Module Introduction

Module 4: The Biggest Fear…Falls

Module 4 addresses one of the biggest concerns within any assisted living facility…falls. As we encourage older adults to move more, it is natural to be worried about them falling. Much research has been done in this area, and although no specific efforts or combinations of interventions have been shown to prevent all falls or fall injuries, it is possible to reduce the frequency of falls and the severity of injuries associated with falls.

This module starts with key points to remember when developing policies related to fall risk and management for your facility. Also included is "Policy and Procedure: Falls Prevention and Management," developed by the Toronto Best Practice in LTC Initiative in September of 2006. This can serve as a guide as you develop your site's own policy and procedure for falls.

Following this is a protocol for nursing staff regarding falls prevention, along with four forms: a falls risk assessment form, a form for evaluation of a fall incident, a form for physical assessment after a fall, and a form for a comprhensive evaluation post-fall. In addition, there is a brief assesment form for evaluating risk for Vitamin D deficiency.

This module also includes a compilaton of interventions for falls that have been researched and evaluated. Each intervention is rated (A,B, or C) based on the strength of evidence available to support its use.

Finally, the module includes an "FFC Tidbit" that addresses the safety of function focused care, and another that staff can use to help remember important tips on how to reduce falls.

Function Focused Care Tidbit

Falls: Small Word, BIG concern

Falling is an ever-present concern and challenge for assisted living facilities, and much research has been done on how to best prevent and manage them. As you consider developing policies related to FFC at your facility, developing policies related to fall risk and management is a good place to start.

We hope the information provided here can help you begin to shape these policies. Also, please take a few minutes to review the documents within this module. In addition to a brief outline that describes a falls protocol for staff to follow, there are some quick, one-page forms that can help nurses record important information related to fall risk and management.

Although no specific efforts or combinations of interventions have been shown to prevent all falls or injuries associated with falling, it's often possible to reduce the frequency of falls and the severity of injuries associated with falling. Successful fall management uses a systematic approach that may require repeated reassessment and adjustment. This approach includes recognition of fall risk factors, both intrinsic and extrinsic; identification of causes of falls and post-fall evaluations; treatment; and monitoring with performance measures. Below are some key points to keep in mind when developing fall-related policies.

- If a resident has a history of one or more recent falls (within 6 months), for any reason, it should be listed as a problem in the resident's record.
- The potential for further falling should be addressed in the resident's service plan.
- Review a resident's risk factors for falling, which may include reduced mobility, acute illness, medications, neuropathies, visual impairments, vitamin D deficiency, anemia, arthritis and decreased cognitive status, to name just a few. Document risk factors in the resident's record and discuss in care conferences. Residents are often at an increased risk for falls and injury from falls within the first several days of admission.
- Document presence of irreversible risk factors, such as residual weakness from an old stroke or postural instability from Parkinson's disease. Consider interventions to try to minimize fall-related injuries, such as using hip protectors or treating osteoporosis.
- Provide staff with a clear, written procedure that describes what to do when a resident falls. For instance, a nurse should record vital signs and evaluate for injuries to the head, neck, spine and extremities. If there is significant injury, the nurse should provide first aid, notify the practitioner and family, and get emergency assistance if necessary.
- Staff should document relevant post-fall clinical findings, such as vital signs, pain, swelling, bruising, and changes in function or cognitive status in the resident's record, as well as the absence of such findings to show that the resident is being appropriately monitored.

- After an observed or probable fall, or after a fall risk has been identified, staff should conduct a more detailed analysis of the resident's falling or fall risk, including evaluating the factors associated with the fall. This should include characteristics of the fall and related circumstances such as time and location,(i.e. buckling of the right knee or leaning far to one side while ambulating, or a tendency to slide from a chair while sitting) as well as frequency of falls in a certain period or between situations that present a risk of falling.
- If possible, being the identification of possible causes within 24 hours of a fall by reviewing the chain of events that preceded the fall, and using resident-specific evidence that includes adequate details, such as whether the resident has a gait disturbance or is on medications that may affect blood pressure and balance. Keep in mind that it is critical to identify underlying contributors to a fall to prevent it from recurring.
- Post-fall evaluations could include conducting the Get Up and Go Test, or using the Tinetti Balance Assessment tool. Review fall history, medications, underlying conditions, functional status, neurological status psychological factors and environmental factors.
- Consider asking a pharmacy consultant to conduct a medication review after a fall to evaluate and rule out any medication risk factors.
- Care goals should include prevention of falls when possible, a decrease in the number of falls, and a decrease in the risk and severity of injury, with an understanding that it is unrealistic to expect to eliminate all falls.
- Prioritize approaches to managing fall risk and falling. In other words, if a systematic evaluation of a resident's fall risk identifies several possible interventions, it is reasonable to choose one of them the try first.
- Adjust resident's care plan as necessary to reflect implementation of new or modified interventions aimed to minimize fall risk, documenting briefly the rationale for specific interventions to show that causes of the problem are being sought.
- Facility should develop an assessment and screening protocol and determine the frequency of screening (annually, quarterly, monthly).
- Consistent staffing assignments are a proactive approach to fall prevention and management because staff are familiar with resident habits, behaviors, routines, and patterns.
- Encourage use of ergonomic mechanical lifting devices because they reduce the risk of falls and fall-related injuries.
- Since many falls occur due to urge incontinence in residents, facilities should implement toileting and continence programs, or use a timed voiding schedule for residents at a higher fall risk due to incontinence.
- Establish quality improvement activities related to fall risk and falling. Use information collected about falls to evaluate and adjust the prevention and management program.
- Assign members of the interdisciplinary team to clearly defined roles in evaluating and prevention falls. For example, nursing assistants should observe and report gait disturbances and physical therapists should help clarify the nature and severity of gait disturbances or impaired mobility.
- Facilities should provide ongoing education for all staff regarding fall risk factors, fall risk assessment, and the importance of each staff member's role in fall prevention. Programs can go behind nursing and PT staff and include housekeeping, maintenance and dietary staff.
- Care plans should address the status of the conditions that predispose the resident to falling, specific fall prevention efforts, and the resident's response to each intervention.

Function Focused Care Tidbit

Falls: Small Word, BIG concern (cont.)

This is a lot of information. Where to begin?

Facilities can begin to assess their fall prevention by asking questions such as the following:

- Is a fall risk assessment completed and documented for each newly admitted resident? Are the results of this assessment communicated to the resident and his or her family or advocate?
- Do practitioners address medical or medication risk factors in residents who are identified as having such risk factors?
- Do facility staff and management review the factors (e.g., environment, staff assignments, time of day) associated with falls?
- To identify potentially correctable conditions, does a practitioner review the case of any resident who falls more than once or who has a fall with a significant injury?

POLICY AND PROCEDURE

FALLS PREVENTION AND MANAGEMENT

Developed by:
Toronto Best Practice in LTC Initiative
September 2006

*__Remember:__ Doing an assessment only won't prevent a fall! Continue with prevention interventions after assessment is complete.

FORM 1: FALLS RISK ASSESSMENT

_____ _____

Resident Date

RISK	YES	NO
Previous fall		
Fear of falling		
Cardiac arrhythmia		
Transient ischemic attacks		
Stroke		
Parkinson's Disease		
Delirium		
Dementia		
Depression		
Musculoskeletal problems (DJD)		
Mobility/gait problems		
History of fractures		
Orthostatic hypotension		
Bowel/bladder incontinence		
Visual or auditory impairments		
Dizziness		
Dehydration		
Acute medical illness		
Use of restraint		
Hypoglycemia		
Polypharmacy		
Total		

Score:
0-5 in the yes column is low risk

6-10 in the yes column is moderate risk

11+ in the yes column is high risk

FORM 2: Evaluation of Fall Incident

Name_____Date_____Description of Fall:

Variable	
Fall Location Room Outside Bathroom Facility Dining Room Facility Hallway Activity room Other (Elevator, front lobby, store)	
Activity related to fall Walking Transferring Dressing Bathing Toileting Other Cooking	
Time of Fall 12:01pm-6pm 6:01pm-12midnight 12:01am-6am 6:01am-12noon	
Loss of Consciousness Yes No	
Dizziness Yes No	
Alcohol Use at time of Fall/Sedative Hypnotic Yes No	
Outcome of Fall None Hematoma Skin Tear Fracture Musculoskeletal pain Laceration	

Form 3: Physical Assessment Following Fall

Name_____ Date of Fall_____

I. Vital signs:
   a. Heart rate _____
   b. Heart rhythm: regular_____ irregular_____
   c. Blood pressure: lying_____ standing_____

II. Physical Exam
   a. Active, or independent range of motion
      1. neck ____yes ____no
      2. Shoulders Rt: _____yes _____no Lt: _____yes _____no
      3. Wrists Rt: _____yes _____no Lt: _____yes _____no
      4. Hands Rt: _____yes _____no Lt: _____yes _____no
      5. Hips Rt: _____yes _____no Lt: _____yes _____no
      6. Knees Rt: _____yes _____no Lt: _____yes _____no
      7. Ankles Rt: _____yes _____no Lt: _____yes _____no
      8. Feet Rt: _____yes _____no Lt: _____yes _____no

   b. Observations of resident:
      1. Shortening and external rotation of lower extremities: Rt_____ Lt_____
      2. Swelling: Location_____
      3. Redness/bruising: Location_____
      4. Abrasions: Location_____
      5. Pain on movement: Location_____
      6. Shortness of breath: yes _____ no_____
      7. Impaired balance: yes _____ no_____
      8. Loss of consciousness: yes _____ no _____
      9. Change in cognition: yes _____ no _____

   c. Assessment of the environment
      1. Dim lighting: yes _____ no _____
      2. Glare: yes _____ no _____
      3. Uneven flooring: yes _____ no _____
      4. Wet or slippery floor: yes _____ no _____
      5. Poor fit of seating device: yes _____ no _____
      6. Inappropriate footwear: yes _____ no _____
      7. Inappropriate eye wear: yes _____ no _____
      8. Loose carpet or throw rugs: yes _____ no _____
      9. Use of full length side rails in bed: yes _____ no _____
      10. Lack of hallway rails in area of fall: yes _____ no _____
      11. Inappropriate assistive devices (fit or condition): yes _____ no _____
      12. Lack of grab bars in bathroom: yes _____ no _____
      13. Cluttered areas: yes _____ no _____
      14. Other environmental causes: _____

Form 4: Comprehensive Evaluation Post Fall (inform MD/NP)

Name_____ Date of fall_____

I. Underlying medical problems:

a. Orthostatic hypotension (drop from lying to standing blood pressure of 20 yes _____ no _____: Management_____
b. Balance problems: yes _____ no _____: Management _____
c. Dizziness/vertigo: yes _____ no _____: Management _____
d. Other: _____: yes _____ no _____: Management:_____

II. Medications:

a. Drugs that may contribute to fall:

Diuretics: yes _____ no _____: Management _____
Cardiovascular medications: yes _____ no _____: Management _____
Antipsychotics: yes _____ no _____: Management _____
Antianxiety agents: yes _____ no _____: Management _____
Sleeping agents: yes _____ no _____: Management _____
Antidepressants: yes _____ no _____: Management _____

III. Functional Status:

a. Impaired sitting balance: yes _____ no _____: Management _____
b. Impaired standing balance: yes _____ no _____: Management _____
c. Independent ambulation: yes _____ no _____: Management _____
d. Independent toileting: yes _____ no _____: Management _____

IV. Sensory Problems:

a. Evidence of impaired vision: yes _____ no _____: Management _____
b. Evidence of impaired sensation: yes _____ no ____: Management _____
c. Evidence of impaired hearing: yes _____ no _____: Management _____

V. Psychological Status:

a. Evidence of depression: yes _____ no _____: Management _____
b. Evidence of change in cognition: yes _____ no _____: Management _____
c. Evidence of impaired judgment: yes _____ no _____: Management _____

Name_____ Date_____

Assessment for Risk of Vitamin D Deficiency:

Risk Factor	**Yes**	**No**
No vitamin D supplementation		
Little sun exposure		
Crohn's or celiac disease		
Liver of kidney disease		
Taking any of the following medications: Anticonvulsants (e.g. Dilantin,Phenobarbitol) Cholestyramine Antituberculin medications Chronic alcohol intake		
Hypoparathyroidism		
Dark colored skin		
Score: If ANY risk factor is identified residents is considered high risk and discuss with RCC and Primary Health Care provider		

Function Focused Care Tidbit

Fall Interventions that have been Researched and Evaluated

Falls don't generally happen because of being physically active…they happen because we let ourselves and our residents get weaker by doing insufficient amounts of activity, often because we, the residents, or both, are afraid of a fall. But here's the catch--the weakness that results from this inactivity puts individuals at an increased risk for falling.

SO…give these a quick review and give it a try. Get your residents moving more and growing stronger. This may really help them stand on their feet instead of taking that dreaded fall.

FALL PREVENTION INTERVENTIONS

Below are some fall prevention interventions that have been researched. You'll see several that refer to fall risk assessment. Included in this module are forms to use for fall risk assessments. Give them a try, as there is strong evidence to support their use.

The letter after each intervention signifies how much evidence is available to support it:
A= STRONG EVIDENCE (we've also put these in bold!)
B=SOME EVIDENCE BUT NOT AS STRONG
C= WEAK EVIDENCE

***The multifactorial fall risk assessment should be followed by direct interventions tailored to the identified risk factors, coupled with an appropriate exercise program.[A]**
***A strategy to reduce the risk of falls should include multifactorial assessment of known fall risk factors and management of the risk factors identified.[A]**
*The components most commonly included in effective interventions were:

- ***Adaptation or modification of home environment [A]**
- * Withdrawal or minimization of psychoactive medications [B]
- *Withdrawal or minimization of other medications [C]
- *Management of postural hypotension [C]
- *Management of foot problems and footwear [C]
- ***Exercise, particularly balance, strength, and gait training [A]**

***All older adults who are at risk of falling should be offered an exercise program incorporating balance, gait, and strength training. Flexibility and endurance training should also be offered, but not as sole components of the program. [A]**
*Multifactorial/multicomponent intervention should include an education component complementing and addressing issues specific to the intervention being provided, tailored to individual cognitive function and language. [C]

(continued on next page)

*__The health professional or team conducting the fall risk assessment should directly implement the interventions or should assure that the interventions are carried out by other qualified healthcare professionals. [A]__
*Psychoactive medications (including sedative hypnotics, anxiolytics, antidepressants) and antipsychotics (including new antidepressants or antipsychotics) should be minimized or withdrawn, with appropriate tapering if indicated. [B]
*A reduction in the total number of medications or dose of individual medications should be pursued. All medications should be reviewed, and minimized or withdrawn. [B]
*** Exercise should be included as a component of multifactorial interventions for fall prevention in community-residing older persons. [A]**
***An exercise program that targets strength, gait and balance, such as Tai Chi or physical therapy, is recommended as an effective intervention to reduce falls [A]**
* Exercise may be performed in groups or as individual (home) exercises, as both are effective in preventing falls. [B]
*In older women in whom cataract surgery is indicated, surgery should be expedited as it reduces the risk of falling. [B]
*An older person should be advised not to wear multifocal lenses while walking, particularly on stairs. [C]
*Assessment and treatment of postural hypotension should be included as components of multifactorial interventions to prevent falls in older persons. [B]
***Vitamin D supplements of at least 800 IU per day should be provided to older persons with proven vitamin D deficiency. [A]**
*Identification of foot problems and appropriate treatment should be included in multifactorial fall risk assessments and interventions for older persons living in the community. [C]
*Older people should be advised that walking with shoes of low heel height and high surface contact area may reduce the risk of falls. [C]
***Home environment assessment and intervention carried out by a health care professional should be included in a multifactorial assessment and intervention for older persons who have fallen or who have risk factors for falling. [A]**
***The intervention should include mitigation of identified hazards in the home, and evaluation and interventions to promote the safe performance of daily activities. [A]**
*Education and information programs should be considered part of a multifactorial intervention for older persons living in the community. [C]

Function Focused Care Tidbit

Falls, Safety and Function Focused Care

We recognize the great fear of falling that staff and residents all experience. We have shown and believe that a Function Focused Care approach is quite safe and will not increase your rate of falls. Please keep in mind that we are not encouraging excessive exercise or therapeutic interventions to turn your residents into trained athletes, but rather are trying to help you maintain the function that your residents currently have and keep them moving. Here are some little tidbits to live by and share with staff, residents and family members:

- Some older adults and caregivers believe that adverse events can be prevented by decreasing time spent in physical activity. Sedentary behavior, however, results in progressive deconditioning (weakness). Over time, the protective effect of remaining in a seated or lying position is diminished as the deconditioned state that occurs results in falls and increases the risk of acute illness.
- Overall, physical activity is preferred as a strategy to reduce adverse events and optimize resident safety.
- No adverse events (falls, fractures or increased hospitalizations) have occurred over 15 years of implementing Function Focused Care approaches. In fact, implementing a Function Focused Care approach may actually help prevent infection and illness and decrease the need to transfer residents to the hospital.
- Performance of functional activities helps to maintain strength and optimize balance, but increased time spent in functional activity also results in increased exposure to fall opportunities and environmental threats.
- Functional and physical activity should be encouraged with careful consideration of safety for the individual.
- Safety can be optimized through use of appropriate assistive devices, as well as supervision of the activity, particularly when working with individuals who have impairments in balance or cognition.

Function Focused Care Tidbit

HALT SLIPS…

Falls are a major challenge for all of us in Assisted Living, and there are many things we can do to decrease the risk of falling.

Take a look at the pneumonic below, which provides an easy way to remember important tips on how to reduce falls. You may find it helpful to use in teaching staff, and may even want to post it someplace as a reminder.

HALT SLIPS

Home safety interventions such as removing clutter, using good lighting
Ask about falls at least yearly
Look for and treat vitamin D deficiency
Treat osteoarthritis to reduce pain and increase physical activity
Stop or reduce problem medications (particularly those that cause confusing or an excessive drop in blood pressure)
Look for orthostatic hypotension (a 20 mm drop in systolic blood pressure when transferring from lying to standing)
Immobility must be avoided; promote exercise
Prevent and treat osteoporosis
Stop pain wherever possible