

Falls Prevention: Falls Risk Assessment

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We all know the statistics surrounding falls in the elderly. Nearly one in three community-dwelling adults over the age of 65 will fall each year, with that percentage increasing to one in two over the age of 80. Falls are the leading cause of unintentional injury and death in those over 65, both nationally and in Maine. And falls are costly. In 2000, the direct cost of all fall injuries for people over 65 exceeded \$19 billion, and the Medicare costs for hip fractures *alone* are projected at \$32 billion in 2020! Even more sobering is the impact on quality of life. Many will never return to their prior level of living and independence, and 20% will die within one year of a hip fracture.

While the statistics on falls are staggering, *falls are not a natural part of aging!* Furthermore, *most falls are predictable and preventable.* Research has identified the key risk factors for falling and many are modifiable. Research has further shown that the incidence of falls in older adults can be reduced by targeting modifiable risk factors using proven interventions. A falls risk assessment determines those modifiable risk factors, but the first step in preventing falls is screening.

Screening For Fall Risk

There are two key screening actions for any patient over the age of 65:

- Ask your patients about falls
- Watch your patients walk

Ask each patient if they have fallen or had any trouble with their walking or balance in the last year. A fall within the prior twelve months is a strong predictor of future falls. Also ask all patients about fear of falling. Fear of falling alone can cause a downward spiral of decreasing activity levels that leads to further declines in gait and balance and increasing fall risk.

Also observe their walking. If you could not observe them walking to or from the exam room, the Get Up and Go is a quick and informative test. With the Get Up and Go, have the patient get up from a chair, walk a short distance, return to the chair, and sit down. This test quickly assesses their strength to rise from a chair, ability to initiate gait, stability while walking and turning, and safety with sitting. Any difficulty, imbalance, or unsafe movements suggests gait and balance impairment and potential increased fall risk. Persons reporting falls or presenting with mobility issues should then have a multi-factorial fall risk assessment.

This approach is supported by the American and British Geriatrics Societies in their new guidelines aimed at preventing falls among older adults. Released in January 2010, the guidelines recommend a multi-factorial fall risk assessment for all older adults who have had a fall, who report difficulties with gait or balance, or who have been identified as having gait and balance problems. Conducting a falls risk assessment is a critical step in falls prevention.

The Multi-Factorial Risk Assessment

The multi-factorial fall risk assessment should include: a focused history, a physical examination, and a functional and environmental assessment. The goal of the falls history is to identify modifiable risk factors. A medication review is critical. Research has shown that persons taking four or more prescription medications are at increased fall risk; medications known to increase the risk of falling include sedatives, benzodiazepines, antidepressants, and antipsychotics.

A physical examination should include a thorough review of systems with emphasis on the musculoskeletal, neurological and cardiac systems, as well as assessment of gait, balance, mobility, orthostatic vital signs, and cognition.

Functional and environmental assessments evaluate the use of adaptive equipment and mobility aids, ask about the level of independence with daily activities, question patients about fear of falling and activity level, and inquire about home environments to identify home safety issues and unsafe behaviors.

Then What? Effective Interventions

The most common, effective interventions supported in the research include:

- Exercise, particularly strengthening, gait and balance training
- Modifications of the home environment to improve safety
- Withdrawal or minimization of psychoactive medications, and other medications
- Management of postural hypotension

How do we accomplish all of this? An effective falls prevention program typically includes public health and healthcare professionals and community service providers. Exercise can be addressed through local community-based exercise programs for seniors, or with individualized outpatient physical therapy. Home safety evaluations can be initiated through an area home health agency. The Matter of Balance program can be accessed through the Agency on Aging to address concerns about falls. And the Maine Medical Center Geriatric Center Falls Clinic can assist with further assessing your patient's fall risk.

Screening is the first step in preventing future falls. Performing a fall risk assessment and intervening to reduce fall risk factors can reduce falls by as much as 30-40%. That would be a dramatic step towards reducing injury and health care costs and improving quality of life for our seniors.