Fall Prevention Training: Strategies for Reducing Falls Among Residents in Assisted Living Facilities

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Division of Quality Assurance
Bureau of Assisted Living
Learning Objectives

- Review statistics identifying the high incidence of falls.
- Recognize multifactorial risks and causes of falls.
- Review balance screenings and assessments for falls risk that are easily administered.
- Discuss strategies for falls prevention in residential care facilities.
- Learn the role participants can play in reducing falls risk and falls at their locations.
Leading With our Conclusion

All prevention programs will be most effective in:
• Reducing the number of residents who fall
• The total number of falls each year
• Length between falls
• Severe injuries such as femoral fractures if it:
  o Is inter-professional
  o Avoids the use of restraints
  o Includes both residents and staff in efforts
  o Takes into consideration the residential care environment
  o Includes personal falls prevention plans for each resident
Setting Up a Falls Prevention Program

- Generate and review relevant data on falls prevention and management.
- Determine organizational readiness and barriers.
- Designate a falls prevention team.
- Decide which problem(s) to address.
- Determine the resident’s falls risk – assume every resident is at risk.
- Provide a safe environment for all residents – create if missing.
Setting Up a Falls Prevention Program, cont.

• Develop individualized care plans.
• Reassess fall risk at least every 3 months.
• Utilize post-fall assessments after every fall.
• Develop a method of reporting.
• Develop education for staff.
• Evaluate your program and outcomes on a regular basis.
• Incorporate an exercise program for strength, balance and cognitive function.
Providing a Safe Environment for all Residents

• Be aware
• Be responsive
• Work as a team
• Report and support
• Learn by talking with team members
• Avoid blaming
• Fix “accidents waiting to happen”

Source: AHRQ Falls Prevention and Management Publication No. 12-0001-4, 2012
The Burden of Falls

How Big is the Problem Nationally?

• In 2010, the total direct medical costs of fall injuries for people 65 and older, adjusted for inflation, was $30 billion.
• By 2020, the annual direct and indirect cost of fall injuries is expected to reach $67.7 billion (in 2012 dollars).
• Among community-dwelling older adults, fall-related injury is one of the 20 most expensive medical conditions.

http://www.cdc.gov/HomeandRecreationalSafety/Falls/fallcost.html
The Burden of Falls in Wisconsin

The Burden of Injury in Wisconsin, Released Fall 2011  WI DHS, Division of Public Health, p. 12.  
https://www.dhs.wisconsin.gov/publications/p0/p00283.pdf

**Number of Injury Emergency Department Visits (2007-09)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>18 – 24 Years</th>
<th>25 – 44 Years</th>
<th>45 – 64 Years</th>
<th>65 – 84 Years</th>
<th>85+ Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Falls 31,889</td>
<td>Falls 76,520</td>
<td>Falls 77,073</td>
<td>Falls 53,407</td>
<td>Falls 24,073</td>
</tr>
</tbody>
</table>

**Number of Injury Hospitalizations (2007-09)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>18 – 24 Years</th>
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<th>45 – 64 Years</th>
<th>65 – 84 Years</th>
<th>85+ Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self-harm 3,301</td>
<td>Self-harm 6,857</td>
<td>Falls 14,026</td>
<td>Falls 30,812</td>
<td>Falls 22,014</td>
</tr>
</tbody>
</table>

**Number of Injury Deaths (2007-09)**

<table>
<thead>
<tr>
<th>Rank</th>
<th>18 – 24 Years</th>
<th>25 – 44 Years</th>
<th>45 – 64 Years</th>
<th>65 – 84 Years</th>
<th>85+ Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MVC 337</td>
<td>Suicide 782</td>
<td>Suicide 882</td>
<td>Falls 550</td>
<td>Falls 1,576</td>
</tr>
</tbody>
</table>
The Burden of Falls in Wisconsin

**Place of Injury for Falls-related death in persons 65+, 2008**

<table>
<thead>
<tr>
<th>Place of Injury</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>55.2%</td>
</tr>
<tr>
<td>Residential institution</td>
<td>25.6%</td>
</tr>
<tr>
<td>School, Institution or other public area</td>
<td>3.4%</td>
</tr>
<tr>
<td>Trade and Service Area</td>
<td>3.1%</td>
</tr>
<tr>
<td>Street or highway</td>
<td>2.1%</td>
</tr>
<tr>
<td>Other</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

**Place of Death for Falls-related death in persons 65+, 2008**

<table>
<thead>
<tr>
<th>Place of Death</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>50.3%</td>
</tr>
<tr>
<td>Nursing Home</td>
<td>25.0%</td>
</tr>
<tr>
<td>Facility-based hospice</td>
<td>15.0%</td>
</tr>
<tr>
<td>Home</td>
<td>5.8%</td>
</tr>
<tr>
<td>CBRF</td>
<td>2.5%</td>
</tr>
<tr>
<td>Other</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Discharge status of fall-related inpatient hospitalizations for persons 65+, 2008:

All discharges: 18,432

- Transferred to a nursing home: 58.0%
- Home: 22.6%
- Home with home health service: 6.9%
- Transferred to rehab or outpatient services: 4.4%
- Expired: 3.2%
- Transferred to another hospital: 2.5%
- Discharged to hospice: 2.1%
- Left against medical advice: 0.2%
The Burden of Falls for Residents of Long Term Care Facilities

How Big is the Problem?

- More than 95% of hip fractures are caused by falling, most often by falling sideways onto the hip.
- Annually, there are at least 258,000 hospital admissions for hip fractures among people aged 65 and older.
- By 2030, the number of hip fractures is projected to reach 289,000, an increase of 12%.

http://www.cdc.gov/HomeandRecreationalSafety/Falls/nursing.html
The Burden of Falls for Residents of Long Term Care Facilities

How Serious are these falls?

• About 35% of fall injuries occur among residents who cannot walk.
• About one-half of fatal falls among older adults are due to Traumatic Brain Injury.
• In 2013, 2.5 million nonfatal falls among older adults were treated in emergency departments and more than 734,000 of these patients were hospitalized.

http://www.cdc.gov/HomeandRecreationalSafety/Falls/nursing.html
Dad Falls in His Assisted Living Apartment

“Most patient falls are predictable, and simple patient risk assessment tools can predict over 70% of falls.”

The 2014 statewide total for Assisted Living self reports of falls with hospitalization or emergency department visits was 1,995.

What is a Fall?

THREE TYPES OF FALLS:

• Fall
• Near fall
• Un-witnessed fall
Signs of a Fall

- Fracture
- Bruising
- Soreness
- Limping
- Inactivity
Multifactorial and Interacting Causes of Falls

Intrinsic Risk Factors
- Person

Extrinsic Risk Factors
- Environment

Precipitating Causes
- Activity
Classification of Falls

- Accidental Falls: derived from extrinsic factors such as environmental considerations
- Anticipated Physiologic Falls: derived from intrinsic physiologic factors, such as confusion
- Unanticipated Physiologic Falls: derived from unexpected intrinsic events, such as a new onset syncopal event or a major intrinsic event such as stroke

Using this classification, approximately 78 percent of the falls related to anticipated physiologic falls can be identified early, and safety measures can be applied to prevent the fall.

Assessing for Falls Risk Factors

Assessments generally include these factors:

- Cognitive impairment, agitation, confusion
- Age
- Incontinence/urinary frequency
- Sensory deficits
- Acute/chronic illness
- Previous history of falls
- Non-healing foot sores
- Mobility impairment, gait instability and balance problems
- Medication usage, sedatives and hypnotic drugs
- General health status
- Depression
Falls and Intellectual Disabilities

Individuals with Intellectual Disabilities (ID) who reside in Assisted Living facilities suffer higher rates of Fracture.

• Fractures are estimated to occur 1.7-3.5 times more frequently among individuals with ID.
• 19-37% of adults with ID were reported to have fallen within the past year.


Assessing for Falls
Risk Factors

Get Up and Go Test
Original purpose was to identify elderly patients at risk of falling. Created by Mathias, Nayak and Isaccs. Graded on a subjective 5-point scale in which 1 is normal and 5 severely abnormal.

Predictive Results:
1 = Normal – no evidence of being at risk of falling during test
2 = Very slightly abnormal
3 = Mildly abnormal
4 = Moderately abnormal
5 = Severely abnormal – evidence of being at risk of falling during test

Indicators of possible falling:
Undue slowness, hesitancy, abnormal movements of the trunk or upper limbs, staggering, stumbling
Assessing for Falls Risk Factors

Timed Up and Go Test
- Original purpose was to test basic mobility skills of frail elderly persons who are able to walk on their own.
- Adapted by Podsiadlo and Richardson from the original “Get Up and Go” Test, created by Mathias, Nayak and Isaccs.
- Measurement of the time in seconds for a person to rise from sitting from a standard arm chair, walk 10 feet, turn, walk back to the chair and sit down.

Predictive Results:

<table>
<thead>
<tr>
<th>Seconds</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10</td>
<td>Freely Mobile</td>
</tr>
<tr>
<td>&lt;20</td>
<td>Mostly Independent</td>
</tr>
<tr>
<td>20-29</td>
<td>Variable mobility</td>
</tr>
<tr>
<td>&gt;20</td>
<td>Impaired mobility</td>
</tr>
</tbody>
</table>

Balance problems can be distinguished by the amount of time it takes to complete a task.
Timed Up and Go Test

Measures mobility in people who are able to walk on their own (assistive device permitted)

Instructions:
The person may wear their usual footwear and can use any assistive device they normally use.

1. Have the person sit in the chair with their back to the chair and their arms resting on the arm rests.
1. Ask the person to stand up from a standard chair and walk a distance of 10 feet (3 meters).
1. Have the person turn around, walk back to the chair and sit down again.

Timing begins when the person starts to rise from the chair and ends when he or she returns to the chair and sits down. The person should be given 1 practice trial and then 3 actual trials, with the times from these three averaged.
Elements of a Post-Fall Assessment History

• Description of fall event from individual and/or staff
• Activities at the time of the fall, footwear, restraints, etc.
• Any injuries incurred from the fall
• Review of key sudden-onset symptoms
• Physical Examination
  • Vital signs
  • Head
  • Cardiovascular
  • Musculoskeletal
  • Neurologic
  • Cognitive
Exercises for Strength and Balance

Strength, flexibility, balance and reaction time are considered the most readily modifiable risk factors for falls. (Otago) However, exercise alone will not decrease falls.

Balance and lower body strength exercises are aimed at improving the ability to control and maintain the body's position while standing still and moving.
Hip Protectors

[Image of pink and white hip protectors]
Interventions in Residential Care and Nursing Homes

Resource from Agency for Healthcare Research and Quality (AHRQ):

www.ahrq.gov

Interventions in Residential Care and Nursing Homes

Resource from US Dept. of Veterans Affairs: http://www.patientsafety.gov/SafetyTopics/fallstoolkit
Interventions in Assisted Living Facilities

- Facility-level identification
- Modification of environmental hazards
- Use of falls risk alert icons to identify high-risk residents
- Reduce use of restraints
- Fall prevention education for staff
- Exercises for balance and strength, gait training
Interventions in Assisted Living Facilities, cont.

- Correct use of assistive devices
- Medication review and modification, especially psychotropic medications
- Treatment of postural hypotension and cardiovascular disorders
- Continence management
- Provision of hip protectors
Wisconsin Department of Health Services

Wisconsin Coalition for Collaborative Excellence in Assisted Living (WCCEAL):

• The first standardized quality improvement data set for Assisted Living Centers (ALCs) in the country.

• Primary goal is to assure and improve their quality of care and the quality of life of their residents.
Dr. David Zimmerman, UW-Madison awarded a grant to work with WCCEAL and partners to evaluate the effectiveness of existing evidence-based falls prevention programs (EBHPP) for Assisted Living Centers.

Key activities:
• Evaluating current application of Falls EBHPP and best practices
• Project will encourage centers to adopt a falls EBHPP
• Quarterly Improvement Variables Comparison Report
  o Facilities with a falls prevention program identified over 25+ different programs
  o 57% of survey respondents do not have a falls prevention program

https://ictr.wisc.edu/2014PilotAwards
Training Opportunities

• Wisconsin Assisted Living Association offers the Walking Tall Falls Prevention Program with a list of consultants that can offer training.
• Leading Age-Quality Improvement Task Force has a falls focused initiative that includes technical assistance, mentoring and module templates targeted at Residential Care Apartment Complexes (RCAC) and Community Based Residential Facilities (CBRF).
• Private contractors offer Falls prevention training.
Wisconsin Injury Prevention Program

Find resources that can be helpful in your falls prevention month planning

- **Wisconsin Burden of Falls Report** *(pdf)*
  Find out more about the consequences of fall-related injuries in Wisconsin

- **Wisconsin Falls Action Plan** *(pdf)*
  Read about Wisconsin's plan for preventing falls

- Falls Prevention Initiative
  State Falls Coalition that meets every other month addressing falls in Wisconsin. For more information please contact RTurpin@UWHealth.org
Wisconsin Community Falls Prevention Coalition Websites

- Kenosha County Falls Prevention Coalition
  https://sites.google.com/site/strongandsteadykenosha/home
- La Crosse County Falls Prevention Coalition
  http://www.lacrossestopfalls.org/preventionCoalition.asp
- Safe Communities of Madison – Dane County
  http://www.safercommunity.net/
- Winnebago County Fall Prevention Coalition
  http://www.co.winnebago.wi.us/health/units/general-public-health/facts-about-falls
Wisconsin Institute for Healthy Aging

www.wihealthyaging.org

- Stepping On
- Sure Step
- Resources for leaders
- Statewide workshop list
- Statewide Health Promotion list
Other Community Falls Prevention Programs

- **A Matter of Balance** (Douglas County)
- Arthritis Foundation Exercise Program
- **Arthritis Foundation Tai Chi Program**
- Falls Free (Dane County)
- Otago Exercise Programme
- Stay Active and Independent for Life (SAIL) (Brown County)
- Strong Bones
- **Tai Chi: Moving for Better Balance** (selected YMCA locations)
- Title III-D Highest Tier Evidence Based Health Promotion Programs List:
  [http://www.ncoa.org/improve-health/center-for-healthy-aging/content-library/Title-IIID-Highest-Tier-Evidence-FINAL.pdf](http://www.ncoa.org/improve-health/center-for-healthy-aging/content-library/Title-IIID-Highest-Tier-Evidence-FINAL.pdf)
September is National Falls Prevention Month...

Sept. 23rd, 2015 is National Falls Prevention Day

Center for Healthy Aging
National Falls Prevention Resource Center
Falls Free Coalition
www.ncoa.org
Centers for Disease Control and Prevention

- Centers for Disease Control and Prevention (CDC): Falls Prevention (website)
- CDC: Falls Facts (pdf)
  Falls Among Older Adults; Cost of Falls Among Older Adults; Hip Fractures Among Older Adults; Falls in Nursing Homes
- CDC: Falls Reports (pdf)
- Preventing Falls: What Works - A CDC Compendium of Effective Community-Based Interventions from Around the World (pdf)
- Preventing Falls: How to Develop Community-Based Fall Prevention Programs for Older Adult (pdf)
- CDC STEADI toolkit: Stopping Elderly Accidents, Deaths and Injuries
  www.cdc.gov/injury/STEADI
Questions?

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