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ELDER CARE

A Resource for Interprofessional Providers

Falls: Assessing and Intervening in Fall Risk in Older Adults

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Falls are the leading cause of fatal and nonfatal injuries among adults aged 65 years and older. Nearly one-third of older adults report falling each year, resulting in an estimated 7 million injuries; 10% of falls result in serious injuries. Over 3 million older adults are treated in U.S. emergency rooms each year because of falls; 25% of them are hospitalized and nearly 1% die. Despite the frequency of falls, half of older adults who fall do not discuss the fall with their health care providers, resulting in lost opportunities for preventing future falls.

Primary care providers (PCPs) can play an important role in assessing and ameliorating fall risk. Effective fall prevention, including assessment and intervention, has the potential to reduce functional decline, fall-related injuries, emergency visits, hospitalization, and institutionalization. Despite the fact that most PCPs are aware of older adults' fall risk, many are unsure about how to best assess and reduce fall risk in the course of a busy office schedule.

The U.S. Preventive Services Task Force (USPSTF) does not recommend a specific tool or approach for primary care fall assessment. But, both the American Geriatrics Society/British Geriatrics Society Clinical Practice Guideline for Prevention of Falls in Older Persons, and the CDC's Stopping Elder Accidents, Deaths and Injuries (STEADI) tool kit provide clinicians in all health professions with an approach to assessing fall risk, intervening to reduce risk, and providing follow-up. For care settings with the time and resources to fully implement these programs, they are ideal, and their free patient materials are easily accessible. However, many clinicians lack the time and/or resources to fully incorporate these recommendations. For these providers, a shortened approach, as discussed in this edition of *Elder Care*, still offers substantial fall risk benefit.

Assessing Fall Risk

All community dwelling adults age 65 and older should be assessed annually for fall risk. This can be done at the

Welcome to Medicare visit, the Medicare Annual Wellness visit, or other visits, and there are billing codes for reimbursement of this work by PCPs.

Falls often involve both environmental factors and factors intrinsic to the patient, some of which are modifiable (Table 1). Although the cause of falls is typically multifactorial, the various environmental and patient factors are often not considered. Instead, patients just say they fell because they "tripped," and no further evaluation is undertaken.

Balance problems	Muscle weakness
Fear of falling	Need for assistive devices
Foot and shoe problems	Peripheral neuropathy
Frailty/deconditioning	Postural hypotension
Home hazards	Sedating medications
Incontinence	Vision problems

In lieu of a formal Timed Up-and-Go test (see resource list) or other assessments, simply watching a patient walk into the exam room and sit or rise from a chair can quickly give you a sense for whether there are problems with weakness, deconditioning, gait, balance, or stability.

Medical assistants can be trained to assess fall risk at patient check-in by performing the observations noted above, and asking questions about falls. Furthermore, design and implementation of an electronic health record fall template, with triggered referrals based on clinical findings, can help to guide fall-risk encounters. Importantly, if found to be at risk of falling, "Fall Risk" should be added to the patient's problem list, so that all clinicians can consider this risk in their care of the patient.

The most predictive question to assess fall risk is: "Have you fallen in the past year?" If the response is yes, ask the

TIPS

- "Have you fallen in the past year?" is the most predictive question for detecting high fall risk.
- Ask about fear of falling. It can affect even high-functioning older adults, causing them to decrease their physical activity and creating a downward spiral of deconditioning and further increasing their risk of falling.
- Refer deconditioned elders for physical therapy rather than initially recommending a community exercise program.
- Many communities have robust fall resources – check your local health department, fire department, Fall Prevention Consortium, or Area Agency on Aging to find out about local resources.

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patient to provide details of exactly what happened, rather than just accepting an explanation about tripping.

Additional questions may include: “How often have you fallen?” “Were you injured?” “Do you feel unsteady when standing or walking?” and, “Do you worry about falling?” This last question is of special importance because fear of falling is common as people age, even among those who have not fallen. Fear of falling can lead older adults to avoid activities that require walking in unknown areas or taking part in physical activities. The latter, in turn, can lead to deconditioning, and thus, an even higher risk of falling.

Interventions to Reduce Fall Risk

Medication Review. A first step in reducing fall risk is a review to find out if the patient is taking medications that can contribute to falls, including sedative-hypnotics, anxiolytics, diuretics, steroids, skeletal muscle relaxants, antidepressants, and antipsychotics (including typical or atypical antipsychotics). Taking three or more of any of these medications significantly increases fall risk and these medications should be withdrawn or doses reduced, if at all possible, with appropriate tapering if indicated.

Address Environmental Hazards. Home environmental hazards, which are common, should also be addressed. Many fire departments have programs to assist in home environmental assessment and modification of the environment as needed. In addition, many older adults qualify for in-home home health safety checks to assist in alleviation of home hazards. Your local Area Agencies on Aging may have such a program and be able to assist with installation of safety equipment for those with low income. Patient education materials on home hazards and on do-it-yourself home safety checks are also available (Table 2).

Address Fear of Falling. For patients who express fear of falling, check with your Area Agency on Aging, Health Department, or Health Care System about community-based fall prevention courses such as “A Matter of Balance” (Table 2), which can decrease the fear of falling through fall-risk education - including information about fall pendants and alert systems. Plus, these programs are helpful in teaching strategies to avoid falling.

Physical Therapy (PT) and Exercise Programs. The aforementioned community courses often are in group settings and the specific needs of individual patients may

not be addressed. For example, patients may benefit from practicing how to get up from the floor. Patients who started using a cane or walker on their own can benefit from an evaluation to determine if it is the best assistive device for them, and if it is being used correctly. A referral to PT can provide this personalized evaluation, plus address issues of strength, balance, and conditioning.

Home PT should be considered for deconditioned older adults who have fallen and cannot leave home without considerable effort. Plus, many fall risk factors can be better assessed at home. Patients may subsequently transition to outpatient PT or a community exercise program, which have benefit of providing socialization and “normalizing” physical activity. The latter is important to help patients make exercise a habit. Furthermore, evidence indicates that “dual task” balance training such as Tai Chi or ballroom dancing, usually in groups, is superior to more static balance training for improving balance overall.

Other Interventions. Consider annual eye exams, checking for lower-extremity neuropathy, and managing foot problems and footwear (particularly in patients with diabetes). Check for orthostatic hypotension and cardiac arrhythmias. Neurologic exam should assess cognitive function, muscle strength, proprioception, reflexes, and cortical, extrapyramidal, and cerebellar function. Ask about urinary incontinence and screen for depression, anemia, and alcohol use.

Address Bone Health. In addition to interventions to reduce fall risk, it is important to assess and improve bone health. Check bone density to determine fracture risk, and check for vitamin D deficiency with supplementation as indicated.

Patient Education For patients with good computer skills, or who are accompanied by caregivers with those skills, refer them to the websites listed in Table 2. Also provide information about fall pendants and alert systems. In addition, provide information about the previously mentioned community fall prevention programs.

Table 2. Fall Resources for Patients

STEADI Fall Prevention Program: www.cdc.gov/STEADI/
The Fall Prevention Center of Excellence: www.stopfalls.org
National Council on Aging - A Matter of Balance: www.ncoa.org/resources/program-summary-a-matter-of-balance/

References and Resources

Final Update Summary: Falls Prevention in Older Adults: Counseling and Preventive Medication. U.S. Preventive Services Task Force. September 2016.

<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/falls-prevention-in-older-adults-counseling-and-preventive-medication>

American Geriatrics Society/British Geriatrics Society Fall Guideline <https://www.ncbi.nlm.nih.gov/pubmed/21226685>

Centers for Disease Control and Prevention. Stopping Elderly Accidents, Deaths and Injuries (STEADI). www.cdc.gov/steadi

Lomas-Vega, et al. Tai chi for risk of falls. A meta-analysis. J Am Geriatr Soc. July 2017; epub ahead of print

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