Fall Risk Assessment in Older Adults

OBJECTIVE

The objective of this Clinical Practice Guideline (CPG) is to provide evidence-based practice recommendations for the fall risk assessment in older adults, including any behavioral health implications. In addition, the CPG outlines the organizations that WellCare aligns with regarding fall risk assessment and Measureable Health Outcomes.

OVERVIEW

Fall risk and injury increases with age; they are associated with morbidity and mortality in the older population as well as linked to poorer overall functioning and early admission to long-term care facilities. Effective fall prevention has the potential to reduce serious fall-related injuries, emergency department visits, hospitalizations, nursing home placements, and functional decline.[1] Common injuries due to falls are head injuries, shoulder and forearm fractures, spine fractures, pelvic fractures, and hip fractures. Older adults may fear falling as it could lead to injury which may lead to hospitalization, decreased independence and mobility, and relocation to a nursing or residential institution. Falls can be prevented with lifestyle choices and safety modifications.[2] Most falls occur at home however simple safety modifications can be made to reduce the risk of falls and related injuries. Many falls are the result of hazards like slippery or wet surfaces, poor lighting, inadequate footwear, and cluttered pathways in the home. In addition, most fractures are the result of a fall in the home, usually related to everyday activities such as walking on stairs, going to the bathroom, or working in the kitchen.[3]

Annually, 1 in 4 adults over the age of 65 falls in the United States, causing moderate to severe injuries, such as hip fractures and head injuries; such injuries can increase the risk of early death. Annually, 2.8 million older people are treated in emergency departments for fall injuries and 800,000+ patients are hospitalized due to a fall injury; of this number, at least 300,000 older adults are hospitalized for hip fractures of which 95% are caused by falling. Falls are the most common cause of traumatic brain injuries (TBI). Approximately 25% of hip fracture patients will make a full recovery; 40% will require nursing home admission; 50% will be dependent upon a cane or a walker; and 20% will die within one year of the fall. Adjusted for inflation, the direct medical costs for fall injuries are $31 billion annually with hospital costs accounting for two-thirds of the total.[2] In 2012, there were 24,190 fatal fall related injuries. Direct medical costs totaled $616.5 million for fatal injuries in 2012 and rose to $637.5 million in 2015. Fall incidence as well as total cost increased with age and were higher among women.[4]

Risk Factors

Personal risk factors include the age (risk increases with older which also affects eyesight, balance, strength, and ability to quickly react to our environments). Activity level is important as exercise improves balance, coordination, and bone and muscle strength. Habits such as excessive alcohol intake and smoking decrease bone strength; alcohol consumption can also cause unsteadiness and slow reaction times. Finally, a poor diet and not getting drinking water will deplete strength and energy, making it hard to do everyday activities. Medical risk factors include:[2]

- Lower body weakness
- Vitamin D deficiency

Original Effective Date: 11/1/2012 Revised: 11/6/2014, 10/5/2017

- Difficulties with walking and balance
- Medication (e.g., tranquilizers, sedatives, antidepressants, some over-the-counter) can affect balance
- Vision or hearing problems
- Foot pain or poor footwear
- Home hazards or dangers (e.g., broken or uneven steps, throw rugs, clutter that can be tripped over)
- Impaired musculoskeletal function, gait abnormality and osteoporosis
- Cardiac arrhythmias (irregular heartbeat), blood pressure fluctuation
- Depression, Alzheimer's disease and senility
- Arthritis, hip weakness and imbalance
- Neurologic conditions, stroke, Parkinson's disease, multiple sclerosis
- Urinary and bladder dysfunction
- Cancer that affects the bones

For screening information related to fall risk, visit the United States Preventive Services Task Force (USPSTF) website at https://www.uspreventiveservicestaskforce.org. Refer to the following CPG: *Older Adult Preventive Health: HS-1063.*

Hierarchy of Support

GUIDELINE HIERARCHY

CPGs are updated annually or as necessary due to updates made to guidelines or recommendations by the American Geriatrics Society (AGS), British Geriatrics Society (BGS), and the National Institute for Health and Care Excellence (NICE). When there are differing opinions noted by national organizations, WellCare will default to the member's benefit structure as deemed by state contracts and Medicaid / Medicare regulations. If there is no specific language pertaining to fall risk assessment in older adults, WellCare will default (in order) to the following:

- National Committee for Quality Assurance (NCQA);
- United States Preventive Services Task Force (USPSTF), National Quality Strategy (NQS), Agency for Healthcare Research and Quality (AHRQ);
- Specialty associations, colleges, societies, etc. (e.g., American Academy of Family Physicians, American Congress of Obstetricians and Gynecologists, American Cancer Society, etc.).

Links to websites within the CPGs are provided for the convenience of Providers. Listings do not imply endorsement by WellCare of the information contained on these websites. NOTE: All links are current and accessible at the time of MPC approval.

WellCare aligns with AGS, BGS, and NICE on the topic of fall risk assessment in older adults. Highlights from their respective publications are noted below.

AMERICAN GERIATRICS SOCIETY (AGS) / BRITISH GERIATRIC SOCIETY (BGS)

The American Geriatrics Society and the British Geriatrics Society (2010) recommend the following questions be asked when screening older adults for fall risk:[1]

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 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 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 with appropriate skills and training.
11. The multifactorial fall risk assessment should include:

A focused history should also be documented that includes the following:

- **Fall History.** Detailed description of the circumstances of the fall(s), frequency, symptoms at time of fall, injuries, other consequences.
- **Medication Review.** All prescribed and over-the-counter medications with dosages.
- **Relevant Risk Factors.** Review acute or chronic medical problems, (e.g., osteoporosis, urinary incontinence, cardiovascular disease).

The member should also have a physical examination that includes the following components:

- **Detailed Assessment.** Review of gait, balance, and mobility levels and lower extremity joint function.
- **Neurological Function.** Cognitive evaluation, lower extremity peripheral nerves, proprioception, reflexes, tests of cortical, extrapyramidal and cerebellar function.
- **Muscle Strength.** Specific attention should be paid to the lower extremities.
- **Cardiovascular Status.** Heart rate and rhythm, postural pulse, blood pressure, and, if appropriate, heart rate and blood pressure responses to carotid sinus stimulation
- **Assessment of Visual Acuity.**
- **Examination of the Feet and Footwear.**

Finally, a functional and environmental assessment of the member should include:

- **Activities of Daily Living (ADL).** Review ADLs including use of adaptive equipment and mobility aids.
- **Functional Ability.** Review the individual's perceived functional ability and fear related to falling.
- **Home Safety.** Review ways the individual can modify their home to decrease fall risk.

To view the summary of the AGS/BGS guidelines, click here.[5] The guidelines can be viewed in their entirety here.[2]

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE (NICE)

The National Institute for Health and Care Excellence (NICE) has published a guideline that covers assessment of fall risk and interventions to prevent falls in in people aged 65 and over. It aims to reduce the risk and incidence of falls and the associated distress, pain, injury, loss of confidence, loss of independence and mortality. To view the NICE guideline, click here. The guideline also includes recommendations on:[6]

- Multifactorial risk assessment of older people who present for medical attention because of a fall, or report recurrent falls in the past year;
- Multifactorial interventions to prevent falls in older people who live in the community;
- Multifactorial risk assessment of older peoples' risk of falling during a hospital stay; and
- Multifactorial interventions to prevent falls in inpatients at risk of falling.

Evidence Based Practice

AGENCY FOR HEALTHCARE RESEARCH AND QUALITY (AHRQ)

The Agency for Healthcare Research and Quality (AHRQ) has published the following report(s):

- **Preventing Falls in Hospitals: A Toolkit for Improving Quality Care**[7] (click here)
  Includes a specific section on fall prevention practices including how to implement as well as assess patients.

MEASUREMENT OF COMPLIANCE

WellCare is committed to adhering to the measures and standards published by the Centers for Medicare and Medicaid Services (CMS) and the National Committee for Quality Assurance (NCQA). Please reference WellCare's Clinical Policy Guiding Document titled *Measures of Compliance.*

NOTE: To access Clinical Policy Guiding Documents visit www.wellcare.com – select the Provider tab, then "Tools" and "Clinical Guidelines".

Care Management

Providers can reassure members that falls are preventable and can be reduced with the following tips:[2]

- **Regular Exercise.** Focus on increasing leg strength and improving balance, incorporating more challenging exercises over time. Tai Chi programs are recommended.
- **Medication Review.** Both prescription and over-the-counter medications may cause side effects or interactions such as dizziness or drowsiness.
- **Vision Exam.** Members should have an annual eye exam and update eyeglasses to maximize vision. Members should consider having a pair with single vision distance lenses for some activities such as walking outside.
- **Home Safety.** Providers can encourage members to reduce tripping hazards such as removing throw rugs, adding grab bars inside and outside the tub or shower and next to the toilet, adding railings on both sides of stairways and improving the lighting throughout their home.

To lower hip fracture risk, older adults should:

- Get adequate calcium and vitamin D from food and/or from supplements.
- Do weight bearing exercise.
- Get screened and, if needed, treated for osteoporosis.

MEASURABLE HEALTH OUTCOMES

Targeted Health Outcomes (Extended Program Goals) result from successful member self-management (see Case Management Objectives).

1. The Member experiences no symptoms requiring acute medical care and intervention. The case manager compares the recent utilization frequency for fall-related injury to the frequency prior to CM engagement. CM monitors for ED and inpatient authorization/utilization related to falls/fall-related injuries. In absence of ED and inpatient utilization, authorizations and claims data, or to otherwise demonstrate less frequent need for acute medical intervention, CM may use Provider and/or Member narrative.
2. The Member reports fewer or lessening falls over a specific period of time after the start of Case Management engagement. Member-specific goals should reference member's individual report of falls. Compare member's responses to fall risk assessment questions on initial and subsequent assessments.

CASE MANAGEMENT GOALS

The goals for Care Management is to support the member's ability to self-manage risk for falls, minimize symptoms and complications of falls, and remove barriers preventing the member from achieving those goals. Members at increased risk for falls include those with:

- Lower body weakness
- Vitamin D deficiency
- Difficulties with walking and balance
- Medication (e.g., tranquilizers, sedatives, antidepressants, some over-the-counter) can affect balance
- Vision or hearing problems
- Foot pain or poor footwear
- Home hazards or dangers (e.g., broken or uneven steps, throw rugs, clutter that can be tripped over)
- Impaired musculoskeletal function, gait abnormality and osteoporosis
- Cardiac arrhythmias (irregular heartbeat), blood pressure fluctuation
- Depression, Alzheimer's disease and senility
- Arthritis, hip weakness and imbalance
- Neurologic conditions, stroke, Parkinson's disease, multiple sclerosis
- Urinary and bladder dysfunction
- Cancer that affects the bones

Integrated care management of Fall Risk involves:

- Educate member to discuss falls or problems with balance or walking with provider
- Assist with making appointment with provider
- Assist/arrange transportation to provider
- Assess need for and in obtaining assistive devices per treatment plan
- Educate member on home safety
- Educate member on taking medications as directed

Case Goals should target specific care gaps and/or adherence issues, and measure the member's progress towards self-management and adherence which will lead to the targeted health outcomes above. Examples:

1. Member experiences no falls for a 60 day period with fall prevention strategies.
2. Member states implementation of appropriate interventions to minimize risk of injury within 10 days.
3. Member reports discussion regarding fall risks, concerns and prevention with doctor on [enter date]
4. Specific for Members requiring hospitalization: The Member participates in provider follow-up visit within 7 days of hospital discharge.

Other measureable health outcomes may apply based on the underlying condition causing Fall Risk in the individual. Refer to those other CPGs for additional options for health outcomes.

CASE MANAGEMENT OBJECTIVES

Case Management Objectives should focus on improving the member's self-management skills and include:

- Sending educational material on fall prevention.
- Encouraging member to discuss fall risks / concerns and falls prevention with doctor.
- Getting adequate calcium and vitamin D from food and/or from supplements.
- Doing weight bearing exercise.
- Getting screened and, if needed, treated for osteoporosis.
- Discussing risks/barriers with provider to determine if any healthcare resources could address.
- Assisting member with contacting support resources, setting up support resources to address barrier(s).
- Educating member to discuss fall concerns and potential prevention with doctor.
- Educating member on ways to prevent injury such as:
  - Removing throw rugs
  - Using night lights
  - Using non-slip carpet
  - Wearing non-slip shoes both inside and outside the house
  - Using assistive devices (e.g., grab bars, hand rails, shower chairs, cane, walker)
  - Non-slip mats in the bathtub and on shower floors
  - Removing clutter from floor
  - Improving the lighting in member's home(e.g., having the member sit for a while before standing)
  - Keeping items used often in cabinets that can be reached easily without using a step stool

MEDICAL BEHAVIORAL INTEGRATION

The risk of falling can be exacerbated by mental health conditions. For example, falls in older people with mental health conditions are associated with greater costs compared to the general population of older people. One study showed that while behavioral health units showed a lower incidence of falls overall in comparison to other medical units, they had a higher rate of injurious falls resulting in nursing homes or medical-surgical units. Health care professionals dealing with this high risk population should be educated in falls assessment and prevention.[8]

Psychotropic medications are the biggest risk factor of falls in this population as they can cause orthostatic hypotension, ataxia, psychomotor slowing and extrapyramidal symptoms which can all increase fall risk. Older people taking psychotropic medications should have a fall assessment and medication review and psychotropic medications reduced or discontinued if possible.[9] Cognitive status is another major risk factor for falls in this population. Many

psychiatric patients have decreased cognitive status and learning ability and may find fall prevention recommendations difficult to follow.[10]

MEMBER EDUCATIONAL RESOURCES

WellCare contracts with Krames/StayWell for Member educational materials utilized by Case Managers. Items are available to review with Members to address knowledge gaps. Case Managers verbally educate Members on the topics below related to asthma. (Titles may also be sent to the member).

NOTE: Links are internal for WellCare Care Management staff. Please see below for public links.

- Preventing Falls making Changes in Your living Space
- Preventing Falls Moving Safely Out of a Chair and Bed
- Preventing Falls Moving Safely Using a Cane or Walker
- Exercises to Prevent Falls
- Preventing Falls Make Your Health a Priority

Providers may wish to research the titles above related to asthma that Case Managers utilize with Members.

Related WellCare Guidelines

In addition to the information contained in this document, please reference the following CPGs: *Cancer: HS-1034; Diabetes in Adults: HS-1009; Epilepsy: HS-1070; Frailty and Special Populations: HS-1052; Neurodegenerative Disease (HS-1032); Osteoporosis (HS-1015); Rheumatoid Arthritis: HS-1025;* and *Traumatic Brain Injury (TBI): HS-1066.* Refer to the following preventive CPG: *Older Adult Preventive Health: HS-1063.* For screening information related to fall risk, visit the USPSTF website at https://www.uspreventiveservicestaskforce.org.

NOTE: Clinical Policies can be accessed by going to www.wellcare.com – select the Provider tab, then "Tools" and "Clinical Guidelines".

References

1. Summary of the Updated American Geriatrics Society/British Geriatrics Society Clinical Practice Guideline for Prevention of Falls in Older Persons. http://www.americangeriatrics.org/files/documents/health_care_pros/JAGS.Falls.Guidelines.pdf. Published 2010. Accessed July 7, 2017.
2. Important facts about falls. Centers for Disease Control and Prevention Web site. http://www.cdc.gov/homeandrecreationalsafety/falls/adultfalls.html. Published February 10, 2017. Accessed July 7, 2017.
3. Guidelines to preventing falls. American Academy of Orthopaedic Surgeons Web site. http://orthoinfo.aaos.org/topic.cfm?topic=a00135. Published October 2012. Accessed July 7, 2017.
4. Burns ER, Stevens JA, Lee R. The direct costs of fatal and non-fatal falls among older adults — United States. Journal of Safety Research. 2016; 58:99-103. http://www.sciencedirect.com/science/article/pii/S0022437516300172. Accessed July 7, 2017.
5. AGS/BGS clinical practice guideline: prevention of falls in older persons. American Geriatrics Society Web site. http://www.americangeriatrics.org/files/documents/health_care_pros/Falls.Summary.Guide.pdf. Published 2010. Accessed July 7, 2017.
6. Falls in older people: assessing risk and prevention. National Institute for Health and Care Excellence Web site. https://www.nice.org.uk/guidance/cg161. Published June 2013 (reviewed January 2016). Accessed July 7, 2017.
7. Preventing Falls in Hospitals. Agency for Healthcare Research and Quality Web site. https://www.ahrq.gov/professionals/systems/hospital/fallpxtoolkit/index.html. Accessed July 7, 2017.
8. Bunn, Frances et al. "Preventing Falls among Older People with Mental Health Problems: A Systematic Review." *BMC Nursing* 13 (2014): 4. *PMC*. Web. 19 July 2017.
9. Quigley, Patricia, Barnett, Scott & Friedman, Yvonne. Reducing Falls and Fall-Related Injuries in Mental Health: A 1-Year Multihospital Falls Collaborative. *J Nurs Care Qual,* Vol. 29. No. 1, pp. 51-59, 2014. Accessed July 19, 2017.
10. Abraham S (2016) Factors Contributing to Psychiatric Patient Falls. J Community Med Health 6:410. doi:10.4172/2161-0711.1000410

Disclaimer

Medical Policy Committee Approval History

Date	History and Revisions by the Medical Policy Committee
10/5/2017	• Approved by MPC. New sections on Care Management and Health Equity, Health Literacy, and Cultural Considerations.
11/6/2014	• Approved by MPC. Inclusion of CMS STAR and NCQA HEDIS standards. No other changes.
11/1/2012	• Approved by MPC. New CPG.