

Prevention of Falls in Community-Dwelling Older Adults: Recommendation Statement

► See related Putting Prevention into Practice on page 1135.

This summary is one in a series excerpted from the Recommendation Statements released by the U.S. Preventive Services Task Force (USPSTF). These statements address preventive health services for use in primary care clinical settings, including screening tests, counseling, and preventive medications.

The complete version of this statement, including supporting scientific evidence, evidence tables, grading system, members of the USPSTF at the time this recommendation was finalized, and references, is available on the USPSTF Web site at <http://www.uspreventiveservicestaskforce.org/>.

A collection of USPSTF recommendation statements reprinted in *AFP* is available at <http://www.aafp.org/afp/uspstf>.

Summary of Recommendations and Evidence

The U.S. Preventive Services Task Force (USPSTF) recommends exercise or physical therapy and vitamin D supplementation to prevent falls in community-dwelling adults 65 years or older who are at increased risk of falls (*Table 1*). **B recommendation.**

No single recommended tool or brief approach can reliably identify older adults at increased risk of falls, but several reasonable and feasible approaches are available for primary care clinicians. See the Clinical Considerations section for additional information on risk assessment.

The USPSTF does not recommend automatically performing an in-depth multifactorial risk assessment in conjunction with comprehensive management of identified risks to prevent falls in community-dwelling adults 65 years or older because the likelihood of benefit is small. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of the circumstances of prior falls, comorbid medical conditions, and patient values. **C recommendation.**

See the Clinical Considerations section for more information about providing this service for individual patients.

Rationale

Importance. Falls are the leading cause of injury in adults 65 years or older. Between 30 and 40 percent of community-dwelling adults 65 years or older fall at least once per year.

Detection. Effective primary care interventions for falls use various approaches to identify persons at increased risk. However, no evidence-based instrument exists that can accurately identify older adults at increased risk of falling. The factor used

most often to identify high-risk persons is a history of falls, and most studies use additional risk factors to select patients.

Benefits of early intervention. The USPSTF found convincing evidence that exercise or physical therapy has moderate benefit in preventing falls in older adults. Adequate evidence indicates that vitamin D supplementation has moderate benefit in preventing falls in this population, and that interventions identified and categorized as multifactorial risk assessment with comprehensive management of identified risks have at least a small benefit in preventing falls. Comprehensive multifactorial assessment and management interventions include assessment of multiple risk factors for falls, and providing medical and social care to address factors identified during the assessment. Some combination of interventions in a select population could provide important benefits, but given the current evidence, the USPSTF is uncertain what that combination or population would be.

Harms of early intervention. The USPSTF found convincing evidence that the harms of vitamin D supplementation are no greater than small. Adequate evidence shows that the harms of physical therapy or exercise are small, and may include a paradoxical increase in falls and an increase in physician visits.

The USPSTF found convincing evidence that the harms of multifactorial assessment with comprehensive management of identified risks are no greater than small.

USPSTF assessment. The USPSTF concludes with high certainty that exercise or physical therapy has moderate net benefit in preventing falls in older adults.

The USPSTF concludes with moderate certainty that vitamin D supplementation has moderate net benefit in preventing falls in older adults.

**Table 1. Prevention of Falls in Community-Dwelling Older Adults:
Clinical Summary of the USPSTF Recommendation**

Population	Community-dwelling adults 65 years or older who are at increased risk of falls	Community-dwelling adults 65 years or older
Recommendation	Provide intervention consisting of exercise or physical therapy and/or vitamin D supplementation to prevent falls.	Do not automatically perform an in-depth multifactorial risk assessment with comprehensive management of identified risks to prevent falls.
Risk assessment	Grade: B	Grade: C
Interventions	Primary care clinicians can consider the following factors to identify older adults at increased risk of falls: a history of falls, a history of mobility problems, and poor performance on the timed Get-Up-and-Go test. Effective exercise and physical therapy interventions include group classes and at-home physiotherapy strategies and range in intensity from very low (nine hours or less) to high (greater than 75 hours). Benefit from vitamin D supplementation occurs by 12 months; the effectiveness of treatment of shorter duration is unknown. The recommended daily allowance for vitamin D is 600 IU for adults 51 to 70 years of age and 800 IU for adults older than 70 years. Comprehensive multifactorial assessment and management interventions include assessment of multiple risk factors for falls, and providing medical and social care to address factors identified during the assessment. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of the circumstances of prior falls, medical comorbid conditions, and patient values.	Comprehensive multifactorial assessment and management interventions include assessment of multiple risk factors for falls, and providing medical and social care to address factors identified during the assessment. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of the circumstances of prior falls, medical comorbid conditions, and patient values.
Balance of harms and benefits	Exercise or physical therapy and vitamin D supplementation have a moderate benefit in preventing falls in older adults.	Multifactorial risk assessment with comprehensive management of identified risks has at least a small benefit in preventing falls in older adults.
Other relevant recommendations from the USPSTF	The USPSTF has made recommendations on screening for osteoporosis. These recommendations are available at http://www.uspreventiveservicestaskforce.org/ .	

NOTE: For the full recommendation statement and supporting documents, go to <http://www.uspreventiveservicestaskforce.org/>.

USPSTF = U.S. Preventive Services Task Force.

The USPSTF concludes with moderate certainty that multifactorial risk assessment with comprehensive management of identified risks has a small net benefit in preventing falls in older adults.

Clinical Considerations

Patient population. This recommendation applies to interventions that are feasible in primary care for community-dwelling adults 65 years or older.

Brief assessment of individual risk in primary care. Primary care clinicians can reasonably consider a small number of factors to identify older persons at increased risk of falls. Age itself is strongly related to risk for falls.^{1,2} Several clinical factors, including a history of falls, a history of mobility problems, and poor performance on the timed Get-Up-and-Go test,^{3,4} also identify persons at increased risk of falling. A history of falling is most commonly used to identify increased risk of future falling and has generally been considered concurrently or sequentially with other key risk factors, particularly gait and balance. A pragmatic, expert-supported approach to identifying high-risk persons uses a history of falls and mobility problems and the results of a timed Get-Up-and-Go test. The test is performed by observing the time it takes a person to rise from an armchair, walk 3 m (10 ft), turn, walk back, and sit down again.⁴ The

average healthy adult older than 60 years can do this task in less than 10 seconds.⁵ The USPSTF did not find evidence about frequency of a brief falls risk assessment, but other organizations, including the American Geriatrics Society (AGS), recommend that clinicians ask their patients yearly about falls and balance or gait problems.

Interventions. Effective exercise and physical therapy interventions include group classes and at-home physiotherapy strategies. Effective interventions range in intensity from low (nine hours or less) to high (greater than 75 hours). The U.S. Department of Health and Human Services recommends that older adults get at least 150 minutes per week of moderate-intensity or 75 minutes per week of vigorous-intensity aerobic physical activity, as well as muscle-strengthening activities twice per week.⁶ It also recommends balance training three or more days per week for older adults at risk of falling because of a recent fall or difficulty walking.⁶ The AGS recommends that exercise interventions include balance, gait, and strength training.

The trials studied a wide range of doses and durations for vitamin D supplementation; the median dosage was 800 IU daily, and the median duration was 12 months. The data suggest that benefit from vitamin D supplementation occurs by 12 months; the effectiveness of shorter treatment is unknown. According to the Institute of Medicine, the recommended daily allowance for vitamin D

is 600 IU for adults 51 to 70 years of age and 800 IU for adults older than 70 years.⁷ The AGS recommends 800 IU per day for persons at increased risk of falls.

The following interventions lack sufficient evidence for or against use in prevention of falls in community-dwelling older adults: vision correction, medication discontinuation, protein supplementation, education or counseling, and home hazard modification.

Other approaches to prevention. The Centers for Disease Control and Prevention has published details on implementing community-based interventions to prevent falls.⁸ The USPSTF's recommendation on vitamin D and calcium supplementation to prevent cancer and fractures is being updated and will be available at <http://www.uspreventiveservicestaskforce.org> when complete.

Useful resources. The USPSTF recommends screening for osteoporosis in women 65 years or older. More information is available at <http://www.uspreventiveservicestaskforce.org>.

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The "Other Considerations," "Discussion," and "Recommendations of Others" sections of this recommendation statement are available at <http://www.uspreventiveservicestaskforce.org/uspstf/uspsfalls.htm>.

The U.S. Preventive Services Task Force recommendations are independent of the U.S. government. They do not represent the views of the Agency for Healthcare Research and Quality, the U.S. Department of Health and Human Services, or the U.S. Public Health Service.

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