TBM

The clinical practice guideline for falls and fall risk

Jacqueline Vance, RNC, BSN, CDONA/LTC, FACDONA

[1]American Medical Directors Association, Columbia, MD, USA

Correspondence to: J Vance
jvance@amda.com

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ABSTRACT

Falling is a significant cause of injury and death in frail older adults. Residents in long-term care (LTC) facilities fall for a variety of reasons and are more likely to endure injuries after a fall than those in the community The American Medical Directors Association (AMDA) Clinical Practice Guideline is written to give LTC staff an understanding of risk factors for falls and provide guidance for a systematic approach to patient assessment and selection of appropriate interventions. It is intended to help facilities establish processes for evaluating, managing, and preventing falls. AMDA guidelines are written specifically for the elder in the LTC setting. Facility teams systematically address each individual's risk factors for falls and fall risks and the adverse consequences on the patient's functioning and quality of life. AMDA guidelines emphasize key care processes and are organized for ready incorporation into facility-specific policies and procedures to guide staff and practitioner practices and performance.

KEYWORDS

Falls, Fall risk, Elderly, Clinical practice guidelines, Long-term care, Fall, Falling

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Implications

To Researchers: AMDA's original fall and fall risk guideline had an implementation research study conducted with favorable results within the long-term care setting. Researchers may wish to mimic that study within the LTC environment with the updated guideline and with the implementation of the updated MDS 3.0 for improved metrics collection.

To Practitioners: Practitioners who practice in the LTC setting should incorporate the AMDA CPG in their facilities as a part of quality assessment practice improvement.

To Policy Makers: AMDA's guidelines are referred to by the Center for Medicare & Medicaid Services as expert endorsed and evidenced based for the LTC setting. I suggest that other entities model CMS in endorsing the guideline.

Falling is a significant cause of injury and death in older adults, especially those who are frail. Residents in long-term care (LTC) facilities fall for a variety of reasons and are more likely to endure injuries after a fall than those living in the community. Among other things, decreased body weight and osteoporosis may result in serious injuries or fracture as a consequence of a fall. To help prevent and manage falls in long-term care settings, American Medical Directors Association (AMDA)-*Dedicated to Long Term Care Medicine*™ recently developed a Clinical Practice Guideline (CPG) for Falls and Fall Risk. Preventing falls with frail elders in this setting, many with cognitive problems, age-related changes, chronic medical conditions, medication effects, and physical limitations is a significant challenge and requires dedicated interdisciplinary effort. AMDA stresses that goals should focus on minimizing fall risk and risk of fall-related injuries while maximizing individual dignity, freedom, and quality of life.

The purpose of the guideline is to give LTC facility staff an understanding of intrinsic and extrinsic risk factors for falls and provide guidance for a timely and systematic approach to patient assessment and selection of appropriate interventions. In addition, it is intended to help facilities establish processes for evaluating, managing, and preventing falls.

AMDA guidelines are written specifically for the elder in the LTC setting. AMDA believes that guidelines in the LTC setting should be consistent with fundamental goals of desirable LTC practice. Operationally, this requirement means that the nursing facility care team systematically addresses (1) each individual's risk factors for a number of diseases and conditions and (2) the adverse consequences of the diseases and conditions on the patient's functioning and quality of life. AMDA guidelines emphasize key care processes and are organized for ready incorporation into facility-specific policies and procedures to guide staff and practitioner practices and performance. AMDA's guidelines are intended for the members of the interdisciplinary team in long-term care facilities, including the medical director, director of nursing, practitioners, nursing staff, consultant pharmacist, and other professionals such as therapists, social workers, dietitians, and nursing assistants who care for residents of LTC facilities.

Similar to other AMDA guidelines, the AMDA Falls Guideline emphasizes key care processes and uses an interdisciplinary team approach and a step by step process. The CPG for Falls and Fall Risk addresses the following four phases: recognition, assessment, treatment, and monitoring. Under each of these phases are multiple steps to follow as shown in Table 1.

GUIDELINE IMPLEMENTATION

The first phase of the implementation process is the recognition phase. This involves assessing/evaluating the residents and determining who is or is not a risk of falling. This may be carried out by many different members of the facility team. The second phase of the care process is the assessment/root cause analysis phase. This is often the longest and most intensive phase of the care process. This involves exploration at the facility/community and individual level to determine the cause of fall and consider the impact of preventative interventions on the daily life of the residents. The third phase of the care process is the treatment phase. This is where interventions based on what was learned in the assessment/root cause analysis phase are put into place. Making your interventions truly patient centered and focused. Instead of canned care plans with dozens of interventions that may or may not target the patient's underlying cause, this phase allows you to discover the causation and focus your efforts on that cause. The fourth and last phase of the care process is monitoring. This is where you monitor the course of treatment or management and decide to continue, change, or stop interventions. Since most conditions of persons in this environment are chronic, the monitoring phase often continues over the life or stay of the patient.

PHASE 1 RECOGNITION: STEPS 1 AND 2

The focus of step 1 is around reviewing the resident's past history (medical records and reports from the resident and/or family) for evidence of previous falls. Step 2 then expands on the resident's individual risk factors for falls. This might include such things as comorbidities, fear of falling, deconditioning, medications that have central nervous system effects, or vitamin D deficiency. Step 1 also discusses practices that occur in LTC facilities without evidence. (e.g., while it is a common practice in many LTC facilities to do frequent vital signs or "neurochecks", no studies demonstrating the utility of performing regular neurochecks in LTC settings are available; no evidence supports observing patients for a fixed period of time after a fall, and there is no regulatory requirement to do so.)

PHASE 2: STEPS 3, 4, AND 5

Step 3 addresses what to do once the resident has actually experienced a fall. A written procedure should be established that includes management of the resident, appropriate individuals to contact following the falls, and continued follow-up of the resident to monitor for signs and symptoms of traumatic events such as head trauma or persistent pain or internal bleeding. Step 4 addresses how to reevaluate the resident for risk after a new fall has occurred. This is done in step 4 by carefully delineating what happened during the fall (e.g., was there a buckling of the knee or was the resident leaning far to one side while trying to ambulate; did the resident slide from a chair while sitting). Step 5 guides providers in the evaluation of the residents' risk for subsequent complications associated with falls. The common use of anticoagulants among residents in long-term care facilities is a good example of an increased risk factor for significant injury from falls.

PHASE 3: STEPS 6, 7, AND 8

Moving into phase 3 of the CPG, the next step, step 6 uses the information obtained to this point to develop care goals for the resident. Goals should address prevention of falls when possible, a decrease in the number of falls, and a decrease in the risk and severity of injury. Goal development should include

Table 1 | The steps of the CPG for falls and fall risk

Recognition	Assessment	Treatment	Monitoring
Step 1: Does the patient have a history of falls?	Step 3: Has the patient just fallen?	Step 6: Develop a plan for managing falls and fall risk	Step 9: Monitor falling in patients with a fall risk or fall history
Step 2: Is the patient at risk of falling?	Step 4: Evaluate the factors associated with the fall	Step 7: Manage the cause of falling	Step 10: Establish quality improvement activities related to fall risk and falling
	Step 5: Identify the patient's actual and potential complications of falls	Step 8: Implement relevant general measures to address falling and fall risks	

the resident and/or family and the goals established should be realistically achievable. It may be, for example, that a resident and his or her family are willing to accept the risk of falling so as to be able to maintain independent ambulation within the facility. The goal(s) in this situation would be to decrease the risks of serious injuries by doing such things as wearing hip protectors. Step 7 directs the providers toward the management of falls using a systematic approach that includes repeated reassessment and adjustment. Cause-specific interventions are only sometimes available and effective. At other times, the best that can be done is to try various interventions until falling is reduced or stops or until an uncorrectable reason is identified for its continuation. Management techniques are provided within the CPG for a variety of common causes of falls such as gait or balance impairments, orthostatic hypotension, or vitamin D deficiency. Step 8 moves from a focus on the individual resident to addressing generic approaches to implement within the facility. This might involve making changes in the environment like clearing hallways, investing in low beds for all residents, or implementing regular exercise activities into the daily lives of residents. This section also examines the evidence on controversial issues such as bed and chair alarms, restraint usage, bed heights, side rails, body mechanics, hip protectors, floor mats, and ergonomic mechanical lifting devices.

PHASE 4: STEPS 9 AND 10

Step 9 acknowledges that falls likely will continue to occur and addresses how to best monitor falls within the facility. This involves monitoring the residents' response to interventions intended to reduce falling or the risk of falling, documenting the presence of irreversible risk factors (impaired balance secondary to a stroke), and evaluating relevant interventions to try to minimize fall-related injuries (e.g., treating osteoporosis). Finally, step 10 is geared toward establishing quality improvement activities. Although it may be very difficult to decrease the number of falls that occur, quality improvement can and should be considered based on evidence that care processes are occurring to address the falls that do happen. This would be evidence that the various steps within the CPG are being implemented (e.g., that post-fall assessments of residents are completed).

ADDITIONAL RESOURCES WITHIN THE CPG

The CPG includes multiple assessment tools and resources to help providers easily implement the guideline in their real world settings. These resources can be easily copied and used to educate staff about falls and fall prevention and management, in the implementation process and for the ongoing evaluation that is needed. The information provided is evidence or experience based and pulls from current research and literature on falls and fall prevention with 45 fall-related references. For example, under the recognition phase, there is a table that addresses the common risk factors for falls; one that provides categories of medications that increase the risk of falls; and a checklist for assessing fall risk in each resident. Under the assessment phase, the guideline includes a table delineating a neurological evaluation that a nurse at the bedside can perform; a checklist for a post-fall evaluation of the resident; a review of environmental factors to consider associated with falling; and a table delineating the potential complications of falling. Under the treatment phase, there are two tables: one providing examples of approaches to try and reduce falls or the consequences of falls (e.g., function-focused care approaches, increased activities to engage residents; restraint reduction); and one delineating the risk associated with restraint use. Lastly, the monitoring phase has one table that provides examples of process and outcome indicators related to falls.

TRICKS OF THE TRADE FOR CPG IMPLEMENTATION

The implementation of CPGs developed by AMDA has repeatedly been shown to make a positive impact on clinical outcomes among residents and can be implemented using the information provided [1–4]. The use of a champion to initiate the process and an implementation team is strongly recommended. The implementation of the CPG for Falls and Falls Risk will help not only to prevent falls within these settings but also help the facilities monitor for trends and follow their own progress in terms of fall management and number of falls and benchmark this against national standards. The CPG Falls and Falls Risk is available on the webpage for the American Medical Directors Association (http://www.amda.com/tools/guidelines.cfm#falls) and the author can be contacted for additional information.

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