Preventing Falls and Fall-Related Injuries at Home

Teaching family caregivers about home modification and what to do if a fall occurs.

In a national survey of caregivers who provide unpaid care to a relative or friend, 46% reported they assisted with medical and nursing tasks. Of these, 43% said such help involved the use of assistive mobility devices, such as walkers or canes. Almost half of family caregivers are also known to provide assistance to older adults as they transfer into and out of beds and chairs in the home environment. These caregivers providing assistance with activities of daily living as well as medical and nursing tasks typically receive little training regarding optimal mobility and safety.

MOBILITY AND THE RISK OF FALLING
Falls are a high-impact, high-cost health concern for older adults. They are the leading cause of fatal and nonfatal accidents for those ages 65 and older. In a sample of almost 150,000 older adults, investigators at the Centers for Disease Control and Prevention (CDC) found that almost 30% fell at least once in the prior 12 months, resulting in 7 million fall injuries that required medical attention or at least one day of restricted activity. Women in older age groups were at highest risk for both falls and injuries. Additionally, falls can increase the likelihood of being admitted to a long-term care facility.

A plethora of research about the risk and epidemiology of falls in older adults has revealed that the causes of falls are multifactorial. Important risk factors include a history of falls; visual impairment; polypharmacy; the use of psychotropic medications; postural hypotension; environmental risks; and impaired strength, balance, or gait. Most of these factors are modifiable: older adults, their families, and caregivers can make safety changes to the home environment, while health care providers ensure that a patient’s clinical needs are met.

Because mobility in later life results in positive health benefits but increases exposure to falls, many researchers and health care providers in geriatric nursing and medicine have called for ensuring safe mobility while protecting older adults from harm. It’s especially important to identify strategies that can potentially reduce the risk of fall-related injuries in older adults. This increasing focus on fall-injury prevention—in addition to fall prevention—represents a major shift in safety practice.

GUIDELINES AND RESOURCES FOR CLINICIANS
Numerous guidelines and online resources are available to nurses and other health care providers and can help to improve clinical practice and communication with older adults and families about fall risk and risk reduction. The updated American Geriatrics Society/British Geriatrics Society Clinical Practice Guideline for Prevention of Falls in Older Persons (AGS/BGS...
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guideline), published in 2010, outlines a comprehensive approach that is applicable across care settings. Clinicians can improve outcomes for older adults by focusing interventions on both fall prevention and fall-injury prevention. The AGS/BGS guideline highlights ways to mitigate risks for fractures and uncontrolled bleeding (which is especially important among those taking anticoagulants) and addresses the increased fall risk and deconditioning of older adults who are not physically active. The guideline notes that matching multifactorial assessment of older adults with specific clinical interventions can reduce the risk of falls, as can home environment assessment and intervention that is part of a multifactorial fall prevention program.

The CDC’s STEADI (Stopping Elderly Accidents, Deaths, and Injuries) Toolkit provides comprehensive falls prevention information. The toolkit consists of guidance and resources for health care providers to assess an older adult’s risk of falling and provides patients and their caregivers with information about preventing falls and fall injuries at home. Included in the toolkit is an assessment and treatment algorithm based on the AGS/BGS guideline, basic information about falls and risk factors, case studies, tips for discussing fall prevention with patients, standardized gait and balance assessment tests (with instructional videos), and patient and family educational brochures. For more information, see www.cdc.gov/steadi/about.html.

A CDC brochure, Check for Safety, focuses on home safety and includes a checklist to identify and mitigate hazards in the home, including in the kitchen, bathroom, bedroom, and stairways. The brochure contains recommendations, for instance, such as removing rugs and clutter from living spaces and improving lighting throughout the home. For each hazard, improvements are identified; general tips for preventing falls are listed at the end of the brochure. For more information, see www.cdc.gov/homeandrecreationalsafety/pubs/english/booklet_eng_desktop-a.pdf.

Private health insurance, Medicare, and Medicaid typically do not reimburse for accessible home and bathroom modifications, but they do pay for durable medical equipment like walkers, hospital beds, and mechanical patient lifts that can assist with mobility. Some home modifications, such as ramps and bathroom accessibility may be tax deductible (for more information, see www.irs.gov/pub/irs-pdf/p502.pdf). Local governments, via special housing programs for low-income families, may fund kitchen, bathroom, or stair modifications. Nonprofit organizations, such as neighborhood associations, community groups, churches, synagogues, Lutheran social services organizations, Catholic Charities USA, Area Agencies on Aging, and senior centers, may provide support for home modifications. For veterans, there are several home modification grant programs (Home Improvements and Structural Alterations and Specially Adapted Housing) available through the Veterans Administration. For eligibility information, see www.benefits.va.gov or speak with a vocational rehabilitation specialist. Primary care providers can request a vocational rehab consultation, and these specialists can answer questions regarding benefits.

The National Council on Aging has published several information sheets for health care providers, family caregivers, and older adults that help to increase public awareness and provide education on the risks of falls and ways to prevent them. For more information, see www.ncoa.org/healthy-aging/falls-prevention/falls-prevention-awareness-day/general-resources/infographics-handouts.

The VA National Center for Patient Safety’s Falls Toolkit is designed for health care facilities seeking to develop a comprehensive falls prevention program. Among the resources available in this toolkit is an

A caregiver helps her family member to his knees and prepares to assist him in standing, using the furniture for support. Photo courtesy of the AARP Public Policy Institute.
SUPPORTING FAMILY CAREGIVERS  
NO LONGER HOME ALONE

Information for Family Caregivers

Risk Factors for Falls

- A history of falls
- Impaired strength, balance, and gait
- Visual impairment
- Polypharmacy
- Use of psychotropic medications
- Postural hypotension
- Environmental risks

Home Modification Tips

- Remove throw rugs and mats from living spaces, including bathrooms. Alternatively, affix rugs and mats to floors, making sure the edges do not create a tripping hazard.
- Remove clutter from living spaces, entryways, and hallways.
- Improve lighting throughout the home.
- Although many modifications can be made by the older adult, caregiver, or other family members and friends, more complicated modifications, such as the installation of a ramp at an entryway, may require the assistance of a professional.
- Involve social workers in securing financial assistance for durable medical equipment and home modifications.
- Arrange furniture to ensure there is space for the older adult to perform exercises.
- Mitigate environmental barriers by raising toilet seats, encouraging the older adult to use a walker or a walking frame with wheels, and installing grab bars.
- Arrange for contrast edging along steps and handrails.
- Acquire chairs and sofas that are high and stable enough to facilitate sitting and rising.
- Reverse hinges on doors to allow more space for walkers through narrow doorways, or install pocket doors.
- Remove or secure paving stones in walkways.
- Keep frequently used items on counters and low shelves for easy access and to prevent the older adult from reaching too far.

Family caregiver instructional videos about mobility can be found on AARP’s website:

Preparing Your Home for Safe Mobility
http://links.lww.com/AJN/A94

What to Do When Someone Falls
http://links.lww.com/AJN/A95

For additional information and to access these videos in Spanish, visit AARP’s Home Alone Alliance web page: www.aarp.org/ppi/info-2017/home-alone-alliance.html.
GUIDANCE FOR FAMILY CAREGIVERS

Older adults, their caregivers, and other family members need guidance in the event of a fall at home. The same principles that guide nursing practice—assessing a person who has fallen, providing emergency assistance and first aid, helping the person to rise—can guide caregivers as they navigate this situation. They especially need information on how to assess for injuries and when to help the person up versus when to call for emergency help (for example, when the person loses consciousness, is bleeding uncontrollably, experiences head trauma, or has hip or other bone pain, which could indicate a fracture).

In the absence of apparent injury, the family caregiver should guide the person to a stable chair or other piece of furniture. From here, the caregiver can help the person to her or his knees and assist the person in getting up off the floor, using the furniture for support. If the person requires more than minimal assistance, the caregiver should call for assistance, so that she or he doesn’t become injured while helping the person who has fallen. Afterward, the family caregiver should notify the older adult’s health care provider to ensure she or he receives appropriate follow-up care.

Nurses play an important role in helping patients and their caregivers to understand the importance of making home modifications to prevent falls. Because some older adults are reluctant to make changes to their homes, the potentially serious consequences of a fall should be emphasized, and the help of caregivers, family, and friends should be enlisted. Counseling older adults and their caregivers using motivational interviewing techniques—which aim to encourage a person to make positive decisions and changes—can be helpful when seeking to ensure a safe home environment for older adults.

For additional tips and resources to give to family caregivers, see Information for Family Caregivers.

For more information, see www.patientsafety.va.gov/docs/WhatIfFall_RevNov12.pdf.

REFERENCES


Resources for Nurses

Preparing Your Home for Safe Mobility
http://links.lww.com/AJN/A96

What to Do When Someone Falls
http://links.lww.com/AJN/A97

AJN’s resource page for supporting family caregivers includes previous articles and videos in this series.
http://links.lww.com/AJN/A81

*Family caregivers can access these videos, which are available in English or Spanish, as well as additional information and resources, on AARP’s Home Alone Alliance web page: www.aarp.org/ppi/info-2017/home-alone-alliance.html.

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