTION II SUB-TOTAL: _____

Cardiac	1	NSAID	1
Antihypertensive	1	Narcotic analgesic:	
Diuretic	1	• Mild	1
Antipsychotic	2	• Moderate	2
Hypnotic	2	Anticonvulsant	1
Sedating antidepressant or antihistamine	2	Hypoglycemic	1
Benzodiazepine	2		

SECTION III: DISEASE

SECTION III SUB-TOTAL: _____

INCONTINENCE		CARDIAC		NEUROLOGIC/ PSYCHIATRIC		MUSCULOSKELETAL	
Bowel	2	Arrhythmia	1	Dementia	1	Arthritis	1
Bladder	2	CHF	1	Parkinsonism	1	Casts / Splints / Slings	1
				Seizures	1	Prosthesis	1
				Stroke	1		

Risk Scores: Minimal 0-3 Moderate 4-7 High risk 8 or more

*TOTAL SCORE: _____

Causes of Falls

- Falls can be classified in a number of ways
- Can be based on environmental or physiological
- One approach used by Janet Morse is to classify as
 - **Accidental, unanticipated physiologic, or anticipated physiologic**
- Prevention depends on the type of fall

Morse - 3 Classifications of Falls

- **Accidental** – a fall can occur in a low risk patient due to an environmental hazard such as the patient slipping or tripping, such as water on the floor so to prevent reduce environmental hazard (14%)
- **Anticipated physiological**- falls by persons considered to be at risk for falling (8%)
 - The patients have some risk factors for falling such as abnormal gait, frequent toileting needs, high risk medications, etc.
 - Close supervision and attempt to address risk factors
- **Unanticipated physiological** - falls attributed to physiological factors that can not be predicted before the first fall (78%)
 - Such as a stroke, seizure, or syncopal episode so need appropriate post fall care

Intrinsic vs. Extrinsic Factors

- Generally accepted that falls are caused by multiple factors
- Another classification scheme is that falls result from complex interaction of extrinsic and/or intrinsic factors
- **Intrinsic** is related to patient's physical, mental and cognitive condition
- **Extrinsic** is related to the environment

Source: Tideiksaar, 1998

CDC Risk Factor Chart

Risk Factors For Falls



Research has identified many risk factors that contribute to falling—some of these are modifiable.

Most falls are caused by the interaction of multiple risk factors. The more risk factors a person has, the greater their chances of falling. Healthcare providers can lower a person's risk by reducing or minimizing that individual's risk factors.

To prevent falls, providers should focus **FIRST** on these modifiable risk factors:

- Lower body weakness
- Difficulties with gait and balance
- Use of psychoactive medications
- Postural dizziness
- Poor vision
- Problems with feet and/or shoes
- Home hazards

Fall risk factors are categorized as intrinsic or extrinsic.

Intrinsic	Extrinsic
Advanced age	Lack of stair handrails
Previous falls	Poor stair design
Muscle weakness	Lack of bathroom grab bars
Gait & balance problems	Dim lighting or glare
Poor vision	Obstacles & tripping hazards
Postural hypotension	Slippery or uneven surfaces
Chronic conditions including arthritis, diabetes, stroke, Parkinson's, incontinence, dementia	Psychoactive medications
Fear of falling	Improper use of assistive device

www.cdc.gov/homeandrecreational/safety/Falls/steady/index.html#download

Intrinsic Risk Factors

These are integral to patient's system and many are associated with age-related changes

- **Previous fall** - studies have cited a history of falls as a significant factor associated with patients being more likely to fall again
- **Reduced vision or visual acuity** – vision affected by, for example, a decline in visual acuity, decreased night vision, altered depth perception, decline in peripheral vision, or glare intolerance
- **Unsteady gait** - manner and style of walking

Intrinsic Risk Factors

- Mental status – status affected by confusion, disorientation, inability to understand, and impaired memory, dementia, depression, poor impulse control, inability to perceive depth
- Having had a stroke in the past with sustained neurological impairment
- Low physical activity, being given a laxative or psychotropic drug, or sedative
- Acute illnesses – rapid onset of symptoms associated with seizures, stroke, orthostatic hypotension, and febrile conditions

Intrinsic Risk Factors

- Chronic illnesses - conditions such as arthritis, cataracts, glaucoma, dementia, diabetes and Parkinsonism
- Postural or orthostatic hypotension
- Incontinence or urinary frequency or urgency
- Use of four or more prescriptions
- Belief that asking for help is inappropriate- call before you fall campaign and age
- Fear of falling that increases the fall rate after increased mobility

Extrinsic Risk Factors

External to the system and relating to physical environment

- **Medications** - those that affect the central nervous system, such as sedatives and tranquilizers, benzodiazepines, and the number of administered drugs (some consider intrinsic)
- **Bathtubs and toilets** – equipment without support, such as grab bars, toilets in low position
- **Design of furnishings** – height of chairs and beds, bed in high position, table or beds that are on wheels and have sharp edges

Extrinsic Risk Factors

- **Condition of ground surfaces-floor** coverings with loose or thick-pile carpeting or throw rug, sliding rugs, upended linoleum or tile flooring, highly polished or wet floors
- **Poor illumination conditions** - intensity or glare issues and monochromatic color schemes or colors that agitate
- Distracting noise and prolonged length of stay
- Use of restraints

Extrinsic Risk Factors

- Poor staff training
- **Not answering call lights promptly**
- Attached to equipment like monitor or IV or oxygen tubing
- Time of day (more falls at night)
- ECT therapy in behavioral health
- Being physically challenged in rehab

Environment Assessment to Prevent Falls

Item #	<u>Environmental Consideration</u>	Yes	No	N/A	Room # / area deficiencies found	Comments
<u>PATIENT ROOM</u>						
1	Is there adequate lighting in the patient's room? (Bright light – no burned out bulbs?)					
2	Is the nightlight on the patient's bed functional / operating?					
3	Does the patient have an unobstructed path to the bathroom?					
4	Are patient room furnishings safely arranged?					
5	Is bedside furniture free of sharp edges?					
6	Is the bedside furniture sturdy?					
7	Are beds /stretchers kept at lowest setting whenever possible?					
8	Are beds/ stretchers kept in locked position?					
9	Were the upper siderails in the up position for patient to reach controls?					
10	Was the bedcheck system on in the patient's room?					
11	Were the patient's personal belongings / telephone call bell within reach?					
12	Are handrails provided in patient bathroom and properly secured?					
13	Emergency call button / cord in patient care bathroom present and works properly?					
14	Are nonslip surfaces provided in patient showers?					
15	Are the door openings into the patient bathroom wide enough for an assistive device to fit through?					
16	Are door openings flush with the floor for ease of movement for patient equipment?					
<u>EQUIPMENT</u>						
17	Portable equipment pushed by patient (i.e. IV pole) sturdy and in good repair?					
18	Are bedside commodes available on the unit and have proper rubber slip tips on the legs?					
19	Do walkers / canes / crutches have the appropriate slip tips?					
20	Are wheelchairs locked when stationary?					
21	Is broken equipment properly tagged for non-use?					

Environment Assessment to Prevent Falls

OTHER ENVIRONMENTAL CONSIDERATIONS						
22	Are floor surfaces/carpeting free of cracks and tripping hazards?					
23	Are hallways kept adequately clear / clutter free to allow patient ambulation?					
24	Are floors properly marked when wet to avoid slipping or spill cleaned up immediately?					
25	Do parking lots have uneven pavement / potholes / tripping hazards?					
26	Do sidewalks have uneven pavement / tripping hazards?					
27	Entrance areas free and clear?					
28	Parking areas / entrances well – lit?					
29	Parking lots well marked?					

Interventions Universal Fall Precautions

Identify steps and interventions to prevent falls in light of the intrinsic and extrinsic factors and the score on the risk assessment:

- Bed in low position
- Toileting and continence programs
 - Elevated toilet seats
- An appropriate armchair with wheels locked at the patient's bedside
 - Cameron ID, Murray GR, Gillespie LD, et al. Interventions for preventing falls in older people in nursing care facilities and hospitals. Cochrane Database of Systematic Reviews 2010, Issue 1. Art. No.: CD005465.

Interventions Universal Fall Precautions

- Comprehensive patient assessment and environmental assessment
- Assess for low BMI, osteoporosis, vitamin D deficiency and anti-platelet therapy since evidence based practice recommendations
- Ensure that the pathway to the restroom is free of obstacles and properly lighted
- Sturdy handrails in patient bathrooms
- Ensure the hallways are clear of obstacles
 - Top TJC Problematic Standard

Interventions Universal Fall Precautions

- Bathroom close to bed or bedside commode
 - Do not leave patient unattended in bathroom
- Medication review
 - Reconciliation of medication should also be done
 - Treat underlying disorders such as syncope, diabetes and anemia
- Increase mobility and get patients moving
- Instruct the patient or resident to request assistance as needed - call before you fall
- Safe handling practices

Interventions

- Answer call lights promptly and one hour rounds during day and evening on high risk patients
 - Use teach back regarding call light use
 - Have patient demonstrate call light
- Instruct the patient to wear non-skid footwear
- Place assistive devices such as walkers and canes within a patient's or resident's reach
- Evaluate chair and bed height, lower bedrails
- Validate instrument that assesses for risk injury
- Reassess at regular intervals

Interventions

- Consider peak effect for prescribed medications that affect level of consciousness, gait and elimination when planning patient care
- Reduce use of **restraints**
- Observe environment for potentially unsafe conditions, such as loose carpeting and water on the floor. Do not over wax. Notify appropriate department(s) of hazardous conditions
- Use alarm devices
- Monitor and treat calcium and Vit D deficiencies for long term care patients

Interventions

- Do not leave “at risk” patients or residents unattended in diagnostic or treatment areas such as x-ray
- Ensure patients or residents being transported by stretcher/bed have all side-rails in the up position during transport and while awaiting test
- Reduce bedrail hazards
- Use floor mats
- Keep patient’s personal items within reach at all times
- Transfer belts should be available
- Assess need for 1:1 monitoring

Plan of Care

- Interventions are also based on the actual number obtained on the risk assessment tool
- Morse scale, Hendrich II, Tinetti, Schmidt , Johns Hopkins, STRATIFY, Edmonson-Psychiatric, Downton, Mahc Home Health, Innes, or other evidenced based scales
- Recent history of falls (category) and indicator is fallen past 3 months gives you 7 points
- North America Nursing Diagnosis Association nursing diagnosis guideline on “risk for falls”

Plan of Care Based on Total Score

- Poor mobility/generalized weakness (category) and indicator is difficulty rising from chair unassisted, unsteady gait, use of assistive devices, needs assistance, imbalance gives you 4 points
- Altered elimination and indicator is incontinence, frequency, nocturia, diarrhea, needs assist toileting, gives you 3 points
- Confusion/disorientation and indicator is poor judgment, lack of safety awareness, not able to follow instructions and memory problems gives you a score of 3

Plan of Care

- Dizziness/vertigo/syncope and indicator is related medications, blood/volume loss, vital signs INR, orthostatic changes, dizzy with position change gives you score of 3 points
- Medications and indicator is psychotropics, antihistamine, benzodiazepines, antidepressants, cardiac-hypertensive meds, diuretics, laxatives, multiple meds, sleep aides gives you a 3 points

Plan of Care

- Poor judgment (if not confused) and indicator is lacks safety awareness, needs assistance but reports independence gives you score of 3 points
- Eye sight and indicator is decreased vision, nonuse of optical devices gives score of 2
- Age and indicator is over 65 years of age and gives you score of 1

FALL RISK ASSESSMENT

INSTRUCTIONS: Assess the resident status in the eight clinical condition parameters listed below (A-H) by assigning the corresponding score which best describes the resident in the appropriate assessment column. Add the column of numbers to obtain the Total Score. If the total score is 10 or greater, the resident may be considered at HIGH RISK for potential falls. An intervention protocol should be initiated immediately and documented on the care plan.

PARAMETER	SCORE	RESIDENT STATUS/CONDITION	1	2	3	4
A Level of Consciousness/ Mental Status	0	ALERT—(oriented x 3) or COMATOSE				
	2	DISORIENTED x 3 at all times				
	4	INTERMITTENT CONFUSION				
B History of Falls (past 3 months)	0	NO FALLS in past 3 months				
	2	1-2 FALLS in past 3 months				
	4	3 OR MORE FALLS in past 3 months				
C Ambulatory Elimination Status	0	AMBULATORY / CONTINENT				
	2	CHAIR BOUND—may require restraints/assistance with elimination				
	4	AMBULATORY / INCONTINENT				
D Vision Status	0	ADEQUATE (with or without glasses)				
	2	POOR (with or without glasses)				
	4	LEGALLY BLIND				
E Gait / Balance If total is greater than 1 — refer to Rehab Department for screening.	To assess the resident's Gait/Balance, have him/her stand on both feet without holding onto anything; walk straight forward; walk through a doorway; make a turn.					
	0	GAIT/BALANCE normal				
	1	Balance problem while standing				
	1	Balance problem while walking				
	1	Decreased muscular coordination				
	1	Change in gait pattern when walking through doorway				
	1	Jerking or unstable when making turns				
	1	Requires use of assistive devices (i.e., cane, w/c, walker, furniture)				
F Systolic Blood Pressure	0	NO NOTED DROP between lying and standing				
	2	Drop LESS THAN 20mm Hg between lying and standing				
	4	Drop MORE THAN 20mm Hg between lying and standing				
G Medications If total is greater than 2 — refer to Physician or Pharmacy Consultant for assessment.	Respond below based on the following types of medications: Anesthetics, Antihistamines, Antihypertensives, Antisetzure, Benzodiazepines, Cathartics, Diuretics, Hypoglycemics, Narcotics, Psychotropics, Sedatives/Hypnotics.					
	0	NONE of these medications taken currently or within last 7 days				
	2	TAKES 1-2 of these medications currently and/or within last 7 days				
	4	TAKES 3-4 of these medications currently and/or within last 7 days				
H Predisposing Diseases	Respond below based on the following predisposing conditions: Hypotension, Vertigo, CVA, Parkinson's Disease, Loss of Limb(s), Seizures, Arthritis, Osteoporosis, Fractures.					
	0	NONE PRESENT				
	2	1-2 PRESENT				
	4	3 OR MORE PRESENT				
*NOTE: Total score above 10 may represent HIGH RISK			TOTAL SCORES			

Assessment	SIGNATURE / TITLE	DATE	Assessment	SIGNATURE / TITLE	DATE
1.		__/__/__	3.		__/__/__
2.		__/__/__	4.		__/__/__

RESIDENT NAME: Last _____ First _____ Middle Int. _____ Chart # : _____



Level 1 Score 0-3

- Intervention is based on score
- All patients get level one
- Orient to environment and patient items, call light within reach
- Bed low and locked
- Night light evening and night shift
- Non-slip footwear, use of visual / hearing devices,
- Safest rail position for mobility (**3** or less rails up)
- Room, floor free of obstacles and educate pt /family related fall risk factors/ prevention strategy

Level 2 Score 4-7

- Patients get everything in level 1 plus the following
- Fall Precaution ID band, magnet, red or yellow socks, different colored gown, and on Kardex
- Toilet before bedtime & q 4 hr while awake
 - Do not leave unattended in bathroom.
Bedside commode prn
- Observe Q 2 hr day for care needs/ obstacles
- Observe for orthostatic symptoms with activity
- Increase daytime activity to increase rest at night

Level 2 Score 4-7

- Communicate fall risk in report & when sending to other departments
- Cannot be unattended when transported
- Use gait belt and assist devices as appropriate
- PT/OT screen with new onset of poor mobility
- Transport on cart to procedures (to facilitate transfers)

Level 3 Score 8 or More

- Get everything in level 1 and 2 plus the following
- Observe every 1 hr for care needs/obstacles
- Relocate for improved visibility
- Supervise patient when toileting, ambulating or transferring
- Obtain high-low bed and keep in low position when unattended
 - See safe room set up
- Encourage family to stay with patient or sitter
- Bed or chair alarm

Bed controls at fingertips

Bed alarm

Bedside commode placed along-side bed (replaces urinal)

Non-skid floor

Room illuminated at all times



Bed trapeze

Falls prevention poster

Non-exit side rails up for support

Exit side head rail up for support and foot rail down at all times.

Movable hand rail (Hemi-walker) always within reach

Non-slip floor mat absorbs fluids, food, & stool, and prevents slips

Ambulatory Outpatient Fall Assessment

Variable	0	1	2	2
Age	18-30	31-60	61-75	>75
History of Falls	No history	> 6 months	1-6 months ago	Within 1 month
Mental Status	Alert & Oriented x 3, follows instructions	Oriented to person/place	Oriented to person only, Short Term Memory loss	Disoriented, unable to follow instructions

Ambulatory Outpatient Fall Assessment

9 or more points patient at risk of fall

Physical Mobility	No physical impairment, no assistive devices to ambulate	Use assistive device and/or able to ambulate	Assist of 2 or more to ambulate	Unable to ambulate
Communication/ Sensory Impairment (vision, hearing, speech, neuropathy, language barrier)	No deficits	1 deficit with correction	1 deficit without correction or 2 deficits with correction	3 or more deficits or onset of 1 new problem
Elimination (nocturia, frequency, urgency, diarrhea, incontinence, retention, laxative, bowel prep)	No problem	1 problem and/or Foley/ostomy	2 problems or removal of Foley within 24 hours	3 or more problems or onset of 1 new problem

Get Up and Go Test

Get Up and Go Test

www.gericareonline.net/tools/eng/falls/

The “Get Up and Go Test” is an assessment that should be conducted as part of a routine evaluation when dealing with older persons. Its purpose is to detect “fallers” and to identify those who need evaluation.

The staff should be trained to perform the “Get Up and Go Test” at check-in and query those with gait or balance problems for falls.

INITIAL CHECK

All older persons who report a single fall should be observed as they:

- From a sitting position, stand without using their arms for support.
- Walk 10 feet, turn, and return to the chair.
- Sit back in the chair without using their arms for support.

Individuals who have difficulty completing the above in less than 10 seconds or demonstrate unsteadiness performing this test require further assessment.

Intervention Strategies

Intervention	Level of Risk			Area of Risk					
	High	Med	Low	Frequent Falls	Altered Elimination	Muscle Weakness	Mobility Problems	Multiple Medications	Depression
Low beds	X	X	X	X	X	X	X	X	X
Non-slip grip footwear	X	X	X	X	X	X	X	X	X
Assign patient to bed that allows patient to exit toward stronger side	X	X	X	X	X	X	X	X	X
Lock movable transfer equipment prior to transfer	X	X	X	X	X	X	X	X	X
Individualize equipment to patient needs	X	X	X	X	X	X	X	X	X

High risk fall ro om setup	X	X		X	X	X	X	X	X
Non-skid floor mat	X	X		X	X	X	X	X	X
Medication review	X	X		X	X	X	X	X	X
Exercise program	X	X		X	X	X	X	X	X
Toileting worksheet	X	X			X				
Color armband / Falling Star etc	X			X	X	X	X	X	X
Perimeter mattress	X			X	X	X	X		
Hip protectors	X			X		X	X		
Bed/chair alarms	X			X		X	X		

Stratify Risk Assessment Tool

STRATIFY Risk Assessment Tool

Answer all five questions below and count the number of “Yes” answers.

1	Did the patient present to hospital with a fall or has he or she fallen on the ward since admission (recent history of fall)?	Yes = 1	No = 0
2	Is the patient agitated ?	Yes = 1	No = 0
3	Is the patient visually impaired to the extent that everyday function is affected?	Yes = 1	No = 0
4	Is the patient in need of especially frequent toileting ?	Yes = 1	No = 0
5	Does the patient have a combined transfer and mobility score of 3 or 4? (calculate below)	Yes = 1	No = 0
	<i>Transfer score:</i> Choose one of the following options which best describes the patient’s level of capability when transferring from a bed to a chair: 0 = Unable 1 = Needs major help 2 = Needs minor help 3 = Independent		
	<i>Mobility score:</i> Choose one of the following options which best describes the patient’s level of mobility: 0 = Immobile 1 = Independent with the aid of a wheelchair 2 = Uses walking aid or help of one person 3 = Independent		
	<i>Combined score (transfer + mobility):</i> _____		
Total score from questions 1-5: _____ 0 = Low risk 1 = Moderate risk 2 or above = High risk			

Supplement Tools with Medication Risk

Medication Fall Risk Score

Point Value (Risk Level)	American Hospital Formulary Service Class	Comments
3 (High)	Analgesics,* antipsychotics, anticonvulsants, benzodiazepines [†]	Sedation, dizziness, postural disturbances, altered gait and balance, impaired cognition
2 (Medium)	Antihypertensives, cardiac drugs, antiarrhythmics, antidepressants	Induced orthostasis, impaired cerebral perfusion, poor health status
1 (Low)	Diuretics	Increased ambulation, induced orthostasis
Score \geq 6		Higher risk for fall; evaluate patient

* Includes opiates.

[†] Although not included in the original scoring system, the falls toolkit team recommends that you include non-benzodiazepine sedative-hypnotic drugs (e.g., zolpidem) in this category.

Medication Fall Risk Evaluation Tools

Use the tools below when evaluating patients found to have high medication-related risk for falls. The comments section provides information on how to evaluate the indicators.

Indicator	Comments
Medications	Beers criteria,* dose adjustment for renal function or disease state, overuse of medications, IV access
Laboratory	Therapeutic drug levels (digoxin, phenytoin), international normalized ratio, electrolytes, hemoglobin/hematocrit
Disease states	Comorbidities, hypertension, congestive heart failure, diabetes, orthopedic surgery, prior fall, dementia, other [†]
Education	Patient's ability/willingness to learn, patient's mental status

* Beers criteria are available at: American Geriatrics Society updated Beers criteria for potentially inappropriate medication use in older adults. J Am Geriatr Soc 2012;60(4):616-31.

[†] Age 65 years or older.

Hendrich II Falls Risk Model

RISK FACTOR ASSESSMENT

Points

- Confusion/disorientation 4
- Depression 2
- Altered elimination (incontinence, nocturia, frequency) 1 Dizziness/vertigo 1 Gender (male) 1
- Any anti-epileptics 2
- Any benzodiazepines 1

Hendrich II Falls Risk Model

RISK FACTOR ASSESSMENT

Points

- **GET UP** Rises in a single movement 0
- **AND** Pushes up in one attempt 1
- **GO** Multiple attempts, successful 3
- **TEST** Unable to rise without assistance 4
- Score (Document under Observation Record)

Morse Fall Scale

Morse Fall Scale

Item	Item Score	Patient Score
1. History of falling (immediate or previous)	No 0 Yes 25	_____
2. Secondary diagnosis (≥ 2 medical diagnoses in chart)	No 0 Yes 15	_____
3. Ambulatory aid None/bedrest/nurse assist Crutches/cane/walker Furniture	0 15 30	_____
4. Intravenous therapy/heparin lock	No 0 Yes 20	_____
5. Gait Normal/bedrest/wheelchair Weak* Impaired [†]	0 10 20	_____
6. Mental status Oriented to own ability Overestimates/forgets limitations	0 15	_____
Total Score [‡] : Tally the patient score and record. <25: Low risk 25-45: Moderate risk >45: High risk		_____

Sitters or Patient Safety Attendant

- Patients who are at risk for self-harm or who are impaired and unable to follow instructions may need a sitter
- A sitter may also be ordered by the physician
- Provide continuous one to one observation
- Sitter responsible for maintaining safe environment
- Many hospitals that did away with sitter programs have reinstated them

Sitters

- Hospital should have sitter policy
- 1:1 observation is required for patients in restraint and seclusion unless video/audio
- Sitters should never leave patient alone
- Work under the direction of the nurse and are often non-licensed
- Can be hospital employee with completed sitter competencies
- Note mixed results in the literature

SITTER GUIDELINES

GENERAL WORK GUIDELINES

1. The sitter reports to the charge nurse on arrival to the unit.
2. Personal Appearance Standards (2 PC 1001) are followed for sitter attire.
3. While the sitter's preference is considered when assigning breaks and lunch times, overall patient needs take precedence over individual requests. The sitter may not leave for break without Registered Nurse (RN) permission and the provision of continuous monitoring during the sitter's absence.
4. The sitter may not make or receive personal phone calls while on duty. This includes the use of personal cellular phones. In the case of an emergency, the sitter will notify the RN that he/she needs to take a break to make a telephone call and wait for someone to relieve him/her.
5. Sitters are not to sleep on duty.
6. Sitters are not permitted to eat or drink while on duty.
7. Sitter may have reading material while on duty, but it must not interfere with his/her duties to observe the patient.

PATIENT RIGHTS

1. The sitter may be present and overhear discussions related to the medical or psychiatric condition of the patient. These conversations are confidential and should not be repeated or shared with anyone.
2. The sitter does not engage in conversations with the patient regarding his/her medical or psychiatric condition or plan of care nor does he/she offer suggestions. The sitter will refer the patient to the nurse or physician to answer any questions regarding care.
3. The sitter monitors the patient's verbalizations and immediately informs the nurse if the patient expresses any idea or intention to hurt self/others or leave without physician's permission (elopement or Against Medical Advice {AMA}).

PATIENT CARE

1. Sitter observes the patient and maintains safe environment and as directed by the RN.

PATIENT CARE

1. Sitters observe the patient and maintain a safe environment, and as delegated by the RN, may provide care to the patient that does not interfere with the ability to maintain continuous visual contact.
 - a. Non-licensed nursing staff assigned as sitters may complete all aspects of ADL's for all patients in the room. This includes but is not limited to the following: vital signs, bathing, feeding, toileting, ROM and restraint protocol if appropriate.
 - b. Ancillary staff may provide care within the scope of their regular practice.
2. Sitters sit in the patient's room with an unobstructed view of the patient. Patient requests for assistance are promptly referred to the nursing staff via the call light/intercom system.
3. The sitter accompanies the patient for any clinical tests or procedures off the unit. The sitter remains within an arm's length distance of the patient unless otherwise directed by the person performing the test or procedure.
4. The sitter may be assigned to monitor two patients in the same room. The sitter positions him/herself to maintain an unobstructed view of both patients. Additional staff must be provided if patient activity (e.g., patient ambulating in the hall, patient in the restroom or patient transported off the unit) prevents the sitter from simultaneously monitoring both patients.

Patient Assessment Should be Done

- On **admission**
- When the patient's **condition changes** (after surgery, new medication regimen, change in condition like onset of confusion, sustains a stroke, return from PT, etc.)
- When a **fall** or good catch (near miss) occurs
- When **transferred** to a new unit
- More often if high risk

Toileting

- Recent studies show that up to 50% of falls are related to toileting needs
- 49% of falls involved left alone to void after being assisted to BR or BSC¹
- Regular toileting or bladder training may be especially helpful for patients/residents with cognitive impairment²

¹Hitcho, EB, Characteristics and circumstances of falls in hospital setting. J Gen Intern Med 2004 Jul;19(7); 732-9.

²McDowell J., Burgio, K, Urinary Eliminations in: Burke, MM, Walsh MB, Eds, Gerontology Nursing:Case of the frail elderly. Missouri: Mosby 1992, 312-331.

See Meade, 2006; Quigley, 2008; Tzeng, 2009; Can reduce falls by 60%

Toileting Worksheet

Example Toileting Worksheet |



Patient Name:

Wednesday	Before Brkfst 6am	After Brkfst 9am	After Lunch 1pm	After Dinner 6pm	Bed Time 8pm	11:30pm	Comments
Outcome / Results							
Staff Initials							
Thursday	Before Brkfst 6am	After Brkfst 9am	After Lunch 1pm	After Dinner 6pm	Bed Time 8pm	11:30pm	Comments
Outcome / Results							
Staff Initials							
Friday	Before Brkfst 6am	After Brkfst 9am	After Lunch 1pm	After Dinner 6pm	Bed Time 8pm	11:30pm	Comments
Outcome / Results							

NURSING: Fall Protocol and Algorithms

TITLE: Patient Fall Prevention & Management Protocol with Toileting Program

PURPOSE: To identify patients at risk for falls; and, to outline recommendations for the nursing management of patients at risk for falls or who have a history of falls.

LEVEL: Independent

SCOPE OF PRACTICE: An RN initiates and discontinues this protocol. All nursing staff participate in interventions. The Morse Fall Scale is completed on all inpatients on admission.

INDICATIONS /SUPPORTIVE DATA: Patient falls are a high risk, high frequency problem in health care facilities. The consequences of falls include patient injury, discomfort, increased morbidity and mortality, increased treatment expenses, quality of care concerns, and (professional) liability. The potential for decreasing the number and severity of falls, decreasing costs, and increasing positive outcomes for patients is significant. This has been demonstrated by Evidenced Based Practice and by research results.

DEFINITION: A Fall is “ A loss of upright position that results in landing on floor, ground or an object of furniture or sudden uncontrolled, unintentional, non-purposeful, downward displacement of the body to the floor, stairs, etc. (VHS Patient Personal Freedom and Security, Fall Prevention and Management, Oct 2001: published by DVA, VHA National Center for Patient Safety.)

I. NURSING ASSESSMENT:

- A. The Morse Fall Scale (MFS) is used to assess all in-patients for fall risk.
- B. All Patients will be assessed on admission.

Morse Fall Scale		
Assessment	Response	Score
HISTORY OF FALLING (Acute medical/surgical and geropsychiatric fall within 3 months GEC {NHCU & Acute Psychiatry} fall within 6 months)	No	0
	Yes	25

Hourly Rounding

- Some hospitals do hourly rounding during the day and evening shift
- Found reduced number of call lights and falls
- Could answer call lights more promptly when patients needed to use to the bathroom
- Might be nurse visiting even hours and aide odd hours
- Use documentation form
- Evaluate if rounding reduced falls

Hourly Rounding Forms

Hourly Rounding Form

Purpose: The purpose of this log is for data collection on hourly patient rounding ensuring clinical accountability and keeping our patients and families informed.

Instructions: The log serves as documentation of hourly rounds. Completed logs are submitted to the Clinical Supervisor daily for review and compliance. The Manager will retain the log for 30 days.

Date: _____ Room # _____ (Do **NOT** include name)

Time Standard Time Military Time	Initials of Person Rounding	Time of Rounding Visit	Reason for Patient Unavailable	
			Sleeping	Off unit / Out of room
6 – 7 a.m. 0600 - 0700				
7 – 8 a.m. 0700 - 0800				
8 – 9 a.m. 0800 - 0900				
9 – 10 a.m. 0900 - 1000				
10 – 11 a.m. 1000 - 1100				
11 a.m. – 12 noon 1100 - 1200				
12 noon – 1 p.m. 1200 - 1300				
1 – 2 p.m. 1300 - 1400				
2 – 3 p.m. 1400 - 1500				
3 – 4 p.m. 1500 - 1600				
4 – 5 p.m. 1600 - 1700				
5 – 6 p.m. 1700 - 1800				

Frequent Rounding Research

- Lancaster AD, Ayers A, Belbot B, et al. Preventing falls and eliminating injury at Ascension Health. *The Joint Commission Journal on Quality and Patient Safety*. 2007;33(7):367-375.
- Meade CM, Bursell AL, Ketelsen L. Effects of nursing rounds: On patients' call light use, satisfaction, and safety. *American Journal of Nursing*. 2006;106(9):58-70.
- See also Weinberg J, Proske D, Szerszen A. An inpatient fall prevention initiative in a tertiary care hospital. *Jt Comm J Qual Pat Saf* 2011;37(7):317-25

Bed Alarms

- Bed exit alarms warn caregivers when patients leave or attempt to leave their beds
- The Joint Commission cited bed alarms as an effective risk reduction technique
- Also has one of the root causes of problems when they malfunction or are misused



Bed Alarms

- Many forms such as pressure-sensitive pad which can be placed under buttocks
- Cords and garment clips, patient wears alarms that are attached directly to body such as ankle
- Floor mats with sensors and bedside infrared beam detectors that are set up next to the wall or bed

Education

What You Can Do to Prevent Falls

Many falls can be prevented. By making some changes, you can lower your chances of falling.

Fall Facts

- Falls are the leading cause of injury deaths and the most common cause for nonfatal injuries.
- More than one third of adults ages 65 and older fall each year in the United States.

It makes you stronger and helps you feel better. Exercises that improve balance and coordination (like Tai Chi) are the most helpful. Lack of exercise leads to weakness and increases your chances of falling. Ask your doctor or healthcare provider about the best type of exercise program for you.

Four things YOU can do to prevent falls:

1. Begin a regular exercise program
2. Have your health care provider review your medicines
3. Have your vision checked
4. Make your home safer

1. Begin a regular exercise program

Exercise is one of the most important ways to lower your chances of falling. It makes you stronger and helps you feel better. Exercises that improve balance and coordination (like Tai Chi) are the most helpful. Lack of exercise leads to weakness and increases your chances of falling. Ask your doctor or healthcare provider about the best type of exercise program for you.



2. Have your health care provider review your medicines

Have your doctor or pharmacist review all the medicines you take, even over-the-counter medicines. As you get older, the way medicines work in your body can change. Some medicines, or combinations of medicines, can make you sleepy or dizzy and can cause you to fall.

3. Have your vision checked

Have your eyes checked by an eye doctor at least once a year. You may be wearing the wrong glasses or have a condition like glaucoma or cataracts that limits your vision. Poor vision can increase your chances of falling.

Give Patients Educational Material

Patient Handout **Falls: General Information**



Falls occur frequently and are a major cause of disability and death in senior citizens. More than one third of people over the age of 65 have at least one fall each year.

Injuries sustained in a fall may range from trivial bruises to life-threatening trauma. Head injuries and fractures of long bones (for example, hip fractures) lead the list. It is important to realize there may be a delay in the onset of the effects of head injury.

Even falls that do not lead to injury can have a negative effect on older adults. After a fall, elderly patients often voluntarily restrict their activity because they fear another fall. This reduction in exercise leads to further weakness that, in turn, increases the risk of another fall — a vicious cycle.

Who Is at Risk of Falling?

Everyone is at risk and risk for falls increases as we age. This increased risk of falling is likely the result of changes that come with aging, plus other medical conditions such as arthritis, cataracts or hip surgery.

How Can I Decrease My Risk of Falling?

Most falls occur in the home. You can make sure your home is safe by following these tips:

- Make sure that you have good lighting in your home. As your eyes age, less light reaches the back of the eyes where your vision is located. Use night-lights in your bedroom, hall, and bathroom.
- Rugs should be firmly fastened to the floor or have nonskid backing. Loose ends should be tacked down.

Patient Educational Material

Falls: General Information

General Information

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www.gericareonline.net/tools/eng/falls/

icates you are taking anticoagulant or anti-platelet medicine.

2. Carry a list of your current medication (prescribed and over-the-counter) on your person when you are out of the house. You could keep a copy of this list in your wallet or purse. Make sure this list is the same as the one you keep in your home for emergency personnel.

3. On your medication list, include the name and phone number of your healthcare provider, in case a stranger or emergency paramedic needs to call them.

4. If you require a mobility aid (such as a cane or walker) for safe transfers and/or walking, be sure to use your mobility aids as prescribed. These devices are prescribed to help you walk safely.

5. Treat all falls as serious. Call your healthcare provider and report your fall, even if you think that you were not hurt.

6. If you are on an anticoagulant, call your health care provider before taking any drug for pain to check on possible increased effect on bleeding.

For Family Members of a Person Taking Blood Thinners who has Fallen:

1. Check for injury and bleeding. **DO NOT** get the person up until you are certain there is no serious injury or bleeding.

- Are they breathing? If not, call 911 and start CPR.
- Are they bleeding? If yes, put pressure on the site of the bleeding, call 911 and inform them that the person takes an anticoagulant or anti-platelet medicine.

- Did they lose consciousness? Are they more confused? If yes, call 911. If the person is confused, talk to the them and orient them to the situation.
- Where do they hurt? Ask the person if they have pain anywhere. Look for any obvious fractures. Do **NOT** get the person up. Call 911 for help.

2. Do **NOT** attempt to lift the person by yourself. Trying to lift a person can injure both of you.

3. Reassure the person. They may be confused, frightened, and embarrassed. If possible, provide a calm environment, cover them with a blanket, and stay until help arrives.

4. Ask for details about the fall, and get as much information as possible from any witnesses.

5. Ask the person how long they have been taking blood thinners, what kind, and the last time they took their medication.

6. As soon as possible notify the person's healthcare provider about the fall. A fall can be a symptom of serious problems. Most falls can be prevented.

For more information contact:

VISN 8 Patient Safety Center
11605 N. Nebraska Ave.
Tampa, FL 33612-5738
813-558-3900

Blood Thinners: Risk Factors Associated with Falling and What to Do When You Fall



**VISN 8 Patient Safety
Center of Inquiry, Tampa, FL**

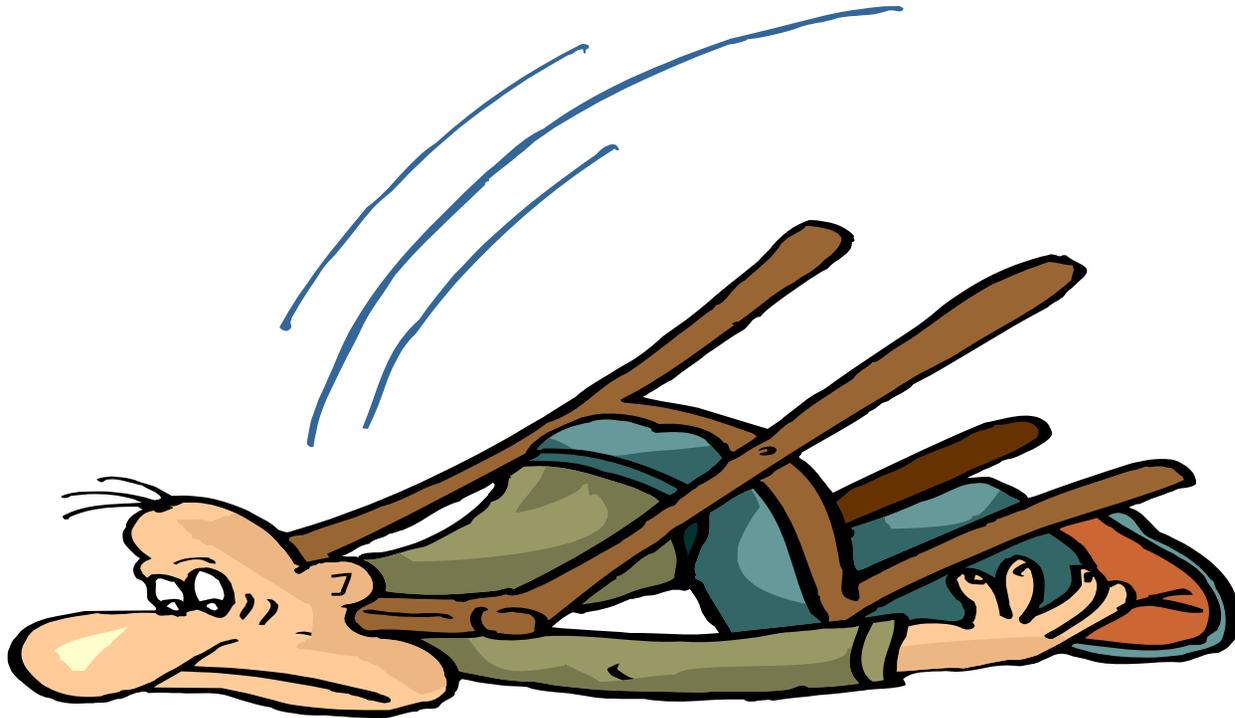
A NATIONAL VA FALLS COLLABORATIVE PROJECT

Patient Education

- **Call before You Fall!**
- Education is critical for both the patient and the family
- Give flyers in the admission packets and have in waiting room
- Give patient direct verbal information since may not read material
- Show the patient where the call cord is and location of the bathroom

Call....

Don't Fall!



Patient and Family Education

- High risk male patients should be asked to urinate from a sitting position
- Explain to patient the risks of falling from medications
- Patients can be taught to walk close to wall and lean on wall if feels they are starting to fall

Documentation

- Documentation is important
- The fall assessment performed on all patients will be documented in the medical record
- Interventions that have been implemented should also be documented
- Incident reports are completed for each fall episode

FALL INCIDENT REPORT
 (Confidential in accordance with Title 38 U.S.C. 5705)

DO NOT INCLUDE THIS FORM IN THE PATIENT'S MEDICAL RECORD



SECTION A: To be completed by clinical staff	
Location at time of fall (ward, clinic, service, etc.): _____ <input type="checkbox"/> Inpatient <input type="checkbox"/> Outpatient	
Date of fall: _____	Time of fall(military): _____
Name of Physician/ARNP/PA notified: _____	
For inpatients, Date admitted/transferred to this ward: _____	
Description of the event, including any obvious fall-related injuries (e.g., head trauma, change in ROM, pain, bruises, lacerations) and describe what was patient doing or trying to do that may have contributed to the fall:	
<input type="checkbox"/> Found on floor <input type="checkbox"/> Staff lowered patient to floor <input type="checkbox"/> Patient lowered self to floor	
Was next of kin notified? <input type="checkbox"/> Yes <input type="checkbox"/> No (If no why not?)	
Contributory Factors (check all that apply):	
Mobility: <input type="checkbox"/> Up ad lib <input type="checkbox"/> Bed rest <input type="checkbox"/> Wheelchair <input type="checkbox"/> Ambulate with wheelchair <input type="checkbox"/> Ambulate with assistance <input type="checkbox"/> Ambulate with walker <input type="checkbox"/> Restraints <input type="checkbox"/> Other _____	Cognitive & Functional factors: <input type="checkbox"/> Incontinent (circle appropriate choice(s): bowel or bladder) <input type="checkbox"/> Confused/memory impaired <input type="checkbox"/> Altered gait/balance <input type="checkbox"/> Altered ADL
Environmental/Equipment (check all that apply):	
<input type="checkbox"/> Floor wet <input type="checkbox"/> Lighting poor <input type="checkbox"/> Needed item out of reach <input type="checkbox"/> Cluttered area <input type="checkbox"/> Foot wear <input type="checkbox"/> Bed side rails (circle appropriate choice(s): all up or down 1 up (left right) top half up (left right) bottom half up (left right)) <input type="checkbox"/> Equipment faulty: <input type="checkbox"/> Shower chair/commode chair <input type="checkbox"/> Cane <input type="checkbox"/> Walker <input type="checkbox"/> Wheelchair <input type="checkbox"/> Unavailable grab bars <input type="checkbox"/> Stretcher <input type="checkbox"/> Bed <input type="checkbox"/> Other, please specify _____	
Assistive Devices:	
<input type="checkbox"/> Assistive Devices involved in fall? <input type="checkbox"/> No <input type="checkbox"/> Yes	

Documentation

Documentation in the medical record after a fall incident consists of the following:

- Patient assessment at time of discovery
- Patient response to fall
- Evidence of injury
- Description of fall (location and position of patient when found)

Documentation in the MR after a Fall

- Notification of patient's physician
- Notification of patient's family
- Any medical or nursing actions that were implemented
- If pictures were taken
- Patient assessment at time, date of discovery
- Patient response to fall (what patient said)
- Evidence of injury
- Medical or nursing action implemented

HCANJ Fall Management Guidelines

FALLS MANAGEMENT INVESTIGATION — POST FALL TOOL

Resident Name _____ Age _____ Living Quarters Room # _____

Date of fall ____/____/____ Day of week _____ Time _____ AM or PM

1. Was this fall observed? No Yes *If yes, by whom:* 1. _____
(name and title of individual)
2. Location of fall (be as exact as possible) _____
3. Was the Resident alone at the time of the fall? Yes No
4. What was the reason for the Resident to be in that location? _____
5. Was this the residents first fall? Yes No
6. Were protective or safety devises in use at the time of the fall? Yes No
7. Investigate the surroundings where the incident occurred for any evidence of the following:

- *The witness is to complete this section:*

Clue	Yes	No	Clue	Yes	No
Water spills?			Resident in a hurry? <i>If yes, explain why:</i>		
Clutter on the floor?			Resident not using cane/walker as MD ordered?		
Phone cords/TV cords lying about?			Improper footwear?		
Poor lighting?			Clothing got in the way?		
Improper bed height?			Resident using incontinent supplies at time of fall?		
Other furniture involved?			Resident became tired?		
Wheelchair unlocked?			Resident reaching for items?		
Wheelchair foot-rests in the way?			Other:		

8. Has the Residents health care status changed? Answer the following questions:

Clue	Yes	No	Clue	Yes	No
New/increase/decrease in medications?			Decrease in fluid intake?		
Weakness/fatigue?			Recent fever/cough/cold?		
Dizziness?			Changes in diagnosis status?		
Changes in blood pressure?			Changes in mental status?		
Recent return from hospital?			Changes in behaviors?		

Medical Center – Post-Fall Investigation Form

Fall: Unplanned descent to the floor

Minor harm: results in application of dressing or ice, elevation of limb, topical medication

Moderate harm: results in suturing, steri-strips, fracture or splinting

Major harm: surgery, casting, traction

Death: (as a result of the fall)

(National Quality Forum)

Patient/Resident/Client Name: _____
MRN: _____ Date of Fall: _____ Time of Fall: _____
Location of Fall (specifically): _____
What was the person trying to do? _____
Was this the first fall? _____ Last fall date: _____ Was the person being assisted? _____
Admission date: _____ Risk Score on Admit: _____ Latest Risk Score: _____
Was this person accurately scored at the time of the fall? _____ Other information: _____

Hospital/Nursing Home: (Y/N or NA)

- Bed/Chair/Tab Alarm activated? _____
- Was Call Light on? _____
- Lights: Off/On? _____
- Pt/Resident Restrained _____
- Walker/Cane/W-chair _____
- Wet Floor _____
- Furniture in the way _____
- Other factor: _____

Home Health Clients: (Y/N or NA)

- Life Line activated? _____
- Was client supervised? _____
- Lights: Off/On? _____
- Walker/Cane/W-chair? _____
- Wet Floor? _____
- Furniture in the way? _____
- Other factors?; _____

Current Diagnosis/Condition Information (check all that apply):

POST FALL ASSESSMENT				
Admitting Diagnosis:				
<input type="checkbox"/> CVA <input type="checkbox"/> TBI <input type="checkbox"/> Ortho <input type="checkbox"/> Other _____				
Fall occurred on _____ (date) at _____ (time). Patient last checked at _____ (time).				
	Yes	No	N/A	Comments
History of previous falls? (Within the past 3 months)				
Any medical conditions that predispose to falls or <u>underlying</u> medical conditions that increase injury risk from falls?				
Was the patient identified as a fall risk?				
Were the precautions in place?				
If this was a transfer, was a gait belt in use?				
Was the patient wearing proper footwear?				
Were the brakes locked on the bed/wheelchair/stretchers?				
Personal items within reach?				
Call light used?				
Environment free of clutter?				
Patient receiving any of these categories of medications?				
<input type="checkbox"/> Anticoagulants <input type="checkbox"/> Anti-psychotics <input type="checkbox"/> <u>Antihypertensives</u> <input type="checkbox"/> Diuretics <input type="checkbox"/> Narcotics <input type="checkbox"/> Laxatives <input type="checkbox"/> >5 Routine Medications <input type="checkbox"/> Other (i.e. Antidepressants, Vasodilators)				
Recent change in medication?				
Change in mobility, standing, sitting balance or activity tolerance?				
Change in bowel and bladder continence status?				
Any visual and auditory impairment?				
Any changes in cognition, judgment, memory, safety awareness, decision-making capacity?				
INTERVENTIONS (mark the new interventions)				
	Fall armband applied to patient's wrist			PT/OT consultation
	Reviewed medication therapy with Pharmacist			Modification of environmental factors
	Increase patient observation/monitoring			<u>Assistive</u> device in place

Document

- Skin - any lacerations, abrasions, skin tears, hematoma
- ROM - can the patient move arms and legs
- Environment - did the fall occur at the bedside, in bathroom, activity engaged in, wet floor, broken glass, etc.

Post Fall Assessment

- If high risk patient on **anticoagulants** experiences a fall in hospital, is referral for a PT screening needed to assess mobility?
 - Since at high risk for injury, Coumadin, Heparin drip, Plavix, Lovenox, Integra, Low weight heparin, Xarelto, Eliquis, Pradaxa. Savaysa, Arixtra, etc.)
- If patient on **psychotropic medication** falls in hospital, is referral to clinical pharmacist needed for medication review? (Antidepressants: Elavil, Norpramin, or Antipsychotic : Risperdal, Haldol, Geodon, Zyprexa, or Seroquel)

Post Fall Assessment

- Review fall prevention interventions and modify plan of care
- Should now institute high risk interventions if not already implemented
- Communicate to all shifts in report that patient has fallen and is high risk to fall again¹
- Physician checklist for assessing fall risk or performing post fall evaluation²

¹King D., Dickerson L. (2003) “Anticoagulant Use in Patient with Risk of Falling”, American Academy of Family Physicians, 8 (67);1-2.

²<http://www.cpgnews.org/FF/tools.cfm>

TABLE 3

Checklist for Assessing Fall Risk or Performing a Post-Fall Evaluation

	Assessing Fall Risk	Performing a Post-Fall Evaluation
Fall history	<ul style="list-style-type: none"> Review patient's history of falls. 	<ul style="list-style-type: none"> Review patient's history of recent or recurrent falls.
Medications	<ul style="list-style-type: none"> Review patient's record for medications or combinations of medications that could predispose to falls. Stop or reduce the dosage of as many of these medications as possible. 	<ul style="list-style-type: none"> Review patient's record for medications or combinations of medications that could predispose to falls. Stop or reduce the dosage of as many of these medications as possible. Review patient's record for recent changes in the medication regimen that may have increased fall risk.
Underlying conditions	<ul style="list-style-type: none"> Assess patient for underlying medical conditions that may predispose to falls, including conditions that affect balance or cause dizziness or vertigo. Assess heart rate and rhythm, postural pulse and blood pressure. Assess patient for orthostatic hypotension and conditions predisposing to it. Assess for underlying medical conditions that may increase the risk of injury from falls. 	<ul style="list-style-type: none"> Review status of medical conditions that predispose to falls or that could increase the risk of injury from falls. Assess patient for orthostatic hypotension and manage predisposing conditions.
Functional status	<ul style="list-style-type: none"> Assess level of mobility. Assess gait and standing / sitting balance. Assess lower extremity joint function. Assess ability to use ambulatory assistive devices (e.g., cane, walker). Review appropriateness and safety of any current restraints. Review activity tolerance. Assess for deconditioning. Review bowel and bladder continence status. 	<ul style="list-style-type: none"> Reassess patient for significant changes in gait, mobility and standing / sitting balance, and lower extremity joint function. Reassess use of ambulatory assistive devices (e.g., cane, walker) and modify as indicated. Review appropriateness and safety of any current restraints. Assess for significant changes in activity tolerance. Review bowel and bladder continence status. Assess whether patient's footwear may have contributed to fall.
Neurological status	<ul style="list-style-type: none"> Assess patient for conditions that impair vision (e.g., cataracts, glaucoma, macular degeneration). Assess for sensory deficits, including peripheral neuropathies. Assess muscle strength, lower extremity peripheral nerves, proprioception, reflexes, motor and cerebellar function. 	<ul style="list-style-type: none"> Reassess visual and auditory impairments. Assess new or progressive neurological impairments.
Psychological factors	<ul style="list-style-type: none"> Review for impaired cognition, judgment, memory, safety awareness, and decision-making capacity. 	<ul style="list-style-type: none"> Reassess as indicated for significant changes in cognition, safety awareness, and decision-making capacity.
Environmental factors	<ul style="list-style-type: none"> Assess presence of environmental factors that could cause or contribute to falls. Assess whether patient's footwear may be contributing to fall risk. 	<ul style="list-style-type: none"> Review and modify environmental factors that could have caused or contributed to fall.

Post Fall Management

- Immediate assessment is performed by licensed healthcare provider
- If life threatening can call code team or rapid response team
- Seek appropriate assistance and equipment to get the patient off the floor
- Diabetics may want to check glucose
- Assess and document if patient denies striking head and there is not visible head trauma

Post Fall Management

- Observe for 24 hours with VS and neuro checks every four hours, observe for restrictions in mobility and notify physician
- Determine in policy how often vital signs are to be done
 - Q 30 minutes X4, Q 1 hours x4, Q 4 hours X24 post fall
- Can differ depending on extent of injury or fall

Post Fall Management

Minor Head Trauma-(No loss of consciousness or change in mental status. Example: headache, small laceration/contusion):

- Follow interventions listed above
- Perform neuro-checks every two hours for the first 12 hours, and every 4 hours for the following 24 hours
- Notify physician of fall and any assessment findings and charge nurse/manager
- Specifically make physician aware if patient is on **anticoagulant therapy**

Vital Signs	BP sit _____	BP standing _____	P___	T___	Wt. ___lb	Ht. ___in
Eyes Pupils Fundus Vision	<input type="checkbox"/> nl conjunctiva & lids <input type="checkbox"/> pupils symmetrical, reactive <input type="checkbox"/> nl discs & pos elements <input type="checkbox"/> acuity and gross fields intact		Feet Nails Footwear		<input type="checkbox"/> no deformity, lesions, tenderness <input type="checkbox"/> no clubbing, cyanosis <input type="checkbox"/> supportive, safe, well-fitting	
ENT-External Otoscope Hearing Intranasal Ant. Oral Oropharynx	<input type="checkbox"/> no scars, lesions, masses <input type="checkbox"/> nl canals & tympanic membranes <input type="checkbox"/> nl to _____ <input type="checkbox"/> nl mucosa, septum, turbinate <input type="checkbox"/> nl lips, teeth, gums <input type="checkbox"/> nl tongue, palate, pharynx		Neurologic Check nl, circ abn	ROM	Strength	Tones
Neck palp. Thyroid	<input type="checkbox"/> symmetrical without masses <input type="checkbox"/> no enlargement or tenderness		Upper extrem Lower extrem	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Resp. effort Chest percuss. Chest palp. Auscultation	<input type="checkbox"/> nl without retractions <input type="checkbox"/> no dullness or hyperresonance <input type="checkbox"/> no fremitus <input type="checkbox"/> nl bilateral breath sounds w/o rales		Mental status Cranial nerves Coordination DTRs Sensation Orientation Tandem walk One leg balance	<input type="checkbox"/> nl alertness, attentive <input type="checkbox"/> w/o gross deficit <input type="checkbox"/> nl rapid alternating movement <input type="checkbox"/> symmetrical, ___ (scale: 0-4+) <input type="checkbox"/> nl touch, proprioception <input type="checkbox"/> nl to m/d/day/yr, time <input type="checkbox"/> able, steady <input type="checkbox"/> 30 sec eyes open		
Heart palp. Cardiac ausc. Carotids Pedal pulses	<input type="checkbox"/> nl location, size <input type="checkbox"/> no murmur, gallop, or rub <input type="checkbox"/> nl intensity w/o bruit <input type="checkbox"/> nl posterior tibial & dorsalis pedis		Psychiatric Mood Memory Thought process	<input type="checkbox"/> nl good eye contact, appropriate <input type="checkbox"/> nl short term and long term memory <input type="checkbox"/> nl no delusions, phobias, hallucinations		
Abdomen L/S Hernia Anus/rectal Breasts	<input type="checkbox"/> no masses or tenderness <input type="checkbox"/> no liver/spleen <input type="checkbox"/> no hernia identified <input type="checkbox"/> no abnormality or masses <input type="checkbox"/> nl inspection & palpation		Get up and Go Test (circle abnormal, check normal) Sitting balance Arise w/arms folded Standing balance Eyes closed Nudge Gait initiation Step length/ht Step symmetry Pattern Path Stance	<input type="checkbox"/> steady, safe when upright <input type="checkbox"/> able <input type="checkbox"/> steady in narrow stance <input type="checkbox"/> remains steady <input type="checkbox"/> recovers w/o difficulty <input type="checkbox"/> no hesitancy <input type="checkbox"/> each foot passes stance, clears floor well <input type="checkbox"/> step lengths equal, regular <input type="checkbox"/> continuous, regular steps <input type="checkbox"/> straight w/o walking aide <input type="checkbox"/> stance with heels together		

Fall Incident Report

- Know your facility's P&P on incident report process
- Include: date, time
- Location or place of fall
- Date of admission to the unit
- Description of the fall
- If pictures were taken
- Intrinsic and extrinsic factors
- If assessment was done as per policy

Fall Incident Report

- Previously implemented strategies
- Equipment in use at the time of the fall (cane, stretcher, bed, walker, WC, unavailable grab bars)
- Factors that contributed to fall (floor wet, lighting poor)
- New intervention and revision of plan of care

Preventing Falls in Older Patients

- One third of Americans over 65 fall each year
- 10-20% have moderate to severe injuries
- Guideline updated 2010 and 2011 from American Geriatric Society (AGS)
- Looked at new evidence available
- Ask if has fallen in past year, frequency, and if experiences difficulty walking or with balance (unsteady when they walk)
- If risk of falling then need assessment of home and interventions to eliminate fall risk factors
- Updates guidelines from American Academy of Orthopedic Surgeons published in 2001 and endorsed by many organizations (ACEP, AMA, AOTA (American Occupational Therapy Association), American PT Association)

Preventing Falls in Older Patients

- All healthcare practices for older adults should include:
 - Falls screening and preventions
 - Assessment of feet and foot wear
 - Fear of falling
 - Ability to carry out daily activities
- All interventions include an exercise component including starting tai chi and reducing medications
- Those with recurrent falls or gait problems undergo comprehensive fall risk assessment
- *Journal of the American Geriatrics Society*, Jan. 13, 2011

Recommendations

- Daily Vitamin D supplement (800 IU)
- Boosting low blood pressure and manage heart rate abnormalities
- Cataract surgery should be performed when needed
- Medication reduction or withdrawal is recommended especially for sedatives, antidepressants, and drugs affecting the CNS
- Environmental adaptation by healthcare professional to reduce factors in the home etc.

Vitamin D May Help Prevent Falls 2014

medscape medical news

Geriatrics Society Guidelines: Vitamin D May Prevent Falls

Laurie Barclay, MD

January 10, 2014

3 comments



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EDITORS' RECOMMENDATIONS



High Vitamin D Doses Lower Fracture Risk for Most Vulnerable



Fall Protection Guidelines From USPSTF Highlight Vitamin D

High-Dose Vitamin D Supplement May Reduce Risk of Falling Among Older People

DRUG & REFERENCE INFORMATION

Vitamin D Deficiency and Related Disorders

Hypophosphatemia

Vitamin D3 1,25-Dihydroxyvitamin D

Older patients should receive sufficient vitamin D intake from all sources to lower their risk for falls and fractures, according to a new consensus statement [published online](#) December 18 in the *Journal of the American Geriatrics Society*. Dietary sources, sunlight, and supplements can all contribute to vitamin D levels of around 30 ng/mL (75 nmol/L), which appears to protect against fall-related injuries.

"In studies that achieved average serum levels greater than 25 ng/mL, falls and fracture rates were significantly reduced," James Judge, MD, chair of the American Geriatrics Society's (AGS's) Consensus Statement on Vitamin D Supplementation for Older Adults Work Group, told *Medscape Medical News*. "The impact on fractures is most likely due to the reduction in falls. In older adults, the impact of vitamin D on bone density is very small, while the impact on falls is measurable."

The consensus statement targets primary healthcare providers, aiming to help them ensure that community-dwelling and institutionalized older adults receive adequate vitamin D from all available sources. In addition to incorporating evidence from recent high-quality research, the statement is based on input from several medical organizations.

News newsletter...

SORT: KEY RECOMMENDATIONS FOR PRACTICE

www.aafp.org/afp/2011/1201/p1267.html

<i>Clinical recommendation</i>	<i>Evidence rating</i>	<i>References</i>
Community-dwelling older persons at risk of falls should receive multifactorial risk assessment and interventions tailored to their needs.	A	<u>18,20</u>
Nursing home residents at risk of falls should receive multifactorial risk assessment and interventions administered by a multidisciplinary team.	B	<u>18,23</u>
Older persons at risk of falls who have been hospitalized for an extended time in a subacute setting should receive multifactorial risk assessment and interventions tailored to their needs.	B	<u>23</u>
The following components should be included in multifactorial interventions for falls:		<u>18,20</u>
<ul style="list-style-type: none"> • Exercise, particularly balance, strength, and gait training 	A	
<ul style="list-style-type: none"> • Adaptation or modification of home environment for older adults who have fallen or who have visual impairment 	B	
<ul style="list-style-type: none"> • Withdrawal or minimization of psychoactive medications 	B	
<ul style="list-style-type: none"> • Withdrawal or minimization of other medications 	B	
<ul style="list-style-type: none"> • Management of postural hypotension 	B	
<ul style="list-style-type: none"> • Management of foot problems and footwear 	B	
The health care professional or team conducting the fall risk assessment should directly implement the interventions or should ensure that other qualified health care professionals carry out the interventions.	C	<u>1,18</u>
All older persons with proven vitamin D deficiency living in the community	A	<u>18,20,23,37</u>

Preventing Falls



- The most effective trials for preventing falls in older people looked at multiple interventions rather than just one; previous studies have indicated that it is more effective to focus on one intervention, but because we looked at not only what recommendations were given, but also which carried out, we're confident that multifactorial interventions is the best course of action”
- Dr Mary Tinetti Yale U. School of Medicine

Physician Office

www.americangeriatrics.org/education/summ_of_rec.shtml

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AGS/BGS Clinical Practice Guideline: *Prevention of Falls in Older Persons*

Summary of Recommendations

SCREENING AND ASSESSMENT

1. All older individuals should be asked whether they have fallen (in the past year).
2. An older person who reports a fall should be asked about the frequency and circumstances of the fall(s).
3. Older individuals should be asked if they experience difficulties with walking or balance.
4. Older persons who present for medical attention because of a fall, report recurrent falls in the past year, or report difficulties in walking or balance (with or without activity curtailment) should have a multifactorial fall risk assessment.
5. Older persons presenting with a single fall should be evaluated for gait and balance.
6. Older persons who have fallen should have an assessment of gait and balance using one of the available evaluations.
7. Older persons who cannot perform or perform poorly on a standardized gait and balance test should be given a multifactorial fall risk assessment.
8. Older persons who have difficulty or demonstrate unsteadiness during the evaluation of gait and balance require a multifactorial fall risk assessment.
9. Older persons reporting only a single fall and reporting or demonstrating no difficulty or unsteadiness during the evaluation of gait and balance do not require a fall risk assessment.
10. The multifactorial fall risk assessment should be performed by a clinician (or clinicians) with appropriate skills and training.
11. The multifactorial fall risk assessment should include the following:

Focused History

- a. History of falls: Detailed description of the circumstances of the fall(s),

INTERVENTIONS

OLDER PERSONS LIVING IN THE COMMUNITY

12. The multifactorial fall risk assessment should be followed by direct interventions tailored to the identified risk factors, coupled with an appropriate exercise program. [A]
13. A strategy to reduce the risk of falls should include multifactorial assessment of known fall risk factors and management of the risk factors identified. [A]
14. The components most commonly included in efficacious interventions were:
 - a. Adaptation or modification of home environment [A]
 - b. Withdrawal or minimization of psychoactive medications [B]
 - c. Withdrawal or minimization of other medications [C]
 - d. Management of postural hypotension [C]
 - e. Management of foot problems and footwear [C]
 - f. Exercise, particularly balance, strength, and gait training [A]
15. All older adults who are at risk of falling should be offered an exercise program incorporating balance, gait, and strength training. Flexibility and endurance training should also be offered, but not as sole components of the program. [A]
16. Multifactorial/multicomponent intervention should include an education component complementing and addressing issues specific to the intervention being provided, tailored to individual cognitive function and language. [C]
17. The health professional or team conducting the fall risk assessment should directly implement the interventions or should assure that the interventions are carried out by other qualified healthcare professionals. [A]
18. Psychoactive medications (including sedative hypnotics, anxiolytics, antidepressants) and antipsychotics (including new antidepressants or antipsychotics) should be minimized or withdrawn, with appropriate tapering if indicated. [B]
19. A reduction in the total number of medications or dose of individual medications should be pursued. All medications should be reviewed, and minimized or withdrawn. [B]
20. Exercise should be included as a component of multifactorial interventions for fall prevention in community-residing older persons. [A]
21. An exercise program that targets strength, gait and balance, such as Tai Chi or physical therapy, is recommended as an effective intervention to reduce falls [A]
22. Exercise may be performed in groups or as individual (home) exercises, as both are

Physician Office Toolkit STEADI

CDC Home



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

SEARCH

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STEADI (Stopping Elderly Accidents, Deaths & Injuries) Tool Kit for Health Care Providers

Did you realize that one out of three people 65 and older falls each year?

The good news is that health care providers can help reduce their patients' chances of falling and of suffering serious injuries like hip fractures and traumatic brain damage.

CDC's Injury Center created the STEADI Tool Kit for health care providers who see older adults in their practice who are at risk of falling or who may have fallen in the past. The STEADI Tool Kit gives health care providers the information and tools they need to assess and address their older patients' fall risk.

[Read more... »](#)

Order Tool Kits

Stopping Elderly
Accidents, Deaths & Injuries

Printed materials will be available for order in Winter 2012-2013. If you are interested in pre-ordering a copy, **please email us your name and address.**

[Download the STEADI Tool Kit materials »](#)

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Contact Us:

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control (NCIPC)
4770 Buford Hwy, NE
MS F-63
Atlanta, GA 30341-3717

800-CDC-INFO
(800-232-4636)
TTY: (888) 232-6348

[Contact CDC-INFO](#)

Download STEADI Tool Kit Materials

Make Fall Prevention Part of Your Practice



Triage Your Patients Based on Fall Risk

This tool walks health care providers through assessing a patient's fall risk, educating patients, selecting interventions, and following up.



See Your Patient's Risk at a Glance

This checklist allows health care providers to summarize an older patient's fall risk.



Have Your Patients Check Their Risk of Falling

This brochure offers a checklist that patients can use to check their risk of falling.



Integrate Fall Prevention into Your Practice

This wall chart helps health care providers determine who in their practice will be responsible for conducting fall risk assessments, delivering interventions, and providing education to older patients.



Prevent Falls in Older Patients, Provider Pocket Guide

This small, easy-to-use tool walks health care providers through key points of fall prevention.



Talk about Fall Prevention with Your Patients

This document can help health care providers comfortably talk about fall prevention with patients.

www.cdc.gov/homeandrecreationalafety/Falls/steady/index.html#download

CDC Fall Risk Checklist

Fall Risk Checklist

Patient: _____ Date: _____ Time: _____ AM/PM

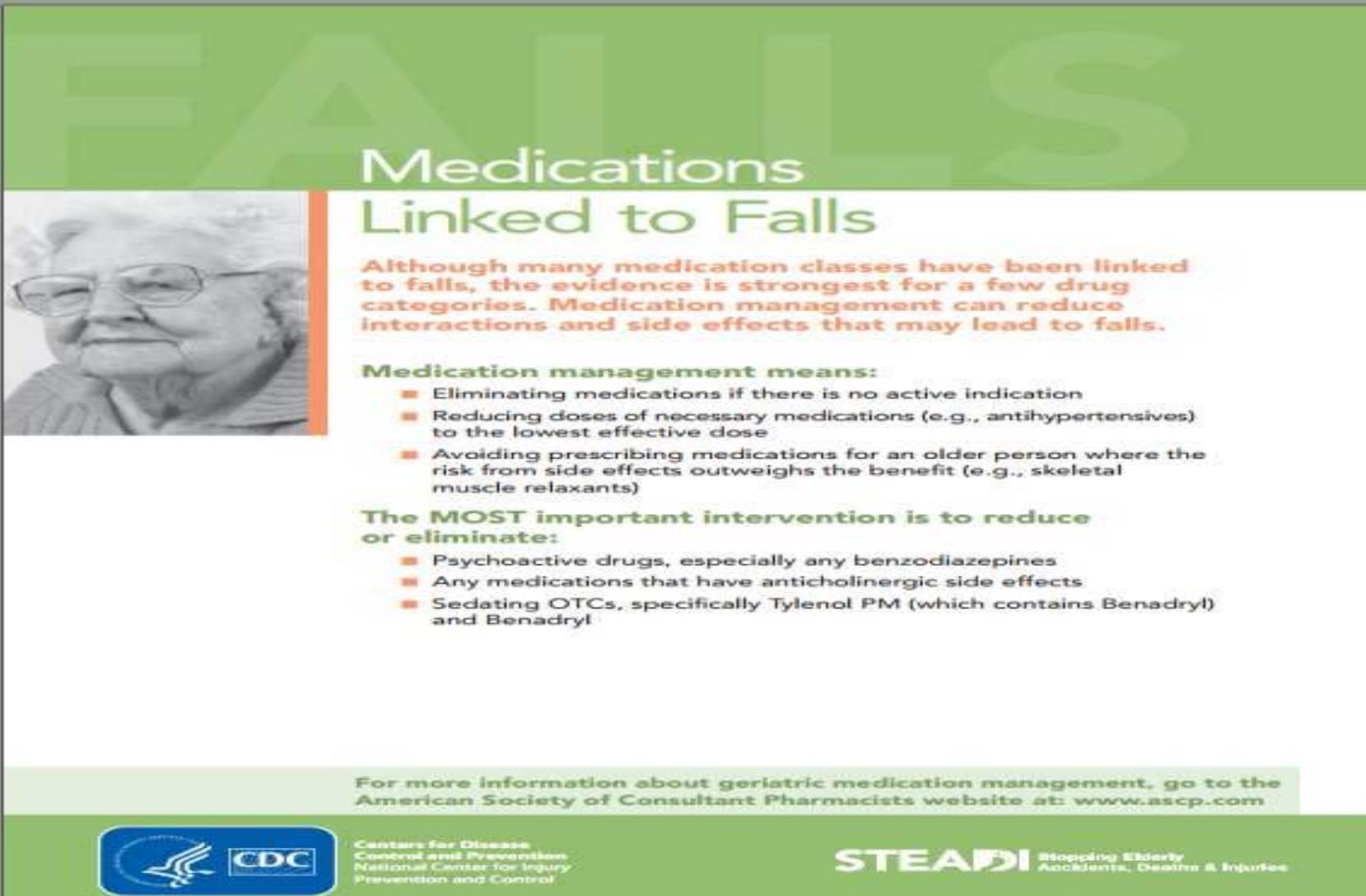
Fall Risk Factor Identified	Factor Present?	Notes
Falls History		
Any falls in past year?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Worries about falling or feels unsteady when standing or walking?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Medical Conditions		
Problems with heart rate and/or rhythm	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Cognitive impairment	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Incontinence	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Depression	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Foot problems	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Other medical conditions (Specify)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Medications		
Any psychoactive medications, medications with anticholinergic side effects, and/or sedating OTCs? (e.g., Benadryl, Tylenol PM)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Gait, Strength & Balance		
Timed Up and Go (TUG) Test ≥12 seconds	<input type="checkbox"/> Yes <input type="checkbox"/> No	
30-Second Chair Stand Test Below average score (See table on back)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4-Stage Balance Test Full tandem stance <10 seconds	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Vision		
Acuity <20/40 OR no eye exam in >1 year	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Postural Hypotension		
A decrease in systolic BP ≥20 mm Hg or a diastolic bp of ≥10 mm Hg or lightheadedness or dizziness from lying to standing?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Other Risk Factors (Specify)		
	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	



Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

STEADI Stopping Elderly Accidents, Deaths & Injuries

CDC Medications Linked to Falls



Medications Linked to Falls

Although many medication classes have been linked to falls, the evidence is strongest for a few drug categories. Medication management can reduce interactions and side effects that may lead to falls.

Medication management means:

- Eliminating medications if there is no active indication
- Reducing doses of necessary medications (e.g., antihypertensives) to the lowest effective dose
- Avoiding prescribing medications for an older person where the risk from side effects outweighs the benefit (e.g., skeletal muscle relaxants)

The MOST important intervention is to reduce or eliminate:

- Psychoactive drugs, especially any benzodiazepines
- Any medications that have anticholinergic side effects
- Sedating OTCs, specifically Tylenol PM (which contains Benadryl) and Benadryl

For more information about geriatric medication management, go to the American Society of Consultant Pharmacists website at: www.ascp.com

 Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

STEADI Stopping Elderly Accidents, Deaths & Injuries

Free Pocket Guide for Physicians

Talking with your Patient about Falls

If you hear:	You can say:
Precontemplation Stage	
Falling is just a matter of bad luck.	As we age, falls are more likely for many reasons, including changes in our balance and how we walk.
Contemplation Stage	
My friend down the street fell and ended up in a nursing home.	Preventing falls can prevent broken hips & help you stay independent.
Preparation Stage	
I'm worried about falling. Do you think there's anything I can do to keep from falling?	Let's look at some factors that may make you likely to fall & talk about what you could do about one or two of them.
Action Stage	
I know a fall can be serious. What can I do to keep from falling and stay independent?	I'm going to fill out a referral form for a specialist who can help you improve your balance.

For more information, go to:
www.cdc.gov/injury/STEADI



Centers for Disease Control and Prevention
National Center for Injury Prevention and Control



Preventing Falls in Older Patients Provider Pocket Guide

Key Facts about Falls:

- 1/3 of older adults (age 65+) fall each year.
- Many patients who have fallen do not talk about it.

This is What You Can Do:

RTUAL:

- Review self-assessment brochure
- Identify risk factors
- Test gait & balance
- Undertake multifactorial assessment
- Apply interventions
- Later, follow-up

STEADI Stopping & Preventing Falls in Older Adults

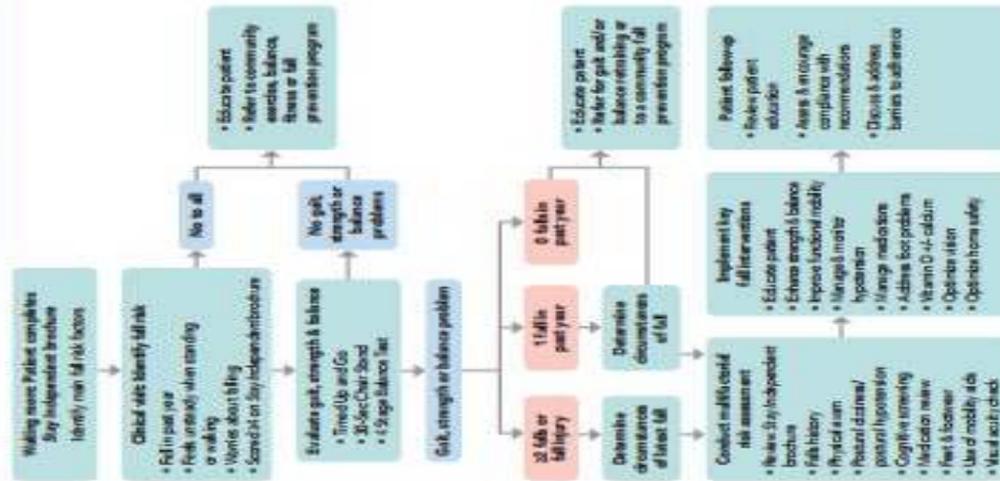
Key Steps for Fall Prevention

1. Be proactive—ask all patients 65+ if they've fallen in the past year.
2. Identify & address fall risk factors:
 - Lower body weakness
 - Gait and balance problems
 - Psychoactive medications
 - Postural dizziness
 - Poor vision
 - Problems with feet and/or shoes
 - Home safety
3. Refer as needed to specialists or community programs.
4. Follow-up with patient within 30 days.

Key Fall Interventions

- Educate patient
- Enhance strength & balance
- Manage medications
- Manage hypotension
- Supplement vitamin D +/- calcium
- Address foot problems
- Optimize vision
- Optimize home safety

Algorithm for Fall Risk Assessment & Interventions



Use Technology To Reduce Falls

- November 2010 JAMA article found that using health information technology reduced falls in patients over 65 by 25%
- Nurse entered risk assessment into the computer
- Computer printed out interventions to follow for the patient
- Printed out education material for the patient and family
- Printed out a fall plan of care and signs

Fall Prevention in Acute Care Hospitals

A Randomized Trial

Patricia C. Dykes, RN, DNSc; Diane L. Carroll, RN, PhD, BC; Ann Hurley, RN, DNSc; Stuart Lipsitz, ScD; Angela Benoit, BComm; Frank Chang, MSE; Seth Meltzer; Ruslana Tsurikova, MSc, MA; Lyubov Zuyov, MA; Blackford Middleton, MD, MPH, MSc

JAMA. 2010;304(17):1912-1918. doi:10.1001/jama.2010.1567

Context Falls cause injury and death for persons of all ages, but risk of falls increases markedly with age. Hospitalization further increases risk, yet no evidence exists to support short-stay hospital-based fall prevention strategies to reduce patient falls.

Objective To investigate whether a fall prevention tool kit (FPTK) using health information technology (HIT) decreases patient falls in hospitals.

Design, Setting, and Patients Cluster randomized study conducted January 1, 2009, through June 30, 2009, comparing patient fall rates in 4 urban US hospitals in units that received usual care (4 units and 5104 patients) or the intervention (4 units and 5160 patients)

JAMA

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Have a Safety Huddle Before & After the Fall

Transforming Care at the Bedside
How-to Guide: Reducing Patient Injuries from Falls

Safety Huddle Form



DATE: _____

Shift: 3rd
Top 3 Patients for Fall
Precautions

1. _____
2. _____
3. _____

Patient/Family Issues

1. _____

Most Unstable Patient

1. _____

Highest Acuity

1. _____

Shift: 1st
Top 3 Patients for Fall
Precautions

1. _____
2. _____
3. _____

Patient/Family Issues

1. _____

Most Unstable Patient

1. _____

Highest Acuity

1. _____

Shift: 2nd
Top 3 Patients for Falls
Precautions

1. _____
2. _____
3. _____

Patient/Family Issues

1. _____

Most Unstable Patient

1. _____

Highest Acuity

1. _____

References

- AHRQ Preventing Falls Toolkit
 - <https://www.ahrq.gov/sites/default/files/publications/files/fallpxtoolkit.pdf>
- TJC Sentinel Event Alert
 - http://www.jointcommission.org/assets/1/6/SEA_55_Falls_4_26_16.pdf
- HPOE Preventing Patient Falls
 - <http://www.hpoe.org/Reports-HPOE/2016/preventing-patient-falls.pdf>
- TJC Speak Up
 - www.jointcommission.org/PatientSafety/SpeakUp
- CMS Survey and Certification
 - www.cms.hhs.gov/SurveyCertificationGenInfo/PMSR/list.asp
- CMS Manual
 - https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107_Appendixtoc.pdf

References cont.

- CDC Falls in Older Adults
 - <https://www.cdc.gov/HomeandRecreationalSafety/Falls/index.html>
- CDC STEADI
 - <https://www.cdc.gov/steady/index.html>
- AHRQ Clinical Guidelines and Recommendations
 - <http://www.ahrq.gov/clinic/tp/nursesttp.htm>
- Practicing Physician Education in Geriatrics Falls Toolkit
 - www.gericareonline.net/tools/eng/falls/

The End! Questions???



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Healthcare Consulting
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Dublin, Ohio 43017
- 614 791-1468
(Call with questions, no emails)
- sdill1@columbus.rr.com
- Email questions to CMS at
hospitalscg@cms.hhs.gov

THANK YOU

Additional Resources



AHRQ Toolkit Has a Test

Fall Knowledge Test

Each question may have more than one option as the correct answer.

Please circle the letters that correspond to the correct answers.

1. Which of the following statements is *correct*?
 - a. Falls have multifactorial etiology, so fall prevention programs should comprise multifaceted interventions.
 - b. Regular review of medication can help to prevent patient falls.
 - c. The risk of falling will be lessened when a patient's toileting needs are met.
 - d. The use of antipsychotic medications is associated with an increased risk of falls in older adults.

2. A multifaceted intervention program should include:
 - a. Individually-tailored fall prevention strategies
 - b. Education to patient/family and health care workers
 - c. Environmental safety
 - d. Safe patient handling

3. Risk factors for falls in the acute hospital include all of the following *except*:
 - a. Dizziness/vertigo
 - b. Previous fall history
 - c. Antibiotic usage
 - d. Impaired mobility from stroke disease

4. Which of the following statements is *true*?

AHRQ Toolkit Has a Test

4. Which of the following statements is *true*?
- a. The cause of a fall is often an interaction between patient's risk, the environment, and patient risk behavior.
 - b. Increase in hazardous environments increases the risk of falls.
 - c. The use of a patient identifier (e.g., identification bracelet) helps to highlight to staff those patients at risk for falls.
 - d. A fall risk assessment should include review of history of falls, mobility problems, medications, mental status, continence, and other patient risks.
5. Patients with impaired mobility should be:
- a. Confined to bed
 - b. Encouraged to mobilize with assistance
 - c. Assisted with transfers
 - d. Referred for exercise program or prescription of walking aids as appropriate



6. The management of the acutely confused patient should include all of the following *except*:
- Moving patients away from the nursing station
 - Involving family members to sit with the patient
 - Orienting patients to the hospital environment
 - Reinforcing activity limits to patients and their families
7. Which of the following statements is *false*?
- Fall prevention efforts are solely the nurses' responsibility.
 - A patient who is taking four or more oral medications is at risk for falling.
 - A patient who is taking psychotropic medication is at higher risk for falling.
 - Testing or treatment for osteoporosis should be considered in patients who are at high risk for falls and fractures.
8. In hospital settings, intervention programs should include:
- Staff education on fall precautions
 - Provision and maintenance of mobility aids
 - Postfall analysis and problem-solving strategy
 - Bed alarms for all patients, regardless of risk
9. When assessing patients, which of the following statements is *false*?
- All patients should be assessed for fall risk factors at admission, at a change in status, after a fall, and at regular intervals.
 - Medication review should be included in the assessment.
 - All patients should have their activities of daily living and mobility assessed.
 - Environmental assessment is not important in the hospital as it is all standardized.

ICSI Prevention of Falls Updated 2012

ICSI

www.icsi.org/guidelines_and_more/gl_os_prot

INSTITUTE FOR CLINICAL SYSTEMS IMPROVEMENT

Health Care Protocol Prevention of Falls (Acute Care)

How to cite this document:

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Copies of this ICSI Health Care Protocol may be distributed by any organization to the organization's employees but, except as provided below, may not be distributed outside of the organization without the prior written consent of the Institute for Clinical Systems Improvement, Inc. If the organization is a legally constituted medical group, the ICSI Health Care Protocol may be used by the medical group in any of the following ways:

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Falls Protocol ICSI 2012

*Prevention of Falls (Acute Care) Protocol
Third Edition/April 2012*

Protocol

Perform risk assessment to identify risk factors *(Annotation #3)*

- Test for cognitive dysfunction (dementia, delirium)
- Assess gait and mobility function
- Identify potential medication factors
- Perform an environmental safety assessment

Communicate risk factors *(Annotation #4)*

- Use visual communication tools
- Inform patient and family of risks
 - Describe organization's falls prevention program – discuss how patient/family can assist with falls prevention and when/how to contact staff when necessary
 - Patient education
- Communicate patient falls risk to all members of the health care team

Perform risk factor interventions *(Annotation #5)*

- Establish universal falls interventions for all patients
- Implement behavioral interventions
- Implement impaired mobility interventions
- Perform environmental rounds

3 Excellent Falls Resources

- VHA National Center for Patient Safety Falls Toolkit
<https://www.patientsafety.va.gov/professionals/onthejob/falls.asp>
 - Institute for Clinical Systems Improvement Prevention of Falls (Acute Care) Protocol
https://www.icsi.org/_asset/dcn15z/Falls-Interactive0412.pdf
 - IHI Transforming Care at the Bedside How-to Guide: Reducing Patient Injuries from Falls
<http://www.ihl.org/knowledge/Pages/Tools/TCABHowToGuideReducingPatientInjuriesfromFalls.aspx>
-

Resources

- Pennsylvania Patient Safety Advisory
<http://patientsafetyauthority.org/pages/bbtresults.aspx?Filter1Field=Event&Filter1Value=Fall>

<http://ltctoolkit.rnao.ca/resources/falls>

The screenshot shows the website for the Best Practices Toolkit, specifically the 'Falls' resource page. The header features the 'ia BPG' logo (International Affairs & Best Practice Guidelines) and the 'RNAO' logo (Registered Nurses' Association of Ontario). The main title is 'Best Practices Toolkit' with the subtitle 'Implementing and Sustaining Change in Long-Term Care'. A navigation bar includes links for Home, Client Centred Care, Contenance and Constipation, Falls (selected), Pain, and Pressure Ulcer. The main content area is titled 'Resources: Falls prevention and management' and contains a paragraph explaining the resource's purpose, a disclaimer, and links for 'Submit a Resource' and 'Feedback'. A note mentions that PDF files require Adobe Acrobat Reader. A list of resource categories is provided at the bottom.

ia BPG International Affairs & Best Practice Guidelines

RNAO Registered Nurses' Association of Ontario
L'Association des infirmières et infirmiers autorisés de l'Ontario

Best Practices Toolkit

Implementing and Sustaining Change in Long-Term Care

Home Client Centred Care Contenance and Constipation **Falls** Pain Pressure Ulcer

Resources: Falls prevention and management

The following resource is designed to assist Long-Term Care (LTC) homes with the implementation of the Prevention of Falls and Fall Injuries in the Older Adult Best Practice Guideline. Documents found in this resource are evidence-based, but it is not a program plan. Each LTC home is unique and each home is in various stages of guideline implementation. LTC homes are advised to use the resource at their discretion. For those resources that have copyright notations, it is recommended that LTC homes obtain permission from the primary author prior to implementing them within their setting. The Toolkit is a dynamic resource, and is being updated and revised on a regular basis by the LTC Best Practices Initiative team. Visit this site often to see what's new!

[Disclaimer](#)
[Submit a Resource](#)
[Feedback](#)

To view PDF format files, you need to have Adobe Acrobat® Reader installed on your computer. You can download this free software from the [Adobe Web site](#).

- [Best Practices/Standards](#)
- [Assessment Tools](#)
- [Planning & Implementation Tools](#)
- [Quality Improvement Tools](#)
- [Additional Implementation Resources](#)
- [Policies and Procedures](#)
- [Care Planning](#)

Best Practices/Standards

Resource	Link
RNAO Best Practice Guideline (BPG) Prevention of Falls and Fall Injuries in the Older Adult	
RNAO Prévention des chutes et des blessures associées chez la personne âgée RNAO Best Practice Guideline (BPG) Prevention of Falls and Fall Injuries in the Older Adult in French.	
RNAO BPG – Summary of Recommendations for Prevention of Falls and Fall Injuries in the Older Adult	
RNAO Prevention of Falls and Fall Injuries in the Older Adult PDA Guideline Condensed version of the Falls BPG viewable on Personal Digital Assistants (PDAs) or mobile phones.	
College of Nurses of Ontario Practice Standards Restraint Policy Includes restraint descriptions, least restraint policy, and nursing responsibilities.	
Gap Analysis Worksheet for Falls Worksheet identifies gaps in current practices related to Falls prevention.	
Patient Restraints Minimization Act 2001 The government of Ontario's Act on restraints.	

[Back to top]

Assessment Tools

Resource	Link
Berg Balance Scale This scale rates a resident's balance, and in turn, can be used to help determine resident fall risk. Available at http://www.fallpreventiontaskforce.org/pdf/BergBalanceScale.pdf .	

Assessment Tools

Resource	Link
Berg Balance Scale This scale rates a resident's balance, and in turn, can be used to help determine resident fall risk. Available at http://www.fallpreventiontaskforce.org/pdf/BergBalanceScale.pdf .	
MOHLTC Critical Incident This form is mandatory for falls resulting in significant injury. It would be best to incorporate this form into policy and procedure.	
Morse Falls Scale This scale requires systematic, reliable assessment of a client's fall risk factors upon admission, after a fall, with a change in status, and at discharge or transfer to a new setting. Available: The National Center for Patient Safety (NCPS). Author: Morse, J. M., Morse, R., & Tylko, S. (1989)	
Post Fall Investigation The incident reporting forms help determine who fell and why, and looking at these factors help discover how to prevent falls.	
Tinetti Balance and Gait Evaluation Tool These tools can be found and a tutorial is available at http://geriatrics.uthscsa.edu/tools/TINETTI.pdf .	

Planning & Implementation Tools

Resource	Link
RNAO Toolkit: Implementation of clinical practice guidelines	
RNAO Trousse sur la marche à suivre Mise en place des lignes directrices pour la pratique Clinique.	

Administration of the Tinetti Gait & Balance Instrument

The Tinetti Gait and Balance Instrument is designed to determine an elders risk for falls within the next year. It takes about 8-10 minutes to complete. The evaluator should review the questions prior to evaluation of the patient and ask any questions regarding the Instrument prior to beginning. The patient is asked to complete the gait portion first with the evaluator walking close behind the elder and evaluating gait steppage and drift. The patient is then asked to complete the balance portion with the evaluator again standing close by the patient (towards the right and in front). The patient is then asked to sit and the score is then totaled.

Scoring— The higher the score, the better the performance. Scoring is done on a three point scale with a range on each item of 0-2 with 0 representing the most impairment. Individual scores are then combined to form three scales: a Gait Scale, a Balance Scale and then an overall Gait and Balance score. The maximum score for gait is 12 points while the maximum for Balance is 16 points with a total maximum for the overall Tinetti Instrument of 28 points.

Score Interpretation

<19 High Risk for Falls

19-24 Risk for Falls

Not Clear on What Steppage Is?—Evaluators usually have the most questions about steppage. For a complete tutorial on gait analysis click below.

[Gait Analysis Tutorial](#)

<http://psnet.ahrq.gov/content.aspx?taxonomyID=450>

The screenshot shows the AHRQ PSNet Patient Safety Network website. The header includes the site name, a search bar, and navigation links. The main content area displays search results for 'Patient Falls (65)', listing four items with their titles and authors.

Home > Safety Target > Medical Complications > Patient Falls (65)

Search within these results: **GO** Date Show Summary

Patient Falls (1-20 of 65): [Next Page>](#)
[How are these results ranked?](#)

- Study: Applying root cause analysis to improve patient safety: decreasing falls in postpartum women.**
Chen KH, Chen LR, Su S. Qual Saf Health Care. 2010;19:138-143.
- Review: Adverse events experienced by homecare patients: a scoping review of the literature.**
Masotti P, McColl MA, Green M. Int J Qual Health Care. 2010;22:115-125.
- Commentary: The patient who falls: "It's always a trade-off."**
Tinetti ME, Kumar C. JAMA. 2010;303:258-266.
- Book/Report: Adverse Health Events in Minnesota: Sixth Annual Public Report.**
St. Paul, MN: Minnesota Department of Health; January 2010.

Chapter 10. Fall and Injury Prevention

Leanne Currie

Background

Fall and injury prevention continues to be a considerable challenge across the care continuum. In the United States, unintentional falls are the most common cause of nonfatal injuries for people older than 65 years. Up to 32 percent of community-dwelling individuals over the age of 65 fall each year, and females fall more frequently than males in this age group.^{1, 2} Fall-related injuries are the most common cause of accidental death in those over the age of 65, resulting in approximately 41 fall-related deaths per 100,000 people per year. In general, injury and mortality rates rise dramatically for both males and females across the races after the age of 85, but males older than 85 are more likely to die from a fall than females.²⁻⁶ Unfortunately, fall-related death rates in the United States increased between 1999 and 2004, from 29 to 41 per 100,000 population.^{2, 7} Sadly, these rates are moving away from the Healthy People 2010 fall-prevention goal, which specifically seeks to reduce the number of deaths resulting from falls among those age 65 or older from the 2003 baseline of 38 per 100,000 population to no more than 34 per 100,000.⁸ Thus, falls are a growing public health problem that needs to be addressed.

The sequelae from falls are costly. Fall-related injuries account for up to 15 percent of rehospitalizations in the first month after discharge from hospital.⁹ Based on data from 2000, total annual estimated costs were between \$16 billion and \$19 billion for nonfatal, fall-related injuries and approximately \$170 million dollars for fall-related deaths across care settings in the community.^{10, 11} Several factors have been implicated as causes of falls and injuries; to date,

however, no definitive predictor profile has been identified. Although the underlying status of

falls tool kit:

These tool kits were developed for the Practicing Physician Education in Geriatrics project supported by a grant from the John A. Hartford Foundation through the American Geriatrics Society. The tool kits are intended to help physicians better understand the common 'Geriatric Syndromes' and contain educational materials, suggested guidelines, forms and tools for evaluation, diagnosis and treatment.



The Falls Tool Kit is used for the initial evaluation and management of a patient who experiences falls, and provides educational materials to teach patients how to reduce their risk of falling.

Click on the title of an individual tool for a short description and download options. Or download the the complete toolkit by clicking on the links in the right-hand column.

Individual Tools ● = indicates new tool

Process	Professional Tools	Educational Materials
Identify	Get Up and Go Test PDF DOC files	Falls: General Information PDF DOC files
		Medical Evaluation of Falls PDF DOC files
Prepare	Home Safety Questionnaire PDF DOC files	Home Safety Checklist PDF file

first time
tool kit user >>>

Practicing Physician
Education Project:

Learn more
about the PPE Project >>>

complete
tool kit download:

Download Training Materials:

<http://ir.hillenbrand.com/eventdetail2.cfm?eventid=42963>

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Get Up and Go Test

Get Up and Go Test

The “Get Up and Go Test” is an assessment that should be conducted as part of a routine evaluation when dealing with older persons. Its purpose is to detect “fallers” and to identify those who need evaluation.

The staff should be trained to perform the “Get Up and Go Test” at check-in and query those with gait or balance problems for falls.

INITIAL CHECK

All older persons who report a single fall should be observed as they:

- From a sitting position, stand without using their arms for support.
- Walk several paces, turn, and return to the chair.
- Sit back in the chair without using their arms for support.

Individuals who have difficulty or demonstrate unsteadiness performing this test require further assessment.

FOLLOW-UP ASSESSMENT

In the follow-up assessment, ask the person to:

- Sit.
- Stand without using their arms for support.
- Close their eyes for a few seconds, while standing in place.
- Stand with eyes closed, while you push gently on his or her sternum.
- Walk a short distance and come to a complete stop.