

The Falls Management Program: A Quality Improvement Initiative for Nursing Facilities

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The information in this manual and the other program materials are intended to supplement the knowledge of nursing and medical staff. The instructions for altering the environment or adapting equipment as well as other care processes may not be applicable in your setting. Before using any of the adaptations or items, all available information concerning the resident as well as particular circumstances of the environment and equipment must be carefully evaluated by staff. The information provided in this manual is advisory only and is not intended to replace sound clinical judgment or individualized resident care. Contents of this manual do not necessarily reflect CMS policy or endorsement.

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Introduction and Program Overview

1

1. Program Goal and Background

The Falls Management Program (FMP) is an interdisciplinary quality improvement initiative. It is designed to assist nursing facilities in providing individualized, person-centered care, and improving their fall care processes and outcomes through educational and quality improvement tools. Why is this important? There are several reasons:

- **Falls are common in nursing facilities.** Of the 1.6 million residents in U.S. nursing facilities, approximately half fall annually. About 1 in 3 of those who fall will fall two or more times in a year.
- **Falls often have serious consequences, especially in frail older residents.** Fall-related injuries decrease the resident's quality of life and ability to function. Residents who fall without injury often develop a fear of falling that leads to self-imposed limitation of activity. One in every 10 residents who fall has a serious related injury and about 65,000 patients suffer a hip fracture each year. Adverse consequences of falls for residents are listed in Figure 1.
- **Falls are a major safety concern for nursing facilities.** Injuries resulting from falls are a major reason for lawsuits against facilities and staff, which can result in the loss of large sums of money and higher insurance premiums. Potential consequences for facilities are listed in Figure 2.
- **Many nursing facilities have fall programs in place, but recognize that there is always room for improvement.** While not all falls and injuries can be prevented, it is critical to have a systematic process of assessment, intervention and monitoring that results in minimizing fall risk.

2. Causes of Falls

The FMP helps facility staff to identify and intervene, whenever possible, on the common causes of falls. Falls among nursing home residents are usually the consequence of a combination of risk factors, both intrinsic and extrinsic. Examples of these risk factors are illustrated in Figure 3.

Key Points in Chapter 1

- Background and causes of falls in nursing homes
- FMP overview
- Building a culture of safety
- Developing the FMP team

Figure 1 Adverse consequences of falls for residents

- Reduced quality of life
- Increased fear of falling and restriction of activities
- Decreased ability to function
- Serious injuries
- Increased risk of death

Figure 2 Adverse consequences of falls for nursing facilities

- Increased paperwork for staff
- Increased levels of care required for fallers
- Poor survey results
- Lawsuits
- High insurance premiums

Figure 3 Common fall risk factors**Intrinsic factors**

- Effects of aging on gait, balance and strength
- Acute medical conditions
- Chronic diseases
- Deconditioning from inactivity
- Behavioral symptoms and unsafe behaviors
- Medication side effects

Extrinsic fall risk factors

- Environmental hazards
- Unsafe equipment
- Unsafe personal care items

Figure 4 Examples of specific extrinsic risk factors

- Poor lighting
- Cluttered living space
- Uneven floors, wet areas
- Unstable furniture
- Unstable bed wheels
- Ineffective wheelchair brakes
- Missing equipment parts
- Improper footwear
- Hard-to-manage clothing
- Inaccessible personal items

Although intrinsic risk factors such as age-related changes and chronic diseases cannot be eliminated, they can be managed in a way to reduce the resident's risk of falling. Medical management of both acute and chronic conditions can be improved through appropriate evaluation and treatment. Extrinsic risk factors can also be addressed to improve safety in the environment and during equipment use. Figure 4 gives examples of specific extrinsic risk factors which can be modified by staff to decrease risk.

The FMP is designed to assist facilities in addressing both intrinsic and extrinsic risk factors. It is important to remember that not all falls can be prevented. Nonetheless, research shows that a facility's fall rate can be substantially reduced by using a multifaceted approach that includes comprehensive falls assessment and individualized care planning by an interdisciplinary team, organizational support and appropriate management using quality improvement methods.

3. Overview of the Falls Management Program

The FMP includes two primary approaches to the management of falls and injuries. The first is through an immediate response to residents who fall. When a fall occurs, careful evaluation and investigation, along with immediate intervention during the first 24 hours, can help identify risk and prevent future incidents. The second approach is long-term management. Here, screening at admission, quarterly, annually and change of condition are key in identifying residents at high risk of a fall. In both approaches, a comprehensive falls assessment should be used to develop individualized care plan interventions. Staff should monitor and manage the resident's response, making care plan revisions as needed. While both approaches are fundamental to a comprehensive program, the burden on staff in terms of increased time and paperwork due to the high number of resident falls is significant. Facilities that master the fall response process can shift from crisis management to proactive reduction of fall risk and related injuries.

4. Culture of Safety

The term "culture of safety" is used to describe how the behavior of staff and management affects the safety of residents. The development of a culture of safety is an important first step to ensure that the FMP is effective and integrated into the organizational system.

Developing a culture of safety requires changes in staff attitudes, beliefs and behavior as well as changes in management style. This change process requires strong leadership, effective communication, new policy development and the formation of multidisciplinary teams to address areas for improvement. Empowered staff should be encouraged to participate in all levels of care. Finally, an environment of “no blame/no shame” will provide an open atmosphere where staff members can report errors and safety concerns without fear of punishment. (Figure 5)

Effective, open communication is crucial to achieving a culture of safety. An open style of communication means that the organization supports discussion about resident safety, and direct care staff are encouraged to report full details of unsafe conditions without fear of punishment. Communication should be built upon trust and clear expectations of performance based on objective criteria.

The administration should discuss with staff the importance of resident safety and the facility’s commitment to a culture of safety during orientation of new employees and repeat this message with all employees on a regular basis.

Staff should not be “blamed or shamed” when a resident falls. Rather, the system failure should be examined using a team approach. While falls are liability and survey concerns, it is counterproductive to keep data secret. All staff including nursing assistants should receive concrete information about their performance. Monthly reports of falls should be openly shared by the administration and staff feedback should be used to make program improvements.

Strong leadership is essential in establishing a culture of safety. The primary role of leadership is to make safety a top priority within the facility and to have clearly defined safety policies. The administrator and director of nursing accomplish this by setting goals for the facility and allocating resources to support safety programs.

Table 1 outlines the activities of the administrator and director of nursing during the FMP.

Figure 5 Culture of safety checklist

- Strong leadership
- Clearly defined safety policies
- All staff to identify and report safety concerns
- Empowerment of staff to correct safety problems
- Enforcement of safety policies by supervisors and managers
- Regular measurement of staff safety performance
- Analysis and review of procedures
- Safety data and trends provided to all staff

Table 1 Responsibilities of the administrator and director of nursing

- 1 Appoint a nurse coordinator, a back-up coordinator, and a falls team to meet each week.
- 2 Set specific goals for the facility using key indicators.
- 3 Be involved in the team meetings on a regular basis.
- 4 Give the falls team members enough time away from other duties to meet weekly and implement the program.
- 5 Ensure that the team members are given the authority to complete appointed tasks.
- 6 Help identify and remove barriers that prevent the team members from completing their tasks.
- 7 Provide a small budget to repair safety problems found in the environment and with equipment.
- 8 Provide a small budget to adapt wheelchairs and to obtain seating items and specialized equipment.
- 9 Monitor progress and guide data collection and analysis.
- 10 Conduct periodic evaluation of the program.

Figure 6 Falls Team

- Falls Nurse Coordinator
- Falls Nursing Assistants (2–4)
- Falls Therapist
- Falls Engineer

5. Teamwork

Interdisciplinary teamwork is essential for success in the FMP and the selection of members is an important first step. (Figure 6) The falls team can function in collaboration with or as part of a team that addresses residents at high risk for multiple conditions, including falls. The following recommendations should be reviewed by the administrator and director of nursing before selecting the team.

Falls Nurse Coordinator is responsible for full implementation of the program and serves as the clinical champion of the FMP. This person coordinates screening of high-risk residents to be included in the program and performs a falls assessment for each one. The nurse oversees all steps in the Falls Response process and coordinates implementation of individualized care plans. The nurse ensures the education and training of all staff, families and residents and works with the medical director to inform all primary care providers of the program and their role in it.

It is recommended that two nurses be appointed and trained as coordinators so that continuity of care can be maintained during changes in staffing and periods of high demand. It is especially helpful to have

more than one coordinator in larger facilities to ensure adequate coverage on all units.

This role is best filled by a nurse leader with the ability to communicate well with frontline staff, management and physicians and who can devote 8 hours per week to this role.

Falls Nursing Assistant(s) is responsible for inspection of the environment and equipment and acts as a leader among frontline staff in support of the falls nurse. This person should be a senior level certified nursing assistant who works well with peers and is an informal leader on his or her unit. In most average size nursing facilities, the selection of two nursing assistants for the falls team is sufficient while in larger facilities, 3–4 nursing assistants are needed.

Falls Therapist helps to assess resident transfer, mobility and wheelchair seating. This role is best filled by a member of the rehabilitation department who has experience in functional positioning and seating, such as an occupational or physical therapist.

Falls Engineer inspects, repairs and modifies equipment and the environment. This role is best filled by a member of the maintenance staff.

Director of Nursing is an ad hoc member of the falls team and may join meetings each week or less frequently if progress is steady.

Some facilities choose additional staff such as activities staff, social workers and housekeeping staff. While the administrator does not attend weekly meetings, he or she should stay informed of progress and be asked to remove identified barriers when necessary. Frontline staff from the units of residents who have fallen should be asked to attend the meeting for 10-15 minutes in order to participate in discussion and problem-solving about their resident. Their input is critical for this process and their participation will help build interest and support for the program.

A primary team responsibility is the development of effective problem solving skills so that appropriate interventions for high-risk residents are selected. This is especially important for managing the high risk of demented residents with unsafe behaviors who often have repeated falls. Under the leadership of the falls nurse coordinator, team members must work with direct care staff to determine new strategies as the resident's cognitive level changes over time. An example of a falls team meeting agenda is provided in Table 2.

Table 2 Team meeting agenda**1 Clarify objectives**

The goal of this meeting is to discuss program implementation by team members, residents who fell this past week and this month's falls data.

2 Review team roles

A nursing assistant is the timekeeper, the ADON is the record keeper.

3 Review agenda

- a. Report from all team members about activities for the week. *Example:* The Falls Engineer reports he has completed 10 wheelchair inspections this week.
- b. Discussion about individual residents who fell during the past week.
- c. Presentation of this month's falls data.

4 Work through agenda

- a. Discuss barriers that members may be experiencing when trying to complete their assignments. Ask administration for support if needed. *Example:* The CNAs have not had time to do any room inspections this past week.
- b. Bring LPNs and CNAs from units of the residents who fell to discuss interventions. Review information on the Tracking Record for Improving Patient Safety. Explore all possible causes and risk factors. Develop new strategies and revise plans.
- c. Discuss results of data analysis and how key indicators have changed.

5 Plan next steps and list action items

- Engineer will finish wheelchair inspections and repairs.
- Nursing assistants will do the Living Space Inspection on two more units after the director of nursing checks with their unit managers about assignments.
- Director of nursing will order additional alarms.
- Therapist will do a seating assessment for two residents.
- Nurse will bring additional information about specialized wheelchairs and seat belt alarms to next meeting.
- Team will meet next week at the same time and place.

6 Evaluate meeting

Examples: Team members are progressing with assignments at a good pace. Discussion about recurrent fallers was frustrating, although the team developed some additional strategies.

The FMP Self-Assessment tool (Figure 7) will enable staff to identify strengths and weaknesses in key areas. It should be completed before starting the program in order to develop a facility-specific plan for program implementation. The self-assessment should also be completed after program implementation to evaluate progress and identify further process improvement needs. In particular, completing the chart audit section of the self-assessment quarterly will detect which care processes (screening, assessment, care planning, and monitoring) are being performed and documented adequately and which need improvement. This section includes the major areas of documentation necessary to reflect implementation of best practices and should promote positive results during survey or in case of litigation. A copy of the Self-Assessment Tool is provided in Appendix B.

Figure 7 FMP Self-Assessment Tool

The Falls Management Program

Self-Assessment Tool

The purpose of the FMP Self-Assessment Tool is to identify what processes of care your facility has in place and what areas need improvement. It is divided into 7 areas of focus. Use your facility's policies, procedures and general practices to answer the questions listed under the first 4 areas (A, B, C, D). To answer the questions listed under the last 3 areas (E, F, G) in the Chart Audit section, select a minimum of 5 residents who have falls during the last 6 months. Answer the questions based on the documentation you find in each resident's chart and care plan. Further instructions are provided in the Chart Audit section. Complete the Plan for Improvement when finished.

A. Culture, Organizational Commitment and Team Skills (Chapter 1)			
	Yes	No	Comments
1. Top-level policies and procedures for a comprehensive falls management program?			
2. Appointed falls team leader and resource person for staff?			
3. Selection of staff members (including one or more CNAs) for interdisciplinary falls team?			
4. Weekly falls team meetings used ground rules, a leader, timekeeper and recorder?			
5. Effective team problem solving to develop and monitor interventions for recurrent falls?			
6. Administrator and DON attend team meetings periodically and monitor falls data at least monthly?			
7. No diversion blame assignment with formal investigation and reporting to staff?			
8. Calculation of success stories and search for caregivers who reduce falls?			
9. Adequate staffing for needs to spend 8 hours/week and team to meet for 20 minutes/week?			
10. Tools for education, equipment, environmental modifications and adherence requirements?			
11. Activity programs for frequent structured supervision of residents?			
12. Staff/physician consultation regarding importance of and facility commitment to resident safety?			
B. Data Collection and Analysis (Chapter 2)			
	Yes	No	Comments
1. Accurate completion of fall incident report forms by all licensed staff?			
2. Monthly falls analysis by location and time of fall type of injury	<input type="checkbox"/>	<input type="checkbox"/>	
3. Monthly falls analysis by # of falls, falls, patients > 2 falls and falls with serious injury?	<input type="checkbox"/>	<input type="checkbox"/>	
4. Falls data reported to medical director and primary care providers every quarter?			
5. Feedback about falls data given to direct care staff each month?			
6. Falls data trended over 6 months or more?			

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Fall Response **2**

Past history of a fall is the single best predictor of future falls. In fact, 30–40% of those residents who fall will do so again. Thus, it is crucial for staff to respond quickly and effectively after a fall. The Fall Response (Table 3) is a comprehensive approach that forms the backbone of the Falls Management Program (FMP). It includes the following eight steps:

Key points in Chapter 2

- Eight-step Fall Response

- 1 Evaluate and monitor resident for 72 hours after the fall.
- 2 Investigate fall circumstances.
- 3 Record circumstances, resident outcome and staff response.
- 4 FAX Alert to primary care provider.
- 5 Implement immediate intervention within first 24 hours.
- 6 Complete falls assessment.
- 7 Develop plan of care.
- 8 Monitor staff compliance and resident response.

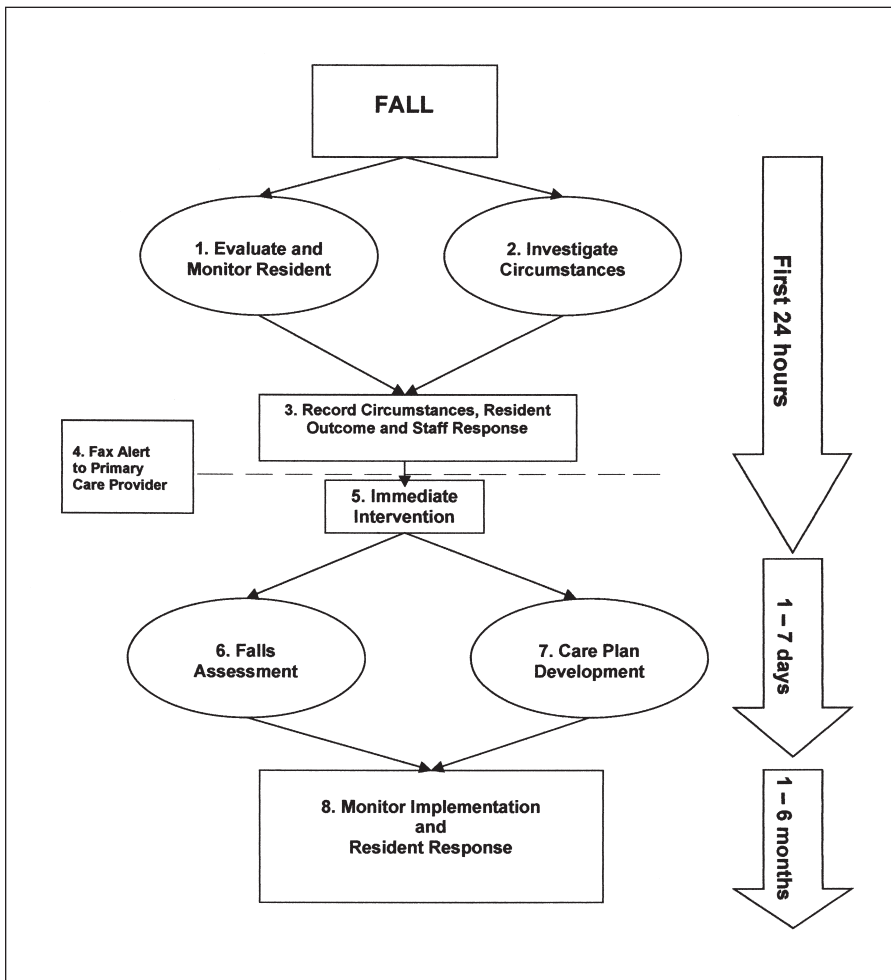


Table 3 FMP Fall Response

Figure 1 Fall Circumstances

- 1 Date
- 2 Day of week
- 3 Time
- 4 Location
- 5 Type of fall
- 6 Likely cause
- 7 Activity at time of fall
- 8 Staff present
- 9 Type of footwear
- 10 Aids in use
- 11 Restraint use
- 12 Side rail use
- 13 Alarm use

The first five steps comprise an immediate response that occurs within the first 24 hours after a fall. Steps 6, 7, and 8 are long-term management strategies.

The purpose of this chapter is to present the FMP Fall Response process in outline form. As you review this chapter, it may be helpful to use the case study and materials presented in Appendix C to illustrate the Fall Response process.

1. Evaluate and Monitor Resident for 72 Hours After the Fall

Immediate evaluation by the nurse after a resident falls should include a review of the resident systems and description of injuries. Upon evaluation, the nurse should stabilize the resident and provide immediate treatment if necessary.

Evaluation of the resident's condition before, during or immediately after the fall provides clues to possible causes. Risk factors related to medical conditions or medication use may be reflected in abnormal values for any of the following:

- Vital signs (T, P, R, BP)
- Postural blood pressure and apical heart rate
- Finger stick glucose (for diabetics)

When indicated by the resident's condition and history, laboratory tests such as CBC, urinalysis, pulse oximetry, electrolytes and EKG should be performed.

Residents should have increased monitoring for the first 72 hours after a fall. Each shift, the nurse should record in the medical record a review of systems, noting any worsening or improvement of symptoms as well as the treatment provided. Reference to the fall should be clearly documented in the nurse's note. See Appendix C for a sample nurse's note after a fall.

2. Investigate Fall Circumstances

If fall circumstances are not investigated at the time of the incident, it is very difficult later to piece together the event and to determine what risk factors were present. Even when a resident is found on the floor after an unwitnessed fall, direct care staff can use their experience and knowledge of the resident to make educated guesses based on the evidence. A response of "unknown" should rarely if ever be accepted by the nurse manager during the investigation of a fall.

If staff fear negative responses from their supervisors, they will not be willing to report near misses or clues that might reflect a staff error. Nurse managers should be non-blaming and skilled in problem-solving with frontline staff.

3. Record Circumstances, Resident Outcome and Staff Response

A written full description of all external fall circumstances at the time of the incident is critical. This includes factors related to the environment, equipment and staff activity. (Figure 1)

The Tracking Record for Improving Patient Safety (TRIPS) is the method used in the FMP to report all types of falls. (Figure 2) The Centers for Medicare and Medicaid Services' definition of a reportable fall includes the following:

- a) An episode where a resident lost his/her balance and would have fallen, were it not for staff intervention, is a fall. In other words, an intercepted fall is still a fall.
- b) The presence or absence of a resultant injury is not a factor in the definition of a fall. A fall without injury is still a fall.
- c) When a resident is found on the floor, the facility is obligated to investigate and try to determine how he/she got there, and to put into place an intervention to prevent this from happening again. Unless there is evidence suggesting otherwise, the most logical conclusion is that a fall has occurred.
- d) The distance to the next lower surface (in this case, the floor) is not a factor in determining whether a fall occurred. If a resident rolled off a bed or mattress that was close to the floor, this is a fall.

The TRIPS form is divided into two sections. Section A includes basic resident information, methods for documentation in the medical record and notification of the primary care provider and family. (Figure 3) In section B there are questions related to 1) circumstances, 2) staff response and 3) resident and care outcomes. A sample of the second page of the TRIPS form is given in Figure 4. A full copy of the form is provided in Appendix B.

The nurse manager working at the time of the fall should complete the TRIPS form. After talking with the involved direct care staff, the nurse is asked to use his/her experience and knowledge of the resident

Figure 2 Examples of falls

- Found on floor (unwitnessed)
- Fall to floor (witnessed)
- Near fall (resident stabilized or lowered to floor by staff or other)
- Rolled or fell out of low bed onto mat or floor

Figure 3 Tracking Record for Improving Patient Safety, first page

TRIPS
Tracking Record for Improving Patient Safety

Name: _____ Medical Record Number: _____

SECTION A

Date of Incident _____ Time of Incident _____ AM PM

Day of Week _____ Severity Level (Check highest level of injury)

Sunday No injury
 Monday Minor injury/first aid only (ex: bruise, abrasion, skin tear)
 Tuesday Major injury (ex: laceration with suture, closed head injury, fracture)
 Wednesday Death
 Thursday
 Friday
 Saturday

Location _____ Treatment (Check all that apply)

Patient room To primary care provider for evaluation
 Patient bathroom To emergency room
 Another patient room/bathroom Admit to hospital
 Hallway Sutures
 Dining room/day room X-ray
 Shower/club room Blood work
 Outside building Urinalysis
 Other (specify): _____ Other (specify): _____

yes | no

Physician notified
 Name of MD _____
 Date of notification _____
 Time of notification _____

Family/POA notified
 Name of contact _____
 Date of notification _____
 Time of notification _____

Medical record flagged & occurrence documented accordingly
 Plan of care updated
 Medical record flagged for follow-up documentation

Signature: _____ Date: _____

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Figure 4 Tracking Record for Improving Patient Safety, second page

SECTION II

1. Was the incident a:

- Found on the floor (unwitnessed)
- Fall to the floor (witnessed)
- Near fall (patient lowered to floor by staff/other or stabilized)
- Self-reported fall

2. The cause of the incident was:

- Lost Balance
- Slipped (specify): _____
- Lost strength/weakness
- Tripped
- Lost consciousness/seizure
- Equipment malfunction (specify): _____
- Environmental factor (specify): _____ (i.e. clutter, inadequate lighting, floor)
- Other (specify): _____

3. The activity during the incident was:

- Ambulating in bedroom
- Ambulating to/from bathroom
- Transferring on/off toilet
- Ambulating in hallway
- Sliding out of wheelchair
- Getting up from chair/wheelchair
- Brakes unlocked
- Getting in/out of bed
- Bed wheels unlocked
- Out of low bed to floor/mat
- Changing clothes/other ADLs
- Getting in/out of tub or shower
- Reaching for something
- Other (specify): _____

4. Was there staff present during this activity?

Yes No

5. The footwear at the time of the incident was:

- Shoes
- Slippers
- And if applicable:
 - No tread or tread too high/thick
 - High/narrow heel
 - Poor fit/loose
 - Plain socks only
 - Non-skid socks
 - Bare feet
 - Other (specify): _____

6. Indicate aid in use at the time of the incident:

- None
- Cane
- Wheelchair
- Walker
- Merry walker
- Hip protectors
- Other (specify): _____

7. Part A. Was a restraint in use at the time of the incident?

Yes (complete Part B) No

Part B:

- Vest/trunk restraint
- Wrist/hand mitten
- Seat belt/roll belt/waist restraint
- Gatch with table
- Lap Buddy/Lap tray
- Other (specify): _____

8. Part A. Were the side rails up?

Yes (complete Part B) No

Part B:

- Full length side rails (2 full or 4 half rails on both sides of bed)
- Other side rails: _____

9. Part A. Was alarm present?

Yes (complete Part B) No

Part B. Check all that apply:

- Bed alarm sounded during event
- Bed alarm did not sound during event
- Chair alarm sounded during event
- Chair alarm did not sound during event
- Other (specify): _____

AS A RESULT OF THIS INCIDENT

10. Did the patient's mental status change?

Yes No

11. Did the patient's level of consciousness change?

Yes No

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to piece together clues so that “unknown” is used sparingly, if at all. The form should next be checked by the Falls Nurse Coordinator or director of nursing and any missing information such as emergency room visits, hospital admissions, x-ray results or additional medical tests added at a later time. More information on step 3 appears in Chapter 3.

4. FAX Alert to the Primary Care Provider

When a resident falls who has already been entered into the FMP, the nurse should send a FAX Alert (Figure 5) to the primary care provider. The purpose of this alert is to inform the physician, nurse practitioner or physician’s assistant of the resident’s most recent fall as well as the resident’s total number of falls during the previous 180 days. A copy of the FAX Alert is provided in Appendix B.

5. Implement Immediate Intervention Within First 24 Hours

An immediate response should help to reduce fall risk until more comprehensive care planning occurs. Therefore, an immediate intervention should be put in place by the nurse during the same shift that the fall occurred.

When investigation of the fall circumstances is thorough, it is usually clear what immediate action is necessary. For example, if the resident falls on the way to the bathroom because of urgency and poor balance, interventions related to toileting and staff assistance would be appropriate. However, if the resident is found on the floor between the bed and the bathroom and staff do not look for clues such as urine or footwear or ask the resident questions, immediate care planning is much more difficult.

Some examples of immediate interventions are:

- Increased toileting with specified frequency of assistance from staff
- Increased assistance targeted for specific high-risk times
- Increased monitoring using sensor devices or alarms
- Increased staff supervision targeted for specific high-risk times
- Pain management

Figure 5 FAX Alert

The Falls Management Program

FAX ALERT

INORY CENTER FOR HEALTH IN AGING

Facility: _____

Address: _____

City/State: _____

Telephone: _____

Fax: _____

Date: ____/____/____

Physician/NP/PA: _____ Fax #: _____

Patient Name: _____ Unit/Room: _____

Your patient who is in the Falls Management Program fell on _____. It is this patient's _____ fall in the past 180 days.

Please consider reviewing the attached suggestions for known risk factors of falls and consider making appropriate recommendations.

Please call the Falls Nurse Coordinator if you have any questions about the incident or suggestions for our Falls Management Program. Thank you.

Falls Coordinator: _____ Phone number: _____

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- Protective clothing (helmets, wrist guards, hip protectors)
- Safe footwear
- Low bed/mat
- Specific behavior management strategies

Documentation of the immediate response on the medical record is important. Missing documentation leaves staff open to negative consequences through survey or litigation.

6. Complete Falls Assessment

In addition to the clues discovered during immediate resident evaluation and increased monitoring, the FMP Falls Assessment is used for a more in-depth look at fall risk. (Figure 6) Five areas of risk accepted in the literature as being associated with falls are included. They are:

- Medications – antidepressants, antipsychotics, benzodiazepines, sedative/hypnotics and digoxin
- Orthostatic hypotension
- Poor vision
- Impaired mobility
- Unsafe behavior

A copy of the Falls Assessment is provided in Appendix B.

The resident’s footwear and foot care as well as environmental and equipment safety concerns should also be assessed. In the FMP, these factors are part of the Living Space Inspection. (See Chapter 6)

Because the Falls Assessment will include referrals for further work-up by the primary care provider or other health care professionals, contact with the appropriate persons should be made quickly. Automatic faxes are used to communicate with the resident’s physician, nurse practitioner or physician’s assistant. The Primary Care Provider FAX Report and Orders introduces the FMP, presents results of the resident’s Falls Assessment and provides a form to fax back orders. The FAX Back Orders sheet and the Falls Assessment should be placed on the medical record once completed. A copy of this 3-page fax is in Appendix B. The first page is illustrated in Figure 7. More information on step 6 appears in Chapter 4.

Figure 6 FMP Falls Assessment, first page

Figure 7 Primary Care Provider FAX Report and Orders, first page

Data Collection And Analysis Using TRIPS

3

1. Measurement System

An accurate measurement system is an important component of the quality improvement process that allows staff to determine if changes in care lead to improvement.

The Tracking Record for Improving Patient Safety is the key tool used for measurement in the FMP, and replaces old incident reporting tools.

The key indicators for the FMP are outcome measures that include falls, residents who fall, residents with two or more falls and fall related serious injuries. (Figure 1) When studied over time, these key indicators are the best markers of improvement.

In addition to these four, there may be other important markers for administration and staff members to consider. (Figure 2)

Reduction of survey tags and lawsuits related to falls and injuries is desirable and a comparison of these indicators before and after program implementation will provide important information for facility and corporate leadership. Changes in awareness and organization cannot be measured in numbers, but it is helpful to obtain opinion-based information from staff, and to use their feedback in making program revisions. Perceptions of residents and family members are important indicators of customer satisfaction and should be used to evaluate the program as well. Specific process measures identified through chart audits during the FMP Self-Assessment can be targeted for improvement and monitored over time.

2. Collecting and Using TRIPS DATA

After evaluating and treating the resident immediately, the nurse should investigate the circumstances of the fall and look for all possible causes. The nurse should talk with the nursing assistant(s) who cared for the resident at the time of the fall and encourage full disclosure of the circumstances without placing blame. Even in “found on floor” incidents, staff should brainstorm together to determine likely causes. It is critical that investigation take place immediately so that valuable clues are not lost. “Unknown” should rarely if ever be used on a TRIPS form.

Key points in Chapter 3

- Importance of tracking
- Defining key indicators
- Data collection and analysis using the Tracking Record for Improving Patient Safety

Figure 1 Key indicators for the FMP

- Number of falls each month
- Number of residents who fall each month
- Number of residents with two or more falls each month
- Number of falls with serious injury each month

Figure 2 Other indicators for the FMP

- Family and resident satisfaction
- Number of survey tags related to falls
- Number of lawsuits related to falls
- Changes in staff awareness
- Changes in staff organization

All licensed nursing staff should be trained in the immediate fall response so that even on weekends, a detailed investigation, appropriate documentation and immediate interventions are done.

Using the data recorded on the TRIPS form, it is useful to identify trends related to types of falls. Such details as location, time and activity may reveal that a large percentage of falls occur in one area, at one time of day or during a specific activity.

Implementing the FMP will increase staff awareness and may prompt staff to report falls more accurately when administration uses a clear fall definition and develops a strong culture of safety. For this reason, there actually may be a rise in the number of falls reported during the first months after implementation. Normal variation in falls from month to month can be dramatic and it is better not to rely upon one or two months' data to detect change.

Figure 3 TRIPS form, Section A

TRIPS
Tracking Record for Improving Patient Safety

Name: _____ Medical Record Number: _____

SECTION A

Date of Incident: _____ Time of Incident: _____ AM PM

Day of Week: Sunday
 Monday
 Tuesday
 Wednesday
 Thursday
 Friday
 Saturday

Severity Level (Check highest level of injury)
 No injury
 Minor injury/first aid only (ex: bruise, abrasion, skin tear)
 Major injury (ex: laceration with suture, closed head injury, fracture)
 Death

Location: Patient room
 Patient bathroom
 Another patient room/bathroom
 Hallway
 Dining room/day room
 Shower/tub room
 Outside Building
 Other (specify): _____

Treatment (Check all that apply)
 To primary care provider for evaluation
 To emergency room
 Admit to hospital
 Sutures
 X-ray
 Blood work
 Urinalysis
 Other (specify): _____

YES/NO

Physician notified
Name of MD: _____
Date of notification: _____
Time of notification: _____

Family/POA notified
Name of contact: _____
Date of notification: _____
Time of notification: _____

Incident of known origin
 Medical record flagged & occurrence documented accordingly
 Plan of care updated
 Medical record flagged for follow-up documentation

Signature: _____ Date: _____

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3. Tracking Record for Improving Patient Safety (TRIPS)

A copy of the TRIPS form should be completed by the unit manager or nurse supervisor at the time of each fall. Illustration of the TRIPS form with instructions for the completion of each section follows.

A. Directions for completing the TRIPS form

The first section of the TRIPS form (Figure 3) is a basic log that includes a general description of the incident, including severity level, treatment provided, persons notified and documentation methods. The nurse will write in the resident's name, medical record number, date the incident occurred and time of the incident, specifying AM or PM. The day of the week and location of the incident should be checked. When the location is other than the listed options or is unknown, the nurse should check "other" and write in a brief description. Treatment and resident outcome or "severity factor" should be checked. If a form of treatment was provided that is not listed on the form, the nurse should check "other" and describe it.

The next items relate to notification of the physician and family and should include name of the contact and time and date of notification. The last 3 items ask if the appropriate actions were documented on the medical record and plan of care. The nurse should sign the form and write in the date the form was completed.

B. Directions for completing Section B of the TRIPS form

Section B of the TRIPS form (Figure 4a-b) contains 18 items and is used to document circumstances of the fall event (items 1 – 9) and resident outcomes (items 10 – 17).

Circumstances of the fall

ITEM 1 asks if the fall was witnessed or unwitnessed or if the resident was lowered to the floor by staff. If the fall was reported by the resident and was unwitnessed by staff, check “self-reported.”

ITEM 2 is cause of fall. If the resident slipped, the nurse should specify how this occurred. If there was equipment malfunction, the nurse should specify the equipment item and its condition. If an environmental factor was present, the nurse should specify if clutter, lighting, floor conditions, etc. were present. If the nurse cannot determine the cause after checking with direct care staff and examining clues at the scene, “other” should be checked and “unknown” written in the space provided.

ITEM 3 is the activity at the time of the fall. If the resident is in a wheelchair at the time of the fall, staff should be trained to check if the brakes were locked. This should be recorded under “Getting up from chair/wheelchair.” If the resident fell while getting in or out of the bed, the nurse should specify if the resident rolled out of the bed onto a mat and if the wheels of the bed were locked or unlocked. If the nurse cannot determine the activity after checking with direct care staff and asking the resident, “other” should be checked and “unknown” written in the space provided.

ITEM 4 is staff presence at the time of the fall.

ITEM 5 is the type of footwear the resident wore at the time of the fall. The nurse should check whether the footwear had tread or narrow/high heels as well as if the shoes or slippers were a loose fit.

ITEM 6 is the assistive device or other aid used during the fall, if any.

Figure 4a Section B, items 1-11

SECTION B

1. Was the incident a:

- Found on the floor (unwitnessed)
- Fall to the floor (witnessed)
- Near fall (patient lowered to floor by staff/other stabilized)
- Self-reported fall

2. The cause of the incident was:

- Lost Balance
- Slipped (specify): _____
- Lost strength/weakness
- Tripped
- Lost consciousness/seizure
- Equipment malfunction (specify): _____
- Environmental factor (specify): _____ (e.g. clutter, inadequate lighting, floor)
- Other (specify): _____

3. The activity during the incident was:

- Ambulating in bedroom
- Ambulating to/from bathroom
- Transferring on/off toilet
- Ambulating in hallway
- Sliding out of wheelchair
- Getting up from chair/wheelchair
- Brakes unlocked
- Getting in/out of bed
- Bed wheels unlocked
- Out of low bed to floor/mat
- Changing clothes/other ADLs
- Getting in/out of tub or shower
- Reaching for something
- Other (specify): _____

4. Was there staff present during this activity?

Yes No

5. The footwear at the time of the incident was:

- Shoes
- Slippers
- And if applicable:
 - No tread or tread too high/thick
 - High/narrow heel
 - Poor fit/loose
 - Plain socks only
 - Non-slip socks
 - Bare feet
 - Other (specify): _____

6. Indicate aid in use at the time of the incident:

- None
- Cane
- Wheelchair
- Walker
- Merry walker
- Hip protectors
- Other (specify): _____

7. Part A. Was a restraint in use at the time of the incident?

Yes (complete Part B)

No

Part B.

- Vest/trunk restraint
- Wrist/hand mitten
- Seat belt/roll belt/waist restraint
- Geri-chair with table
- Lap Buddy/Lap tray
- Other (specify): _____

8. Part A. Were the side rails up?

Yes (complete Part B)

No

Part B.

- Full length side rails (2 full or 4 half rails on both sides of bed)
- Other side rails: _____

9. Part A. Was alarm present?

Yes (complete Part B)

No

Part B. (Check all that apply)

- Bed alarm sounded during event
- Bed alarm did not sound during event
- Chair alarm sounded during event
- Chair alarm did not sound during event
- Other (specify): _____

AS A RESULT OF THIS INCIDENT

10. Did the patient's mental status change?

Yes No

11. Did the patient's level of consciousness change?

Yes No

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ITEM 7A-B -is type of restraint in use, if any. Both restrictive and less restrictive forms of restraint should be recorded. If the type is not listed, the nurse should check “other” and specify.

ITEM 8A-B -is side rail use. When two full or four half rails were in use at the time of the fall, the nurse should check “full length side rails.” If any other combination of side rails were in use at the time of the fall, the nurse should check “other” and specify the type.

ITEM 9A-B -is alarm use. First check if an alarm was present. Include alarms attached to a wheelchair and consider all types of pressure or position change alarms as well as room sensors. If an alarm was present, check whether it sounded.

Resident Outcomes

ITEM 10 is change in mental status.

ITEM 11 is change in level of consciousness.

ITEM 12 asks if the blood glucose level was checked and if so, the value. All residents with a history of diabetes should have their blood glucose level checked immediately following a fall.

ITEM 13 asks if the resident’s pulse was taken after the fall and if so, the value.

ITEM 14 asks if the resident’s blood pressure was taken after the fall. If so, the systolic and diastolic values should be recorded. For residents with complaints of dizziness or lightheadedness, history of recurrent falls or use of cardiovascular medications, postural vital signs should be taken and recorded beside postural BP. The resident’s position during measurement should be checked.

ITEM 15 asks if the resident’s temperature was taken. If so, the value and whether it was oral, rectal or axillary should be recorded.

ITEM 16A asks if the resident had an injury as a result of the fall. If so, the nurse should check the injury site and which side of the resident’s body sustained the injury in 17B. In the next four columns, the nurse

should check whether the injury was minor, involving a bruise, skin tear or abrasion, or was a major injury that involved laceration with sutures or a subdural hematoma, and if the resident experienced pain. If the resident's injury is not among the listed options, the nurse should put a check in the last column across from the injury site and specify the type of injury.

ITEM 17 - asks if the resident was in the Falls Management Program at the time of the fall. If not, the nurse should enter the resident into the program and proceed with the full Falls Assessment. If the resident was already in the Falls Management Program, the nurse should send the FAX Alert to the resident's physician with the current fall and the total number of falls sustained in the last 180 days.

The nurse should complete the last item of the TRIPS form if, for any reason, the fall is not described sufficiently in items 1-17 and a narrative note would be helpful.

Figure 4b Section B, items 12–17

12. Was the patient's blood glucose level checked?
 Yes No
 If yes, indicate value: _____

13. Was the patient's pulse checked?
 Yes No
 If yes, indicate: _____

14. Was the patient's BP taken? Yes No
 If yes, indicate value: _____ systolic / _____ diastolic
 If postural BP indicated, record value:
 sitting _____ systolic / _____ diastolic
 standing _____ systolic / _____ diastolic

15. Was the patient's temperature taken?
 Yes No
 If yes, indicate value: _____
 And check oral rectal axillary

16. Part A. What was the incident outcome?
 Injury (complete Part B)
 Non-injury

16. Part B. If injury, indicate site(s) injured in first column, and the type of injury for each site checked ("X" all that apply):

INJURY SITE	TYPE OF INJURY					
	Left or Right	Bruise, Skin Tear or Abrasion, Laceration without suture	Fracture	Laceration w/ suture or subdural hematoma	Pain	If other, specify type of injury
Head	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upper Spine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lower Spine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shoulder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wrist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abdomen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pelvis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hip	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ankle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other site (specify): _____

17. Was this person in The Falls Management Program at the time of the fall?
 Yes If yes, send fax alert to MD
 No If no, consider enrollment in The Falls Management Program.

If necessary, please provide a brief narrative of this incident:

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Key points in Chapter 4

- FMP Progression
- Screening for falls risk
- Falls Assessment
- Fall Interventions Plan
- Fall Interventions Monitor

Figure 1 FMP Approaches

- Living Space Inspection for all residents
- Falls Assessment, Intervention Plan and Monitor for residents who fall in facility or have a history of falls
- Falls Assessment for residents who trigger a Falls RAP but have not fallen in past 180 days

All residents in nursing homes have some degree of fall risk, however, the FMP includes various approaches to address different levels of risk. (Figure 1)

Three classes of residents should be entered into the FMP: 1) those who fall while in the facility, 2) those with a history of falls and 3) those who have not fallen but trigger the Falls RAP during MDS assessment. The FMP Progression illustrated in Table 4 on the following page describes the suggested immediate and long-term management for residents in each of these three classes. Immediate response for those who fall in the facility is described in Chapter 2. The other two groups, those with a history of falls or who are at high risk of falls, must be identified through the screening process.

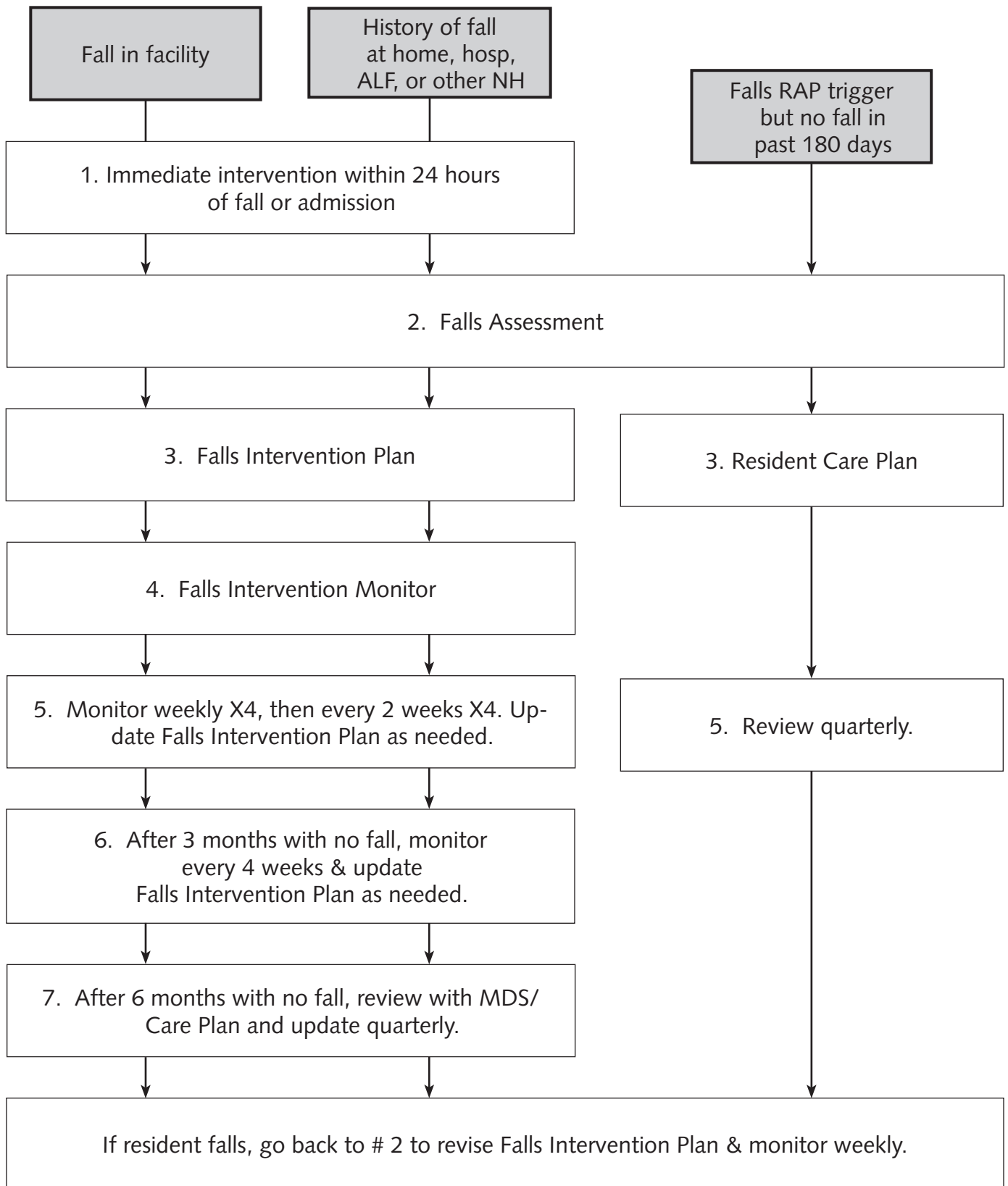
1. Screening Process

The basic criteria for screening are those used in the Minimum Data Set (MDS) that trigger the Falls Resident Assessment Protocol (RAP). These are listed in Table 5. The criteria used to trigger the Falls RAP and their corresponding MDS section in parentheses are highlighted in bold.

Table 5 Criteria for high-risk resident selection with MDS Falls RAP items in bold

1. **All residents with a history of any fall in the last 180 days (J4a and J4b)**
2. Residents with any of the following risk factors who are judged to be at high-risk by the falls team:
 - **Wandering (E4a)**
 - **Dizziness (J1f)**
 - **Trunk restraint (P4c)**
 - **Antianxiety medication (O4b)**
 - **Antidepressant medication (O4c)**
 - Antipsychotic medication
 - Parkinson's disease
 - Dementia
 - Any restraint
 - Other reason (e.g., unsteady gait, poor judgment, etc.)

Table 4 FMP Progression



Step 1: Identify which of the five risk areas contribute to the resident's fall risk.

The five areas of fall risk are:

- medications
- orthostatic hypotension
- vision
- mobility
- unsafe behavior

The Falls Assessment Cue Sheet (Figure 4a-b) provides instructions for all of the procedures used to assess risk in each of the areas and should be used by the nurse for quick reference during assessment. A given resident may have one, several or all of these types of risks. Thus, thorough assessment is needed to identify all appropriate interventions. When a resident does not have risk in one of the listed areas, check **NA**. A copy is provided in Appendix B.

Medications

While all medications should be reviewed for their potential impact on fall risk, the following classes of drugs are reported in the literature as most important.

- Antidepressants
- Antipsychotics
- Benzodiazepines
- Sedative/hypnotics
- Digoxin

If the resident received a drug in any of these classes on 4 or more of the past 7 days, the nurse should put a check by the specific drug class. Please see the Falls Assessment Cue Sheet for a list of the drugs in each class.

Orthostatic Hypotension

Postural vital signs are taken for ambulatory residents and should be taken in the right arm unless indicated otherwise. The resident should be seated for at least five minutes prior to measurement. The resident's blood pressure and apical heart rate are taken while sitting and at 1 minute after standing. If there is a drop of 20 mm Hg or more in the resident's systolic pressure 1 minute after standing, the nurse should put a check by *Orthostatic Hypotension* and write in values for the two BP measurements.

Figure 4a Falls Assessment Cue Sheet, page one

Falls Assessment Cue Sheet

Medications
Review the patient's drugs in the MAR and PRN records. Consider all drugs in each of the classes listed below when completing the medications section of the Falls Assessment.

Antipsychotic	Generic Names	Antidepressant	Generic Names
Trade Names		Trade Names	
Abilify	aripiprazole	Anafranil	clomipramine
Chazarel	clozapine	Asendis	amoxapine
Erzidan	perphenazine	Axerenil, Pamchor	amitriptyline
Haldol	haloperidol	Celera	clonidine
Loxazine	loxapine	Devel	trazodone
Mellaril	thioridazine	Efficace	venlafaxine
Moban	moxidone	Elavil	amitriptyline
Navane	thiothixene	Lexapro	escitalopram
Orap	pinazone	Nardil	phenelzine
Permitil	fluphenazine	Neoptamin	doxepamine
Prolixin	fluphenazine	Paxil	fluoxetine
Risperdal	risperidone	Parinate	trans-cypromine
Serenid	moxidazine	Prozac	paroxetine
Seroquel	quetiapine	Remeron	nortriptyline
Seldazine	trifluoperazine	Serzone	nefazodone
Taractan	chlorpromazine	Simoquan	doxepin
Thorazine	chlorpromazine	Sumomnil	trimipramine
Tandil	acetophenazine	Tofranil	imipramine
Tidilol	perphenazine	Wellbutrin	bupropion
Telival	perphenazine	Zaldoff	sertraline
Vespin	nifurpromazine		
Ziprexa	olanzapine		
Zexidon	ziprasidone		
		Digoxin	
		Trade Names	Generic Names
		Digoxin	digoxin
		Lanoxap	
		Lanoxin	
		Novo-digoxin	
		Sedatives/Hypnotics	
		Trade Names	Generic Names
		Asbiam	zolpidem
		Atarax, vistaril	hydroxyzine
		Buqpar	buspirone
		Aquasol	chloral hydrate
		Equanil, Miltown	meprobamate
		Socoral	secobarbital
		Sonata	zalcitabine
		Versed	midazolam

Orthostatic Hypotension
Equipment needed: sphygmomanometer, watch with a second hand.
Take the patient's blood pressure in the right arm unless otherwise indicated and take an apical heart rate for 60 seconds. Encourage the patient not to smoke and to remain calm for at least 10 minutes before the test.
For ambulatory patients, take BP readings in the sitting position and then 1 minute after standing. Ensure that the patient has been sitting for at least 5 minutes before taking the first measurement. Use staff assistance when necessary for patient safety.
Subtract the values obtained while patient is standing from the values obtained while the patient was sitting. Determine if there is a reduction of ≥ 20 mm Hg in systolic pressure for postural hypotension.

Figure 4b Falls Assessment Cue Sheet, page two

Vision
Observe the patient during her activities of daily living and while she moves about in her room, bathroom, hallway and dining room. Determine if the patient stumbles, trips, has difficulty finding objects or detecting changes in floor surfaces, or shows other signs of poor vision.

Mobility
Complete a Mobility and Transfer Assessment for all patients who ambulate or transfer without human assistance. Include patients who use a cane, walker or wheelchair and those patients who should be assisted but get up unsafely without assistance.

Get Up and Go Test: Ask the patient to sit in a standard armchair, rise, walk 10 feet, turn, walk back to the chair and sit down. The patient should wear her normal footwear and use her customary walking aid. Look for unsteadiness, difficulty rising or lowering and any gait problems. Determine level of staff assistance required for safety.

Transfer Test: Ask the patient to transfer in and out of the bed, on and off the toilet and in and out of the lounge chair. Determine if the patient is safe, if the height of the bed, toilet or lounge chair needs adjustment; if existing handrails need adjustment; and if the patient's assistive device needs further evaluation.

Wheelchair Screen: For all patients who use a wheelchair or sit in a wheelchair for reasons other than transport only, collect the following measurements and assess the patient's position while seated. Based on your evaluation, determine if the patient is unsafe while seated in the wheelchair.

CORRECT SEAT WIDTH

Hip width + 2 in = _____

CORRECT SEAT DEPTH

Thigh length - 2 in = _____

CORRECT ARMREST HEIGHT

1 in higher than elbow = _____

After the patient has been seated in the wheelchair for at least 1 hour, compare her position with the pictures to determine if she is seated correctly.

correct position with two 90° angles

sliding down


leaning over

leaning to one side

Unsafe Behavior
Review the chart and MAR, obtain a history from the family and talk with staff about the patient's behavior. Complete the Unsafe Behavior Worksheet if necessary to determine the following:

- location
- time of day
- frequency
- potential triggers
- patient's agenda
- motivation
- people involved
- unsuccessful staff approaches
- new interventions

Figure 5 Mobility and Transfer Assessment



Mobility and Transfer Assessment

Patient Name: _____ Unit/Room: _____

The Mobility and Transfer Assessment is a 3-step process used to screen for problems related to balance, gait and transfer. During the assessment, the patient should use a cane, walker or wheelchair if she or he normally does so. The nurse should observe the patient's safety during ambulation using the Get Up and Go Test and during transfer in and out of bed, on and off the toilet and in and out of the lounge chair when one is used by the patient. The nurse should assess the patient's wheelchair for proper fit and positioning.

Step One: Put a check by the level of assistance needed by the patient in order to be safe during ambulation, bed transfer, toilet transfer and chair transfer.

Step Two: Put a check by those environmental adjustments needed for safety during ambulation or transfer.

Step Three: Complete the Wheelchair Screen. Put a check by each needed safety improvement.

For instructions to the Get Up and Go Test and Wheelchair Screen, see the FMP Cue Sheet.

	Get Up and Go Test	Bed Transfer	Toilet transfer	Chair transfer
1. Level of Assistance				
Safe independent				
Safe with 1 person assist				
Safe with 2 person assist				
PT referral				
2. Environmental Adjustments				
Adjust height of bed/toilet/lounge chair		Mark _____ inches from floor for bed height.		
Adjust handrail support				
Use assistive device				
Adjust assistive device				
OT/PT referral				
3. Wheelchair Screen				
Locate missing equipment				
Add labels to wheelchair and seating items				
Seat width needs adjustment				
Seat depth needs adjustment				
Seat height needs adjustment				
Armrest height needs adjustment				
Footrest(s) needs adjustment				
OT/PT Seating Assessment				

Signature: _____ Date: _____

Sometimes it may be difficult to determine if the resident is hypotensive when checking only one point in time. If the resident does not show evidence of orthostatic hypotension during the Falls Assessment but complains of light headedness or dizziness, the nurse should perform the measurements when the resident complains or after meals.

Vision

The nurse should observe the resident during activities of daily living while in the bedroom, bathroom, hallway and dining room. If the resident stumbles or trips, has difficulty finding objects or detecting changes in floor surfaces, or shows other signs of poor vision, the nurse should put a check by *Vision*.

Mobility

The nurse should complete the Mobility and Transfer Assessment (Figure 5) to screen residents for safety problems related to gait, balance, transfer and wheelchair seating. This is a 3 step process to determine 1) the level of assistance needed by the resident, 2) any environmental adjustments needed for safe transfer and 3) wheelchair changes needed for safe position and use. A copy of the Mobility and Transfer Assessment is provided in Appendix B.

The nurse uses the Get Up and Go Test to determine safety during rising and ambulation. The resident should be instructed to sit in a standard chair with armrests, rise, walk 10 feet, turn, walk back to the chair and sit down. The resident should use a cane or walker if she normally does so. Any unsteadiness, loss of balance or problems with gait should be noted. In addition, the nurse should ask the resident to transfer in and out of bed, on and off the toilet and in and out of the lounge chair if one is used. Any difficulty the resident has rising, turning, managing clothing or lowering during the transfers should be noted.

Step 1 Determine the level of assistance needed by the resident to be safe during the Get Up and Go Test and during each of the transfers. Record as safe independent, safe with 1 person assist or safe with 2 person assist.

Step 2 Determine if adjustments to the bed height, toilet height, lounge chair and handrail support are necessary and record findings. Determine if further evaluation of the resident's assistive device is needed and record findings.

Step 3 Perform a Wheelchair Screen for all residents who use a wheelchair other than for transport only. Locate all missing equipment and check for correct personal labeling. Using the diagrams on the Falls Assessment Cue Sheet, check the size and fit of the wheelchair as well as the resident's position. Record findings.

If the resident is unsafe during the Get Up and Go Test or during transfer, the nurse should put a check by *Mobility* on the Falls Assessment. When the resident's wheelchair does not fit or if the resident is positioned incorrectly, the nurse should put a check by *Mobility* as well. In both cases, the resident should be referred to a physical or occupational therapist for evaluation. The Wheelchair Seating Assessment provided in Appendix B may be used by a therapist to evaluate the resident's seating. It is a detailed assessment that includes recommendations for seating changes.

Unsafe Behavior

The nurse should talk with staff to determine if the resident had any of the following unsafe behaviors on 2 or more occasions during the past month:

- Tried to stand, transfer or walk alone unsafely
- Tried to get out of the bed alone unsafely or climbed over bed rails.
- Walked or paced when too tired to be safe
- Propelled wheelchair or walked alone in unsafe areas such as outdoors on rough pavement or in parking lot

If the resident has one or more of these unsafe behaviors, the nurse should put a check by *Unsafe Behavior* and identify the specific behavior(s).

Step 2 Send a Primary Care Provider Report, receive orders and make appropriate referrals.

Once the Falls Assessment is complete, the nurse should use the 3-page Primary Care Provider FAX Report and Orders to inform the physician, nurse practitioner or physician's assistant of the results of the Falls Assessment. (Figs 6a-c) On the first page, the FAX COVER SHEET, the nurse should add the name of the primary care provider, resident's name, unit/room number, date, and fax number of

Figure 6a Primary Care Provider Report and Order Sheet: FAX COVER SHEET

The Falls Management Program
Primary Care Provider FAX Report and Orders

1. FAX COVER SHEET

Facility: _____
Address: _____
City/State: _____
Telephone: _____
Fax: _____

Date: ____/____/____

Primary Care Provider: _____ Fax #: _____

Patient Name: _____ Unit/Room: _____

This patient was identified in our Falls Management Program as having a high risk of falls, and underwent a Falls Assessment per our protocol. Attached are the following:

1. FALLS ASSESSMENT REPORT and suggestions for further assessment and/or intervention.
2. A form for you to FAX BACK ORDERS on which you can indicate those that you select for this patient.

Please review the FALLS ASSESSMENT REPORT and return the FAX BACK ORDERS form the next business day. Thank you.

Falls Coordinator: _____ Phone number: _____

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Figure 6b Primary Care Provider Report and Order Sheet: FALLS ASSESSMENT REPORT

The Falls Management Program

2. FALLS ASSESSMENT REPORT


Facility: _____
Address: _____
City/State: _____
Telephone: _____
Fax: _____

Date: ____/____/____

Patient Name: _____

Findings: (X) = positive for this patient	Suggestions for further assessment and/or interventions
<input type="checkbox"/> Medications that could increase fall risk:	<ul style="list-style-type: none"> • Review medications and consider changes if appropriate. • Consider psychiatric evaluation if indicated to evaluate psychotropic meds • Consider consultant pharmacist recommendations.
<input type="checkbox"/> Low vision	<ul style="list-style-type: none"> • Consider optometry or ophthalmology evaluation.
<input type="checkbox"/> Postural hypotension ≥20 mm Hg drop in systolic pressure with position change	<ul style="list-style-type: none"> • Review cardiovascular and diuretic medications. • Consider blood work for BUN/Creatinine ratio. • Consider TED hose.
<input type="checkbox"/> Unsafe gait, transfers, and/or wheelchair seating problems	<ul style="list-style-type: none"> • Consider OT/PT evaluation.

Figure 6c Primary Care Provider Report and Order Sheet: FAX BACK ORDERS



The Falls Management Program

████████████████████

EDMUND CENTER FOR HEALTH IN AGING
 Facility: _____
 Address: _____
 City/State: _____
 Telephone: _____
 Fax: _____

Date: ____/____/____

Return by FAX to: _____ Fax #: _____

Patient Name: _____ Unit/Room: _____

Please mark the orders that are appropriate for this patient with an (X) and sign at the bottom.

Medication changes (please specify)

Psychiatric evaluation to evaluate psychotropic medications

Optometry evaluation

Ophthalmology consult

Blood for BUN and Creatinine

TED hose during the day

Physical or occupational therapy evaluation of gait/balance/transfer/seating

Other orders:

Signature: _____ Date: _____

(primary care provider)

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the primary care provider. The second page, FALLS ASSESSMENT REPORT, is a list of the safety problems found by the nurse during the Falls Assessment and a list of suggestions for further assessment and/or interventions. The nurse should write in the resident's name and date and put a check by each identified risk area. If *Medications* is checked, the specific medications should be added as well. The third page is the FAX BACK ORDERS for the primary care provider to complete. Before sending the FAX, the nurse should fill in the FAX number of the facility, resident name, date, and unit/room at the top of this page. Providers who are in the facility multiple times per week may prefer to receive these forms in person, rather than by fax.

The primary care provider is asked to respond to the FAX by the next business day. It is recommended that the nurse wait two business days for a reply and contact them again if a reply is not received. Once the FAX BACK ORDERS are received, the nurse should carry out all of those requested. This may include referrals to an OT/PT, optometrist or ophthalmologist as well as medication changes, laboratory tests or other procedures. While the Falls Assessment and care planning are in process, an interim care plan to reduce fall risk should be used.

3. Fall Interventions Plan

Care plans that incorporate input from medicine, therapy and other health care professionals are more likely to address the multiple risk factors common in this population. Input from direct care staff can provide the personal details necessary to target specific behaviors and personal situations of increased risk.

The continuum of care to manage fall risk includes three areas of focus which need special consideration:

- Interim plan of care for new admissions
- Comprehensive care plan development driven by the Falls Assessment
- Intensive care planning for residents with recurrent falls

A. Interim Plan of Care for New Admissions

Most residents are at a higher risk of falling in the first 2-3 weeks following admission to a facility. However, it may take staff a significant portion of this period to develop a comprehensive care plan based on a multidisciplinary approach. Also, it may be difficult to determine the resident's risk this early in their stay. Other residents may have increased fall risk after admission that will decrease once adjustment to the facility is made.

For these reasons, an interim plan of care should be implemented for all new admissions regardless of risk level. During this time, close observation to collect information about the resident's risk factors and individual behaviors can be used to develop a more comprehensive plan once a Falls Assessment is complete. If a resident is found not to be at high risk during screening or this observation period, some measures may be stopped.

Interim Plan of Care

- Close observation and increased supervision
- Frequent orientation to room, bathroom and facility
- Medication review
- Use of safe footwear
- Staff assistance to toilet or bedside commode
- Use of monitoring or sensor devices
- Use of pressure, position, seat belt or other alarm
- Use of protective clothing/devices: helmet, wrist guards or hip protectors

B. Comprehensive Care Plan Development Driven by the Falls Assessment

A comprehensive falls care plan is developed using two steps.

1. Complete the Falls Assessment
2. Select and individualize interventions on the Fall Interventions Plan

1. Complete the Falls Assessment (Figure 7)

Once the nurse completes an assessment in each of the five areas (Column 1) and sends the Primary Care Provider FAX Report and Orders, the next step is to complete all of the recommendations and orders from the primary care provider, therapist and any other healthcare

Figure 7 Falls Assessment

The Falls Management Program
Falls Assessment
 Resident: _____ Room: _____
Directions: Use the instructions on the Falls Assessment Case Sheet to assess the resident in the five areas listed in the first column. Put a check beside each risk factor present for this resident. If the resident does not have a risk factor, put a check beside N/A. In the second column, check when the primary care provider report is faxed and orders are received and when the resident is discussed in the interdisciplinary team meeting. Check all appropriate evaluations and referrals. Once the assessment is complete, proceed to the Fall Interventions Plan and select specific individualized interventions for each risk category identified for this resident.

RISK FACTORS	INTERDISCIPLINARY ASSESSMENTS
Medications <input type="checkbox"/> Antipsychotics <input type="checkbox"/> Sedative/hypnotics <input type="checkbox"/> Antidepressants <input type="checkbox"/> Digoxin <input type="checkbox"/> Benzodiazepines <input type="checkbox"/> N/A	<input type="checkbox"/> Primary Care Provider Report faxed <input type="checkbox"/> Primary Care Provider Orders received <input type="checkbox"/> Discussed in falls team meeting <input type="checkbox"/> Medication review by consultant pharmacist <input type="checkbox"/> Psychiatric evaluation
Orthostatic Hypotension <input type="checkbox"/> Reduction of ≥ 20 mm Hg in systolic pressure 1 minute after change in position from sitting to standing Sitting BP: ____/____ Standing BP: ____/____ <input type="checkbox"/> N/A	<input type="checkbox"/> Review cardiovascular medications
Vision <input type="checkbox"/> Stumbles and trips <input type="checkbox"/> Difficulty finding objects or detecting changes in floor surfaces <input type="checkbox"/> N/A	<input type="checkbox"/> Ophthalmologist evaluation <input type="checkbox"/> Ophthalmologist referral
Mobility <input type="checkbox"/> Unsafe during the Get Up and Go Test <input type="checkbox"/> Unable to transfer on and off toilet, bed or chair safely <input type="checkbox"/> Unsafe wheelchair seating <input type="checkbox"/> N/A	<input type="checkbox"/> OT consultation <input type="checkbox"/> PT consultation
Unsafe Behaviors <input type="checkbox"/> Tries to stand, transfer or walk alone unsafely <input type="checkbox"/> Tries to climb over bed rails or get out of bed alone unsafely <input type="checkbox"/> Walks or paces alone when too tired to be safe <input type="checkbox"/> Propels or walks alone in unsafe areas <input type="checkbox"/> N/A	<input type="checkbox"/> Behavioral assessment <input type="checkbox"/> Evaluation of restraint use

Signature: _____ Date Completed: _____
 October 2009

professionals (Column 2). Examples include medication changes, lab tests, new assistive devices and seating modifications. This step ensures multidisciplinary involvement. Because some referrals and further evaluations will take longer, the Falls Nurse Coordinator should proceed with the care plan and add later recommendations at the time they are received.

2. Select and individualize interventions on Fall Interventions Plan

For most residents who trigger a Falls RAP but have not actually fallen in the past 180 days, do not complete the Falls Intervention Plan. Rather, incorporate results of the assessment into the regular care plan. Exceptions may include residents felt to be high-risk due to risk factors not included on the current MDS or those residents with a new MDS trigger occurring in the last 90 days.

Development of the Fall Interventions Plan (Figure 8) is based on results of the Falls Assessment as well as investigation of all circumstances and related resident outcomes. In order to be specific during care plan development, the nurse must have the following information:

- Input from direct care staff about effective and ineffective strategies tried in the past
- Input from direct care staff about resident’s individual behaviors and needs
- Past fall history including TRIPS data
- Input from family and resident

Figure 8 Fall Interventions Plan

Fall Interventions Plan

Resident: _____ Room: _____

Directions: Check all interventions that apply.

RISK FACTOR	SELECTED INTERVENTIONS	RISK FACTOR	SELECTED INTERVENTIONS
Medications	<p>For changes in psychotropic meds:</p> <ul style="list-style-type: none"> Monitor and report changes in anxiety, sleep patterns, behavior, or mood Monitor and report drug side effects Behavior management strategies Sleep hygiene measures <ul style="list-style-type: none"> no caffeine after 4 pm up at night with supervision comfort measures pain management regular exercise, limit napping relaxing bed routine individualized toileting at night safe bathroom routine <p>For changes in digoxin:</p> <ul style="list-style-type: none"> Monitor apical heart rate; if < 50, notify PCP. 	Mobility	<ul style="list-style-type: none"> Increase staff assistance <ul style="list-style-type: none"> early morning during all transfers during ambulation other Correct height of bed, toilet or chair <ul style="list-style-type: none"> king bed at correct height as marked on footrest or wall Use raised toilet seat Use cushion in lounge chair Lower lounge chair Increase bathroom safety <ul style="list-style-type: none"> Use adequate handrails support Use easy to manage clothing Promote wheelchair safety <ul style="list-style-type: none"> Use individualized, labeled wheelchair Check brakes and instruct pt on use Seating modifications <ul style="list-style-type: none"> Use all prescribed seating items Other: _____
Orthostatic Hypotension	<ul style="list-style-type: none"> Low blood pressure precautions <ul style="list-style-type: none"> instruct pt to change position slowly instruct pt to sit on edge of bed and dangle feet before standing instruct pt to use dorsiflexion before standing instruct pt not to tilt head backwards provide staff assistance in early AM and after meals If medication change <ul style="list-style-type: none"> take prochlor V5 q day X 3 days. If systolic drops > 20 mm Hg on day 3, notify PCP Promote adequate hydration <ul style="list-style-type: none"> TED hose Other: _____ 	Unsafe Behavior	<ul style="list-style-type: none"> Behavior management strategies Increase assistance and surveillance <ul style="list-style-type: none"> Position or pressure change alarm Movement sensor Locate patient near station Intrusion Toilet at regular intervals Increase activities involvement Other: _____ Reduce risk of injury <ul style="list-style-type: none"> Floor mat Helmets, wrist guards, hip protectors Non-skid mats Non-skid strips or non-skid rug Non-skid socks Lower or remove side rails Increase comfort <ul style="list-style-type: none"> Pain management Frequent rest periods Recliner or chair with deep seat Rocking chair Wheelchair seating items Exercise Cradle mattress Sheepskin, air mattress or pillows Other: _____
Vision	<ul style="list-style-type: none"> Low vision precautions <ul style="list-style-type: none"> use maximum wattage allowed by fixture increase lighting in room use adequate lighting at night add high contrast strips on stairs, curbs, etc. use signs with large letters or pictures use high contrast to offset visual targets reduce glare Corrective lenses <ul style="list-style-type: none"> keep glasses within easy reach at all times encourage patient to wear glasses Other: _____ 		

Signature: _____ Date: _____

Based on this information, the nurse checks those interventions listed in each of the risk categories checked on the resident’s Falls Assessment that are appropriate. Additional tasks can be added beside “other” and to the back of the form when needed. An example of a completed Fall Interventions Plan is provided in Appendix C. A copy of the Fall Interventions Plan should be kept on the unit with other CNA guidelines and revised as needed. Once it is revised several times, it may be necessary to complete a new updated one to ensure readability.

If the nurse has difficulty selecting interventions for the management of identified unsafe behaviors, he or she should complete the Unsafe Behavior Worksheet (Figure 9). This 2-page worksheet will help staff identify the circumstances of the behavior, review the resident’s per-

sonal and medical history and analyze staff/resident interactions so that staff can problem solve and develop new management strategies. Detailed instructions are provided on the form. A copy is provided in Appendix B and a sample of a completed Unsafe Behavior Worksheet is provided in Appendix C.

C. Intensive Care Planning for Residents With Recurrent Falls

Often in nursing facilities there are recurrent fallers, that is, residents who fall two or more times. Developing care plans for these residents is challenging, not only because of their high fall risk but also because staff may become discouraged and feel nothing will work. However, careful assessment and care planning can reduce risk of additional falls in most residents. Risk factors that are common in recurrent fallers are described in Figure 10.

To be effective, management of falls in this group of residents must include multidisciplinary assessment, creative team problem solving with direct care staff and weekly monitoring of staff implementation and resident response. Adjustments to the care plan and a willingness to try both new and old interventions is needed. This is time consuming and labor intensive for staff. However, residents in this group require and can benefit from ongoing team efforts.

General guidelines for managing recurrent falls include careful investigation in the following areas:

1. Toileting Often for recurrent fallers, toileting by staff must be individualized and more frequent. If it is determined that urgency, frequency or incontinence are reasons for unsafe transfer or ambulation, staff must develop a toileting plan that will minimize these symptoms. Strategies may include medication review, an individualized toileting plan and restorative care measures.

2. Monitoring Recurrent fallers need more supervision than other residents either by staff, family, volunteers or through the use of equipment. Room sensors to detect resident movement; position or pressure alarms on the bed, chair or wheelchair; and alarms to prevent unsafe wandering can be helpful. Recurrent fallers should be placed in structured activities and exercise programs whenever possible so that observation by other residents and the activities staff occurs. As new models of care develop within the long-term

Figure 9 Unsafe Behavior Worksheet, second page

The Falls Management Program	
Unsafe Behavior Worksheet	
Resident: _____ Rm #: _____ Date: _____	
Step 1	Behavior stated clearly using action verbs
Step 2	Personal and medical history
Step 3	Circumstances Time Frequency Location Persons present Situation Motivation Feelings Agenda
Step 4	Past staff approaches and patient reactions
Step 5	New Interventions
Signature: _____	

Figure 10 Common risk factors in recurrent fallers

- unsafe behaviors
- acute illness such as delirium or UTI
- chronic illness such as Parkinson's Disease, Alzheimer's disease and arthritis
- high-risk medication use
- restraints
- sensory impairment

care industry, new living space and staffing structures will enable increased interaction between residents and staff and therefore may improve observation.

3. Bed safety Residents who try to get out of the bed unsafely when alone should be evaluated for a low bed and floor mat. Full side rails should not be used as a means to keep a resident in the bed when they are trying to exit. Trying to climb over bedrails may well result in a serious fall related injury. Cradle mattresses or perimeters are useful options.

4. Individualized seating For residents who exhibit unsafe behavior while in a wheelchair, individualized seating modifications and equipment prescribed by an OT/PT experienced in functional seating can reduce fall risk. The Wheelchair Seating Assessment outlines specific solutions to seating problems and can be used by a qualified therapist to perform a detailed assessment.

5. Environment Staff should work with residents and their families to eliminate all possible hazards in the resident's room and bathroom. Adequate lighting at night and safe footwear are crucial. (See Living Space Inspection, Chapter 6.)

6. Underlying medical conditions Every effort should be made to determine what health conditions may be increasing the resident's fall risk. Infections, uncontrolled blood sugar, stroke and other acute conditions should be treated promptly.

7. Chronic conditions Ongoing management of risk for residents with chronic degenerative diseases is difficult. Staff must have a good picture of the resident's baseline function such as known periods of weakness during the day and side effects of the medications used to treat the disease. From this staff can determine routine measures and respond appropriately when the resident's condition worsens.

8. Pain management Appropriate pain assessment and treatment may reduce unsafe behaviors stemming from pain or discomfort.

9. Protective clothing For residents who are in danger of head injury, a helmet can provide protection. Wrist guards may also be used to protect the resident's wrists and forearms during a fall. Hip protectors should be used for all frail, ambulatory residents. Newer brands are easier to use during toileting and residents should be encouraged to wear them on a daily basis.

10. Behavior management All direct care staff should be skilled in responding to behavioral symptoms in a way to minimize the resident's anxiety and agitation rather than fuel it through inappropriate staff attitudes and responses. Basic behavior management skills are illustrated in Table 6 on the following page.

Since falls management for this group of residents can be frustrating, it is important for the Falls Nurse Coordinator to provide leadership and make all possible resources available to staff. Articles, books and websites are referenced in Appendix A. Lists of companies that sell adaptive equipment, alarms, low beds and other items that may be used to reduce risk are also provided.

Table 6 Basic Behavior Management Skills

KNOW THE RESIDENT. Know what the resident likes and does not like, past behaviors, family history, habits and customs, past interests, and at least three things that bring the resident comfort.

Be sure to **DEPERSONALIZE** the resident's behavior. Remember that the behavioral symptom is caused by the resident's condition. Don't let the behavior be a trigger for you.

Use good **COMMUNICATION SKILLS** to approach the resident and give a clear message.

1. Approach

- Be positive
- Stay neutral
- Remain calm
- Stay flexible

2. Verbal Message

- Identify yourself
- Talk slowly
- Use simple words
- Use one step commands
- Put sentences in positive terms
- Use Validation Therapy by responding to the resident's feelings

3. Nonverbal Message

- Make eye contact
- Get at resident's level
- Match actions to words
- Move slowly

MATCH THE DEMANDS OF CAREGIVING TO THE PATIENT'S ABILITIES. Watch for signs of increasing anxiety. When resident's anxiety increases, slow down, re-explain, reassure, or return later.

1. Provide a routine each day.
2. Schedule periods of physical activity.
3. Provide times of rest.
4. Use the staff member with the best relationship with the resident to give care when possible.
5. Break down complex tasks into single steps.
6. Show the resident how to begin an action.
7. Simplify clothing fasteners.
8. Give as much control to the resident as possible.
9. Give rewards.
10. Use distraction.
11. Instead of using force, return later and try a different approach.
12. Anticipate the resident's needs.
13. Provide opportunities for touch through hugging and holding hands with others.
Provide contact with animals, gardening, or objects with different textures and shapes.
14. Make sure resident wears hearing or visual aids.
15. Use activity boxes or reminiscence boxes.

Use **ENVIRONMENTAL MANAGEMENT** to keep the resident safe, to help control the resident's behavior and to reduce the effects of other residents' behaviors.

1. Label the resident's door, bathroom, or other areas to help resident locate areas. Use black and white pictures at the wheelchair level when necessary.
2. Reduce distractions of unattended TV's, intercoms, or other background noise. Put easily confused residents in small groups for eating or activities. Put residents who are sensitive to noise in quieter rooms. Use soothing music.
3. Provide safe outdoor areas for walking and propelling wheelchairs.

4. Falls Intervention Monitor

In a nursing home, routine supervision of front line staff may not provide enough consistent information about specific care processes such as the interventions listed on a resident’s Fall Interventions Plan. This can be the result of many factors including heavy workloads, competing priorities and staff turnover. As a result, individualized care plans may be implemented inconsistently. As the leader of the FMP, the Falls Nurse Coordinator uses the Fall Interventions Monitor (Figure 11) to evaluate implementation of the program by direct care staff.

The Falls Nurse Coordinator records on the Fall Interventions Monitor whether the selected interventions are being done by staff and their effectiveness. Many of the tasks listed on the Fall Interventions Plan can be observed directly by the nurse—for example, locked or unlocked bed wheels and safe footwear. For other tasks, such as the level of assistance provided, the nurse should ask direct care staff. Comments and changes to the Fall Interventions Plan should be noted on the form each week.

The following guidelines (See Table 4, page 21) provide suggestions for how often to monitor different categories of residents in the FMP.

- For residents who fall in the facility and those with a history of falls, monitor weekly X4 and then every 2 weeks X4. After 3 months with no fall, monitor monthly. Update Fall Interventions Plan as needed.
- For residents who trigger the Falls RAP but have not fallen in the past 180 days, review quarterly.
- When a resident falls, return to Step 2 of the FMP Progression and revise the Falls Assessment as needed. Then continue with Steps 3 and 4.

Figure 11 Fall Interventions Monitor

Fall Interventions Monitor

Resident: _____ Room: _____

Directions: Monitor staff implementation and effectiveness of the Fall Intervention Plan each week. Revise interventions as needed and record below. Use one sheet for every 2 weeks.

	DATE:		DATE:
Medications	Are interventions effective: ___ YES ___ NO Changes: Comments:	Medications	Are interventions effective: ___ YES ___ NO Changes: Comments:
Orthostatic Hypotension	Are interventions effective: ___ YES ___ NO Changes: Comments:	Orthostatic Hypotension	Are interventions effective: ___ YES ___ NO Changes: Comments:
Vision	Are interventions effective: ___ YES ___ NO Changes: Comments:	Vision	Are interventions effective: ___ YES ___ NO Changes: Comments:
Mobility	Are interventions effective: ___ YES ___ NO Changes: Comments:	Mobility	Are interventions effective: ___ YES ___ NO Changes: Comments:
Unsafe Behavior	Are interventions effective: ___ YES ___ NO Changes: Comments:	Unsafe Behavior	Are interventions effective: ___ YES ___ NO Changes: Comments:

Signature: _____ Date: _____

Information and Training for Staff, Primary Care Providers, and Residents and their Families

5

This chapter contains three modules for orienting staff, primary care providers and residents and their families to the FMP. Staff materials are more structured and include a train-the-trainer module.

MODULE ONE: STAFF TRAINING

This module provides all of the information necessary for the Falls Nurse Coordinator or staff development coordinator to deliver two 30-minute training sessions for all facility staff and one additional 30-minute session with licensed nursing staff.

Introduction

People have many different learning styles, however, the following principles apply to all adult learners and will enhance their ability to learn:

- Provide adult learners the opportunity to talk about their own life experiences.
- Provide adult learners with content based on real-life situations that can be applied in a practical way.
- Provide adult learners the opportunity to participate in the classroom in an active way.

Adults learn best when the teaching situation encourages them to contribute their ideas and opinions. This principle is especially applicable to nursing assistants who have valuable knowledge and experience but may have limited classroom experience. It is important to ask nursing assistants for their ideas about changes in care and to acknowledge their central role in any plan. This is accomplished by asking for their opinions, listening to their responses, acknowledging the value of their opinions and then incorporating their suggestions into care routines. The classes are designed so that after the video, the participants discuss the content and how to apply it while caring for their residents.

In a culture of safety, it is the role of the Falls Nurse Coordinator to encourage full reporting by staff of all fall incidents and to emphasize there is no blame or shame attached to mistakes that may result in a resident's fall. This message must also come from the administration through reassurance that those reporting a fall will not be punished.

Key Points in Chapter 5

- Training facility staff
- Information for primary care providers
- Information for residents and their families

Figure 1a Inservice #1 Pretest/Posttest

The Falls Management Program

Inservice #1: Why Falls Happen

EMORY CENTER FOR HEALTH IN AGING

Pretest/Posttest

Name: _____ Date: _____

- List 3 common safety problems in the patient's room and bathroom.
 - _____
 - _____
 - _____
- For most patients, the bed should be left in the lowest position. True or False (Circle one)
- New admissions have the same risk of falling as patients who have been in the facility more than 60 days. True or False (Circle one)
- List two common problems with wheelchairs that increase a patient's risk of falling.
 - _____
 - _____
- List three side effects of sedatives that increase a patient's risk of falling. An example of a sedative is Ativan.
 - _____
 - _____
 - _____

Figure 1b Inservice #2 Pretest/Posttest

The Falls Management Program

Inservice #2: How to Reduce Falls

EMORY CENTER FOR HEALTH IN AGING

Pretest/Posttest

Name: _____ Date: _____

- List 3 ways to improve safety in a patient's room and bathroom.
 - _____
 - _____
 - _____
- Personal items should be kept within 10 feet of the patient. True or False (Circle one)
- List three ways to improve the patient's safety during transfer and mobility.
 - _____
 - _____
 - _____
- Staff should use behavior management skills with patients who have unsafe behaviors. True or False (Circle one)
- A patient who leans over or slides down while seated in a wheelchair is more likely to fall out of the chair. True or False (Circle one)

Emphasis should be on examining the system rather than blaming individuals. During the inservices, the instructor should communicate this message and encourage staff to report falls accurately and to participate in group problem solving to develop new interventions.

Section One: Inservices for All Facility Staff

Goals and objectives of class

The goals of Inservice #1, "Why Falls Happen," are to explain the importance of reducing falls in long-term care and common causes of falls. This inservice should include a description of the FMP, introduction of the team members, and a review of the culture of safety.

Program Objectives for Inservice #1

Upon completion of Inservice #1, each staff member will be able to name:

1. Common safety problems in the resident's room and bathroom
2. Safety problems during transfer and ambulation
3. Unsafe behaviors that increase fall risk
4. Safety problems related to wheelchair use
5. Side effects of psychotropic drugs that increase fall risk

The goals of Inservice #2, "How to Reduce Falls," are to explain specific strategies to reduce fall risk and to discuss their application to individual residents in the program.

Program Objectives for Inservice #2

Upon completion of Inservice #2, each staff member will be able to name:

1. Strategies to improve safety in the resident's room and bathroom
2. Strategies to improve safety during transfer and ambulation
3. Strategies to manage unsafe behaviors
4. Strategies to improve safety during wheelchair use

Methods

The materials for both inservices include a variety of instructional methods. Participants will hear the content delivered by the instructor, see the content on video and read it in a handout. In this way the material is reinforced and individual preferences for learning may be met. Pre and posttests (Figure 1a-b) for each inservice are provided in Appendix B. However, they should be used in a manner that encourages staff to see their progress instead of noting failure. For staff members who do not understand English well or have other learning barriers, the instructor may need to provide an additional review of the program. Handouts 1 and 2 as well as the pre and posttests are provided in Spanish and English.

It is helpful to use examples and case histories during the group discussion. This can be easily accomplished by naming a specific room or bathroom, wheelchair, or resident with risk factors. A sample case study with discussion points for both inservices is provided in Appendix C.


Resources and materials

There is one videotape, *The Fall Reduction Program*, that contains two 15 minute sessions. The first program, *Part I*, is for inservice #1 and the second program, *Part II*, is for inservice #2. Information for the purchase of this video is provided in Appendix A, item #6. There is one handout for inservice #1, *Why Falls Happen*, and one handout for inservice #2, *How to Reduce Falls* (Fig. 2a-b). A copy of each is given in Appendix B.

The following items are needed for both Inservice #1 and #2:

- Reserved Room
- Videotape, *The Fall Reduction Program, Part I and II*
- Videotape player and monitor
- Attendance sheet
- Handout for inservice #1, *Why Falls Happen*, a copy for each participant
- Handout for inservice #2, *How to Reduce Falls*, a copy for each participant
- Refreshments

Figure 2a Inservice #1: Why Falls Happen



Why Falls Happen in Nursing Facilities

Facts:

- About half of all patients in nursing facilities fall every year.
- 30-40% of the patients who fall in nursing facilities fall at least twice.
- One in every ten patients has a serious injury from a fall, such as a fracture, laceration, or serious head injury.
- One of the most serious injuries from falls is hip fracture.
- Falls result in a decrease in the patient's quality of life, an increase in staff time and effort, added costs of medical treatment, and an increase in the nursing facility's costs to settle legal claims.

There are many reasons why patients fall. These reasons are called fall risk factors. Many of these we can change.

Fall Risk Factors We Can Change:

Patients' Living Space and Personal Safety

- clutter, uneven floors and raised thresholds
- broken bed wheel locks, poor lighting
- unstable furniture, hard to reach personal items
- loose handrails and toilet seats, unsafe footwear and poor foot care

Patients' Transfer and Mobility

- unsafe transfer and walking without staff assistance
- lack of handrail support in bathroom
- new admissions or health declines
- incorrect height of transfer points
- hard-to-manage clothing
- unsafe behavior

Equipment


- poor maintenance and repair, wheelchair seating problems
- improper wheelchair fit, sharing wheelchairs among patients

Psychotropic Drugs

- use of benzodiazepines such as Ativan and Xanax
- use of antipsychotics such as Haldol and Risperdal

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Figure 2b Inservice #2: How to Reduce Falls



How to Reduce Falls in Nursing Facilities

Patients' Living Space and Personal Safety

- Remove clutter. Keep a clear path 2 to 3 feet wide around the bed, from the bed to the hall, from the bed to the bathroom, and from the bed to the lounge chair.
- Keep the bed wheels locked at all times. Report beds with broken wheel locks.
- Remove lightweight furniture. Keep the overbed table across the bed when it is not in use.
- Report loose handrails and toilet seats.
- Report torn linoleum and loose carpet edges. Wipe up wet spots when you see them.
- Report burned out light bulbs.
- Keep the call light, water pitcher, glass, and any personal items within arm's length of the resident.
- Use footwear which has tread on the bottom, a firm shape, and a low, even heel. Use gripper socks when the patient cannot wear safe shoes.
- Give proper foot care.

Patients' Transfer and Mobility

- Know which patients need assistance during transfer and walking. Give help when needed.
- Watch all patients closely during the first 2 to 3 weeks after admission and after a health decline or acute illness. Increase assistance during these times.
- For most patients, keep bed in the lowest position at all times. Use a raised toilet seat when ordered.
- Dress the patient in easy-to-manage clothing such as those with elastic bands and Velcro fasteners.
- Provide toileting, food, drink and activity based on the patient's individual schedule.
- Check the patient often. Ask volunteers and family to help.

Equipment Use

- Check the wheelchair brakes often. Report ones that do not hold the chair firmly in place.
- Report all broken or lost parts of wheelchairs, walkers and canes.
- Use all of the seating items which are ordered for the patient.
- Report any patient who leans over, slides down, or leans to one side while seated in a wheelchair.
- Do not share wheelchairs among patients.
- Make sure all equipment is labeled with the patient's name.

Psychotropic Drugs

- Know which patients take a benzodiazepine or an antipsychotic.
- Watch patients who are on these drugs for side effects such as confusion, drowsiness, dizziness, changes in gait, loss of balance, and changes in mental status.
- Use behavior management skills to lessen the need for these drugs.

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Section Two: Education For Registered Nurses and Licensed Practical Nurses

Goals and Objectives of Class

The goal of this inservice is to provide the information and training that nurses need in order to coordinate the Fall Response when a resident on their unit falls. Training should include nurses on all three shifts and those who work on weekends.

Program Objectives

Upon completion of this session, the participants will be able to:

1. Name the components of the Fall Response.
2. Correctly complete the Tracking Record for Improving Patient Safety.
3. List all of the information that should be included in their nurses notes during the period of increased monitoring.
4. Name the five areas of falls risk on the Falls Assessment.
5. Recognize the Primary Care Provider FAX Report and Orders.
6. Name at least ten interventions that can be implemented during the first 24 hours after a fall.

Methods

Training for licensed staff should emphasize each of the eight elements of the Fall Response as described in Chapter 2. In reviewing this material, the trainer should emphasize the importance of prompt and thorough resident evaluation and investigation of the circumstances. Nurses on all three shifts and those who work the weekend are expected to respond immediately. The nurse should rely upon direct care staff's knowledge and experience with the resident to completely fill out the TRIPS form.

Licensed personnel may need follow-up after the inservice to ensure correct completion of the form. Licensed staff should rely on direct care staff's input but remember that they are ultimately accountable for the investigation and documentation of a fall as well as implementing an immediate response on their shift.

Licensed staff should be reminded of the crucial role of documentation during state surveys, litigation or other formal investigations so that their notes during the first 72 hours after the fall are comprehensive and always reference the fall. Information on the TRIPS form should be used as the basis for their first note.

All licensed staff should understand the processes related to assessment, care plan development and monitoring as outlined in the FMP. While the Falls Nurse Coordinator is responsible for completion of the Falls Assessment and Falls Intervention Monitor, various aspects may be delegated to direct care staff.

Resources

The following items are needed for this inservice:

- Reserved room
- Attendance sheet
- Tracking Record for Improving Patient Safety, a copy for each participant
- Falls Assessment, a copy for each participant
- Mobility and Transfer Assessment, a copy for each participant
- Unsafe Behavior Worksheet, a copy for each participant
- Primary Care Provider FAX Report and Orders, a copy for each participant
- Fall Interventions Plan, a copy for each participant
- Fall Interventions Monitor, a copy for each participant
- Refreshments

MODULE TWO: INFORMATION FOR PRIMARY CARE PROVIDERS

All primary care providers should be kept informed of their residents' fall risk and be active during the assessment process and treatment. To ensure that this communication occurs, the FMP provides two formal methods for correspondence between the nursing staff and the resident's primary care provider.

1) Once a resident has been entered into the FMP as a result of screening or during the Fall Response, the Falls Nurse Coordinator conducts a Falls Assessment. The results of this assessment are communicated to the primary care provider using a 3-page fax called the Primary Care Provider Fax Report and Orders. The first page is a COVER SHEET (Figure 3); the second page is the FALLS ASSESSMENT REPORT (Figure 4); and the third page is the FAX BACK ORDERS (Figure 5).

Once this fax is received, the primary care provider should review the results of the Falls Assessment and use the FAX BACK ORDERS to order referrals and any further evaluations. It is important that the primary care provider return the FAX BACK ORDERS on the next business day to ensure appropriate safety measures and interventions are implemented in a timely manner.

2) When a resident who has already been entered into the FMP falls, a FAX Alert will be sent to the primary care provider communicating the total number of falls for this resident during the past 180 days and asking the primary care provider for further evaluation. (Figure 6)

The Falls Nurse Coordinator is the point of contact for the primary care physician in monitoring residents' status. The Falls Nurse Coordinator will continue to work collaboratively with the primary care physician to ensure appropriate interventions and care plan changes occur as necessary.

Primary care providers should also be kept informed of relevant monthly data including the key indicators (number of falls, number of fallers, number of residents with 2 or more falls and number of serious injuries) during quality improvement or utilization review meetings.

Figure 3 FAX COVER SHEET

The Falls Management Program
Primary Care Provider FAX Report and Orders

1 FAX COVER SHEET

EMORY CENTER FOR THE HEALTH SCIENCES

Facility: _____
Address: _____
City/State: _____
Telephone: _____
Fax: _____

Date: ____/____/____

Primary Care Provider: _____ Fax #: _____
Patient Name: _____ Unit/Room: _____

This patient was identified in our Falls Management Program as having a high risk of falls, and underwent a Falls Assessment per our protocol. Attached are the following:

1. FALLS ASSESSMENT REPORT and suggestions for further assessment and/or intervention.
2. A form for you to FAX BACK ORDERS on which you can indicate those that you select for this patient.

Please review the FALLS ASSESSMENT REPORT and return the FAX BACK ORDERS form the next business day. Thank you.

Falls Coordinator: _____ Phone number: _____

Confidentiality Statement: The documents accompanying this fax transmission contain confidential information belonging to the sender that is legally privileged. This information is intended only for the use of the individual or entity named above. The unauthorized recipient of this information is prohibited from disclosing this information to any other party and is required to destroy the information after its stated need has been fulfilled, unless otherwise required by state law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or action taken in reliance on the contents of these documents is strictly prohibited. If you have received this fax in error, please notify the sender immediately and should destroy all documents.

Figure 4 FALLS ASSESSMENT REPORT

The Falls Management Program

2 FALLS ASSESSMENT REPORT

EMORY CENTER FOR THE HEALTH SCIENCES

Facility: _____
Address: _____
City/State: _____
Telephone: _____
Fax: _____

Date: ____/____/____

Patient Name: _____

Findings: (X) = positive for this patient	Suggestions for further assessment and/or interventions
() Medications that could increase fall risk:	<ul style="list-style-type: none"> • Review medications and consider changes if appropriate. • Consider psychiatric evaluation if indicated to evaluate psychotropic meds • Consider consultant pharmacist recommendations.
() Low vision	• Consider optometry or ophthalmology evaluation.
() Postural hypotension ≥20 mm Hg drop in systolic pressure with position change	<ul style="list-style-type: none"> • Review cardiovascular and diuretic medications. • Consider blood work for BUN/Creatinine ratio. • Consider TED hose.
() Unsafe gait, transfers, and/or wheelchair seating problems	• Consider OT/PT evaluation.

It is the medical director's responsibility to inform all primary care providers of their role in the program. This includes explaining the program; providing a background on falls in long-term care; reviewing suggestions for further assessment and intervention; and answering questions. The following handouts intended for distribution to the primary care providers are designed to aid the medical director in this process. They include:

- Basic facts about falls and the FMP flow chart (Figure 7)
- Suggestions for further assessment and/ or interventions (Figure 8)
- Resources (Figure 9).

Copies of the Primary Care Provider FAX Report and Orders, FAX Alert, Falls Assessment and TRIPS form should also be given to the primary care providers to familiarize them with the correspondence and documentation tools used during the FMP. All of the handouts and forms for the primary care providers are in Appendix B. A letter that may be used by the medical director to introduce primary care providers to the program is also provided in Appendix B.

Figure 5 FAX BACK ORDERS

The Falls Management Program
3 FAX BACK ORDERS

Facility: _____
 Address: _____
 City/State: _____
 Telephone: _____
 Fax: _____
 Date: ____/____/____
 Return by FAX to: _____ Fax #: _____
 Patient Name: _____ Unit/Room: _____

Please mark the orders that are appropriate for this patient with an (X) and sign at the bottom.
 Medication changes (please specify) _____
 Psychiatric evaluation to evaluate psychotropic medications
 Optometry evaluation
 Ophthalmology consult
 Blood for BUN and Creatinine
 TED hose during the day
 Physical or occupational therapy evaluation of gait/balance/transfer/seating
 Other orders: _____

Signature: _____ Date: _____
 (primary care provider)

Confidentiality Statement: The documents accompanying this fax transmission contain confidential information belonging to the sender that is legally privileged. This information is intended only for the use of the individual or entity named above. The authorized recipient of this information is prohibited from disclosing this information to any other party and is required to destroy the information after its stated need has been fulfilled, unless otherwise required by state law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or action taken in reliance on the contents of these documents is strictly prohibited. If you have received this fax in error, please notify the sender immediately and should destroy all documents.

The Falls Management Program
FAX ALERT

Facility: _____
 Address: _____
 City/State: _____
 Telephone: _____
 Fax: _____
 Date: ____/____/____
 Physician/NP/PA: _____ Fax #: _____
 Patient Name: _____ Unit/Room: _____

Your patient who is in the Falls Management Program fell on _____. It is this patient's _____ fall in the past 180 days.

Please consider reviewing the attached suggestions for known risk factors of falls and consider making appropriate recommendations.

Please call the Falls Nurse Coordinator if you have any questions about the incident or suggestions for our Falls Management Program. Thank you.

Falls Coordinator: _____ Phone number: _____

Confidentiality Statement: The documents accompanying this fax transmission contain confidential information belonging to the sender that is legally privileged. This information is intended only for the use of the individual or entity named above. The authorized recipient of this information is prohibited from disclosing this information to any other party and is required to destroy the information after its stated need has been fulfilled, unless otherwise required by state law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or action taken in reliance on the contents of these documents is strictly prohibited. If you have received this fax in error, please notify the sender immediately and should destroy all documents.

Figure 6 FAX Alert

The Falls Management Program
FACTS

- 1 in 3 persons ≥ 65 years will fall each year.
- Of 1.7 million patients in nursing facilities, about 50% will fall each year.
- Of those that fall, 30-40% will fall two or more times.
- 10% of patients have a serious injury related to a fall.
- About 65,000 patients suffer a hip fracture each year.

CONSEQUENCES OF FALLS

- Reduced quality of life
- Serious injury
- Increased level of fear
- Increased paperwork for staff
- Lawsuits
- Decreased ability to function
- Increased risk of death
- Increased level of care
- Poor survey results
- High insurance premiums

THE FALLS MANAGEMENT PROGRAM (FMP)


The Falls Nurse Coordinator will conduct a Falls Assessment of your patients who are found to be at high fall risk during screening and after an initial fall. You will receive a Primary Care Provider FAX Report and Orders asking you to review the results and to order referrals or participate in the assessment as indicated. A copy of the 3-page FAX Report and Orders is attached. It is important that you respond to the fax ASAP so that the nurse coordinator can use your recommendations to develop an individualized care plan. Thereafter, whenever your patient falls, you will receive a 2-page FAX Alert. A copy is attached.

FMP Flow Chart

```


    graph TD
      A[1. Screen all patients  
- history of fall in past 180 days - initial fall - other MSDS triggers] --> B[2. Falls Assessment  
- Medication review  
- Footwear, foot care  
- Vision  
- Blood pressure  
- Urinal and stool]
      A --> C[1. Physical, NP, PA Refs  
- Medication review  
- Podiatry referrals  
- Low vision  
- Dental Hygiene  
- Urinal pH, urines, uOPM]
      B --> D[3. Individualized Care Plan]
      C --> D
      D --> E[4. Reassess falls]
      E --> F[5. Weekly case reviewing and follow-up as needed]
      F --> D
  
```

Figure 7 Facts and Flow Chart



EMF Findings	Suggestions for further assessment and/or interventions
Medications Anti-psychotics Antidepressants Benzodiazepines Other sedatives/hypnotics Digoxin	Review all medications. Consider changes if appropriate. Consider psychiatric evaluation if indicated to re-evaluate psychotropic medications
Postural hypotension	Diagnose and treat postural hypotension: Review cardiovascular, diuretic, and other medications Consider blood work for BUN/Creatinine ratio Consider TED hose If severe, consider prescribing fludrocortisone (Florinef) or midodrine (Proxanthine)
Low vision	Consider optometry or ophthalmology evaluation.
Unsafe gait, transfers, and/or wheelchair seating problems	Consider OT/PT evaluation.
Conditions that increase fall risk	
Cardiac Postural hypotension Arrhythmias	Others Poor vision Incontinence Dehydration Use of restraints
Neuropsychiatric Stroke and TIA's Parkinson's disease Dementias and delirium Dizziness Depression	Hypoglycemia Fear of falling Foot problems
Drugs Anti-psychotics Antidepressants Benzodiazepines Other sedatives/hypnotics Digoxin Polypharmacy and drug interactions	

Figure 8 Suggestions for further assessment and/or interventions



Resources
Guidelines American Geriatrics Society, British Geriatrics Society, American Academy of Orthopaedic Surgeons Panel on Falls Prevention. Guideline for the prevention of falls in older persons. <i>J Am Geriatr Soc</i> 2001;49(5):664-672. Falls and Fall Risk, AMDA Clinical Practice Guideline. 1998
Websites Agency for Healthcare Research and Quality (AHRQ). Medical Errors and Patient Safety. http://www.ahrq.gov/qual/ermsrx.htm/ Alabama Quality Assurance Foundation (AQAF). AQAF Long-term care fall prevention project. http://www.aqaf.com The American Geriatrics Society Position Statements, Recommendations, Guidelines, and Papers. http://www.americangeriatrics.org/products/gostopapers/ Centers for Disease Control (CDC) National Center for Injury Prevention and Control (NCEIPC). Falls in Nursing Homes. http://www.cdc.gov/ncepc/factsheets/nursing.html Gillespie LD, Gillespie WJ, Robertson MC, Lamb SE, et al. Interventions for preventing falls in elderly people. <i>Cochrane Database Syst Rev</i> 2001;3:CD000340. http://www.cochrane-library.com Quality Indicators for Assessing Care of Vulnerable Elders (ACOVE). Quality Indicators for the Management and Prevention of Falls and Mobility Problems in Vulnerable Elders. http://www.annals.org/issues/v135n8/full/200110161-00007.html
Key References Agostini JV, Baker DL, Bogardus J. Prevention of falls in hospitalized and institutionalized older people. In: US Agency for Healthcare Research and Quality and University of California San Francisco-Stanford Evidence-Based Practice Center, eds. Making Health Care Safer: A critical analysis of patient safety practices. Rockville, MD: The Agency, 2001. Caporaso E, Strumpf NE, Evans LK, Grimo JA, Mainlin G. The relationship between physical restraint removal and falls and injuries among nursing home patients. <i>J Gerontol Series A: Biological Sciences & Medical Sciences</i> 1998;53(1):M47-52. Jensen J, Lundin-Olsson L, Nyberg L, Gustafson Y. Fall and injury prevention in older people living in residential care facilities: a cluster randomized trial. <i>Annals of Int Med</i> 2002;136(10):733-741. Killy DK, Kiel DE, Burrows AR, Lipsitz LA. Identifying nursing home patients at risk for falling. <i>J Am Geriatr Soc</i> 1996;44(5):551-555. Leipziger RM, Cunningham RG, Tinetti ME. Drugs and falls in older people: a systematic review and meta-analysis. II. Cardiac and analgesic drugs. <i>J Am Geriatr Soc</i> 1999;47(1):40-50. Ray WA, Taylor JA, Meador KG, Thapa PL, et al. A randomized trial of a consultation service to reduce falls in nursing homes. <i>JAMA</i> 1997;278(7):857-62. Rubenstein L. Falls in the nursing home. <i>Ann Intern Med</i> 1993;119(6):442-451. Tinetti ME. Preventing falls in elderly persons. <i>N Engl J Med</i> 2003;348(1):42-4.

Figure 9 Resources

MODULE THREE: INFORMATION FOR RESIDENTS AND THEIR FAMILIES

The purpose of the educational session for families and residents is to present information about falls in the elderly and to describe the facility's program to reduce the fall risk of their residents. Some family members may want to talk about other aspects of a resident's care. It is best to stay on the topic of fall reduction. Acknowledge concerns and ask families to write questions down for later discussion with the appropriate staff.

Goal and Objectives of Class

The goal of this class is to inform families of the high risk of falls in the elderly, common causes of falls in a nursing facility, consequences of falls, and basic strategies to reduce them. Residents who can understand and follow the discussion should be encouraged to attend and to participate in whatever manner they can.

Program objectives

After attending the presentation, each family member will be able to:

1. Improve the safety of resident's room by removing clutter and unused items.
2. Distinguish between safe and unsafe footwear for the resident.
3. Understand the need to call for help from staff during transfer and mobility when the resident is unsafe.
4. Remind and encourage the resident to follow precautions for postural hypotension when appropriate.

Methods

Some facilities may choose to conduct the class during regularly scheduled family meetings. A second option is to have a "De-clutter Luncheon". For this, families would be invited to a lunch at the facility. The class could be conducted either before or after the lunch. At the conclusion of the presentation, families are asked to evaluate the resident's room with the resident and then take home items that are no longer used. Content for the presentation, which can be used for other presentations as well, follows at the end of the chapter. The following items are needed for the session.

Figure 10 Ways Families Can Help Reduce Fall Risk

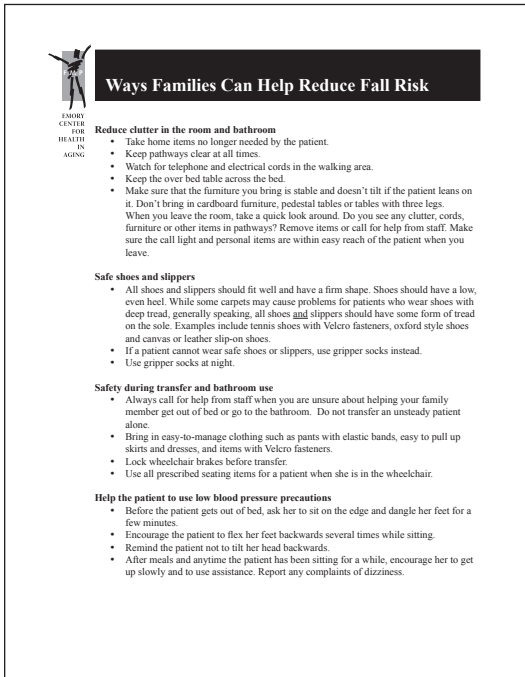
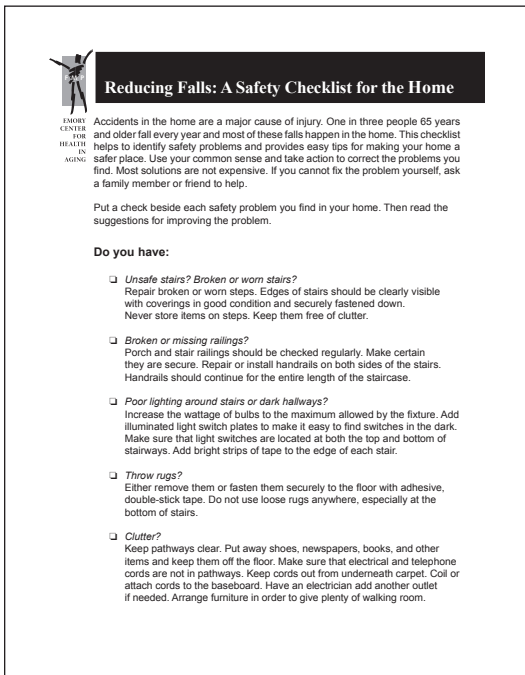


Figure 11 Reducing Falls: A Safety Checklist for the Home



Resources

- Reserved room
- Attendance sheet or a form of check-in
- Name tags
- Refreshments
- Handout, *Ways Families Can Help Reduce Fall Risk* (Figure 10)
- Brochure, *Reducing Falls: A Safety Checklist for the Home* (Figure 11)
- Samples of safe and unsafe footwear

The handout and brochure are in Appendix B.

Facts About Falls

1

Facts About Falls

- **General Population**
 - 34.9 million people \geq 65 years of age
 - One in three elderly persons living in the community fall each year
 - Of deaths caused by a fall, 60% involve people who are \geq 75 years of age
 - Falls account for 87% of all fractures in people \geq 65 years

2

Facts About Falls

- **Nursing Facilities**
 - The average age at admission to a nursing facility is 82.6 years
 - Over 50% of those admitted to a nursing facility have three or more admitting diagnoses
 - One in two patients in nursing facilities fall every year
 - Of those patients who fall, 30-40% will fall again
 - People \geq 85 years are 10-15 times more likely to experience hip fractures than those people who are 60-65 years

3

Intrinsic Fall Risk Factors

- **Effects of normal aging**
 - **Vision**- decreased acuity, decreased contrast sensitivity, increased sensitivity to glare, decreased peripheral vision, decreased night vision
 - **Hearing**- decreased hearing sensitivity
 - **Changes in gait and balance**- reduced arm swing, decreased step length, slowed reaction time, slower movements
 - **Urological**- feelings of urgent need to urinate and having to urinate frequently

4

Intrinsic Fall Risk Factors (cont.)

- **Acute and chronic diseases** (Parkinson's, Alzheimer's, stroke, arthritis, depression, cancer, osteoporosis)
 - Confusion, disorientation, agitation, impaired judgment
 - Weakness, dizziness, fainting
 - Paralysis, tremors
 - Loss of joint mobility, contractures
 - Lower extremity weakness
 - Drop in blood pressure upon standing, after meals or after voiding
 - Incontinence

5

Intrinsic Fall Risk Factors (cont.)

- **Side Effects of Medications** (antidepressants, sedatives/hypnotics, and antipsychotics)
 - Dizziness
 - Confusion, impaired judgment
 - Weakness, impaired gait
 - Sedation, slowed reaction time
- **Drug interaction and or polypharmacy**

6

Extrinsic Fall Risk Factors

- **Environment**
 - Clutter
 - Inadequate lighting, glare
 - Uneven or wet floors, raised thresholds, missing tiles or linoleum
 - Unstable or lightweight furniture
 - Insecure toilet seat or handrail
 - Hard-to-reach personal items
 - Unstable wheels
 - Low toilet seat
 - Lack of handrail support in bathroom

7

Extrinsic Fall Risk Factors (cont.)

- **Personal Safety**
 - Unsafe shoes or slippers
 - Hard-to-manage clothing

8

Extrinsic Fall Risk Factors (cont.)

- **Equipment**
 - Missing wheelchair parts
 - Incorrect wheelchair fit
 - Inadequate wheelchair seating
 - Broken parts

9

Physical Restraints

Physical restraints **INCREASE** the likelihood of serious injury resulting from a fall.

Not a method of fall prevention

10

Consequences of Falls

- Serious injury such as hip fracture
- Increased risk of death associated with hospitalization and complications
- Loss of independence and decreased ability to function
- Loss of self-confidence and fear of falling
- Reduced quality of life
- Increased need for care

11

Staff Strategies to Reduce Fall Risk

- Falls Assessment to determine problems with medications, behavior, vision, gait and mobility, or presence of postural hypotension
- Medical evaluation
- Medication review
- Gait and balance training

12a

Staff Strategies to Reduce Fall Risk

(cont.)

- Hip protectors
- Individualized wheelchair seating
- Low beds, Mats
- 1/2 or 1/4 side rails
- Toileting
- Alarms / sensors
- Activities and exercise programs
- Behavioral strategies

12b

How You Can Help

- Remove clutter from room and bathroom
- Provide safe shoes and slippers
- Promote safety during transfer and bathroom use
- Use low blood pressure precautions when needed

13

Remove Clutter

- Help keep pathways around bed and to bathroom clear
- Provide only stable furniture from home
- Remove items no longer needed

14

Provide Safe Footwear

- Shoes and slippers should have tread, fit well, have a firm shape and have low even heels.

Examples: tennis shoes with Velcro fasteners, oxford style shoes, canvas or leather slip-on shoes, fitted, soft slippers with tread

15

Promote Safety During Transfer

- Call for help when unsure about safety
- Provide easy-to-manage clothing with elastic waist and Velcro fasteners
- Lock wheelchair brakes before transfer
- Keep all seating items in wheelchair

16

Use Low Blood Pressure Precautions

For resident's with low blood pressure:

- Sit on edge of bed and dangle feet before rising
- Flex feet backwards several times before rising
- Do not tilt head backwards
- Get up slowly and use assistance
- Report dizziness

17

Living Space Inspection 6

The purpose of the Vanderbilt Living Space Inspection (LSI) is to make the personal living space of all residents as safe as possible. It includes inspection of 1) resident rooms and bathrooms; 2) canes, walkers and wheelchairs; and 3) the resident's feet and footwear. Once safety problems are identified, tasks for different staff are selected and completed.

The LSI contains five components (Figure 1) which lead staff through a systematic inspection and repair process. Copies of all of the forms in the LSI are provided in Appendix B and may be made into a separate notebook for ease of use.

1. The Living Space Inspection

The Living Space Inspection includes seven sections, each with instructions and questions related to a specific safety issue. (Figure 2)

Under supervision of the Falls Nurse Coordinator, the Falls Nursing Assistant(s) should complete the 2-page inspection. In larger facilities, it is helpful to train additional nursing assistants to divide the workload and increase staff involvement in the program.

A sample of the Living Space Inspection is shown in Figures 3a and 3b. The Falls Nursing Assistant should read the directions for each of the seven sections, look for the specific details that are mentioned and answer the questions listed in each section. The nursing assistant should use his or her best judgment based on knowledge of the resident and circumstances. If the answer to a question is "yes" or "does not apply to this resident or room," the nursing assistant should go to the next question. If the answer is "no," the nursing assistant should read the list of suggestions in the matching section of the Nursing Inspection List and Engineer Inspection List and decide which of the tasks will help solve the identified safety problems. Each list is divided into sections that match those on the LSI. There are two symbols used on the LSI to signal involvement of the nursing staff and engineer. The cross (⊕) means there are tasks in a matching section on the Nursing Inspection List. A wrench (🔧) means that there are tasks in a matching section on the Engineer Inspection List.

Section 6 of the LSI deals with canes, walkers and wheelchairs in the resident's room, closet and bathroom. If the resident has a cane or walker, the nursing assistant should inspect it carefully. If either needs repair, "Repair cane" or "Repair walker" should be checked on the Engineer Inspection List. If the resident has a wheelchair, "In-

Key points for Chapter 6

- The Living Space Inspection
- The Nursing Inspection
- The Engineer Inspection
- Equipment Inspections

Figure 1 Components of the Living Space Inspection

- Living Space Inspection
- Nursing Inspection List
- Engineer Inspection List
- Engineer Cane, Walker and Wheelchair Inspections
- Falls Engineer Instructions

Figure 2 Living Space Inspection

- 1 Paths
- 2 Stable furniture
- 3 Easy access
- 4 Lighting
- 5 Floor
- 6 Equipment
- 7 Foot care and footwear

Living Space Inspection

The Living Space Inspection has 7 sections. Read the instructions carefully and answer all questions for each bed and resident. If the answer is yes, or does not apply, go to the next question. If the answer is no, read the list of tasks in the matching section of the Nursing Inspection List and Engineer Inspection List. Select the tasks which you think will help solve that safety problem. In the column under the room number and bed you are inspecting, put a ✓ beside each task you have selected. For safety problems in common areas, write notes on the back of the Engineer Inspection List.

1: Paths 🔧

Instructions: Walk slowly from door to bed, bed to chair, bed to commode, and chair to commode. Look for furniture, cords, bedside commode, overbed table, personal items or other objects which may block the path for the resident to walk or propel a wheelchair.

Question: Is there a 2 foot wide clear path for the resident to walk in or propel a wheelchair from:
a. door to bed? b. bed to commode? c. bed to chair? d. chair to commode?

2: Stable Furniture ⊕

Instructions: Push against bed, chair, and furniture. Unlock and lock bed wheels. Check rubber tips on legs of bedside commode or other equipment. Check for loose handrails on wall, commode or raised toilet. Check if raised toilet seat is secured to the commode.

Questions:
a. Has staff locked bed in a stable position? c. Are bathroom handrails secure?
b. Do bed wheels lock and hold bed secure? d. Are all rubber tips present on bedside commode and other equipment?
e. Does furniture remain stable when pushed? f. Is raised toilet seat secure?
g. Is chair stable?

3: Easy Access ⊕

Instructions: Ask resident which items he uses each day and locate them in room. (Example: glass, pitcher, tissues, eyeglasses, cane, walker or wheelchair.) If resident is unable to answer, locate these items yourself.

Question: Are all items within arm's length so that resident can reach them while sitting or lying? If items have been stored, can resident get to them safely? (Example: Is path to wheelchair clear and can resident walk to and unfold wheelchair safely?)

October 2005

Figure 3a Living Space Inspection, front

4: Lighting	
Instructions:	Turn on all lights in bedroom and bathroom. Check cord lengths to overhead light and bathroom call light.
Questions:	<ul style="list-style-type: none"> a. Are all of the following lights in working order? Do they shine without flicker? <ul style="list-style-type: none"> • bedside or overhead light • bedside call light • night light • bathroom light • bathroom call light b. Are call light cords long enough to be reached by resident while sitting on commode or in bed?
5: Floor	
Instructions:	Inspect floor in resident's room and bathroom and threshold between the two rooms.
Questions:	<ul style="list-style-type: none"> a. Are all floor coverings in good repair with no cracks, missing sections or loose edges? b. Are thresholds intact and low so that patient will not trip if walking? Can resident propel wheelchair across threshold easily? c. Is the floor dry?
6: Equipment	
Instructions:	Look for canes, walkers, and wheelchairs. Check closets and bathrooms. For all wheelchairs that you find, put a ✓ by "check wheelchair" on the Engineer Inspection List. If there is a cane made of wood, inspect shaft and handle for cracks or weak spots. If there is a metal cane, check if all bolts and screws are present. Check if rubber tips is present and inspect shape. If there is a walker, look at bolts and screws. Check for all four rubber tips and inspect shape. If it has caster wheels, check for cracks, shape and movement while rolling.
Questions:	<ul style="list-style-type: none"> a. Is cane and/or walker stable with all hardware present and secure? b. Are all rubber tips present, even and clean? c. If walker has wheels, are they firm, in good shape, and able to roll smoothly?
7: Foot Care and Footwear	
Instructions:	Look closely at resident's feet for very long nails, open lesions, bunions, hammer toes, and large calluses. Look closely at shoes and slippers patient usually wears. Check for a firm shape, low even heels and tread.
Questions:	<ul style="list-style-type: none"> a. Are resident's feet free of problems that may prevent even weight bearing or keep her from wearing safe shoes or slippers? b. Do resident's shoes and slippers fit well, have tread and have even low heels?

Figure 3b Living Space Inspection, back

spect wheelchair” should be checked. The engineer should inspect all wheelchairs and make any necessary repairs.

2. The Nursing Inspection List and Engineer Inspection List

Samples of the Nursing Inspection List and the Engineer Inspection List are shown in Figures 4 and 5.

The unit, date and nursing assistant’s signature should be written on a Nursing Inspection List and Engineer Inspection List. The room numbers for that unit should be added in the first line. If a room has more than one bed in it, the letter or number of each of the beds in the room should be written across the second line of the form. Each page is designed for the inspection of 14 beds. One bathroom inspection is sufficient when two or more residents share the same one.

The Nursing Inspection List has 20 different tasks that may be checked and the Engineer Inspection List has 17 different tasks. When checking a selected task, it is important to make sure that the check is under the correct room number and bed. Sometimes there may not be a matching section on one of the task lists. For example, in *Section 3: Easy Access*, the nursing assistant is asked to check whether frequently used items are within the resident’s reach. If they are not, nursing staff must make changes but there are no tasks for the engineer to do. On the other hand, all the possible tasks to make the lighting safer in *Section 4* are for the engineer to do. Therefore, tasks to increase safety in relation to lighting appear only on the Engineer Inspection List.

If the nursing assistant needs to add any notes to help the engineer or nursing staff complete their tasks, they should be written in the *Notes* column on the right-hand side of the list. On the back of the Engineer Inspection List there is space to write in safety problems found in common areas such as shower rooms and with common equipment such as gerichairs, shower chairs and lifts.

3. Completing Tasks on the Nursing Inspection List

There are two types of tasks on the Nursing Inspection List: 1) tasks to be completed by the Falls Nurse Coordinator or the Nursing Assistant and 2) tasks for other staff to do. The tasks for the nurse or nursing assistant are written as orders on the list. For example, one of

UNIT:		DATE:	ROOM NUMBER:											NOTES:
SIGNATURE:		BED:												
1: Paths	Remove unused equipment (canes/walkers).													
	Instruct SW to ask family to remove unused items.													
	If bedside commode is unused, ask staff to remove it.													
	With resident's permission, rearrange room to clear paths.													
	Instruct staff to keep paths clear.													
	Instruct staff to keep overbed table across bed.													
2: Furniture	Remove unused items from bathroom and store elsewhere.													
	Instruct nursing staff and housekeepers to keep bed in locked position except during care or cleaning.													
	Replace unstable bed with a stable one.													
	Push bed to wall (check local and state fire codes).													
	Remove all cardboard, lightweight or unstable furniture.													
3: Easy Access	Instruct SW to ask family to remove or replace unstable items.													
	Arrange room so that items are within resident's reach.													
	Instruct staff to keep items within arm's length of patient.													
5: Floor	Instruct staff to place cane, walker or w/c within safe reach.													
	Instruct staff to wipe up all spills quickly.													
7: Foot Care and Footwear	Ask nurse for podiatry consult.													
	Instruct staff and resident to use specific shoes/slippers.													
	Instruct staff and resident to use non-skid socks.													
Instruct SW to ask family to provide safe footwear.														

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Figure 4 Nursing Inspection List

UNIT:		DATE:	ROOM NUMBER:											NOTES:
SIGNATURE:		BED:												
1: Paths	1. Make tiebacks for divider curtains.													
	2. Tie electrical cords out of path (TV, phone, heater).													
2: Furniture	3. Clean, repair or replace broken bed wheel locks.													
	4. Fix unstable furniture.													
	5. Secure loose bathroom handrails.													
	6. Replace missing rubber tips on bedside commode.													
	7. Replace missing rubber tips on handrails that rest on floor.													
	8. Secure raised toilet seat to commode.													
4: Lighting	9. Replace burned out or flickering bulbs. Use max wattage.													
	10. Repair broken room lights or call lights.													
	11. Replace broken call light cords or lengthen cords.													
5: Floor	12. Repair or replace floor covering.													
	13. Replace high, broken or missing thresholds.													
6: Equipment	14. Add grading to thresholds between room and bathroom.													
	15. Inspect wheelchair (for all wheelchairs found).													
	16. Repair cane.													
17. Repair walker.														

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Figure 5 Engineer Inspection List

6

Living Space Inspection

the tasks is “Remove unused equipment.” Although it may be necessary to talk with other staff to find out when the equipment, such as a cane or walker, was last used and who owns it, this task should be completed by the Falls Nurse Coordinator or Nursing Assistant. Some tasks require the nurse or nursing assistant to instruct unit staff to do something, for example, “Instruct staff to keep the overbed table across the bed.” This is something that needs to be done not just once, but daily. It is therefore important that the unit staff understand what they are being asked to do and why. The nurse or nursing assistant should explain the tasks and make sure they have been understood. There are also tasks on the Nursing Inspection List for housekeeping staff and the social worker. The Falls Nurse Coordinator should explain to them what is required. A sample of a completed Nursing Inspection List is in Figure 6.

4. Completing Tasks on the Engineer Inspection List and Equipment Inspections

All of the tasks on the Engineer Inspection List are related to the daily maintenance and repair of the physical plant. A sample of a completed Engineer Inspection List is in Figure 7.


 Nursing Inspection List	
Write the unit name, date and room numbers across the top line. Put the bed number or letter across the second line and sign it. Put a ✓ under the room number and bed beside all the tasks that need to be done. Write notes about special problems or add details in the NOTES column.	
UNIT: <i>East Wing</i> DATE: <i>1/25/04</i> ROOM NUMBER: <i>33 34 35 36 37 38 39</i>	NOTES:
SIGNATURE: <i>Jill Corcoran, RN</i> BED: <i>A B A B A B A B A B</i>	
1: Paths	Remove unused equipment (canes/walkers). <input type="checkbox"/>
	Instruct SW to ask family to remove unused items. <input type="checkbox"/>
	If bedside commode is unused, ask staff to remove it. <input checked="" type="checkbox"/>
	With patient's permission, rearrange room to clear paths. <input type="checkbox"/>
	Instruct staff to keep paths clear. <input checked="" type="checkbox"/>
	Instruct staff to keep overbed table across bed. <input type="checkbox"/>
2: Furniture	Remove unused items from bathroom and store elsewhere. <input type="checkbox"/>
	Instruct nursing staff and housekeepers to keep bed in locked position except during care or cleaning. <input type="checkbox"/>
	Replace unstable bed with a stable one. <input type="checkbox"/>
	Push bed to wall (check local and state fire codes). <input type="checkbox"/>
	Remove all cardboard, lightweight or unstable furniture. <input type="checkbox"/>
3: Easy Access	Instruct SW to ask family to remove or replace unstable items. <input type="checkbox"/>
	Arrange room so that items are within patient's reach. <input type="checkbox"/>
	Instruct staff to keep items within arm's length of patient. <input checked="" type="checkbox"/>
5: Floor	Instruct staff to place cane, walker or w/c within safe reach. <input type="checkbox"/>
	Instruct staff to wipe up all spills quickly. <input type="checkbox"/>
7: Foot Care and Footwear	Instruct staff to wipe up all spills quickly. <input checked="" type="checkbox"/>
	Ask nurse for podiatry consult. <input type="checkbox"/>
	Instruct staff and patient to use specific shoes/slippers. <input type="checkbox"/>
	Instruct staff and patient to use non-skid socks. <input type="checkbox"/>
	Instruct SW to ask family to provide safe footwear. <input checked="" type="checkbox"/>
	<i>schedule for Tues.</i>

Figure 6 Sample of Nursing Inspection List

There are separate forms for the engineer to use when inspecting and repairing equipment: Engineer Cane Inspection, Engineer Walker Inspection and Engineer Wheelchair Inspection. If the therapy department or a third party is responsible for wheelchair adjustment, the engineer should coordinate with the appropriate persons. By completing the Living Space Inspection, the falls team will ensure that all wheelchairs and their parts have been located in the facility, labeled and repaired. This is an important step in assuring resident safety.

5. Bed Safety

As facilities modify side rail use and replace old bed equipment, it is important to determine if there are potential entrapment zones for the resident's head, neck and chest. Inspection of all beds and side rails should be performed routinely so that parts, mattresses and side rails may be modified or replaced to ensure safety. Refer to the FDA web site for specific guidelines. (<http://www.fda.gov/cdrh/beds/>)

Engineer Inspection List

For the person doing the inspection: Label this form and fill it out in the same way as for the *Nursing Inspection List*.

For the Falls Engineer: A member of the nursing staff has checked patient rooms and equipment for safety problems. This is the list of things they have found that you need to inspect and repair. Please do all the tasks that have a ✓ beside them for each room and bed number. Safety problems in common areas and with common equipment are listed on the back of this page. See the Falls Engineer Instructions for details about how to do each task.

UNIT:	East Wing	DATE:	1/23/04	ROOM NUMBER:	33 34 35 36 37 38 39	NOTES:
SIGNATURE:	Jill Owens, RN	BED:	A B A B A B A B A B			
1: Paths	1. Make tiebacks for divider curtains.		✓			
	2. Tie electrical cords out of path. (TV, phone, heater)				✓	reposition phone
2: Furniture	3. Clean, repair or replace broken bed wheel locks.	✓		✓		
	4. Fix unstable furniture.		✓			dresser in 34 A
	5. Secure loose bathroom handrails				✓	✓
	6. Replace missing rubber tips on bedside commode.		✓		✓	
	7. Replace missing rubber tips on handrails that rest on floor.				✓	
4: Lighting	8. Secure raised toilet seat to commode.			✓		
	9. Replace burned out or flickering bulbs. Use max wattage.	✓				✓
	10. Repair broken room lights or call lights.				✓	
5: Floor	11. Replace broken call light cords or lengthen cords.				✓	
	12. Repair or replace floor covering.		✓			✓
	13. Replace high, broken or missing thresholds.			✓		
6: Equipment	14. Add grading to thresholds between room and bathroom.					
	15. Inspect wheelchair (for all wheelchairs found).	✓				✓
	16. Repair cane.			✓		Bob will do this
	17. Repair walker.		✓			✓

Figure 7 Sample of Engineer Inspection List

6. Supervision

When a LSI has been completed, the Falls Nurse Coordinator and Nursing Assistant should meet to review the inspection and the Nursing and Engineer Inspection Lists. At this time the nurse can ensure that appropriate staff are contacted.

The Falls Nurse Coordinator will need to give the Falls Engineer three types of materials

1. Falls Engineer Instructions (Appendix D)
2. Engineer Inspection Lists (Appendix B)
3. Engineer Cane, Walker and Wheelchair Inspections (Appendix B)

The Falls Engineer Instructions contain detailed advice on methods and supplies for all of the engineer tasks related to environmental modifications as well as equipment repair and improvements. The Falls Nurse Coordinator should review all of the completed Engineer Inspection Lists with the engineer and agree on dates for the tasks to be completed. For each resident with a wheelchair and a cane or walker in need of repair, an engineer equipment inspection should be prepared and given to the engineer.

When the program is first implemented, the LSI should be done every 1-2 months until most of the problems are resolved. Based on this progress and the age of the facility, the Falls Nurse Coordinator should decide how often the LSI needs to be done. Whenever a LSI is repeated, the nurse should compare the lists to determine what was found in those rooms previously. Are there problems that were identified last time but have not been corrected? If so, the nurse should discuss the problem with staff to discover barriers and find a solution.

To maintain a wheelchair in good repair, the engineer should repeat the Engineer Wheelchair Inspection at least every six months. The engineer is asked to keep the wheelchair inspection form and reuse it each time he repeats the inspection.

Appendix **A**

List of Appendix Items

1. Resources
2. Equipment



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RESOURCES

Section 1: References

Training Manuals, Videos and Books

1. Bochino, N., Strumpf, N., & Capezuti, E. et al. (1999). *Restraint Reduction and Fall Prevention*. Nashville, TN: Envision, Inc. 1111 16th Avenue South, Nashville, TN 37212. Cost of videotape \$245. 615-321-5066; fax: 615-321-5119 or http://www.envisioninc.net/catalog/product_info.php?products_id=47.
2. Jones, D., Rader, J., & Miller, L. (1998). *Individualized Wheelchair Seating: For Older Adults*. Tigard, OR: Providence Center on Aging. 11308 SW 68th Parkway, Suite 125, Tigard, OR 97223. Cost of caregiver guide videotape (Part I) \$75. Cost of professional guide videotape (Part II) \$85. Cost of both guides \$145. 503-216-6968.
3. Rader, J. (1995). *Individualized Dementia Care: Creative Compassionate Approaches*. New York: Springer Publishing. 536 Broadway, N.Y., NY 10012-3955. Cost \$41.95. 212-431-4370 or <http://www.springerpub.com/>
4. *Retrain Don't Restrain*. American Health Care Association, P.O. Box 3161, Frederick, MD 21705 -3161. Cost for members \$74, nonmembers \$104. 1-800-321-0343 or <http://www.ahca.org/store/>
5. Strumpf, N.E., Robinson, J., Wagner, J., & Evans, L. (1998). *Restraint Free Care: Individualized Approaches for Frail Elders*. New York: Springer Publishing. 536 Broadway, N.Y., NY 10012-3955. \$29.99. 212-431-4370 or <http://www.springerpub.com/>
6. Taylor, J.A., Brown, A.K., Meredith, S., & Ray, W.A. (2002). *The Fall Reduction Program*. Nashville, TN: NDS Media Solutions, 631 Old Hickory Blvd, Old Hickory, TN 37138. 1-800-554-2348, 615-541-0077. Call for pricing of videotape.
7. Tideiksaar, R. (2002). *Falls in Older Persons: Prevention and Management*. (3rd ed.) Baltimore: Health Professions Press. \$25.95. 1-888-337-8808 or www.healthpropress.com

Professional and Other Guidelines and Journal Articles

8. Agency for Healthcare Research and Quality (AHRQ). *Making Health Care Safer: A Critical Analysis of Patient Safety Practices*. Retrieved, from the World Wide Web: <http://www.ahrq.gov/clinic/ptsafety/>
9. Becker, C., Kron, M., Lindemann, U., Sturm, E., Eichner, B., Walter-Jung, B., & Nikolaus, T. (2003). Effectiveness of a multifaceted intervention on falls in nursing home patients. *JAGS*, 51, 306-313.
10. Capezuti, E. & Talerico, K.A. (1999). Review article: Physical restraint removal, falls and injuries. *Research and Practice in Alzheimer's Disease*, 2, 338-355.
11. Capezuti, E., Talerico, K.A., Cochran, I., Becker, H., Strumpf, N., & Evans, L. (1999). Individualized interventions to prevent bed-related falls and reduce siderail use. *Journal of Gerontological Nursing*, 25(11), 26-34.
12. Centers for Disease Control (CDC) National Center for Injury Prevention and Control (NCIPC). *Falls in Nursing Homes*. Retrieved, from the World Wide Web: <http://www.cdc.gov/ncipc/factsheets/nursing.htm>
13. Cumming, R.G. (2002). Intervention strategies and risk-factor modification for falls prevention: A review of recent intervention studies. *Clinics in Geriatric Medicine*, 18, 175-189.



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14. Donius, M. & Rader, J. (1994). Use of siderails: Rethinking a standard practice. *Journal of Gerontological Nursing*, 20(11), 23-27.
15. Falls and Fall Risk: Clinical Practice Guidelines. (1998). American Medical Directors Association. Cost for members \$20.00. Cost for non-members \$30.00. <http://www.amda.com/info/cpg/falls.htm>
16. Guideline for the prevention of falls in older persons. American Geriatric Society, British Geriatrics Society, and American Academy of Orthopaedic Surgeons Panel on Falls Prevention. (2001). *Journal of the American Geriatrics Society*, 49(5), 664-672.
17. Institute of Medicine. (2000). *To Err is Human: Building a Safer Health System*. Retrieved, from the World Wide Web: <http://books.nap.edu/catalog/9728.html>
18. Jensen J., Lundin-Olsson, L., Nyberg, L., & Gustafson, Y. (2002). Fall and injury prevention in older people living in residential care facilities. *Annals of Internal Medicine*, 136, 733 -740.
19. Jones D. (1995). Real solutions. *Team Rehabilitation Report*, September, 14 -16.
20. Quality Indicators for Assessing Care of Vulnerable Adults (ACOVE). Quality Indicators for the Management and Prevention of Falls and Mobility Problems in Vulnerable Elders. Retrieved, from the World Wide Web: <http://www.annals.org/cgi/content/full/137/6/546>
21. Rader, J., Jones, D., & Miller, L. (2000). The importance of individualized wheelchair seating for frail older adults. *Journal of Gerontological Nursing*, 26(11), 24-32.
22. Ray, W.A., Taylor, J.A., Meador, K.G., Purushottam, B.T., Brown, A.K., Kajihara, H.K., Davis, C., Gideon, P.T., & Griffin, M.R. (1997). A randomized trial of a consultation service to reduce falls in nursing homes. *Journal of the American Medical Association*, 278(7), 557-562.
23. Rubenstein, L.Z. (1997). Preventing falls in the nursing home. *Journal of the American Medical Association*, 278(7), 595-596.
24. Taylor, J.A. (2002). The Vanderbilt fall prevention program for long-term care: Eight years of field experience with nursing home staff. *Journal of the American Medical Directors Association*, May/June, 180-185.
25. The Hospital Bed Safety Workgroup. Draft Guidance for Industry and Food and Drug Administration Staff: Hospital Bed System Dimensional Guidance to Reduce Entrapment. Retrieved, from the World Wide Web: <http://www.fda.gov/cdrh/beds/>
26. The Veterans Administration National Center for Patient Safety. Retrieved, from the World Wide Web: <http://www.patientsafety.gov/>
27. Werner, P., Koroknay, V., Braun, J., & Cohen-Mansfield, J. (1994). Individualized care alternatives used in the process of removing physical restraints in the nursing home. *Journal of the American Geriatrics Society*, 42, 321-325.



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Resources

Section 2: Equipment

Alarms

1. "Ambularm," Alert Care Inc.
591 Redwood Hwy
Suite 2125
Mill Valley, CA 94941
1-800-826-7444
2. "Bed Check" Corporation
P. O. Box 170
Tulsa, OK 74101
1-800-523-7956
3. "Code Alert," R.F. Technologies
3125 N. 126th Street
Brookfield, WI 53005
1-800-669-9946
4. Nurse Assist, Inc.
5650 Stratum Dr.
Fort Worth, TX 76137
1-800-727-1868
5. Smart Caregiver Corporation
1205 North McDowell Blvd.
Petaluma, CA 94954
1-800-650-3637
6. "Tabs Mobility Monitor" and "Wander Guard,"
Senior Technologies
1620 N. 20th Circle
P. O. Box 80238
Lincoln, NE 68503
1-800-824-2996

Bathroom Safety

Graham Field Medical Products
2935 NE Parkway, Suite C
Atlanta, GA 30360
1-800-347-5678

Bed Wheel Locks

1. ALCO Sales and Service
6851 High Grove Blvd.
Burr Ridge, IL 60527
1-800-323-4282
2. Basic American Metal Products
336 Trowbridge Drive
P.O. Box 907
Fond du Lac, WI 54937
1-800-365-2338
3. Casters Supply
1780 Eastbridge Road
Rochester, NY 14622
1-800-280-9566
4. Myers, Truck and Caster Sales Co.
745 Douglas Avenue
Nashville, TN 37207
1-800-321-6732

Barriers

"Stopper Kit," Clock Medical Supplies
P. O. Box 620
Winfield, KS 67156
1-800-527-0049



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Beds

1. NOA Medical Industries
801 Terry Lane
Washington, MO 63090
1-800-633-6068
3. Phoenix Textile Corporation
13652 Lakefront Drive
St. Louis, MO 63045
1-800-325-1440
4. Simmons Healthcare
2935 NE Parkway
Suite A
Atlanta, GA 30360-2048
1-800-334-8203

Chairs/Walkers

1. Flaghouse, Inc.
601 Flaghouse Drive
Hasbrouck Heights, NJ 07604-3116
1-800-793-7900
2. Merriwalker Advanced Health Systems
561 East Hines Hill Road
Hudson, OH 44236
1-800-628-1441
3. "Ultimate Walker," Direct Supply
6767 North Industrial Road
Milwaukee, WI 53223
1-800-634-7328

Footwear

1. Slippers such as Dearfoams come in a variety of styles and have a rubber sole with tread. They can be purchased at most department stores. Less expensive styles which have tread are found at discount stores.
2. Socks with non-skid tread can be purchased at discount and department stores. In some areas, these socks are sold on a seasonal basis during the winter months.
3. Walking shoes, tennis shoes, and athletic shoes can be found at department and discount stores.

General

1. Grainger
1938 Elm Tree Drive
Nashville, TN 37210-3718
(615) 885-0332
2. Sears Health and Wellness Catalog
7700 Brush Hill Road, Suite 240
Burr Ridge, IL 60527
1-800-326-1750
3. Total Care
P. O. Box 1661
Rockville, MD 20849
1-800-334-3802

Hip Protectors

1. FallGard
613 Alexander Drive
Naperville, IL 60567-2107
1-800-828-0702
2. The HipSaver Company
7 Hubbard Street
Canton, MA 02021
1-800-358-4477



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Lighting/Call Light

1. Direct Supply, Inc.
6767 North Industrial Road
Milwaukee, Wisconsin 53223
1-800-634-7328
2. Crest Healthcare
195 S. 3rd Street
P.O. Box 727
Dassel, MN 55325
1-800-328-8908

Side Rail

1. "Bed Bar," Brown Engineering Corp.
289 Chesterfield Road
Westhampton, MA 01027
1-800-726-4233
2. National Industries
2727 Philmont Avenue
Unit 340
Huntingdon Valley, PA 19006
1-800-220-2024

Wheelchairs, Seating Items, and Related Equipment

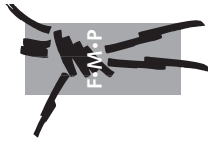
1. Adaptive Engineering Lab, Inc. (seating items)
17907 Bothell-Everett Highway
Mill Creek, WA 98012
1-800-327-6080
2. Ali-Med, Inc. (seating items, D-ring straps and other supplies)
297 High Street
Dedham, MA 02026
1-800-225-2610
3. Body Point Designs (seat belts)
558 1st Avenue South
Suite 300
Seattle, WA 98104
1-800-547-5716

4. Graham-Field Health Products (wheelchairs)
2935 Northeast Parkway
Atlanta, GA 30360
1-800-347-5678
5. INVACARE (wheelchairs)
899 Cleveland Street
P. O. Box 4028
Elyria, OH 44035
1-800-333-6900
6. JDM Medical, Inc. (seating items)
P.O. Box 1064
Pace, FL 32571
1-800-994-4043
7. Land and Wheels
7811 N. 86th Street
Milwaukee, WI 53224
1-800-558-5554
8. Posey Company
5635 Peck Road
Arcadia, CA 91006
1-800-447-6739
9. Roho Inc., Crown Therapeutics (seating items)
100 North Florida Avenue
Belleville, IL 62221
1-800-851-3449
10. Skil-Care Corporation
29 Wells Avenue
Yonkers, NY 10701
1-800-431-2972
11. Sunrise Medical/Jay Products
7477 East Dry Creek Parkway
Longmont, CO 80503
1-800-333-4000
12. Thompson Medical, Inc., (seat belts)
3404 Library Lane
St. Louis Park, MN 55426
1-800-777-4949
13. Varilite Medical Products (seating items)
4000 1st Avenue South
Seattle, WA 98134
1-800-827-4548

Appendix **B**

List of Appendix Items

1. FMP Self-Assessment
2. Tracking Record for Improving Patient Safety (TRIPS)
3. FAX Alert
4. Falls Assessment
5. Falls Assessment Cue Sheet
6. Mobility and Transfer Assessment
7. Wheelchair Seating Assessment
8. Unsafe Behavior Worksheet
9. FMP Entry Log
10. Primary Care Provider FAX Report and Orders
11. Fall Interventions Plan
12. Fall Interventions Monitor
13. Pre and Posttests for Inservice #1, Why Falls Happen
14. Pre and Posttests for Inservice #2, How to Reduce Falls
15. Pre and Posttests for Inservice #1, Why Falls Happen, Spanish
16. Pre and Posttests for Inservice #2, How to Reduce Falls, Spanish
17. Handout for Inservice #1, Why Falls Happen
18. Handout for Inservice #2, How to Reduce Falls
19. Handout for Inservice #1, Why Falls Happen, Spanish
20. Handout for Inservice #2, How to Reduce Falls, Spanish
21. Facts and Flow Chart
22. Suggestions for Further Assessment and/or Interventions
23. Resources
24. Letter to Primary Care Providers
25. Ways Families Can Help Reduce Fall Risk
26. Reducing Falls: A Safety Checklist for the Home
27. Living Space Inspection
28. Nursing Inspection List
29. Engineer Inspection List
30. Engineer Cane/Walker Inspection
31. Engineer Wheelchair Inspection



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The Falls Management Program

Self-Assessment Tool

The purpose of the FMP Self Assessment Tool is to identify what processes of care your facility has in place and what areas need improvement. It is divided into 7 areas of focus. Use your facility's policies, procedures and general practices to answer the questions listed under the first 4 areas (A, B, C, D). To answer the questions listed under the last 3 areas (E, F, G) in the Chart Audit, select a minimum of 5 residents who have fallen during the last 6 months. Answer the questions based on the documentation you find in each resident's chart and care plan. Further instructions are provided in the Chart Audit section. Complete the Plan for Improvement when finished.

A. Culture, Organizational Commitment and Team Skills (Chapter 1)		Yes	No	Comments
1.	Updated policies and procedures for a comprehensive Falls Management Program?			
2.	Appointed falls team leader and resource person for staff?			
3.	Selection of staff members (including one or more CNAs) for interdisciplinary falls team?			
4.	Weekly falls team meeting using ground rules, a leader, timekeeper and recorder?			
5.	Effective team problem solving to develop and monitor interventions for recurrent fallers?			
6.	Administrator and DON attend team meetings periodically and monitor falls data at least monthly?			
7.	No blame/no shame environment with honest investigation and reporting by staff?			
8.	Celebration of success stories and rewards for caregivers who reduce falls?			
9.	Adequate staffing for leader to spend 8 hours/week and team to meet for 30 minutes/week?			
10.	Funds for adaptive equipment, environmental modifications and wheelchair improvements?			
11.	Activity programs for frequent structured supervision of residents?			
12.	Employee orientation materials emphasize importance of and facility commitment to resident safety?			
B. Data Collection and Analysis (Chapter 3)		Yes	No	Comments
1.	Accurate completion of fall incident report form by all licensed staff?			
2.	Monthly falls analysis by: location and time of fall shift and day of week type of injury	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Monthly falls analysis by # of falls, fallers, patients ≥ 2 falls and falls with serious injury?	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Falls data reported to medical director and primary care providers every quarter?	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Feedback about falls data given to direct care staff each month?			
6.	Falls data trended over 6 months or more?			

C. Staff Training and Information for Primary Care Providers, Families and Residents (Chapter 5)	Yes	No	Comments
1. Education on falls management during new employee orientation and CNA training?			
2. Annual inservice training on falls management for all staff?			
3. Staff education materials including: facility policy and procedures internal and external fall risk factors and consequences of falls high-risk medications, sleep hygiene measures for management of anxiety low blood pressure precautions low vision precautions safety during transfer, ambulation and wheelchair use unsafe behaviors, monitoring devices and management strategies environment and equipment safety hazards and methods for improvement foot care and footwear	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
4. All nurses trained in a fall response system that includes: immediate evaluation and increased monitoring of resident investigation of fall circumstances documentation of fall immediate intervention within first 24 hours falls assessment care plan development	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
5. Information for families and residents on falls risk reduction?			
6. All primary care providers given information about the program and their role?			
D. Environment and Equipment Safety (Chapter 6)	Yes	No	Comments
1. Regular inspection of all residents rooms and bathrooms for safety problems including: clutter poor or insufficient lighting unstable furniture hard-to-reach personal items unsafe flooring footwear and foot care	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
2. All staff trained to inspect and report environmental and equipment safety problems?			
3. Repair of reported safety problems in a timely manner by maintenance staff?			
4. Inspection and repair of all wheelchairs, canes and walkers every 6 months?			
5. Communications and inspections documented for ongoing monitoring and accountability?			

Chart Audit Instructions: Select the charts of 5 residents who have fallen within the past 6 months. For each selected resident, read through the chart and care plan to answer all 24 questions. Check yes (Y) or no (N) in the column under each chart across from each question. If the question does not apply to a resident, write NA in either box. For accuracy, use only the information that is written in the chart and care plan. Common locations of the information as well as rationales are described below.

Section E: Screening and Assessment

Location MDS for risk and history; physician notes, nurses notes, assessment form and any other that may include different components of the assessment such as notes by the physical or occupational therapist.

Rationale All of the listed areas of risk are components of an interdisciplinary, comprehensive assessment process. All areas warrant assessment and should be accessible in the medical record. Appropriate referrals during the assessment process should be evident and easily tracked through documentation.

Section F: Care Plan Development

Location Care plan, nurses notes, progress notes.

Rationale All areas of concern identified during assessment should be addressed with specific individualized interventions. Dates of implementation for new interventions should be included to show completeness and follow through.

Section G: Monitoring Implementation and Resident Response

Location Nurses notes, interdisciplinary progress notes, consultant notes and care plan; after a fall, all items under # 21 should be investigated with a written summary in the nurses or progress notes.

Rationale The medical record must show the success or failure of new interventions that are being trialed. In the event a new intervention has been unsuccessful, revisions of the care plan and subsequent progress notes should be evident. After a resident falls, documentation should reflect a new intervention added within 24 hours, increased monitoring during the next 72 hours and physician involvement.

Chart Audit

E. Screening and Assessment (Chapter 4)

	Chart 1		Chart 2		Chart 3		Chart 4		Chart 5	
	Y	N	Y	N	Y	N	Y	N	Y	N
1. Residents screened for fall risk on admission, readmission or last MDS?										
2. History of falls documented in the medical record?										
3. Comprehensive falls assessment completed for those identified at high risk during screening or after resident's initial fall?										
4. Falls assessment reflects a multidisciplinary approach addressing the following risk factors: underlying medical condition(s) high-risk medication use (antipsychotics, antidepressants, benzodiazepines, sedative/hypnotics, digoxin) orthostatic hypotension poor vision mobility/gait/transfer problems wheelchair seating problems unsafe behavior(s) environmental hazards unsafe footwear/foot care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Assessment of all risk factors complete and documented with the appropriate health professionals contacted for additional follow-up?										

Chart Audit

F. Care Plan Development (Chapter 4)

	Chart 1		Chart 2		Chart 3		Chart 4		Chart 5	
	Y	N	Y	N	Y	N	Y	N	Y	N
6. Orders from primary care provider, therapist, and other professionals added to care plan?										
7. Treatment of underlying medical conditions in care plan?										
8. For residents with changes in an antipsychotic, antidepressant, benzodiazepine or sedative/hypnotic, does care plan include sleep hygiene measures and behavior management interventions to reduce anxiety, agitation and other behavioral symptoms?										
9. For residents with changes in digoxin, do the nurses notes or care plan include adequate monitoring of apical heart rate?										
10. For residents with any of the following unsafe behaviors, does care plan include general behavior management strategies and specific interventions to reduce risk of injury, increase comfort, provide assistance and increase surveillance? trying to get out of bed alone unsafely trying to stand, transfer or walk alone unsafely walking or pacing when too tired to be safe propelling or walking alone in unsafe areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. For residents with orthostatic hypotension, does care plan address changes in medications and low BP precautions?										
12. Does care plan include interventions to minimize falls risk during: toileting transfer ambulation ADL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. For residents in wheelchairs, does care plan include interventions to improve positioning and comfort and to ensure correct fit?										
14. For residents with poor vision, does care plan include low vision precautions?										
15. Have environmental and equipment hazards been corrected?										
16. Interim plan of care implemented while falls assessment and care plan are completed?										
17. New intervention added within 24 hours of each fall?										

Chart Audit

G. Monitoring Implementation and Resident Response (Chapters 2 and 4)

	Chart 1		Chart 2		Chart 3		Chart 4		Chart 5	
	Y	N	Y	N	Y	N	Y	N	Y	N
19. Monitoring of success or failure of interventions documented in the nurses, progress or consultant notes?										
20. Review of interventions and revision of care plan by falls team? If the resident has fallen within the past 6 months,										
21. Data collected after each fall? (If fall is unwitnessed, give credit for investigation.) cause time, location, day of week, shift activity at time of fall equipment used footwear staff present assistive device restraint use side rail use results of fall (BP, BS, mental status, VS, tests ordered, ER or hospital visit) description of injury process and results of notification of family and MD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Does the primary care provider refer to resident's fall and/or risk factors in first progress note after fall?										
23. Care plan revision with new interventions added based on data collection at time of fall?										
24. Nurses notes reference fall and show increased monitoring for 72 hours after fall?										

Signature: _____

Date: _____



Plan for Improvement

1. Once you have completed the self-assessment for all 7 areas of focus in the Falls Management Program, determine which of the areas need improvement and develop a plan. Improvement in some of the areas requires changes in the facility's management strategies and improvement in other areas requires changes in care practices.

Using the checks under **Yes** or **No** on the previous pages, determine which areas have one or more questions answered "**No**." For those areas with a **No**, put a check by it in the list below. Your falls team should review those areas and identify priorities for improvement.

Areas that need improvement

- _____ Culture, organization commitment and team skills
- _____ Data Collection and Analysis
- _____ Staff Training and Information for Primary Care Providers, Family and Residents
- _____ Environment and Equipment Safety
- _____ Screening and Assessment
- _____ Care Plan Development
- _____ Monitoring Implementation and Resident Response

List of priorities for improvement:

TRIPS

Tracking Record for Improving Patient Safety

Name: _____

Medical Record Number: _____

SECTION A

Date of Incident _____

Time of Incident _____ AM PM

Day of Week

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday

Severity Level (Check highest level of injury)

- No injury
- Minor injury/first aid only (ex: bruise, abrasion, skin tear)
- Major injury (ex: laceration with suture, closed head injury, fracture)
- Death

Location

- Patient room
- Patient bathroom
- Another patient room/bathroom
- Hallway
- Dining room/day room
- Shower /tub room
- Outside Building
- Other (specify): _____

Treatment (Check all that apply)

- To primary care provider for evaluation
- To emergency room
- Admit to hospital
- Sutures
- X-ray
- Blood work
- Urinalysis
- Other (specify): _____

YES | NO

- | | |
|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> Physician notified
Name of MD _____
Date of notification _____
Time of notification _____ |
| <input type="checkbox"/> | <input type="checkbox"/> Family/POA notified
Name of contact _____
Date of notification _____
Time of notification _____ |
| <input type="checkbox"/> | <input type="checkbox"/> Medical record flagged & occurrence documented accordingly |
| <input type="checkbox"/> | <input type="checkbox"/> Plan of care updated |
| <input type="checkbox"/> | <input type="checkbox"/> Medical record flagged for follow-up documentation |

Signature: _____

Date: _____



SECTION B

1. Was the incident a:

- Found on the floor (unwitnessed)
- Fall to the floor (witnessed)
- Near fall (patient lowered to floor by staff/other or stabilized)
- Self reported fall

2. The cause of the incident was:

- Lost Balance
- Slipped (specify): _____
- Lost strength/weakness
- Tripped
- Lost consciousness/seizure
- Equipment malfunction (specify): _____
- Environmental factor (specify): _____
(i.e. clutter, inadequate lighting, floor)
- Other (specify): _____

3. The activity during the incident was:

- Ambulating in bedroom
- Ambulating to/from bathroom
- Transferring on/off toilet
- Ambulating in hallway
- Sliding out of wheelchair
- Getting up from chair/wheelchair
 - Brakes unlocked
- Getting in/out of bed
 - Bed wheels unlocked
 - Out of low bed to floor/mat
- Changing clothes/other ADLs
- Getting in/out of tub or shower
- Reaching for something
- Other (specify): _____

4. Was there staff present during this activity?

- Yes
- No

5. The footwear at the time of the incident was:

- Shoes
- Slippers
- And if applicable
 - No tread or tread too high/thick
 - High/narrow heel
 - Poor fit/loose
- Plain socks only
- Non-skid socks
- Bare feet
- Other (specify): _____

6. Indicate aid in use at the time of the incident:

- None
- Cane
- Wheelchair
- Walker
- Merry walker
- Hip protectors
- Other (specify): _____

7. Part A.

Was a restraint in use at the time of the incident?

- Yes (complete Part B)
- No

Part B.

- Vest/trunk restraint
- Wrist/hand mitten
- Seat belt/Roll belt/waist restraint
- Gerichair with table
- Lap Buddy/Lap tray
- Other (specify): _____

8. Part A.

Were the side rails up?

- Yes (complete Part B)
- No

Part B.

- Full length side rails (2 full or 4 half rails on both sides of bed)
- Other side rails: _____

9. Part A.

Was alarm present?

- Yes (complete Part B)
- No

Part B. (Check all that apply)

- Bed alarm sounded during event
- Bed alarm did not sound during event
- Chair alarm sounded during event
- Chair alarm did not sound during event
- Other (specify): _____

AS A RESULT OF THIS INCIDENT

10. Did the patient's mental status change?

- Yes
- No

11. Did the patient's level of consciousness change?

- Yes
- No



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The Falls Management Program -

FAX ALERT

Facility: _____
Address: _____
City/State: _____
Telephone: _____
Fax: _____

Date: _____ / _____ / _____

Physician/NP/PA: _____ Fax #: _____

Resident Name: _____ Unit/Room: _____

Your patient who is in the Falls Management Program fell on _____. It is this resident's _____ fall in the past 180 days.

Please consider reviewing the attached suggestions for known risk factors of falls and consider making appropriate recommendations.

Please call the Falls Nurse Coordinator if you have any questions about the incident or suggestions for our Falls Management Program. Thank you.

Falls Coordinator: _____ Phone number: _____

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The Falls Management Program

Falls Assessment

Resident: _____

Room: _____

Directions: Use the instructions on the Falls Assessment Cue Sheet to assess the resident in the five areas listed in the first column. Put a check beside each risk factor present for this resident. If the resident does not have a risk factor, put a check beside N/A. In the second column, check when the primary care provider report is faxed and orders are received and when the resident is discussed in the interdisciplinary team meeting. Check all appropriate evaluations and referrals. Once the assessment is complete, proceed to the Fall Interventions Plan and select specific individualized interventions for each risk category identified for this resident.

RISK FACTORS

- INTERDISCIPLINARY ASSESSMENTS**
- Primary Care Provider Report faxed
 - Primary Care Provider Orders received
 - Discussed in falls team meeting

- Medications**
- Antipsychotics
 - Antidepressants
 - Benzodiazepines
 - Sedative/hypnotics
 - Digoxin
 - N/A

- Medication review by consultant pharmacist
- Psychiatric evaluation

- Orthostatic Hypotension**
- Reduction of ≥ 20 mm Hg in systolic pressure 1 minute after change in position from sitting to standing
- Sitting BP: ___/___ Standing BP: ___/___ N/A

- Review cardiovascular medications

- Vision**
- Stumbles and trips
 - Difficulty finding objects or detecting changes in floor surfaces
 - N/A

- Optometrist evaluation
- Ophthalmologist referral

- Mobility**
- Unsafe during the Get Up and Go Test
 - Unable to transfer on and off toilet, bed or chair safely
 - Unsafe wheelchair seating
 - N/A

- OT consultation
- PT consultation

- Unsafe Behaviors**
- Tries to stand, transfer or walk alone unsafely
 - Tries to climb over bed rails or get out of bed alone unsafely
 - Walks or paces alone when too tired to be safe
 - Propels or walks alone in unsafe areas
 - N/A

- Behavioral assessment
- Evaluation of restraint use

Signature: _____

Date Completed: _____



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Falls Assessment Cue Sheet

Medications

Review the resident's drugs in the MAR and PRN records. Consider all drugs in each of the classes listed below when completing the medications section of the Falls Assessment.

Antipsychotic

Trade Names	Generic Names
Abilify	aripiprazole
Clozaril	clozapine
Etrafon	perphenazine
Haldol	haloperidol
Loxitane	loxapine
Mellaril	thioridazine
Moban	molindone
Navane	thiothixene
Orap	pimozide
Permitil	fluphenazine
Prolixin	fluphenazine
Risperdal	risperidone
Serentil	mesoridazine
Seroquel	quetiapine
Stelazine	trifluoperazine
Taractan	chlorprothixene
Thorazine	chlorpromazine
Tindal	acetophenazine
Trilafon	perphenazine
Triavil	perhenazine
Vesprin	triflurpromazine
Zyprexa	olanzapine
Geodon	ziprasidone

Benzodiazepines

Trade Names	Generic Names
Ativan	lorazepam
Centrax	prazepam
Dalmane	flurazepam
Doral	quazepam
Halcion	triazolam
Klonopin	clonazepam
Librium	chlordiazepoxide
Paxipam	halazepam
ProSom	estazolam
Restoril	temazepam
Serax	oxazepam
Tranxene	chlorazepate
Valium	diazepam
Xanax	alprazolam

Antidepressant

Trade Names	Generic Names
Anafranil	clomipramine
Asendin	amoxapine
Aventyl, Pamelor	nortriptyline
Celexa	citalopram
Desyrel	trazadone
Effexor	venlafaxine
Elavil	amitriptyline
Lexapro	escitalopram
Nardil	phenelzine
Norpramin	desipramine
Paxil	fluoxetine
Parnate	tranylcypromine
Prozac	paroxetine
Remeron	mirtazapine
Serzone	nefazodone
Sinequan	doxepin
Surmontil	trimipramine
Tofranil	imipramine
Wellbutrin	bupropin
Zoloft	sertraline

Digoxin

Trade Names	Generic Names
Digoxin	digoxin
Lanoxicaps	
Lanoxin	
Novo-digoxin	

Sedatives/hypnotics

Trade Names	Generic Names
Ambien	zolpidem
Atarax, vistaril	hydroxyzine
Buspar	bupirone
Aquachloral	chloral hydrate
Equanil, Miltown	meprobamate
Seconal	secobarbital
Sonata	zaleplon
Versed	midazolam

Orthostatic Hypotension

Equipment needed: stethoscope, sphygmomanometer, watch with a second hand

Take the resident's blood pressure in the right arm unless otherwise indicated and take an apical heart rate for 60 seconds. Encourage the resident not to smoke and to remain calm for at least 10 minutes before the test.

For ambulatory residents, take BP readings in the sitting posi-

tion and then 1 minute after standing. Ensure that the resident has been sitting for at least 5 minutes before taking the first measurement. Use staff assistance when necessary for resident safety.

Subtract the values obtained while resident is standing from the values obtained while the resident was sitting. Determine if there is a reduction of ≥ 20 mm Hg in systolic pressure for postural hypotension.

Vision

Observe the resident during her activities of daily living and while she moves about in her room, bathroom, hallway and dining room. Determine if the resident stumbles, trips, has difficulty finding objects or detecting changes in floor surfaces, or shows other signs of poor vision.

Mobility

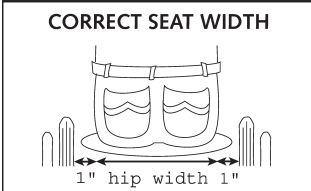
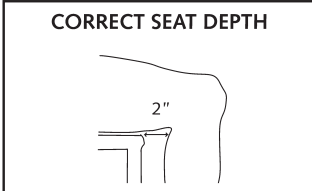

Complete a Mobility and Transfer Assessment for all residents who ambulate or transfer without human assistance. Include residents who use a cane, walker or wheelchair and those residents who should be assisted but get up unsafely without assistance.

Get Up and Go Test: Ask the resident to sit in a standard armchair, rise, walk 10 feet, turn, walk back to the chair and sit down. The resident should wear her normal footwear and use her customary walking aid. Look for unsteadiness, difficulty rising or lowering and any gait problems. Determine level of staff assistance required for safety.

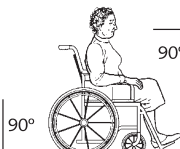



Transfer Test: Ask the resident to transfer in and out of the bed, on and off the toilet and in and out the lounge chair. Determine if the resident is safe, if the height of the bed, toilet or lounge chair needs adjustment; if existing handrails need adjustment; and if the resident's assistive device needs further evaluation.

Wheelchair Screen: For all residents who use a wheelchair or sit in a wheelchair for reasons other than transport only, collect the following measurements and assess the resident's position while seated. Based on your evaluation, determine if the resident is unsafe while seated in the wheelchair.

Use the following measurements to determine if the wheelchair seat and armrests are the correct size for the resident.

 <p>CORRECT SEAT WIDTH</p> <p>1" hip width 1"</p>	 <p>CORRECT SEAT DEPTH</p> <p>2"</p>	 <p>CORRECT ARMREST HEIGHT</p> <p>1"</p>
Hip width + 2 in = ____	Thigh length - 2 in = ____	1 in higher than elbow = ____

After the resident has been seated in the wheelchair for at least 1 hour, compare her position with the pictures to determine if she is seated correctly.

 <p>90° 90°</p> <p>correct position with two 90° angles</p>	 <p>sliding down</p>	 <p>leaning over</p>	 <p>leaning to one side</p>
--	---	--	--

Unsafe Behavior

Review the chart and MAR, obtain a history from the family and talk with staff about the resident's behavior. Complete the Unsafe Behavior Worksheet if necessary to determine the following:

- location
- time of day
- frequency
- potential triggers
- resident's agenda
- motivation
- people involved
- unsuccessful staff approaches
- new interventions



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Mobility and Transfer Assessment

Resident Name: _____ Unit/Room: _____

The Mobility and Transfer Assessment is a 3-step process used to screen for problems related to balance, gait and transfer. During the assessment, the resident should use a cane, walker or wheelchair if she or he normally does so. The nurse should observe the resident's safety during ambulation using the Get Up and Go Test and during transfer in and out of bed, on and off the toilet and in and out of the lounge chair when one is used by the resident. The nurse should assess the resident's wheelchair for proper fit and positioning.

Step One: Put a check by the level of assistance needed by the resident in order to be safe during ambulation, bed transfer, toilet transfer and chair transfer.

Step Two: Put a check by those environmental adjustments needed for safety during ambulation or transfer.

Step Three: Complete the Wheelchair Screen. Put a check by each needed safety improvement.

For instructions to the Get Up and Go Test and Wheelchair Screen, see the Falls Assessment Cue Sheet.

	Get Up and Go Test	Bed Transfer	Toilet transfer	Chair transfer
1. Level of Assistance				
Safe independent				
Safe with 1 person assist				
Safe with 2 person assist				
PT referral				
2. Environmental Adjustments				
Adjust height of bed/toilet/ lounge chair	Mark _____ inches from floor for bed height.			
Adjust handrail support				
Use assistive device				
Adjust assistive device				
OT/PT referral				
3. Wheelchair Screen				
Locate missing equipment				
Add labels to wheelchair and seating items				
Seat width needs adjustment				
Seat depth needs adjustment				
Seat height needs adjustment				
Armrest height needs adjustment				
Footrest(s) needs adjustment				
OT/PT Seating Assessment				

Signature: _____ Date: _____

Wheelchair Seating Assessment

First complete the HISTORY box below. You will need to talk to the resident and/or nursing staff to answer some of the questions.

HISTORY

1. If the resident self-propels the wheelchair,

- a) what does she use? One arm Two arms One foot Two feet
b) where does she go? Bathroom Dining room Activity room Outside

2. If the resident sits in the wheelchair,

- a) for approximately how many hours per day?
b) during which activities? Resting Eating Watching TV Recreation

3. List the resident's skin problems or sensory deficits. _____

4. List the resident's unsafe behaviors. _____

5. Is the resident able and willing to follow directions? YES NO

6. If the resident is not comfortable in the wheelchair, describe the problem. _____

7. List current equipment.

Wheelchair Type: _____ Cushion Type: _____

Other Supports: _____ Footrests: Left Right Both

Other Equipment: _____

Observe the patient sitting and supine and complete the OBSERVATION box below.

OBSERVATION

Pelvic Tilt: Posterior Anterior Thoracic Kyphosis: Mild Moderate Severe

Pelvic Rotation (forward ASIS*): Left Right Scoliosis: Mild Moderate Severe

Pelvic Obliquity (low ASIS*): Left Right Leg Length Discrepancy: L _____ R _____

Range of Motion (ROM) Measured in Supine:

Hip Flexion (Normal > 90°): Left _____ Right _____

Knee Extension with Hip Flexion (Normal < 70°): Left _____ Right _____

Ankle with Hip and Knee In Flexion: Left _____ Right _____

Comments: _____

*Anterior Superior Iliac Spine

Identify the resident's seating problem and the underlying reason from the choices below. Select from the list of suggestions those that you think will improve the resident's seating.

PROBLEM: RESIDENT SLIDES OUT OF CHAIR

Reason: Posterior Pelvic Tilt

- Contoured cushion with large well space
- Ischial shelf/Antithrust cushion
- Solid seat insert with back support
- Other solid seat insert _____
- Seat belt attached at 80°–90°
- Hemi-height wheelchair
- Drop seat
- Footrest adjustment
- Adjustment to angle of w/c back
- Wheelchair with adjustable back
- Adjustable back seating system for w/c
- Back support modifications to w/c
- Lap tray
- Other _____

Reason: Inadequate Hip Flexion

- Seat-to-back angle adjustment to fit hip flexion
- Contoured cushion with trough for femur(s)
- Other _____

PROBLEM: PATIENT LEANS TO LEFT, RIGHT OR FORWARD

Reason: Flexible Pelvic Obliquity

- Adjustable foam, fluid or air cushion to raise cushion under low side
- Other _____

Reason: Fixed Pelvic Obliquity

- Foam, air or liquid cushion to fill space between bony prominence and seat surface on low side
- Other _____

Reason: Flexible Pelvic Rotation

- Contoured cushion with support for femurs & greater trochanters
- Seat belt attached at 80°–90°
- Other _____

Reason: Fixed Pelvic Rotation

- Contoured cushion with large well space
- Cushion modification to support both longer and shorter extremities
- Other _____

Reason: Asymmetrical Trunk or Scoliosis

- Deeper back system with lateral supports
- 3-point support system^a
- Lateral support with accommodation on opposite side
- Hip bolster with accommodation on opposite side
- Arm support
- Adjustment to back of wheelchair
- Other _____

Reason: Anterior Pelvic Tilt, Falling Forward or Kyphosis

- Contoured cushion with large well space
- Ischial shelf/Antithrust cushion
- Solid seat insert with back support
- Other solid seat insert _____
- Seat belt attached at 80°–90°
- Adjustment to angle of w/c back
- Wheelchair with adjustable back
- Adjustable back seating system for w/c
- Other _____



PROBLEM: FEET NOT STAYING ON FOOT REST

Reason: Limited Knee Extension

- Foot plate and hanger adjustment
- Angle-adjustable foot plates
- Custom modification by DME^b supplier
- Drop seat
- Hemi-height wheelchair
- Other _____

Reason: Nonfunctioning Lower Extremity

- Cushion with adequate posterior thigh support
- Front hanger adjustment (with thigh/cushion contact)
- Full foot plate that extends from heel to toe
- Foot plate adjustment
- Heel loops
- Leg rests
- Other _____

PROBLEM: PROPELLING DIFFICULTIES

Reason: Feet Not in Correct Position

- Removal of one foot plate for foot propulsion with adjustment of other foot plate for non-functional foot
- Cushion depth adjustment for full leg excursion (notched one side for one-foot propeller)
- Drop seat
- Hemi-height wheelchair
- Thicker cushion to raise seat
- Other _____

Reason: Ankle Contracture

- Foot plate adjustment
- Angle-adjustable foot plate
- DME^b consultation
- Placement of feet on floor (if foot propeller)
- Drop seat
- Hemi-height wheelchair
- Cushion w/ adequate posterior thigh support and space behind knee for full excursion

Reason: Inefficient propelling

- Review of engineer wheelchair inspection/ ensure repairs completed
- Adjustment of cushion/seat height
- Adjustment of handrim/wheel position
- Replacement wheelchair
 - Powered^c
 - One-handed^c
- Other _____

PROBLEM: PAIN OR SKIN BREAKDOWN

- Jell or air cushion to assist in healing skin ulcer
- Cushion to distribute pressure
- Cushion to accommodate fixed deformities
- Other _____

PROBLEM: UNSAFE BEHAVIOR

- Contoured cushion with large well space
- Ischial shelf/Antithrust cushion
- Solid seat insert with back support
- Other solid seat insert _____
- Seat belt attached at 80°–90°
- Hemi-height wheelchair
- Drop seat
- Adjust angle of w/c back
- Wheelchair with adjustable back
- Adjustable back seating system for w/c
- Other _____

Signature: _____

Date: _____

a. Three point support system: 1) thoracic region at most extreme point of scoliotic curve; 2) just under axilla, avoiding axillary pressure; 3) low pelvis. Attach supports to chairback or back support system.

b. Durable Medical Equipment

3 c. If resident demonstrates competence.

Unsafe Behavior Worksheet

All behavior is meaningful, however, it may be difficult to understand the unsafe behaviors of some residents. Your *perception* of the behavior may be very different from the actual situation. To discover the meaning, you will need to explore the circumstances of the behavior, review the resident's personal and medical history and analyze staff/resident interactions.

Example: A resident gets out of bed unsafely at night and becomes very agitated when staff try to keep him in his room. To staff, he may be anxious, combative, uncooperative and difficult. From the resident's perspective, staff are preventing him from catching the bus to go to work.

Understanding the unsafe behavior of residents requires data collection, investigation and analysis. As you and the team better understand the behavior, you can problem-solve to develop additional individualized approaches. The Unsafe Behavior Worksheet is a 5-step process that directs you to define the behavior, review the resident's personal and medical history, investigate the circumstances, analyze staff approaches and develop new interventions.

Step 1: Define the behavior clearly.

Example: Resident gets out of bed between 2-4 a.m. He comes out into the hallway. His hands are shaking. He pushes staff away when they attempt to return him to the room. He talks loudly and becomes angry when staff ask him to lower his voice.

Step 2: Get as much information as possible about the resident's personal and medical history.

Include health status, family history, occupation, interests, cultural background and spirituality. Determine mental status including orientation, concentration, memory, judgment and psychological history. Incorporate information about mobility status, wheelchair use, postural hypotension, vision, and medications that was obtained during the Falls Assessment and from the evaluations by other health care professionals.

Step 3: Analyze the circumstances of the behavior.

Use a behavior log to track the behavior for at least one week. Gather information from staff and family. Look for patterns and meaning in the behavior by determining the following:

- Time of day
- Frequency
- Location
- Persons present
- Situation
- Resident motivation, feelings and agenda

Step 4: Analyze past staff approaches as well as the resident's reaction to them.

Ask staff about their previous approaches to the behavior and interaction with the resident. Determine with staff what has worked well and what has not been effective. Find out which staff member the resident responds to best.

Step 5: Develop new individualized interventions.

Address underlying medical conditions and medication use first. Ensure that all staff simplify the resident's care environment and use the positive communication skills and management strategies necessary for the care of residents with dementia. Problem solve with staff about the specific behavior, brainstorm about solutions and be creative. Develop a strategy and try it for a set period of time. Monitor the behavior each shift to determine the effect of the intervention. Revise the intervention based on your observations and staff feedback.



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Unsafe Behavior Worksheet

Resident: _____ Rm #: _____ Date: _____

Step 1	Behavior stated clearly using action verbs	
Step 2	Relevant personal and medical history	
Step 3	<i>Circumstances</i> Time Frequency Location Persons present Situation Motivation Feelings Agenda	
Step 4	Past staff approaches and resident reactions	
Step 5	New Interventions	

Signature: _____



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The Falls Management Program

Primary Care Provider FAX Report and Orders

1. FAX COVER SHEET

Facility: _____
Address: _____
City/State: _____
Telephone: _____
Fax: _____

Date: _____ / _____ / _____

Primary Care Provider: _____ Fax #: _____

Resident Name: _____ Unit/Room: _____

This resident was identified in our Falls Management Program as having a high risk of falls, and underwent a *Falls Assessment* per our protocol. Attached are the following:

1. FALLS ASSESSMENT REPORT and suggestions for further assessment and/or intervention.
2. A form for you to FAX BACK ORDERS on which you can indicate those that you select for this resident.

Please review the FALLS ASSESSMENT REPORT and return the FAX BACK ORDERS form the next business day. Thank you.

Falls Coordinator: _____ Phone number: _____

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2. FALLS ASSESSMENT REPORT

Facility: _____
Address: _____
City/State: _____
Telephone: _____
Fax: _____

Date: _____ / _____ / _____

Resident Name: _____

Findings: (X) = positive for this resident

Suggestions for further assessment and/or interventions

() Medications that could increase fall risk:

- Review medications and consider changes if appropriate.
- Consider psychiatric evaluation if indicated to evaluate psychotropic meds
- Consider consultant pharmacist recommendations.

() Low vision

- Consider optometry or ophthalmology evaluation.

() Postural hypotension
≥20 mm Hg drop in systolic pressure with position change

- Review cardiovascular and diuretic medications.
- Consider blood work for BUN/Creatinine ratio.
- Consider TED hose.

() Unsafe gait, transfers, and/or wheelchair seating problems

- Consider OT/PT evaluation.



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3. FAX BACK ORDERS

Facility: _____
 Address: _____
 City/State: _____
 Telephone: _____
 Fax: _____

Date: _____ / _____ / _____

Return by FAX to: _____ Fax #: _____

Resident Name: _____ Unit/Room: _____

Please mark the orders that are appropriate for this resident with an (X) and sign at the bottom.

Medication changes (please specify)

Psychiatric evaluation to evaluate psychotropic medications
 Optometry evaluation
 Ophthalmology consult
 Blood for BUN and Creatinine
 TED hose during the day
 Physical or occupational therapy screen/evaluation of gait/balance/transfer/seating
 Other orders:

Signature: _____ Date: _____
 (primary care provider)

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Fall Interventions Plan

Resident: _____

Room: _____

Directions: Check all interventions that apply.

RISK FACTOR	SELECTED INTERVENTIONS	RISK FACTOR	SELECTED INTERVENTIONS
Medications	<p>For changes in psychotropic meds:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Monitor and report changes in anxiety, sleep patterns, behavior, or mood <input type="checkbox"/> Monitor and report drug side effects <input type="checkbox"/> Behavior management strategies <input type="checkbox"/> Sleep hygiene measures <ul style="list-style-type: none"> <input type="checkbox"/> no caffeine after 4 pm <input type="checkbox"/> up at night with supervision, <input type="checkbox"/> comfort measures <input type="checkbox"/> pain management <input type="checkbox"/> regular exercise, limit napping <input type="checkbox"/> relaxing bed routine <input type="checkbox"/> individualized toileting at night <input type="checkbox"/> safe bathroom routine <p>For changes in digoxin:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Monitor apical heart rate; if < 50, notify PCP. 	Mobility	<ul style="list-style-type: none"> <input type="checkbox"/> Increase staff assistance <ul style="list-style-type: none"> <input type="checkbox"/> early morning <input type="checkbox"/> during all transfers <input type="checkbox"/> other: _____ <input type="checkbox"/> to and from toilet <input type="checkbox"/> during ambulation <input type="checkbox"/> Correct height of bed, toilet or chair <ul style="list-style-type: none"> <input type="checkbox"/> Keep bed at correct height as marked on footrest or wall <input type="checkbox"/> Use raised toilet seat <input type="checkbox"/> Use cushion in lounge chair <input type="checkbox"/> Lower lounge chair <input type="checkbox"/> Increase bathroom safety <ul style="list-style-type: none"> <input type="checkbox"/> Use adequate handrails support <input type="checkbox"/> Use easy to manage clothing <input type="checkbox"/> Promote wheelchair safety <ul style="list-style-type: none"> <input type="checkbox"/> Use individualized, labeled wheelchair <input type="checkbox"/> Check brakes and instruct pt on use <input type="checkbox"/> Seating Modifications <ul style="list-style-type: none"> <input type="checkbox"/> Use all prescribed seating items <input type="checkbox"/> Other: _____
Orthostatic Hypotension	<ul style="list-style-type: none"> <input type="checkbox"/> Low blood pressure precautions <ul style="list-style-type: none"> <input type="checkbox"/> instruct pt to change position slowly <input type="checkbox"/> instruct pt to sit on edge of bed and dangle feet before standing <input type="checkbox"/> instruct pt to use dorsiflexion before standing <input type="checkbox"/> instruct pt not to tilt head backwards <input type="checkbox"/> provide staff assistance in early AM and after meals <input type="checkbox"/> If medication change: <ul style="list-style-type: none"> <input type="checkbox"/> take postural VS q day X 3 days. If systolic drops ≥ 20 mm Hg on day 3, notify PCP <input type="checkbox"/> Promote adequate hydration <input type="checkbox"/> TED hose <input type="checkbox"/> Other: _____ 	Unsafe Behavior	<ul style="list-style-type: none"> <input type="checkbox"/> Behavior management strategies <input type="checkbox"/> Increase assistance and surveillance <ul style="list-style-type: none"> <input type="checkbox"/> Position or pressure change alarm <input type="checkbox"/> Movement sensor <input type="checkbox"/> Locate patient near station <input type="checkbox"/> Intercom <input type="checkbox"/> Toilet at regular intervals <input type="checkbox"/> Increase activities involvement <input type="checkbox"/> Other: _____ <input type="checkbox"/> Reduce risk of injury <ul style="list-style-type: none"> <input type="checkbox"/> Low bed <input type="checkbox"/> Floor mat <input type="checkbox"/> Helmet, wrist guards, hip protectors <input type="checkbox"/> Non-slip mat <input type="checkbox"/> Non-skid strips or non-skid rug <input type="checkbox"/> Non-skid socks <input type="checkbox"/> Lower or remove side rails <input type="checkbox"/> Increase comfort <ul style="list-style-type: none"> <input type="checkbox"/> Pain management <input type="checkbox"/> Frequent rest periods <input type="checkbox"/> Recliner or chair with deep seat <input type="checkbox"/> Rocking chair <input type="checkbox"/> Wheelchair seating items <input type="checkbox"/> Exercise <input type="checkbox"/> Cradle mattress <input type="checkbox"/> Sheepskin, air mattress or pillows <input type="checkbox"/> Other: _____
Vision	<ul style="list-style-type: none"> <input type="checkbox"/> Low vision precautions <ul style="list-style-type: none"> <input type="checkbox"/> use maximum wattage allowed by fixture <input type="checkbox"/> increase lighting in room <input type="checkbox"/> use adequate lighting at night <input type="checkbox"/> add high contrast strips on stairs, curbs, etc. <input type="checkbox"/> use signs with large letters or pictures <input type="checkbox"/> use high contrast to offset visual targets <input type="checkbox"/> reduce glare <input type="checkbox"/> Corrective lenses <ul style="list-style-type: none"> <input type="checkbox"/> Keep eyewear within easy reach at all times <input type="checkbox"/> Encourage patient to wear glasses <input type="checkbox"/> Other: _____ 		

Signature: _____

Date: _____



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Fall Interventions Monitor

Resident: _____ Room: _____

Directions: Monitor staff implementation and effectiveness of the Fall Intervention Plan each week. Revise interventions as needed and record below. Use one sheet for every 2 weeks..

	DATE:		DATE:
Medications	Are interventions effective: ___YES ___NO Changes: Comments:	Medications	Are interventions effective: ___YES ___NO Changes: Comments:
Orthostatic Hypotension	Are interventions effective: ___YES ___NO Changes: Comments:	Orthostatic Hypotension	Are interventions effective: ___YES ___NO Changes: Comments:
Vision	Are interventions effective: ___YES ___NO Changes: Comments:	Vision	Are interventions effective: ___YES ___NO Changes: Comments:
Mobility	Are interventions effective: ___YES ___NO Changes: Comments:	Mobility	Are interventions effective: ___YES ___NO Changes: Comments:
Unsafe Behavior	Are interventions effective: ___YES ___NO Changes: Comments:	Unsafe Behavior	Are interventions effective: ___YES ___NO Changes: Comments:

Signature: _____ Date: _____



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The Falls Management Program -

Inservice #1: Why Falls Happen

Pretest/Posttest

Name: _____ Date: _____

1. List 3 common safety problems in the resident's room and bathroom.

a. _____

b. _____

c. _____

2. For most residents, the bed should be left in the lowest position. True or False (Circle one)

3. New admissions have the same risk of falling as residents who have been in the facility more than 60 days. True or False (Circle one)

4. List two common problems with wheelchairs that increase a resident's risk of falling.

a. _____

b. _____

5. List three side effects of sedatives that increase a resident's risk of falling.

An example of a sedative is Ativan.

a. _____

b. _____

c. _____



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The Falls Management Program -

Inservice #2: How to Reduce Falls

Pretest/Posttest

Name: _____ Date: _____

1. List 3 ways to improve safety in a resident's room and bathroom.

a. _____

b. _____

c. _____

2. Personal items should be kept within 10 feet of the resident. True or False (Circle one)

3. List three ways to improve the resident's safety during transfer and mobility.

a. _____

b. _____

c. _____

4. Staff should use behavior management skills with residents who have unsafe behaviors.
True or False (Circle one)

5. A resident who leans over or slides down while seated in a wheelchair is more likely to fall out of the chair. True or False (Circle one)



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El Programa de la Gerencia de las Caídas -

#1: Porque las Caídas Suceden

Preprueba/ Después de la prueba

Nombre: _____ Fecha: _____

1. Haga una lista de 3 problemas de seguridad comunes en el cuarto y el baño del residente:

a. _____

b. _____

c. _____

2. La cama debe mantener en la posición más baja por la mayoría de los residentes. Verdad o Falso. (círculo uno)

3. Los residentes nuevos tiene el mismo riesgo a los residentes quien están en las instalaciones para más de 60 días. Verdad o Falso. (círculo uno)

4. Haga una lista de dos problemas con los sillónes de ruedas que aumento los riesgos de caídas:

a. _____

b. _____

5. Haga una lista de tres efectos secundarios de sedativos que aumento el riesgo de caídas para residentes:

a. _____

b. _____

c. _____



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El Programa de la Gerencia de las Caídas -

#2: Cómo Reducir Caídas

Antes de la prueba/ Después de la prueba

Nombre: _____ Fecha: _____

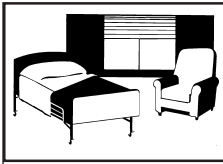
1. Haga una lista de tres maneras que aumento la seguridad en el cuarto y baño del residente:
 - a. _____
 - b. _____
 - c. _____

2. Las cosas personal deben estar diez pies de el residente. Verdad o Falso. (círculo uno)

3. Haga una lista de tres maneras que aumento la seguridad durante la transferencia y la movilidad del residente:
 - a. _____
 - b. _____
 - c. _____

4. Personal debe usar habilidades genencia del comportamiento con los residents quien tienen comportamientos inseguros. Verdad o Falso. (círculo uno)

5. Cuando un residente diapositivas abajo en un sillón de ruedas él tiene más riesgo para caídas. Verdad o Falso. (círculo uno)



Why Falls Happen in Nursing Facilities

Facts:

- About half of all residents in nursing facilities fall every year.
- 30–40% of the residents who fall in nursing facilities fall at least twice.
- One in every ten residents has a serious injury from a fall, such as a fracture, laceration, or serious head injury.
- One of the most serious injuries from falls is hip fracture.
- Falls result in a decrease in the resident's quality of life, an increase in staff time and effort, added costs of medical treatment, and an increase in the nursing facility's costs to settle legal claims.

There are many reasons why residents fall. These reasons are called fall risk factors. Many of these we can change.

Fall Risk Factors We Can Change:

Residents' Living Space and Personal Safety

- clutter, uneven floors and raised thresholds
- broken bed wheel locks, poor lighting
- unstable furniture, hard to reach personal items
- loose handrails and toilet seats, unsafe footwear and poor foot care

Residents' Transfer and Mobility

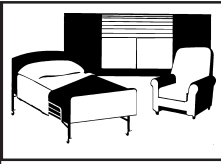
- unsafe transfer and walking without staff assistance
- lack of handrail support in bathroom
- new admissions or health declines
- incorrect height of transfer points
- hard-to-manage clothing
- unsafe behavior

Equipment

- poor maintenance and repair, wheelchair seating problems
- improper wheelchair fit, sharing wheelchairs among residents

Psychotropic Drugs

- use of benzodiazepines such as Ativan and Xanax
- use of antipsychotics such as Haldol and Risperdal



How to Reduce Falls in Nursing Facilities

Residents' Living Space and Personal Safety

- Remove clutter. Keep a clear path 2 to 3 feet wide around the bed, from the bed to the hall, from the bed to the bathroom, and from the bed to the lounge chair.
- Keep the bed wheels locked at all times. Report beds with broken wheel locks.
- Remove lightweight furniture. Keep the overbed table across the bed when it is not in use.
- Report loose handrails and toilet seats.
- Report torn linoleum and loose carpet edges. Wipe up wet spots when you see them.
- Report burned out light bulbs.
- Keep the call light, water pitcher, glass, and any personal items within arm's length of the resident.
- Use footwear which has tread on the bottom, a firm shape, and a low, even heel. Use gripper socks when the resident cannot wear safe shoes.
- Give proper foot care.

Residents' Transfer and Mobility

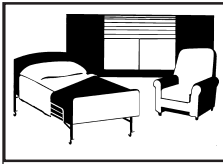
- Know which residents need assistance during transfer and walking. Give help when needed.
- Watch all residents closely during the first 2 to 3 weeks after admission and after a health decline or acute illness. Increase assistance during these times.
- For most residents, keep bed in the lowest position at all times. Use a raised toilet seat when ordered.
- Dress the resident in easy-to-manage clothing such as those with elastic bands and Velcro fasteners.
- Provide toileting, food, drink and activity based on the resident's individual schedule.
- Check the resident often. Ask volunteers and family to help.

Equipment Use

- Check the wheelchair brakes often. Report ones that do not hold the chair firmly in place.
- Report all broken or lost parts of wheelchairs, walkers and canes.
- Use all of the seating items which are ordered for the resident.
- Report any resident who leans over, slides down, or leans to one side while seated in a wheelchair.
- Do not share wheelchairs among residents.
- Make sure all equipment is labeled with the resident's name.

Psychotropic Drugs

- Know which residents take a benzodiazepine or an antipsychotic.
- Watch residents who are on these drugs for side effects such as confusion, drowsiness, dizziness, changes in gait, loss of balance, and changes in mental status.
- Use behavior management skills to lessen the need for these drugs.



Porqué las Caídas Suceden en Instalaciones del Oficio de Enfermera

Hechos:

- Sobre un medio de todos los residentes en instalaciones del oficio de enfermera caen cada año.
- 30–40% de los residentes que caen, cae por los menos dos veces.
- Uno en diez residentes tuvo una lesión seria de una caída, por ejemplo una fractura, una laceración, o una lesión en la cabeza seria.
- Uno de la lesión mas seria es la fractura de la cadera.
- Las caídas estan una resultado de una disminuya en su calidad de vida, un aumento en tiempo y ayuda personal, agregado costes del tratamiento médico, y un aumento en la instalaciones del oficio de enfermera costes para pagar demandas legales.

Hay muchos razones porque los residentes caen. Llamamos éstos razones factores de riesgo de la caída. Muchos de éstos podemos cambiar.

Factores de Riesgo de la Caída que Nosotros Podemos Cambiar:

Espacio Vivo y Seguridad Personal del Residente

- los desechos, pisos desiguales, y umbrales levantados
- las ruedas de la cama trabadas que están rotas
- muebles inestables, artículos personales que son duro para alcanzar
- las barandillas y los asientos del toliet flojos, inseguro zapatos, y mal cuidado del pies

Transferencia y Movilidad del Residente

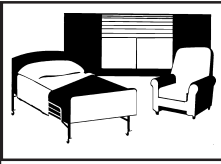
- inseguro transferencia y caminando sin ayuda personal
- no barandillas en el baño
- nuevos admissions o declinaciones de la salud
- altura incorrecta de puntos de transferencia
- “ropa difícil”
- comportamiento inseguro

Equipo

- mantenimiento y reparación pobre
- incorrecto ajustes de los sillónes de ruedas, cambiando los sillónes de ruedas entre los residentes

Drugas Psychotropic

- el uso de benzodiazepines como Ativan y Xanax
- el uso de antipsychotics como Haldol and Risperdal



Cómo Reducir Caídas en Instalaciones del Oficio de Enfermera

Espacio Vivo y Seguridad Personal del Residente

- Quite los desechos . Guarde un camino clara dos o tres pies de ancho alrededor de la cama, de la cama al pasillo, de la cama al baño y de la cama a la silla.
- Siempre mantenga las ruedas de la cama trabadas. Diga cuando las ruedas de las camas están roto.
- Quite los muebles ligeros.
- Informe cuando las barandillas y los asientos del toliet están flojos.
- Informe cuando el linóleo está rasgado y la alfombra está floja.
- Informe bombillas rotas.
- Siempre mantenga la luz de la llamada, la jara del agua, y cualesquiera cosas del personal cerca a la residente.
- Use unos zapatos con pisadas, una forma firme, y un talón bajo. Use calcetines del agarrador cuando el residente no puede desgaste unos zapatos seguros.
- Dé apropiado cuidado del pies.

Transferencia y Movilidad del Residente

- Sepa cuáles residentes necesitan la mas ayuda con caminando.
- Mire todos los residentes cuidadosamente para su primer 2 – 3 semanas y después de una enferma.
- Mantenga la cama en la posición más baja para la mayoría de los residentes. Use un asiento del toliet levantado cuando ordenado.
- Vesta el residente en “ropa fácil” como ropa con vendas elasticos y sujetadores del velcro.
- Proporcione tolieting, comida, bebida, y actividades basado en el horario individual de cada residente.
- Cheque el residente a menudo. Pregunte miembros del familia y unos voluntarios por ayuda.

Uso del Equipo

- Cheque los frenos del sillón de ruedas a menudo. Informe los que están rotos.
- Informe perdido y roto partes de los sillones de ruedas, los bastones, y walkers.
- Use todos los artículos del asiento que estan ordenado por el residente.
- Nunca cambie los sillones de ruedas entre los residentes.
- Etiquete todo el equipo con el nombre del residente.

Drogas Psychotropic

- Sepa cuáles residentes toman benzodiazepine o antipsychotic.
- Mire los residentes que toman éstos drogas para unos efectos secundarios, como confusión, somnolencia, vértigos, perdida de balance, o una cambia en su estado mental.
- Use habilidades gerencia del comportamiento para disminuya la necesidad por éstos drogas.



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The Falls Management Program

FACTS

- 1 in 3 persons \geq 65 years will fall each year.
- Of 1.7 million residents in nursing facilities, about 50% will fall each year.
- Of those that fall, 30-40% will fall two or more times.
- 10% of residents have a serious injury related to a fall.
- About 65,000 patients suffer a hip fracture each year.

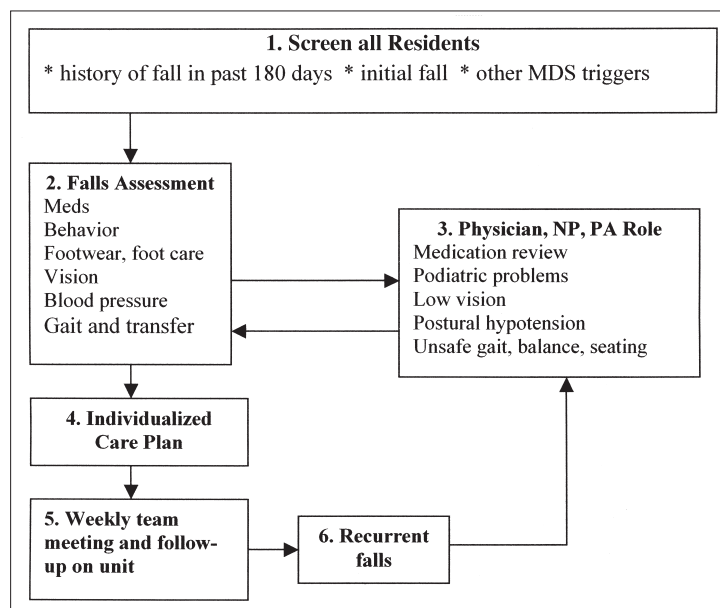
CONSEQUENCES OF FALLS

- Reduced quality of life
- Serious injury
- Increased level of fear
- Increased paperwork for staff
- Lawsuits
- Decreased ability to function
- Increased risk of death
- Increased level of care
- Poor survey results
- High insurance premiums

THE FALLS MANAGEMENT PROGRAM (FMP)

The Falls Nurse Coordinator will conduct a Falls Assessment of your residents who are found to be at high fall risk during screening and after an initial fall. You will receive a Primary Care Provider FAX Report and Orders asking you to review the results and to order referrals or participate in the assessment as indicated. A copy of the 3- page FAX Report and Orders is attached. It is important that you respond to the fax ASAP so that the nurse coordinator can use your recommendations to develop an individualized care plan. Thereafter, whenever your resident falls, you will receive a FAX Alert. A copy is attached.

FMP Flow Chart





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FMP Findings

Suggestions for further assessment and/or Interventions

Medications

Antipsychotics

Antidepressants

Benzodiazepines

Other sedatives/hypnotics

Digoxin

Postural hypotension

Low vision

Unsafe gait, transfers, and/or wheelchair seating problems

Review all medications.

Consider changes if appropriate.

Consider psychiatric evaluation if indicated to re-evaluate
psychotropic medications

Diagnose and treat postural hypotension:
Review cardiovascular, diuretic and other medications
Consider blood work for BUN/Creatinine ratio
Consider TED hose
If severe, consider prescribing fludrocortisone (Florinef)
or midodrine (ProAmatine)

Consider optometry or ophthalmology evaluation.

Consider OT/PT evaluation.

Conditions that increase fall risk

Cardiac

Postural hypotension

Arrhythmias

Neuropsychiatric

Stroke and TIA's

Parkinson's disease

Dementias and delirium

Dizziness

Depression

Drugs

Anti-psychotics

Antidepressants

Benzodiazepines

Other sedatives/hypnotics

Digoxin

Polypharmacy and drug interactions

Others

Poor vision

Incontinence

Dehydration

Use of restraints

Hypoglycemia

Fear of falling

Foot problems



Resources

Guidelines

American Geriatrics Society, British Geriatrics Society, American Academy of Orthopaedic Surgeons Panel on Falls Prevention. Guideline for the prevention of falls in older persons. *J Am Geriat Soc* 2001;49(5):664-672.

Falls and Fall Risk, AMDA Clinical Practice Guideline. 1998

Websites

Agency for Healthcare Research and Quality (AHRQ). Medical Errors and Patient Safety. <http://www.ahrq.gov/qual/errorsix.htm/>

Alabama Quality Assurance Foundation (AQAF), AQAF Long-term care fall prevention project. <http://www.aqaf.com>

The American Geriatrics Society Position Statements, Recommendations, Guidelines, and Papers. <http://www.americangeriatrics.org/products/positionpapers/>

Centers for Disease Control (CDC) National Center for Injury Prevention and Control (NCIPC). Falls in Nursing Homes. <http://www.cdc.gov/ncipc/factsheets/nursing.html>

Gillespie LD, Gillespie WJ, Robertson MC, Lamb SE, et al. Interventions for preventing falls in elderly people. *Cochrane Database Syst Rev* 2001;3:CD000340. <http://www.cochranelibrary.com>

Quality Indicators for Assessing Care of Vulnerable Elders (ACOVE). Quality Indicators for the Management and Prevention of Falls and Mobility Problems in Vulnerable Elders. <http://www.annals.org/issues/v135n8s/full/200110161-00007.html>

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[Date]

[Salutations]

RE: Fall Management Program

Dear

I am writing to introduce you to a new quality improvement initiative that our nursing facility will be implementing over the next several months. The *Falls Management Program* (FMP) is directed at identifying and managing residents at high risk for falls and related injuries. Our leadership is committed to this program, and to continuing to improve care in many key clinical areas such as falls.

The FMP will involve the following:

- Selection and training of a “falls coordinator” and key members of a team that will implement the program in the facility
- A new computerized incident reporting system that will generate quality improvement reports
- Basic nursing assessments on residents who have fallen or who are at high risk for falling, with communication of the results to primary care providers
- Individualized management plans addressing fall risk factors

As a primary care provider for this facility, you will be involved in the FMP. You will be receiving FAX reports on your residents. These reports will be of two different types:

1. Results of the nursing assessment, with related recommendations. A FAX order form will be enclosed for your convenience. **Please return the FAX order form as soon as possible with your recommendations, so that a management plan can be implemented.**
2. A notification of falls and recurrent falls in patients who have been assessed in the FMP. **Please consider further evaluation and management in collaboration with the facility falls coordinator when one of your residents falls recurrently and/or suffers an injurious fall.**

Enclosed with this letter are examples of materials from the FMP. If you have any questions or suggestions about this new quality improvement initiative, please do not hesitate to discuss them with me. Thank you.

Sincerely,

Medical Director



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Ways Families Can Help Reduce Fall Risk

Reduce clutter in the room and bathroom

- Take home items no longer needed by the resident.
 - Keep pathways clear at all times.
 - Watch for telephone and electrical cords in the walking area.
 - Keep the over bed table across the bed.
 - Make sure that the furniture you bring is stable and doesn't tilt if the resident leans on it. Don't bring in cardboard furniture, pedestal tables or tables with three legs.
- When you leave the room, take a quick look around. Do you see any clutter, cords, furniture or other items in pathways? Remove items or call for help from staff. Make sure the call light and personal items are within easy reach of the resident when you leave.

Safe shoes and slippers

- All shoes and slippers should fit well and have a firm shape. Shoes should have a low, even heel. While some carpets may cause problems for residents who wear shoes with deep tread, generally speaking, all shoes and slippers should have some form of tread on the sole. Examples include tennis shoes with Velcro fasteners, oxford style shoes and canvas or leather slip-on shoes.
- If a resident cannot wear safe shoes or slippers, use gripper socks instead.
- Use gripper socks at night.

Safety during transfer and bathroom use

- Always call for help from staff when you are unsure about helping your family member get out of bed or go to the bathroom. Do not transfer an unsteady resident alone.
- Bring in easy-to-manage clothing such as pants with elastic bands, easy to pull up skirts and dresses, and items with Velcro fasteners.
- Lock wheelchair brakes before transfer.
- Use all prescribed seating items for a resident when she is in the wheelchair.

Help the patient to use low blood pressure precautions

- Before the resident gets out of bed, ask her to sit on the edge and dangle her feet for a few minutes.
- Encourage the resident to flex her feet backwards several times while sitting.
- Remind the resident not to tilt her head backwards.
- After meals and anytime the resident has been sitting for a while, encourage her to get up slowly and to use assistance. Report any complaints of dizziness.



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Reducing Falls: A Safety Checklist for the Home

Accidents in the home are a major cause of injury. One in three people 65 years and older fall every year and most of these falls happen in the home. This checklist helps to identify safety problems and provides easy tips for making your home a safer place. Use your common sense and take action to correct the problems you find. Most solutions are not expensive. If you cannot fix the problem yourself, ask a family member or friend to help.

Put a check beside each safety problem you find in your home. Then read the suggestions for improving the problem.

Do you have:

- Unsafe stairs? Broken or worn stairs?*
Repair broken or worn steps. Edges of stairs should be clearly visible with coverings in good condition and securely fastened down.
Never store items on steps. Keep them free of clutter.
- Broken or missing railings?*
Porch and stair railings should be checked regularly. Make certain they are secure. Repair or install handrails on both sides of the stairs. Handrails should continue for the entire length of the staircase.
- Poor lighting around stairs or dark hallways?*
Increase the wattage of bulbs to the maximum allowed by the fixture. Add illuminated light switch plates to make it easy to find switches in the dark. Make sure that light switches are located at both the top and bottom of stairways. Add bright strips of tape to the edge of each stair.
- Throw rugs?*
Either remove them or fasten them securely to the floor with adhesive, double-stick tape. Do not use loose rugs anywhere, especially at the bottom of stairs.
- Clutter?*
Keep pathways clear. Put away shoes, newspapers, books, and other items and keep them off the floor. Make sure that electrical and telephone cords are not in pathways. Keep cords out from underneath carpet. Coil or attach cords to the baseboard. Have an electrician add another outlet if needed. Arrange furniture in order to give plenty of walking room.



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Reducing Falls: A Safety Checklist for the Home

CONTINUED

Hard to reach items?

Cabinets and closets often have shelves that are too high to reach safely. Store frequently used items on the lowest shelf, at waist level. Avoid using stools and never stand on a chair to reach high items. If you do use a stool, use a steady step stool with a bar for support. Use a long-handled grasper to reach high objects.

ÊA slippery bathroom floor, bathtub or shower?

Use a non-skid mat in the shower and bathtub. Use a rubber mat or nonskid strips in front of the sink, bathtub and shower to avoid slipping on wet spots. If you bathe in a shower, consider installing a non-skid shower chair and hand-held shower head so you can sit while bathing.

Avoid pulling up on the sink, a towel rack or soap dish to get up from the toilet or bathtub. These are not intended to support your weight and may come off the wall. Install grab bars or handrails in the shower, on walls around the bathtub, and beside the toilet. Make sure they are securely fastened to the wall to support your weight. There are specially designed commode chairs that can improve safety as well.

ÊNot enough lighting? Too much glare?

Use maximum wattage bulbs allowed by each fixture. Use lights that shine directly on your work area for specific tasks. Use frosted bulbs, globes and shades on fixtures to reduce glare. Avoid shiny surfaces that may increase glare. If overhead lighting is not enough, add lamps. Consider installing motion detector lights that turn on automatically. Install easy-access light switches at the entrance to a room so you do not have to walk in the dark in order to turn on the light.

Always use a night light in the bathroom. Use a night light that automatically turns on in low-light situations. Make sure that you can light the path from your bed to the bathroom easily while en route. Keep a flashlight by your bed.

Make sure there is adequate lighting outside by walkways and entrances. Use a motion sensor light that will turn on whenever there is movement.



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Reducing Falls: A Safety Checklist for the Home

CONTINUED

- Furniture that is difficult to get out of?*
Sit on furniture that has good back support. Firm chairs with sturdy armrests provide more support when rising. Add pillows to the back of the chair so that your feet rest firmly on the floor.
- Unstable furniture?*
Use tables that have four legs. Do not use tripod or pedestal tables. Repair the legs or add stabilizers to furniture that rocks or tilts when you lean on it.
- Loose carpet or linoleum?*
Tack down loose carpeting everywhere in your home, especially on stairs. Make sure that there are no curled or frayed edges. Replace missing linoleum or any tile that is broken or loose.
- Spills or wet spots?*
Wipe up spills immediately. Clean up any liquid, grease, or food spilled on the floor.
- Gutters or windows that need to be cleaned?*
If you use a stepladder, make sure someone is bracing it for you. Don't overextend your reach.
- Cracks or uneven places in cement walks or stairways? Slippery pavement?*
Patch cracks with filler before they spread. Avoid broken sidewalks. Be very careful on wet or icy pavement. Make sure your walkways are shoveled and cleared of ice and snow in the winter. Use salt or an ice-melting product to keep surfaces clear of ice.
- Pets?*
Don't let a pet catch you by surprise by running through your feet. Always be aware of your pet's location.



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Reducing Falls: A Safety Checklist for the Home

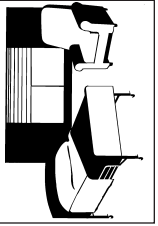
CONTINUED

When someone in your home uses a wheelchair, there are many things that can be done to improve access. Narrow doors can be enlarged and heavy or hard-to-open doors can be altered. Ramps can be added to entrances. Changes in the kitchen and bathroom can be made to accommodate wheelchairs as well.

This brochure does not include all potential causes of falls. It is not intended as medical advice and should not be a substitute for professional advice from your health care provider. Contact your doctor or health care provider if you have questions or need help making changes. Remember to keep a phone with emergency numbers within easy reach.

References:

1. *The Fall Prevention Project*, Southeast Senior Housing Initiative, Baltimore, MD, 1997.
2. *Safe at Home*, Magee Rehabilitation Jefferson Health System, Philadelphia, PA, 2002.
3. *Home Solutions*, American Association of Retired Persons, Washington, DC, 1999.
4. *Home Care of the Elderly*, Sheryl Zang and Judith Allender, Philadelphia, PA, 1999.
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6. *Check for Safety*, Centers for Disease Control, Atlanta, Georgia, 1999.



Living Space Inspection

The *Living Space Inspection* has 7 sections. Read the instructions carefully and answer all questions for each bed and resident. If the answer is yes, or does not apply, go to the next question. If the answer is no, read the list of tasks in the matching section of the *Nursing Inspection List* and *Engineer Inspection List*. Select the tasks which you think will help solve that safety problem. In the column under the room number and bed you are inspecting, put a ✓ beside each task you have selected. For safety problems in common areas, write notes on the back of the *Engineer Inspection List*.

1: Paths

Walk slowly from door to bed, bed to chair, bed to commode, and chair to commode. Look for furniture, cords, bedside commode, overbed table, personal items or other objects which may block the path for the resident to walk or propel a wheelchair.

Is there a 2 foot wide clear path for the resident to walk in or propel a wheelchair from:

- a. door to bed?
- b. bed to commode?
- c. bed to chair?
- d. chair to commode?

2: Stable Furniture

Push against bed, chair, and furniture. Unlock and lock bed wheels. Check rubber tips on legs of bedside commode or other equipment. Check for loose handrails on wall, commode or raised toilet. Check if raised toilet seat is secured to the commode.

- Instructions:**
- Questions:**
- a. Has staff locked bed in a stable position?
 - b. Do bed wheels lock and hold bed secure?
 - c. Does furniture remain stable when pushed?
 - d. Is chair stable?
 - e. Are bathroom handrails secure?
 - f. Are all rubber tips present on bedside commode and other equipment?
 - g. Is raised toilet seat secure?

3: Easy Access

Ask resident which items she uses each day and locate them in room. (Example: glass, pitcher, tissues, eyeglasses, cane, walker or wheelchair.) If resident is unable to answer, locate these items yourself.

- Instructions:**
- Questions:**
- Are all items within arm's length so that resident can reach them while sitting or lying? If items have been stored, can resident get to them safely? (Example: Is path to wheelchair clear and can resident walk to and unfold wheelchair safely?)

4: Lighting

Instructions: Turn on all lights in bedroom and bathroom. Check cord length to overbed light and bathroom call light.

Questions:

- Are all of the following lights in working order? Do they shine without flicker?
 - bedside or overbed light
 - bedside call light
 - night light
 - bathroom light
 - bathroom call light
- Are call light cords long enough to be reached by resident while sitting on commode or in bed?

5: Floor



Instructions: Inspect floor in resident's room and bathroom and threshold between the two rooms.

Questions:

- Are all floor coverings in good repair with no cracks, missing sections or loose edges?
- Are thresholds intact and low so that patient will not trip if walking? Can resident propel wheelchair across threshold easily?
- Is the floor dry?

6: Equipment

Instructions:

Look for canes, walkers, and wheelchairs. Check closets and bathrooms. For all wheelchairs that you find, put a ✓ by “check wheelchair” on the *Engineer Inspection List*. If there is a cane made of wood, inspect shaft and handle for cracks or weak spots. If there is a metal cane, check if all bolts and screws are present. Check if rubber tip(s) is present and inspect shape. If there is a walker, look at bolts and screws. Check for all four rubber tips and inspect shape. If it has caster wheels, check for cracks, shape and movement while rolling.

Questions:

- Is cane and/or walker stable with all hardware present and secure?
- Are all rubber tips present, even and clean?
- If walker has wheels, are they firm, in good shape, and able to roll smoothly?

7: Foot Care and Footwear

Instructions:

Look closely at resident's feet for very long nails, open lesions, bunions, hammertoes, and large calluses. Look closely at shoes and slippers patient usually wears. Check for a firm shape, low even heels and tread.

Questions:

- Are resident's feet free of problems that may prevent even weight bearing or keep her from wearing safe shoes or slippers?
- Do resident's shoes and slippers fit well, have tread and have even low heels?



Nursing Inspection List

Write the unit name, date and room numbers across the top line. Put the bed number or letter across the second line and sign it. Put a ✓ under the room number and bed beside all the tasks that need to be done. Write notes about special problems or add details in the NOTES column.

UNIT:	DATE:	ROOM NUMBER:	NOTES:
SIGNATURE:	BED:		
1: Paths	Remove unused equipment (canes/walkers).		
	Instruct SW to ask family to remove unused items.		
	If bedside commode is unused, ask staff to remove it.		
	With resident's permission, rearrange room to clear paths.		
	Instruct staff to keep paths clear.		
	Instruct staff to keep overbed table across bed.		
2: Furniture	Remove unused items from bathroom and store elsewhere.		
	Instruct nursing staff and housekeepers to keep bed in locked position except during care or cleaning.		
	Replace unstable bed with a stable one.		
	Push bed to wall (check local and state fire codes).		
	Remove all cardboard, lightweight or unstable furniture.		
	Instruct SW to ask family to remove or replace unstable items.		
3: Easy Access	Arrange room so that items are within resident's reach.		
	Instruct staff to keep items within arm's length of patient.		
	Instruct staff to place cane, walker or w/c within safe reach.		
5: Floor	Instruct staff to wipe up all spills quickly.		
	Ask nurse for podiatry consult.		
7: Foot Care and Footwear	Instruct staff and resident to use specific shoes/slippers.		
	Instruct staff and resident to use non-skid socks.		
	Instruct SW to ask family to provide safe footwear.		



Engineer Inspection List

For the person doing the inspection: Label this form and fill it out in the same way as for the *Nursing Inspection List*.

For the Falls Engineer: A member of the nursing staff has checked resident rooms and equipment for safety problems. This is the list of things they have found that you need to inspect and repair. Please do all the tasks that have a ✓ beside them for each room and bed number. Safety problems in common areas and with common equipment are listed on the back of this page. See the Falls Engineer Instructions for details about how to do each task.

UNIT:	DATE:	ROOM NUMBER:	NOTES:
SIGNATURE:		BED:	
1: Paths	1. Make tiebacks for divider curtains.		
	2. Tie electrical cords out of path (TV, phone, heater).		
2: Furniture	3. Clean, repair or replace broken bed wheel locks.		
	4. Fix unstable furniture.		
	5. Secure loose bathroom handrails.		
	6. Replace missing rubber tips on bedside commode.		
	7. Replace missing rubber tips on handrails that rest on floor.		
4: Lighting	8. Secure raised toilet seat to commode.		
	9. Replace burned out or flickering bulbs. Use max wattage.		
	10. Repair broken room lights or call lights.		
5: Floor	11. Replace broken call light cords or lengthen cords.		
	12. Repair or replace floor covering.		
	13. Replace high, broken or missing thresholds.		
6: Equipment	14. Add grading to thresholds between room and bathroom.		
	15. Inspect wheelchair (for all wheelchairs found).		
	16. Repair cane.		
	17. Repair walker.		

Safety Problems in Common Areas and with Common Equipment:



Engineer Cane Inspection

Resident Name: _____ Room: _____ Date: _____

Ask the resident and staff to give you the cane at a time when it is not in use. Follow the instructions and answer each question. If the answer to the question is **YES**, follow the arrow down to the next question. If the answer is **NO**, follow the arrow across to the list of tasks. Check the box beside each task which needs to be done. When you have done the task, write your initials beside it.

Instructions:

If the cane is made of wood, inspect the shaft and handle for cracks or weak spots. If the cane is metal, check if all the bolts and screws are present. Check if the rubber tip(s) is present and inspect the shape.

Question:

1. Is the cane stable with all the hardware present and secure?

YES/NA



NO



- Tighten the loose bolts and screws.
- Replace the missing hardware.
- Ask the Fall Prevention Therapist to replace a wooden cane if it is cracked or weak.

Question:

2. Is the rubber tip present, even and clean? If it is a quad cane, are all four of the tips present, even, and clean?

YES/NA



NO



- Clean the dirty rubber tips.
- Replace the missing or worn tips.

Signature: _____



Engineer Walker Inspection

Resident Name: _____ Room: _____ Date: _____

Ask the resident and staff to give you the walker at a time when it is not in use. Follow the instructions and answer each question. If the answer to the question is **YES**, follow the arrow down to the next question. If the answer is **NO**, follow the arrow across to the list of tasks. Check the box beside each task which needs to be done. When you have done the task, write your initials beside it.

Instructions:

Look at the bolts and screws. Check for all four of the rubber tips and inspect their shape. If the walker has caster wheels, check for cracks, shape, and movement while rolling.

Question:

1. Is the walker stable with all the hardware present and secure?

YES/NA

NO



Tighten the loose bolts and screws.

Replace the missing hardware.



Question:

2. Are all four rubber tips present, even and clean?

YES/NA

NO



Clean the dirty rubber tips.

Replace the missing or worn tips.



Question:

3. If the walker has caster wheels, are they firm, in good shape, and do they roll smoothly?

YES/NA

NO



Replace the worn or cracked caster wheels.

Clean and oil the caster wheels.



Signature: _____



Engineer Wheelchair Inspection

Resident Name: _____ Room: _____ Date: _____

Ask the resident and staff to give you the wheelchair at a time when it is not in use by the resident. There are seven parts to the *Engineer Wheelchair Inspection*. Each part has instructions to follow. Refer to the wheelchair diagram at the end of this form. Put a check in the box beside all of the tasks which need to be done. All wheelchairs should be inspected at least every six months. Keep this form for your records so that you know when this wheelchair was last inspected. Use this form each time you repeat the assessment. When you have done the task, write your initials beside it.

Section 1: General Cleaning and Lubrication

Instructions: Inspect the joints to see if they are dry. Check the chair for dirt and dust.

- \hat{E} If dirty, clean all parts of chair with soap and water. Wipe clean.
- \hat{E} If slide does not move smoothly when you fold chair, spray slide post and into slide tube. Use white lithium, silicone, or teflon-based spray grease (not WD-40).
- \hat{E} If joints are dry, spray with silicone.

Section 2: Frame Check

Instructions: Check for loose fasteners, stripped screws, burrs on screwheads, center pin, bottom rail plug, seat rail guide tips, and spring catch. Choose a level surface and roll the chair. If the chair veers off to one side more than 1 foot as it moves forward 10 feet, check the frame for damage. Inspect the fork and stem of the casters for bent condition.

- \hat{E} If fasteners are loose, tighten. If screws are missing, replace.
- \hat{E} If there are burrs on the screwheads, file or sand burrs.
- \hat{E} If center pin is worn, missing, or bent, replace or contact dealer.
- \hat{E} If rail guide tips or rail plugs are worn, replace.
- \hat{E} If rail posts are bent or cracked, replace.
- \hat{E} If frame has crack or loose weld, repair right away or return to dealer.
- \hat{E} If lifting straps are worn or broken, replace.
- \hat{E} If spring catch is broken, replace.

Section 3: Wheel and Caster Check

Instructions:

Watch for side play of the wheels and casters while the chair is moving. Strum the spokes to check that they have been evenly tightened. Inspect the hubcaps, handrims, axles, stem bearings, washers and spoke guard. Check if the tire is on the rim. Use a tire gauge to check tire pressure if the tire is air-filled. If it is low, look for leaks. Inspect solid tires for cracks or worn areas. Check the casters for free movement.

- Ê** If axle nut or bolt is loose, tighten.
- Ê** If bearings, nuts, or washers are missing or worn, replace. If spoke guard is worn, replace.
- Ê** If wheel spokes have uneven tightness, tighten evenly around wheel.
- Ê** If edges of handrims or attaching hardware are rough, file or sand them.
- Ê** If handrim is loose, attach securely. If rivets on handrim are loose, contact dealer.
- Ê** If rubber tips are missing or worn, replace.
- Ê** If fork or stem bearing is worn or bent, replace.
- Ê** If felt washer or string guard is worn or missing, replace.
- Ê** If casters are worn, cracked or uneven, replace.
- Ê** If casters do not move freely because of dirt and grime, remove and clean.
- Ê** If air-filled tire is soft, inflate until firm and at the pressure recommended on side of tire. Repair leaks.
- Ê** If solid tire is cracked or worn, replace.

Section 4: Brake Check

Instructions:

The tires must be filled to the correct pressure before checking brakes. Lock and unlock the brakes. Check if the brakes engage the tire 1/8 inch when locked and if they hold the chair in place. Check if the brake handles have rubber tips and inspect the latch and lever for wear.

- Ê** If brake is loose, tighten. If brake cannot be tightened, replace.
- Ê** If brake cannot be made to hold chair, change position of brake on frame tubing.
- Ê** If lever or latch is worn, replace.
- Ê** If rubber tip on brake end is worn or missing, replace or change when adding brake extension.

Section 5: Armrest Check

Instructions: Check both armrests for padding, sharp edges, screws which stick out, and cracks or tears in cover. Check if the armrests are secure and all fasteners are tight. Check if the front and back posts fit into the frame.

- If armrests wobble, tighten screws.
- If cover is cracked, replace.
- If armrests have sharp edges, file or sand.
- If screws stick out through padding, replace.
- If front or back posts do not fit into frame, repair or replace.

Section 6: Seat and Back Upholstery Check

Instructions: Inspect the upholstery for cracks, tears and sagging. Check for missing hardware.

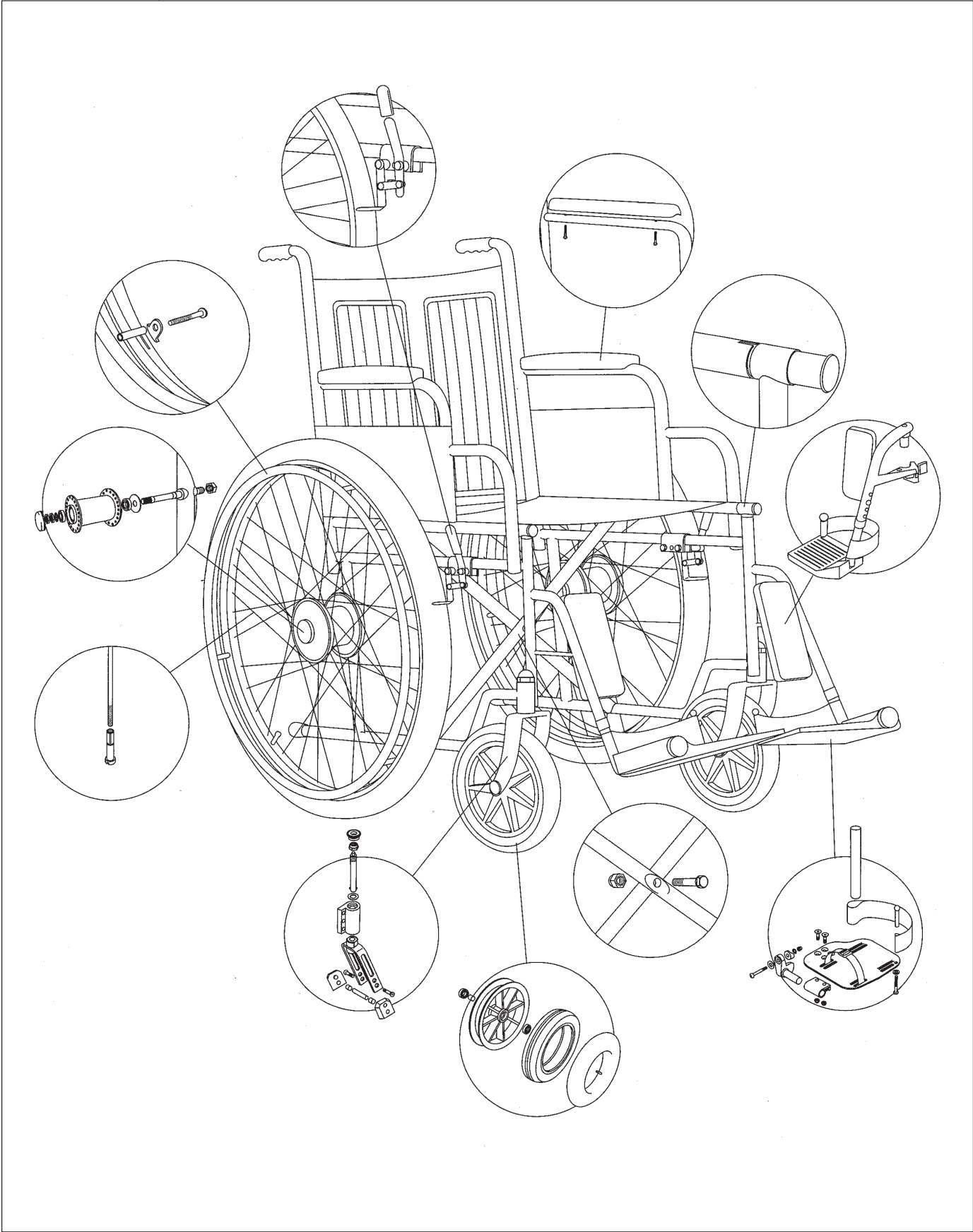
- If hardware is loose or missing, tighten or replace.
- If seat or back upholstery is cracked or torn, replace.
- If back upholstery sags, contact Fall Prevention Therapist for instructions.

Section 7: Footrest and Legrest Check

Instructions: Check the distance the footrest is away from the floor. Check if the spring holds the foot plate in all directions. Lock the legrest. Check if the length-adjustment hardware is secure. Inspect the legrest panels and straps for sharp edges, splits, or fraying. Inspect the heel loops for tears or fraying.

- If lock for legrest does not adjust or is not secure, replace.
- If fasteners are loose, tighten.
- If edges are sharp, file or sand.
- If leg panel is cracked, split or frayed, replace.
- If nut to length adjustment hardware is loose or missing, replace.
- If bumper tips on front extensions of legrest bar are missing, replace.
- If heel loops on foot plate are worn, frayed or missing, replace.
- If spring of foot plate is missing or worn, replace.

Signature: _____



Appendix **C**

List of Appendix Items

1. Case History
2. Discussion Guide for Inservice # 1
3. Discussion Guide for Inservice # 2
4. Illustration of Fall Response

Falls Management Program Case Study

Mrs. P is a 93 year old white female admitted to your facility. She has had Alzheimer's disease for approximately 7 years and has been cared for by her husband and daughter at home. Her other past medical problems include: diabetes mellitus, hypertension, osteoarthritis, depression and a history of falls. Over the past several months, her family has found it increasingly difficult to care for her at home due to worsening agitation and insomnia.

Mrs. P has been at your facility for 3 days and has slept only 3 hours per night. She is extremely restless and anxious and often cries out for her husband. She constantly wants to get up from her chair or bed. Mrs. P was found on the floor by staff at 8 pm and apparently had fallen onto her buttocks; no injuries were found. Mrs. P was assisted to bed for the night. A waist restraint was placed on her and all four side rails were positioned in the upright position.

Later that evening Mrs. P was found on the floor. Her undergarments were soiled and she continued to cry out for her husband. She was assessed to have no injuries resulting from the fall. The nurse obtained an order for a sedative from the physician and Ativan 1.0 mg was given at 1 am. She was put back to bed and finally went to sleep for the night.

Discussion Guide, Inservice #1

What are Mrs. P's known fall risk factors?

Environment/equipment (extrinsic factors)

1. New admission – unfamiliar surroundings
2. Physical restraint – increases risk of serious injury
3. Full side rails – increase risk of serious injury

Medical conditions (intrinsic factors)

1. History of falls at home
2. Dementia
3. Depression

Unsafe behaviors

1. Trying to stand, transfer or walk alone unsafely
2. Tries to climb over bed rails or get out of bed alone unsafely

What are possible fall risk factors that need further evaluation?

Chronic conditions

1. Visual impairment due to aging and diabetes
2. Hypoglycemia/hyperglycemia resulting from diabetes
3. Loss of sensation in feet due to diabetic neuropathy
4. Pain, contractures or decreased ROM resulting from osteoarthritis
5. Urinary urgency and/or frequency
6. Additional gait and mobility problems

Medications

1. Postural hypotension as a result of cardiovascular medications
2. Side effects of antidepressants
3. Side effects of sedative/hypnotics

Acute illness

1. Possible systemic illness

Environment/Equipment

1. Unlocked bed wheels or unstable furniture

Discussion Guide, Inservice #2

What interventions to reduce Mrs. P's fall risk are important to consider?

1. Environmental and equipment

- Reduce clutter, keep clear pathways
- Provide adequate lighting at night
- Add labels/pictures to help her locate the bathroom and her room
- Provide frequent reassurance and orientation to facility
- Use hip protectors

2. Gait and mobility

- Screen resident's ability to transfer and ambulate safely to determine level of staff assistance needed and if further evaluation is necessary
- Based on screen, order an evaluation by OT/PT

3. Medications

- Ask primary care provider to review all medications, their possible interactions and side effects
- Ask consultant pharmacist to review medications
- Implement sleep hygiene measures immediately (no caffeine after 4 pm, limit daytime napping, provide comfort measures at bedtime, offer food or snack, begin an individualized toileting program at night, allow her to be up at night with supervision)

4. Anxiety, agitation and unsafe behavior

- Implement general behavior management strategies
- Move closer to nurses station
- Use adequate night light
- Leave door open at night for regular checking by staff who walk past
- Provide frequent reminders about call bell
- Conduct trial use of a change in position/pressure alarm or a room sensor
- Use a low bed and mat
- Provide comfort measures; reassure frequently
- Learn about her culture, likes and dislikes and religious preference
- Know at least three things that bring her comfort
- Develop a toileting schedule and include an evaluation of bathroom safety and possible bedside commode use

5. Pain management

- Evaluate resident's pain level using appropriate pain scale for residents with dementia
- Give a trial analgesic if appropriate

Fall Response

Step One – Evaluate and monitor resident for 24–72 hours after the fall.

A. Immediate evaluation of Mrs. P after each fall

1. Complete assessment of the resident's condition and examination for:
 - M**usculoskeletal injuries
 - H**ead and neck injuries
 - M**ental changes
 - C**hanges in level of consciousness
2. Vital signs
3. Documentation of neurologic signs since the resident was found on floor
4. Postural vital signs since the resident is on cardiovascular medications for hypertension and has a history of frequent falls
5. Blood glucose level since the resident has a diagnosis of diabetes

B. Sample of initial nurses note using SOAP and occurrence based documentation methods

4/1/04 11 pm

Example 1-SOAP

S: Mrs. P was found on the floor in her room at 8 pm this evening. Resident states “I was needing to use the restroom.” It has been reported that Mrs. P has been agitated and restless off and on since admission and has been showing other signs of unsafe behavior-attempting to transfer without staff assistance, getting out of bed at night with disturbed sleeping patterns.

O: Vital signs-100/60, 66, 20, 98.6.

Blood glucose=70, given Orange Juice and two packets of sugar, blood glucose=100 ½ hour later. Pulse O_x= 98%.

Postural BP: standing at 1 minute 90/60, 80. No evidence of orthostatic hypotension at this time.

Resident in her room alone at time of incident, attempting to get up out of chair unassisted-wants to use bathroom. Gait unsteady and needs the assistance of one person for transfers. Resident ambulates in regular socks.

Dr. Roberts notified at 8:30 pm. Mrs. Mary Taylor, resident's daughter, was notified by telephone at 9 pm. Resident's status and immediate measures taken were explained to daughter. Daughter was reminded of her mother's care plan conference on Friday.

A: Sleep-rest pattern disturbance

Altered tissue perfusion

Altered anxiety level

Altered change in perception of reality

P: To be determined based on further assessment and interdisciplinary evaluation.

4/01/04 11 pm

Example 2-Occurrence based

Mrs. P was found on the floor in her room at 8:00pm this evening. Resident states "I was needing to use the restroom." It has been reported that Mrs. P has been agitated and restless off and on since admission and has been showing signs of unsafe behavior-attempting to transfer without staff assistance, getting out of bed at night with disturbed sleeping patterns.

Vital signs-100/60, 66, 20, 98.6, Blood glucose=70, Orange juice and two packets of sugar given, blood glucose=100, ½ hour later. Pulse Ox=98%.

Postural BP: standing at 1 minute 90/60, 80. No evidence of orthostatic hypotension at this time. Resident in her room alone at time of fall, attempting to get up out of chair unassisted-wants to use bathroom. Gait slightly unsteady and needs the assistance of one person for transfers. Resident ambulates in regular socks.

Dr. Roberts notified at 8:30pm. Mrs. Mary Taylor, resident's daughter, was notified by telephone at 9:00pm. Resident's status and immediate measures taken were explained to daughter. Daughter was reminded of her mother's care plan conference on Friday.

Interventions to be determined based on further assessment and interdisciplinary evaluation.

C. Sample of documentation q shift X 72 hours or until stable using both SOAP and occurrence based documentation

4/2/04 11pm

Example 1-SOAP

S: Mrs. P has no evidence of injury resulting from her two falls on 4/1/04 at this time. Resident does not complain of pain and there is no evidence of grimacing or pain upon movement. She has had no more falls. She is restless and agitated, especially at night.

O: Vital signs-100/60, 80, 20, 98.6. Blood glucose=80

A: Sleep-rest pattern disturbance
Altered anxiety level
Altered change in perception of reality

P: Increase staff surveillance of resident-monitor resident every 30 minutes, toilet every 2 hours or more frequently, ensure resident wears non-skid socks, use position change alarm while resident is up in chair or in bed. Other interventions to be determined based on further assessment and interdisciplinary evaluation.

4/2/04 11pm

Example 2 – Occurrence based

Mrs. P has no evidence of injury resulting from her two falls on 4/1/04 at this time. Resident does not complain of pain and there is no evidence of grimacing or pain upon movement. She has had no more falls. She is restless and agitated, especially at night.

VS-100/60, 80, 20, 98.6. Blood glucose=80.

Falls Assessment completed and discussed with falls team and family. Staff to increase surveillance of resident-monitor patient every 30 minutes, toilet every 2 hours or more frequently, ensure resident wears non-skid socks and use position change alarm while resident is up in chair or in bed. Other interventions to be determined based on further assessment and interdisciplinary evaluation.

Step Two—Investigate Fall

Mrs. P had two falls within 24 hours after recently being admitted to the facility.

1. What questions should be asked to uncover clues as to why Mrs. P is falling?
2. What was the response of the staff member who found her?
3. Were clues at the time of the fall observed or ignored?

Environmental clues:

Where was Mrs. P lying? What was she wearing on her feet? What clothes was she wearing? Was there anything next to her? What direction was she going? Was there enough light for her to see? Where was the call light?

Equipment clues:

Was the bed locked into stable position? Where was her chair? Were any assistive devices present? After the second fall, where was the waist restraint? Were the side rails up or down? Try to determine how she got out of the bed in spite of the restraint and bed rails.

Resident's condition:

Was she wet or soiled? Was she confused or agitated? Was she in pain? What was her agenda? What did Mrs. P say happened? When was the last time she had been taken to the bathroom? When was her last food intake?

Step Three—Record Circumstances, Patient Outcome and Staff Response

A Tracking Record for Improving Patient Safety (TRIPS) should be completed by the nurse in charge within 24 hours of Mrs. P's falls. A separate TRIPS form should be completed for each fall. See the sample TRIPS form.

Step Four—FAX Alert to Primary Care Provider

If the resident is already in the Falls Management Program, the FAX Alert should be sent to the primary care provider. See the sample FAX Alert.

If the resident is not already in the Falls Management Program, do not send a FAX Alert and enter the resident into the Falls Management Program. Communication to the resident's primary care provider will occur during the Falls Assessment process.

Step Five—Implement Immediate Intervention

Any one of the following would be appropriate as immediate interventions within the first 24 hours for Mrs. P.

1. Increase staff surveillance of resident—monitor patient frequently—q 30 minutes
2. Toilet q 2 hours.
3. Bring resident out to station at night when she is agitated and wants to get out of the bed.
Offer a snack and provide reassurance.
4. Use a position change alarm while resident is up in the chair or is in the bed.
5. Dress the resident with the blue canvas shoes or white slippers when she is up. Use non-skid socks when she is in bed during the night or while napping.
6. Use a low bed and place a mat beside the bed at night.

Step Six—Complete Falls Assessment

A Falls Assessment should be completed by the nurse along with a Gait and Mobility Assessment and the Unsafe Behavior Worksheet. The 3-page fax should be sent to the primary care provider and the return orders should be received. The nurse should complete any orders and make the appropriate referrals.

See the sample Falls Assessment.

Step Seven—Develop Plan of Care

Until a Falls Assessment is completed for Mrs. P, an interim plan of care should be used.

- Close observation and increased supervision
- Frequent orientation to room, bathroom and facility
- Medication review
- Use of safe footwear
- Staff assistance to toilet or bedside commode
- Use of monitoring devices
- Use of pressure, position alarm
- Use of hip protectors
- No physical restraint use
- Use of ½ side rail as enabler

Behavior management strategies will be particularly important for staff to use with Mrs. P because she has Alzheimer's disease and is confused, agitated and restless with unsafe behaviors. Particular emphasis should be on using a calm approach, simplifying the environment, using distraction when necessary, and providing comfort measures. It is important to determine at least three things that bring Mrs. P comfort. An effort should be made to talk with her daughter and husband to discover what aspects of Mrs. P's home environment, culture, spirituality and work experience may be used to enhance her adjustment to the facility. Activities staff should offer appropriate daily activities for Mrs. P.

As the Falls Assessment is completed and recommendations are received from the primary care provider, therapist and any other health care professionals, the nurse can select specific tasks on the Fall Interventions Plan. Input from direct care staff as well as family members should be used to individualize the interventions.

See the sample Fall Interventions Plan.

Step Eight—Monitor Implementation

The nurse should monitor staff implementation of the interventions checked on the Fall Interventions Plan and record their effectiveness and any changes on the Fall Interventions Monitor. The resident response should be monitored and used to determine effective approaches.

See the sample Fall Interventions Monitor



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Falls Assessment

Resident: MRS. P

Room: 401-A

Directions: Use the instructions on the Falls Assessment Cue Sheet to assess the resident in the five areas listed in the first column. Put a check beside each risk factor present for this resident. If the resident does not have a risk factor, put a check beside N/A. In the second column, check when the primary care provider report is faxed and orders are received and when the resident is discussed in the interdisciplinary team meeting. Check all appropriate evaluations and referrals. Once the assessment is complete, proceed to the Fall Interventions Plan and select specific individualized interventions for each risk category identified for this resident.

RISK FACTORS

- INTERDISCIPLINARY ASSESSMENTS**
- Primary Care Provider Report faxed
 - Primary Care Provider Orders received
 - Discussed in falls team meeting

- Medications**
- PAXIL*
ZOLOFTE
ATIVAN
- Antipsychotics
 - Antidepressants
 - Benzodiazepines
 - Sedative/hypnotics
 - Digoxin
 - N/A

- Medication review by consultant pharmacist
- Psychiatric evaluation

- Orthostatic Hypotension**
- Reduction of ≥ 20 mm Hg in systolic pressure 1 minute after change in position from sitting to standing
- Sitting BP: ___/___ Standing BP: ___/___ N/A

- Review cardiovascular medications

- Vision**
- Stumbles and trips
 - Difficulty finding objects or detecting changes in floor surfaces
 - N/A

- Optometrist evaluation
- Ophthalmologist referral

- Mobility**
- Unsafe during the Get Up and Go Test
 - Unable to transfer on and off toilet, bed or chair safely
 - Unsafe wheelchair seating
 - N/A

- OT consultation
- PT consultation

- Unsafe Behaviors**
- Tries to stand, transfer or walk alone unsafely
 - Tries to climb over bed rails or get out of bed alone unsafely
 - Walks or paces alone when too tired to be safe
 - Propels or walks alone in unsafe areas
 - N/A

- Behavioral assessment
- Evaluation of restraint use

Signature: Susan Brown LPN

Date Completed: 4/3/04



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Mobility and Transfer Assessment

Resident Name: MRS. P. Unit/Room: 401-A

The Mobility and Transfer Assessment is a 3-step process used to screen for problems related to balance, gait and transfer. During the assessment, the resident should use a cane, walker or wheelchair if she or he normally does so. The nurse should observe the resident's safety during ambulation using the Get Up and Go Test and during transfer in and out of bed, on and off the toilet and in and out of the lounge chair when one is used by the resident. The nurse should assess the resident's wheelchair for proper fit and positioning.

Step One: Put a check by the level of assistance needed by the resident in order to be safe during ambulation, bed transfer, toilet transfer and chair transfer.

Step Two: Put a check by those environmental adjustments needed for safety during ambulation or transfer.

Step Three: Complete the Wheelchair Screen. Put a check by each needed safety improvement.

For instructions to the Get Up and Go Test and Wheelchair Screen, see the Falls Assessment Cue Sheet.

	Get Up and Go Test	Bed Transfer	Toilet transfer	Chair transfer
1. Level of Assistance				
Safe independent				
Safe with 1 person assist		✓	✓	✓
Safe with 2 person assist				
PT referral	✓			
2. Environmental Adjustments				
Adjust height of bed/toilet/ lounge chair		Mark _____ inches from floor for bed height.		
Adjust handrail support		IN BATHROOM		
Use assistive device		? WALKER USE		
Adjust assistive device				
OT/PT referral		✓ FURTHER EVALUATION NECESSARY		
3. Wheelchair Screen				
Locate missing equipment				
Add labels to wheelchair and seating items				
Seat width needs adjustment				
Seat depth needs adjustment				
Seat height needs adjustment				
Armrest height needs adjustment				
Footrest(s) needs adjustment				
OT/PT Seating Assessment				

Signature: Susan Brown LPN Date: 4/3/04



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Unsafe Behavior Worksheet

Resident: MRS. P. Rm #: 401-A Date: 4/12/04

Step 1	Behavior stated clearly using action verbs	GETS UP FREQUENTLY, CLIMBS OUT OF BED AND TRIES TO AMBULATE UNSAFELY. APPEARS ANXIOUS AND FEARFUL.
Step 2	Relevant personal and medical history	MARRIED FOR 45 YEARS, MOTHER OF 3 CHILDREN AND 10 GRAND CHILDREN CATHOLIC, HOMEMAKER, GARDENER, HUSBAND LIVES AT HOME WITH DAUGHTER + IS
Step 3	<p>Circumstances</p> <p>Time</p> <p>Frequency</p> <p>Location</p> <p>Persons present</p> <p>Situation</p> <p>Motivation</p> <p>Feelings</p> <p>Agenda</p>	<p>UNABLE TO VISIT.</p> <p>11 PM - 4 AM</p> <p>3-4 TIME PER WEEK</p> <p>ROOM</p> <p>often alone</p> <p>dementia, new ENVIRONMENT</p> <p>SOMETIMES TO USE BATHROOM, ? PAIN</p> <p>fear, ANXIETY</p> <p>physical need to URINATE, MISSES</p> <p>USUAL ENVIRONMENT.</p>
Step 4	Past staff approaches and resident reactions	<p>LOW BED WITH MAT - HELPFUL</p> <p>POSITION ALARM - PARTIALLY EFFECTIVE</p> <p>STAFF GETS THERE 50% OF TIME BEFORE THE FALL.</p> <p>PAIN MEDICATIONS - responded well to</p> <p>PRESCRIBED ANALGESIC</p>
Step 5	New Interventions	<p>SHORTEN TIME INTERVAL FOR TOILETING SCHEDULE</p> <p>PROVIDE SNACK + ACTIVITY AT NIGHT.</p> <p>FIND AT LEAST 3 ACTIVITIES THAT INTEREST PATIENT.</p> <p>CONTINUE TO ASSESS FOR PAIN USING PAINSCALE FOR DEMENTIA PATIENTS</p>

Signature: SUSAN BROWN LPN



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The Falls Management Program

FAX ALERT

Facility: GREYSTONE MANOR & REHAB
 Address: 1254 MARTIN LANE
 City/State: Wilkes, TN 04321
 Telephone: (423) 403-4881
 Fax: (423) 403-3312

Date: 4 / 2 / 04

Physician/NP/PA: DR. TOM ROBERTS

Fax #: (423) 311-4054

Resident Name: MRS. P.

Unit/Room: 401-A

Your patient who is in the Falls Management Program fell on 4/1/04. It is this resident's 2 fall in the past 180 days.

Please consider reviewing the attached suggestions for known risk factors of falls and consider making appropriate recommendations.

Please call the Falls Nurse Coordinator if you have any questions about the incident or suggestions for our Falls Management Program. Thank you.

Falls Coordinator: SUSAN BROWN LPN

Phone number: (433) 403-4881

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The Falls Management Program

Primary Care Provider FAX Report and Orders

1. FAX COVER SHEET

Facility: GREYSTONE MANOR
 Address: 1254 MARTIN LANE
 City/State: WILKES, TN 04321
 Telephone: (423) 403-4881
 Fax: (423) 403-3321

Date: 4 / 3 / 04

Primary Care Provider: DR TOM ROBERTS

Fax #: (423) 311-4054

Resident Name: MRS. P.

Unit/Room: 401-A

This resident was identified in our Falls Management Program as having a high risk of falls, and underwent a *Falls Assessment* per our protocol. Attached are the following:

1. FALLS ASSESSMENT REPORT and suggestions for further assessment and/or intervention.
2. A form for you to FAX BACK ORDERS on which you can indicate those that you select for this resident.

Please review the FALLS ASSESSMENT REPORT and return the FAX BACK ORDERS form the next business day. Thank you.

Falls Coordinator: SUSAN BROWN LPN

Phone number: (423) 403-4881

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2. FALLS ASSESSMENT REPORT

Facility: GREYSTONE MANOR
 Address: 1254 MARTIN LANE
 City/State: WILKES, TN 04321
 Telephone: (423) 403-4881
 Fax: (423) 403-3312

Date: 4 / 3 / 09

Resident Name: MRS. P.

Findings: (X) = positive for this resident

Suggestions for further assessment and/or interventions

(X) Medications that could increase fall risk:

ATWAN 1 MG PRN
ZOLOFT 50MG QD
POXIL 40MG QD

- Review medications and consider changes if appropriate.
- Consider psychiatric evaluation if indicated to evaluate psychotropic meds
- Consider consultant pharmacist recommendations.

() Low vision

- Consider optometry or ophthalmology evaluation.

() Postural hypotension
≥20 mm Hg drop in systolic pressure with position change

- Review cardiovascular and diuretic medications.
- Consider blood work for BUN/Creatinine ratio.
- Consider TED hose.

(X) Unsafe gait, transfers, and/or wheelchair seating problems

- Consider OT/PT evaluation.



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3. FAX BACK ORDERS

Facility: GREYSTONE MANOR
 Address: 1254 MARTIN LANE
 City/State: WILKES, TN 04321
 Telephone: (423) 403-4881
 Fax: (423) 403-3312

Date: 4 / 4 / 04

Return by FAX to: SUSAN BROWN LPN

Fax #: (423) 403-3312

Resident Name: MRS. P

Unit/Room: 401-A

Please mark the orders that are appropriate for this resident with an (X) and sign at the bottom.

Medication changes (please specify)

D/C ATIVAN
↓ PAXIL TO 20MG QD

Psychiatric evaluation to evaluate psychotropic medications

Optometry evaluation

Ophthalmology consult

Blood for BUN and Creatinine

TED hose during the day

Physical or occupational therapy screen/evaluation of gait/balance/transfer/seating

Other orders:

Signature: T. Roberts, MD

Date: 4/4/04

(primary care provider)

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Fall Interventions Plan

Resident: MRS P.

Room: 401-A

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Directions: Check all interventions that apply.

RISK FACTOR	SELECTED INTERVENTIONS	RISK FACTOR	SELECTED INTERVENTIONS
Medications	<p>For changes in psychotropic meds:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Monitor and report changes in anxiety, sleep patterns, behavior, or mood <input type="checkbox"/> Monitor and report drug side effects <input checked="" type="checkbox"/> Behavior management strategies <input checked="" type="checkbox"/> Sleep hygiene measures <ul style="list-style-type: none"> <input checked="" type="checkbox"/> no caffeine after 4 pm <input checked="" type="checkbox"/> up at night with supervision, <input checked="" type="checkbox"/> comfort measures <input checked="" type="checkbox"/> pain management <input type="checkbox"/> regular exercise, limit napping <input type="checkbox"/> relaxing bed routine <input checked="" type="checkbox"/> individualized toileting at night <input checked="" type="checkbox"/> safe bathroom routine <p>For changes in digoxin:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Monitor apical heart rate; if < 50, notify PCP. 	Mobility	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Increase staff assistance <ul style="list-style-type: none"> <input type="checkbox"/> early morning <input checked="" type="checkbox"/> during all transfers <input type="checkbox"/> other: _____ <input checked="" type="checkbox"/> to and from toilet <input type="checkbox"/> during ambulation <input type="checkbox"/> Correct height of bed, toilet or chair <ul style="list-style-type: none"> <input type="checkbox"/> Keep bed at correct height as marked on footrest or wall <input type="checkbox"/> Use raised toilet seat <input type="checkbox"/> Use cushion in lounge chair <input type="checkbox"/> Lower lounge chair <input checked="" type="checkbox"/> Increase bathroom safety <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Use adequate handrails support <input checked="" type="checkbox"/> Use easy to manage clothing <input type="checkbox"/> Promote wheelchair safety <ul style="list-style-type: none"> <input type="checkbox"/> Use individualized, labeled wheelchair <input type="checkbox"/> Check brakes and instruct pt on use <input type="checkbox"/> Seating Modifications <ul style="list-style-type: none"> <input type="checkbox"/> Use all prescribed seating items <input type="checkbox"/> Other: _____
Orthostatic Hypotension	<ul style="list-style-type: none"> <input type="checkbox"/> Low blood pressure precautions <ul style="list-style-type: none"> <input type="checkbox"/> instruct pt to change position slowly <input type="checkbox"/> instruct pt to sit on edge of bed and dangle feet before standing <input type="checkbox"/> instruct pt to use dorsiflexion before standing <input type="checkbox"/> instruct pt not to tilt head backwards <input type="checkbox"/> provide staff assistance in early AM and after meals <input type="checkbox"/> If medication change: <ul style="list-style-type: none"> <input type="checkbox"/> take postural VS q day X 3 days. If systolic drops ≥ 20 mm Hg on day 3, notify PCP <input type="checkbox"/> Promote adequate hydration <input type="checkbox"/> TED hose <input type="checkbox"/> Other: _____ 	Unsafe Behavior	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Behavior management strategies <input checked="" type="checkbox"/> Increase assistance and surveillance <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Position or pressure change alarm <input type="checkbox"/> Movement sensor <input checked="" type="checkbox"/> Locate patient near station <input type="checkbox"/> Intercom <input checked="" type="checkbox"/> Toilet at regular intervals <input checked="" type="checkbox"/> Increase activities involvement <input type="checkbox"/> Other: _____ <input checked="" type="checkbox"/> Reduce risk of injury <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Low bed <input checked="" type="checkbox"/> Floor mat <input checked="" type="checkbox"/> Helmet, wrist guards, hip protectors <input type="checkbox"/> Non-slip mat <input type="checkbox"/> Non-skid strips or non-skid rug <input checked="" type="checkbox"/> Non-skid socks <input checked="" type="checkbox"/> Lower or remove side rails <input checked="" type="checkbox"/> Increase comfort <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Pain management <input type="checkbox"/> Frequent rest periods <input type="checkbox"/> Recliner or chair with deep seat <input type="checkbox"/> Rocking chair <input type="checkbox"/> Wheelchair seating items <input type="checkbox"/> Exercise <input type="checkbox"/> Cradle mattress <input checked="" type="checkbox"/> Sheepskin, air mattress or pillows <input type="checkbox"/> Other: _____
Vision	<ul style="list-style-type: none"> <input type="checkbox"/> Low vision precautions <ul style="list-style-type: none"> <input type="checkbox"/> use maximum wattage allowed by fixture <input type="checkbox"/> increase lighting in room <input type="checkbox"/> use adequate lighting at night <input type="checkbox"/> add high contrast strips on stairs, curbs, etc. <input type="checkbox"/> use signs with large letters or pictures <input type="checkbox"/> use high contrast to offset visual targets <input type="checkbox"/> reduce glare <input type="checkbox"/> Corrective lenses <ul style="list-style-type: none"> <input type="checkbox"/> Keep eyewear within easy reach at all times <input type="checkbox"/> Encourage patient to wear glasses <input type="checkbox"/> Other: _____ 		

Signature: SUSAN BROWN

Date: 4/19/07



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Fall Interventions Monitor

Resident: MRS. P. Room: 401-A

Directions: Monitor staff implementation and effectiveness of the Fall Intervention Plan each week. Revise interventions as needed and record below. Use one sheet for every 2 weeks..

	DATE: <u>4/12/04</u>		DATE: <u>4/19/04</u>
Medications	Are interventions effective: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Changes: Comments: <u>PT ADJUSTING TO NEW ENVIRONMENT AGITATION DECREASED</u>	Medications	Are interventions effective: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Changes: Comments: <u>PT. WITH OCCASIONAL PERIODS OF AGITATION</u>
Orthostatic Hypotension	Are interventions effective: <input type="checkbox"/> YES <input type="checkbox"/> NO Changes: Comments: <u>NA</u>	Orthostatic Hypotension	Are interventions effective: <input type="checkbox"/> YES <input type="checkbox"/> NO Changes: Comments: <u>NA</u>
Vision	Are interventions effective: <input type="checkbox"/> YES <input type="checkbox"/> NO Changes: Comments: <u>NA</u>	Vision	Are interventions effective: <input type="checkbox"/> YES <input type="checkbox"/> NO Changes: Comments: <u>NA</u>
Mobility	Are interventions effective: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Changes: <u>STAFF</u> Comments: <u>ASSITING WITH ALL TRANSFERS</u>	Mobility	Are interventions effective: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Changes: Comments:
Unsafe Behavior	Are interventions effective: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Changes: Comments: <u>PT. NEEDS TOILETING 1-1/2 HRS INSTEAD OF 2 HRS.</u>	Unsafe Behavior	Are interventions effective: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Changes: <u>MEDICATE WITH ANALGESIC AS ORDERED.</u> Comments: <u>MONITOR AGITATION IN CONJUNCTION WITH ANALGESIC EFFECTIVENESS</u>

Signature: SUSAN BROWN LPN Date: 4/19/04

Appendix **D**

Fall Engineer Instructions

Falls Engineer Instructions

The Falls Management Program is designed to prevent falls and injuries in nursing facilities. This is done by trying to make all residents' rooms and equipment as safe as possible and by correcting specific safety problems of high-risk residents. The Falls Engineer plays an important part in all aspects of the program.

The Falls Engineer makes changes and repairs to residents' rooms and equipment throughout the facility to improve safety. The Falls Nurse Coordinator will give you the *Engineer Inspection List* and the equipment inspection forms. The *Engineer Inspection List* is a list of changes and repairs to make to the resident's living space. The equipment inspection forms will guide you to inspect, repair and adapt residents' equipment.

For high-risk residents, the Falls Therapist or Nurse Coordinator may also ask you to make other changes. These changes will help the resident to be safer when walking, propelling a wheelchair, transferring and during unsafe behaviors.

All of the tasks, the tools and supplies you will need are explained in this section. Supplies and sources of equipment are listed in Appendix A.

In summary, the Falls Engineer has three assignments:

1. Make changes or repairs listed on the *Engineer Inspection List*.
2. Complete the equipment inspection forms.
3. Make other changes for high-risk residents as requested by the Falls Team.

1. Make Changes or Repairs Listed on the Engineer Inspection List

The *Engineer Inspection List* is a list of changes and repairs to make to residents' rooms and equipment. The Falls Nurse Coordinator will give it to you and explain each task. Each list will include the tasks you are being asked to do for a group of 14 beds. The Falls Nurse Coordinator or Nursing Assistant will put a check beside the tasks you need to do for each bed. The size of your nursing facility will determine how many lists you will be given. Because most residents will have at least one repair or change to their bedroom or bathroom, there will be one or more tasks checked for each bed.

UNIT:		DATE:	ROOM NUMBER:						
SIGNATURE:		BED:							
1: Paths	1. Make tiebacks for divider curtains.								
	2. Tie electrical cords out of path (TV, phone, heater).								
2: Furniture	3. Clean, repair or replace broken bed wheel locks.								
	4. Fix unstable furniture.								
	5. Secure loose bathroom handrails.								
	6. Replace missing rubber tips on bedside commode.								
	7. Replace missing rubber tips on handrails that rest on floor.								
	8. Secure raised toilet seat to commode.								
4: Lighting	9. Replace burned out or flickering bulbs. Use max wattage.								
	10. Repair broken room lights or call lights.								
	11. Replace broken call light cords or lengthen cords.								
5: Floor	12. Repair or replace floor covering.								
	13. Replace high, broken or missing thresholds.								
	14. Add grading to thresholds between room and bathroom.								
6: Equipment	15. Inspect wheelchair (for all wheelchairs found).								
	16. Repair cane.								
	17. Repair walker.								

Figure 1 Engineer Inspection List

A list of all the possible tasks on the *Engineer Inspection List* is shown in Figure 1. The reason for the task, the supplies needed, and instructions to do each task follow.

TASK 1. Make tiebacks for divider curtains.

Reason: Pushing a curtain back can be hard for small, frail residents with poor balance. The purpose of a tieback is to clear the resident’s path.

Supplies: About 1 yard of ½–1 inch ribbon, a small metal hook.

Instructions: Screw the hook into the wall at a suitable height for staff to pull back the curtain. Tie the ribbon around the hook and allow ribbon lengths to hang so that they can be used to tie the curtain back. If the metal hook protrudes, place it high enough so that it will not injure the resident.

TASK 2. Tie electrical cords out of path.

Reason: Electrical cords should be kept out of the way so that the resident does not trip on them. This includes cords to the TV, telephone, oxygen tank, and heating/cooling units.

Supplies: Electrician's ties, plastic wrap around ties.

Instructions: Coil the cords out of the way and put electrical ties around the cords to secure them.

TASK 3. Clean, repair or replace broken bed wheel locks.

Reason: Locks on bed wheels or other locking mechanisms must hold the bed firmly in place so that it does not roll away when the resident gets in or out of bed. At least two of the wheels must have locks that work, one at the head of the bed and one at the foot on the alternate side. Many locks do not work because of dirt and grime. Others are broken and need to be replaced. If you make the bed stable by taking off wheels or moving the bed against the wall, you may violate fire codes. Check state and local codes.

Supplies: Denatured alcohol or degreaser, silicone spray or lithium grease, new bed wheel locks.

Instructions: If possible, remove wheel locks and clean them. Remove dirt with denatured alcohol or any type of degreaser. Dry and then lubricate them with silicone or white lithium grease. Do not use WD-40 to lubricate locks because it does not last. Put the wheels back on the bed and see if the locks hold it in place. If not, order new wheel locks from a local vendor or from one of the sources in this section. To order wheels with butterfly locks (Figure 2), measure the caster wheel, stem diameter, and stem length. A common size is a 3 inch caster wheel with a stem that is 7/16 inch thick and 3 5/8 inches long. Some wheels have leg lock pads (Figure 3) with a leg lock assembly. If they cannot be cleaned and repaired, order new ones from a local vendor, the bed manufacturer or from a source in Appendix A.

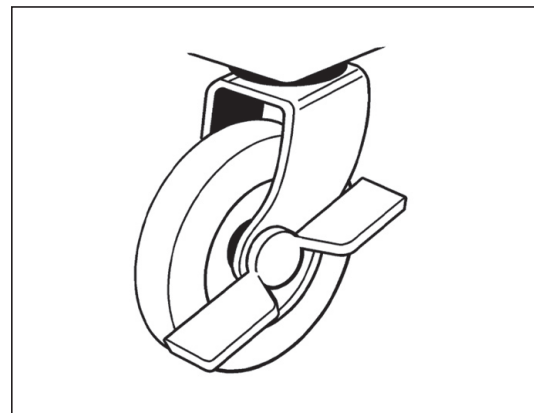


Figure 2 Butterfly Lock

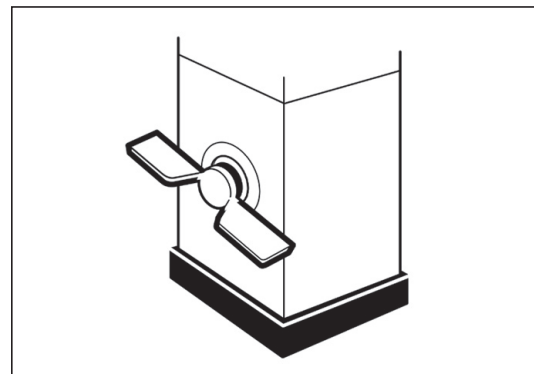


Figure 3 Leg Lock Pad



Figure 4 Bedside Commode

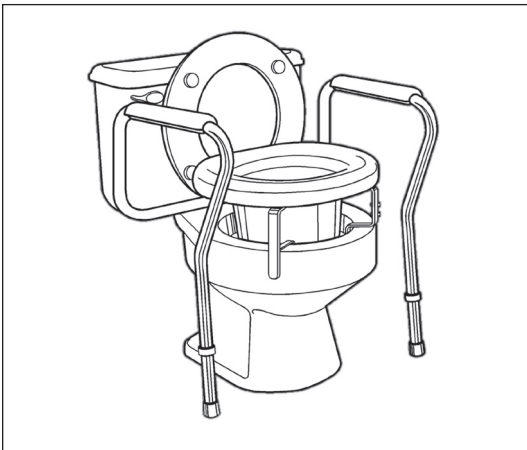


Figure 5 Commode Handrails that Reach to Floor

TASK 4. Fix unstable furniture.

Reason: Residents often lean on furniture for support while walking. If the furniture is unstable it may tip over or rock causing the resident to lose her balance.

Supplies: Scraps of lumber cut into small wedges, cardboard, glue.

Instructions: Place wedge underneath the short leg of the furniture and glue into place.

TASK 5. Secure loose bathroom handrails.

Reason: Residents need support when getting on and off the commode. The handrail must be secure to support the resident's weight.

Supplies: Screws, bolts, screwdriver.

Instructions: Replace missing screws and bolts. Replace any broken hardware. Check to be certain the handrail is strong enough to support the resident's weight.

TASK 6. Replace missing rubber tips on bedside commode.

Reason: Rubber tips help keep the bedside commode (Figure 4) from sliding or tilting during transfer.

Supplies: Measure diameter of the commode leg to get the right size rubber tip. Local hardware stores carry them in different sizes.

Instructions: Replace missing or uneven rubber tips.

TASK 7. Replace missing rubber tips on handrails that rest on the floor.

Reason: Some handrails reach to the floor (Figure 5) and have rubber tips. If the tips are missing, the handrail may not be stable.

Supplies: Measure the diameter of the leg of the handrail to get the right size rubber tip. Local hardware stores carry them in different sizes.

Instructions: Replace missing or uneven rubber tips.

TASK 8. Secure raised toilet seat to commode (Figure 6).

Reason: Some raised toilet seats become loose over time. If a toilet seat is loose or tilts when the resident transfers on and off the commode, the resident may lose her balance.

Supplies: Screws, bolts, screwdriver.

Instructions: Replace missing screws, bolts and any other hardware that is broken or missing. If the raised toilet seat cannot be made secure, ask the nurse or occupational therapist to order a new one. Generally, raised toilet seats with steel fasteners are recommended because they can be secured firmly to the commode. To order new raised toilet seats, refer to sources in Appendix A.

TASK 9. Replace burned out or flickering bulbs.

Use maximum wattage.

Reason: Residents need 2–3 times as much light as younger adults to see clearly. Burned-out bulbs or ones that flicker can prevent the resident from seeing well.

Supplies: New light bulbs.

Instructions: Replace bulbs in resident’s rooms, night lights, halls, and bathrooms. Use bulbs with the full recommended wattage.

TASK 10. Repair broken room lights or call lights.

Reason: Residents must be able to see during the daytime and at night. They must be able to call the nurse for help when needed.

Supplies: New fixtures or parts.

Instructions: Repair or replace light fixtures and call lights.

TASK 11. Replace broken call light cords or lengthen cords in bedroom and bathroom.

Reason: The resident must be able to reach the call light button or cord when seated on the commode or while in bed. If the resident cannot reach it, she may try to get up by herself or lean over and fall.

Supplies: Nylon cord, small rubber ball if cord needs a new end for resident to grab.

Instructions: Tie the cord to the bell. If using a ball, make a hole through the ball and thread the cord through it. Knot or tie the cord so that the ball stays in place.



Figure 6 Raised Toilet Seat

TASK 12. Repair or replace floor covering.

Reason: Elderly persons may not lift their feet high enough to avoid curled carpet edges or changes in floor surfaces.

Supplies: Glue, nails, caulking, cement.

Instructions: Glue or nail any loose edges of carpet. Replace missing tiles or linoleum pieces.

TASK 13. Replace missing or broken thresholds.

Reason: Elderly persons may not lift their feet high enough to avoid tripping on changes in floor surfaces.

Supplies: Metal or wooden thresholds from hardware store.

Instructions: Add a low threshold or strip of metal or wood to cover an open seam in the floor.

TASK 14. Add grading to thresholds between room and bathroom.

Reason: Many residents shuffle their feet when they walk. If a resident shuffles over a raised threshold, she may trip. Also, a resident may not be able to roll a wheelchair over a high threshold. Thresholds should be low or have grading on both sides.

Supplies: Cement or other material for grading, tools to remove a high threshold.

Instructions: Add a slope of cement to either side of a high threshold or remove the threshold.

2. Complete the Equipment Inspection Forms.

There are three equipment inspections:

The Engineer Wheelchair Inspection

The Engineer Walker Inspection

The Engineer Cane Inspection

You will need to inspect all residents' wheelchairs in the facility. If the resident has a wheelchair, there will be a check beside "15. Inspect Wheelchair" on the *Engineer Inspection List*.

As part of the inspection of the resident's living space, the nurse or nursing assistant will look at each resident's cane or walker. If there are no problems, you will not be asked to inspect it. If there are problems, you are asked to inspect and repair it. There will be a check beside "16. Repair Cane" or "17. Repair Walker" on the *Engineer Inspection List* for each one.

The Falls Nurse Coordinator will give you an inspection form for all the wheelchairs, canes and walkers you need to inspect. Some residents may use more than one piece of equipment and will need more than one inspection done. Each inspection is explained below.

Engineer Wheelchair Inspection

The Falls Nurse Coordinator will give you an *Engineer Wheelchair Inspection* form for each resident who uses a wheelchair. Each resident will have her own form with name and room number at the top. The inspection form has seven parts. Read the instructions in each part. Look for each item on the chair that you are asked to check. If you need help or have questions, use the wheelchair picture to find the parts or contact the therapy department or the wheelchair dealer. Check the box beside each job which you think applies to the resident's wheelchair, then make repairs as directed. Write your initials beside the task when it is done.

Wheelchairs should have regular care and cleaning. Use the same *Engineer Wheelchair Inspection* form and repeat your inspection after six months to check the resident's wheelchair again. Add the date at the top of the form and make notes beside each task as needed.

A list of tools that you will need to repair most wheelchairs is given in Figure 7.

-
- spoke wrench
 - regular screwdriver
 - philips screwdriver
 - crescent wrench 8"
 - pliers
 - hammer
 - white lithium or teflon-based spray grease
 - bearing grease
 - chrome cleaner
 - tire pump, tire gauge
 - file, sandpaper
 - silicone spray
 - solvent
 - fine steel wool
 - wipe rags
 - vice grips

Figure 7 List of Tools for Wheelchair Maintenance and Repair

-
1. General cleaning and lubrication
 2. Frame check
 3. Wheel and caster check
 4. Brake check
 5. Armrest check
 6. Seat and back upholstery check
 7. Footrest and legrest check
-

Figure 8 Repairs for Wheelchairs

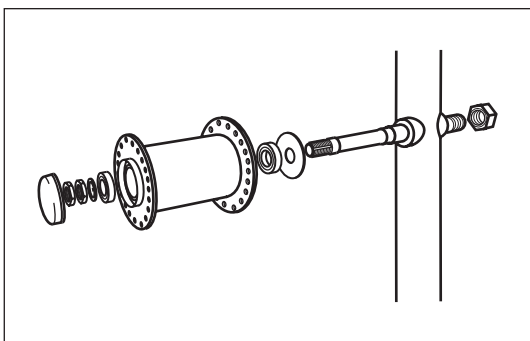


Figure 9 Axel/Hubcap/Stem Bearings

A list of changes and repairs which you may need to make is given in Figure 8. Each task is explained below.

TASK 1. General cleaning and lubrication.

Reason: The wheelchair must be clean and well lubricated for the joints and other moving parts to work well.

Supplies: Soap, water, rags, brush, fine steel wool, white lithium or teflon-based spray grease, silicone spray.

Instructions: Clean all parts of the chair with soap and water. If necessary, use steel wool to remove old grease and dirt. Wipe dry. Spray silicone on all dry joints. Use WD-40 for cleaning only. If the slide does not move smoothly when you fold the chair, use white lithium grease or silicone to lubricate the slide post and inside the slide tube. To do this, tip the chair back and put the lubricant into the slide tube from the bottom. Fold and unfold chair a few times to spread the grease or silicone. Never oil wheels or bearings of a wheelchair. Oil may wash out the grease of the bearings and cause damage. Bearings should be cleaned and repacked yearly. This is best done by a dealer. Peeling chrome or cracks in joints or on the frame may mean there is a broken weld which could cause the chair to break. Call the dealer to repair or replace it.

TASK 2. Frame check.

Reason: A sturdy frame is an important part of a safe wheelchair. The chair should move smoothly and hold its shape when the resident transfers in and out of it and propels it.

Supplies: Screws, bolts, screwdriver, file, sandpaper, order all other parts from dealer.

Instructions: Tighten all loose fasteners and replace missing screws. Check the center pin, rail guide tips, rail plug, and spring catch. Replace if worn, bent or cracked. Replace worn or broken lifting straps. Replace cracked or bent rail posts. File or sand burrs on screw heads. If the frame is cracked or has a loose weld, it should be discarded or returned to the dealer.

TASK 3. Wheel and caster check.

Reason: Wheels and front casters should roll smoothly without side play so that the resident can control the wheelchair when propelling it. A soft air-filled tire can cause uneven steering. Solid tires must be firm with no cracks or they may become loose and come off the

rim. Dirty casters may not move freely, which can cause the chair to stop or veer to one side. Loose handrims can make the resident lose control of the chair.

Supplies: File, rubber tips, pliers, screwdriver, spoke wrench, sandpaper, tire gauge, tire pump, order all other parts from dealer.

Instructions: 1) Check the axle nut and bolt, bearing, nuts, and washers (Figure 9). If the spoke guard is loose or worn, tighten or replace it. Tighten all hardware and replace any missing pieces. Replace or tighten all wheel spokes evenly around the wheel. File sharp edges. Replace missing or worn rubber tips. 2) To clean the caster axle area (Figure 10), remove the nut from the caster axle. Pull the axle out of the axle housing. Remove hair and dirt. Grease the axle. Replace the felt washer that covers the bearing before you put the axle and casters back on the chair. Replace worn or bent fork and stem. Replace the casters if they are cracked or uneven. If you need to adjust the caster fork swivel, remove the dust cap from the top of the caster stem. Tighten the stem nut so that the fork swivels freely but does not wiggle up and down. 3) If the tire is air-filled and low, fill it while the resident is out of the chair. Fill to the pressure recommended on the side of the tire. If the tire is solid and is cracked or worn, replace it. 4) To adjust the wheel, remove the hubcap from outer end of the axle. Loosen the axle nut on the inside of the wheel. Tighten the axle by turning the head of the axle clockwise. Tighten until side play stops, but not so tight as to restrict free turning of the wheel. Tighten the axle nut. Hold the axle firmly in place with one wrench and tighten nut with the other. Lift the wheel off the ground so that it can spin freely while you look for side play. If the axle is too loose, the wheel will wobble. You may need to replace wheel bearings if this is the case. If the axle is too tight, the wheel will stop spinning quickly. It should coast slowly to a stop. Replace hubcap. 5) With brakes locked, tug on each handrim to see if it feels solid. If it wiggles, see which points are loose. Tighten the bolts that hold the handrim to the clip. If the handrim is loose because rivets holding the clips are loose, contact the dealer. If bolts are loose and go into the spokes, it is unsafe and the bolts should be replaced.

Task 4. Brake check (Figure 11).

Reason: Brakes that do not lock the chair securely into place are very common in nursing facilities. Brake repair is one of the most important things that can be done to prevent falls. A resident is likely to fall if the chair moves during transfer. Brakes must lock the wheel-chair firmly into position. The lock must bite into the tire 1/8 inch when engaged.

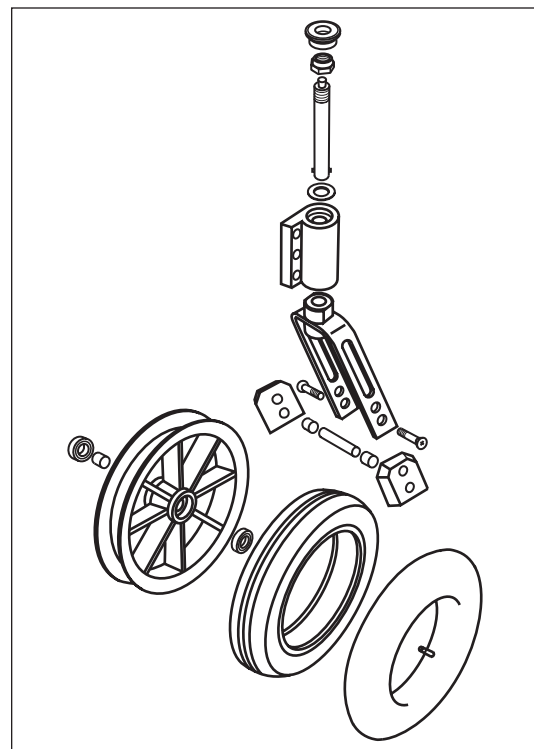


Figure 10 Caster Axle Area

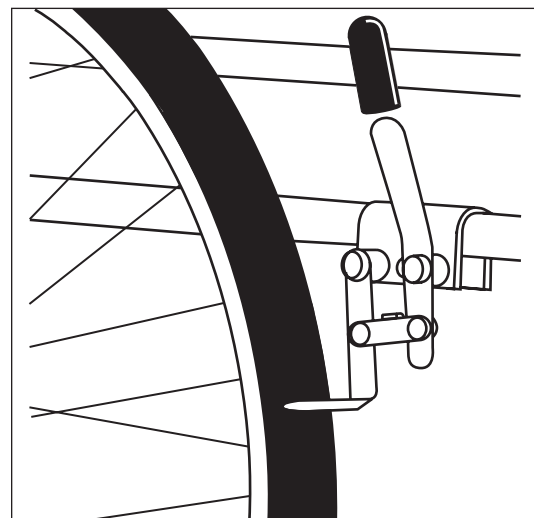


Figure 11 Brake Lever

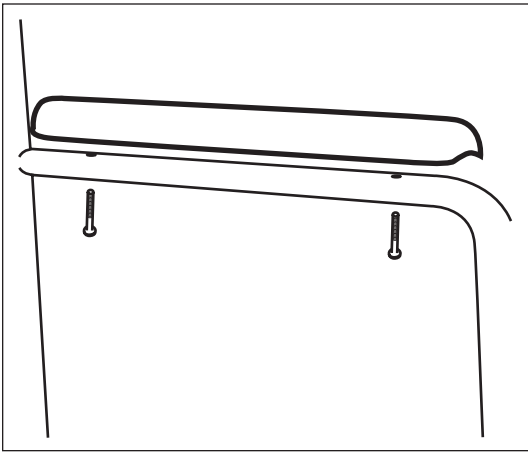


Figure 12 Armrest

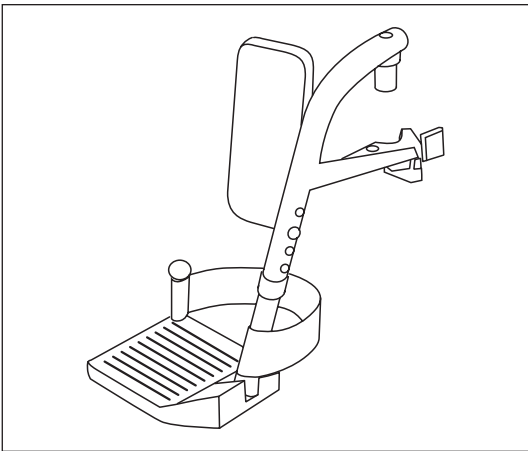


Figure 13a Legrest

Supplies: Silicone spray, wrench, pliers, order all other parts from dealer.

Instructions: If the brake lever does not bite 1/8 inch into the tire, it may be because the tire pressure is not correct or that the tire is worn. If the lock does not bite when the tire is in good condition, the lock may need to be moved closer to the wheel. To do this, loosen both bolts that hold the lock to the side frame. Ease the lock back on the frame tubing until it is in the right place to bite into the tire. Tighten the bolts to hold the lock in place. If locks are too stiff to engage, they may have worked forward on the frame tubing. Use the same process to push them back. Lubricate the locks with a few drops of oil or silicone spray. If the brake lever or latch is worn, replace it. If the rubber tip on the brake is worn or missing, replace it or change it when you add brake extensions.

Task 5. Armrest check.

Reason: Residents need stable armrests for support during transfer.

Supplies: File, sandpaper, screwdriver, screws, foam padding, vinyl upholstery.

Instructions: If armrests are loose, tighten the screws underneath the armrest tubing (Figure 12). Replace torn upholstery. File or sand any sharp edges. If screws stick out through the padding, tighten them back down through the padding. Replace or add padding or purchase new armrests if more cushion for the armrests is needed. If the armrests have become sprung so that they don't fit in the holders, place the front post in the holder. Pull up on the armrest to spread the space between the posts. Push down to reduce the space.

TASK 6. Seat and back upholstery check.

Reason: Residents must have a firm seat and back for good posture and support during transfer.

Supplies: Fasteners, screwdriver, order all other parts from dealer.

Instructions: Tighten any upholstery screws that are loose. Make sure screws and bolts go all the way through the holes in the metal splines along the edge of the upholstery so that it will not tear. If the seat upholstery is cracked or torn, replace it. If the seat upholstery sags, tighten it by removing the fasteners and lifting up on the upholstery. Refasten upholstery after pulling it tight and making new holes if needed. If it cannot be tightened, replace it. But, before tightening back upholstery, check with the occupational therapist.

If the resident has a back deformity, tightening the upholstery may be the wrong thing to do.

TASK 7. Footrest and legrest check (Figures 13a–b).

Reason: Footrests should be secure and work well so that the resident's feet are supported. It is also important that the resident be able to clear them during transfer. The foot plates must stay up out of the way during transfer so that the resident will not trip. Footrests should clear the floor and have secure hardware. Heel loops should be secure and not be torn. There should not be sharp edges on legrests or footrests.

Supplies: Pliers, wrench, screws, nuts, bolts, file, fabric webbing, Velcro, order all other parts from dealer.

Instructions: Adjust the lock of the legrest or replace it if it is not secure. Tighten or replace all hardware. File sharp edges. Replace the leg panel if it is cracked or frayed. Replace missing or worn heel loops with webbing from fabric store. Make a loop of webbing. Remove the foot plate and wrap the fabric around the posts. You can use rivets, or Velcro, or sew it into place. Replace missing bumper tips on the front of the legrest bar and replace the spring of the foot plate if it is missing or worn.

Engineer Cane Inspection (Figure 14).

The Falls Nurse Coordinator will give you an *Engineer Cane Inspection* for each resident who uses a cane which needs repair. Each resident will have her own form with name and room number at the top. There are two questions on this form. After you have inspected the cane, answer each question yes or no. If the answer to the question is yes, follow the arrow down to the next question. If the answer to the question is no, follow the arrow across to the list of tasks. Check the box beside each task which you think applies to the resident's cane, then make repairs as directed. Write your initials beside each task when it is done.

Reason: A cane helps the resident balance during transfer and while walking. It must be stable with all hardware present and have a clean, even rubber tip on the end.

Supplies: Rubber tip from hardware store, screws, bolts, screw-driver.

Instructions: Replace missing bolts or screws. If any are loose, tighten them. If a rubber tip is missing or uneven, replace it. Measure the



Figure 13b Footrest Check

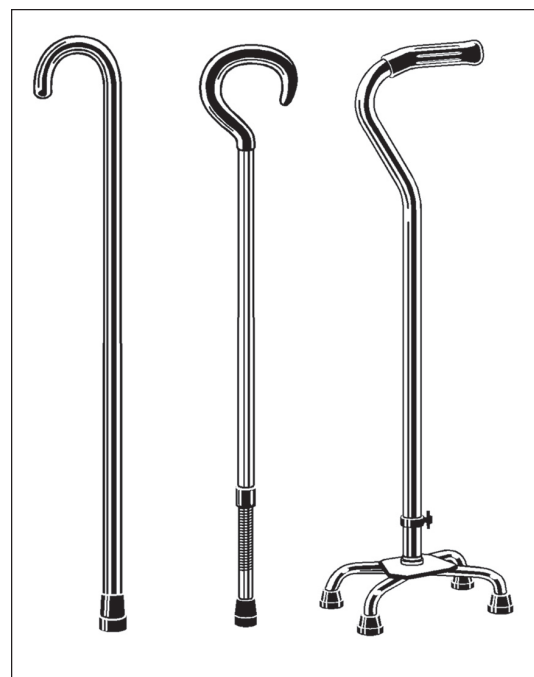


Figure 14 Wooden Cane, Metal Cane, Quad Cane

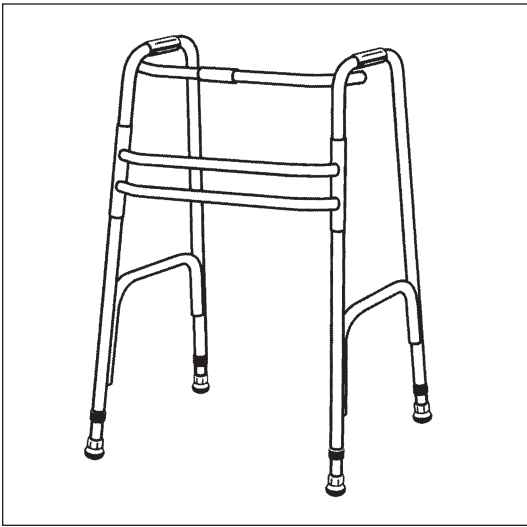


Figure 15a Walker



Figure 15b Rolling Walker

tip of the cane so that you purchase the right size rubber tip. If it is a quad cane, check all four rubber tips.

Engineer Walker Inspection (Figures 15a–b).

The Falls Nurse Coordinator will give you an *Engineer Walker Inspection* for each resident who uses a walker which needs repair. Each resident will have her own form with name and room number at the top. There are three questions on this form. After you have inspected the walker, answer each question yes or no. If the answer to the question is yes, follow the arrow down to the next question. If the answer to the question is no, follow the arrow across to the list of tasks. Check the box beside each task which you think applies to the resident's walker, then make repairs as directed. Write your initials beside each task when it is done.

Reason: A walker helps the resident balance during transfer and while walking. It must be stable with all hardware present and have clean, even rubber tips on the ends of the legs (Figure 15a). If the walker has caster wheels (Figure 15b), they should be firm, in good shape, and roll smoothly.

Supplies: Rubber tips from hardware store, screws, bolts, new caster wheels, oil, screwdriver.

Instructions: Replace missing bolts or screws. If any are loose, tighten them. If a rubber tip is missing or uneven, replace it. Measure the end of the walker legs so that you purchase the right size rubber tip. If the walker has caster wheels that do not roll smoothly, lubricate them. Replace them if they are worn or cracked.

3. Make Other Changes for High-Risk Residents as Requested by the Falls Team

The Falls Therapist and Nurse Coordinator may also ask you to make additional changes to rooms and bathrooms of residents who are at very high risk of falling. There are also changes which may need to be made to the resident's wheelchair. You will be asked to do these tasks in addition to those on the *Engineer Inspection List* and equipment inspections. A list of changes which you may need to make is given in Figure 16. An explanation of each task follows.

TASK 1. Exchange high bed for low bed.

Reason: Residents' feet must rest flat on the floor when they sit on the edge of the bed in preparation for transfer. If a resident's feet do not rest firmly on the floor, they are more likely to lose their balance.

Supplies: Bed that can be lowered.

Instructions: Exchange beds with another resident. Ask staff to find a resident who is bedridden and does not need a bed which can be lowered. If you cannot exchange beds, ask the administrator about the purchase of a new one. To order a new bed, refer to sources in Appendix A.

TASK 2. Add or move handrail.

Reason: The handrail must be situated in the right place for the resident. Some residents need support on both sides. Towel racks are not sturdy enough to support a resident during transfer and should not be used for this.

Supplies: Handrail, screwdriver, screws or bolts.

Instructions: Move the current handrail or secure a new one where the therapist tells you to place it. The handrail should be 1 - 1¼ inches in diameter. In general, you should mount a handrail 33 - 36 inches from the floor and no more than 1½ inches from the wall. The exact height for placement depends upon the height of both the commode and the resident. To order new handrails, refer to sources in Appendix A.

TASK 3. Adjust length of chair legs.

Reason: Many residents sit in a lounge chair during the day. The chair must be the right height for the resident to sit down and stand up safely. If the chair is too low, the resident will have difficulty getting out of the chair. If the chair is too high, the resident's feet will not rest firmly on the floor when rising. Either could cause the resident to lose her balance.

Supplies: Wood glue, plywood or hardwood to make small boxes for each leg or to make a long rectangle for each side of the chair, saw, screws, screwdriver, fastener bit or expandable auger.

Instructions: 1) **To increase chair height.** Find out from the therapist how many inches you need to raise the chair. Measure the thickness of each chair leg. Make four boxes or cut solid squares out of wood for each chair leg of the height you need to raise the chair.

Room and Bathroom

- Exchange high bed for low bed
- Add or move handrail
- Adjust length of chair legs
- Check outdoor areas for safety

Wheelchair

- Label chair
- Add brake extensions

Figure 16 Engineering Tasks for Resident's Room, Bathroom, and Wheelchair

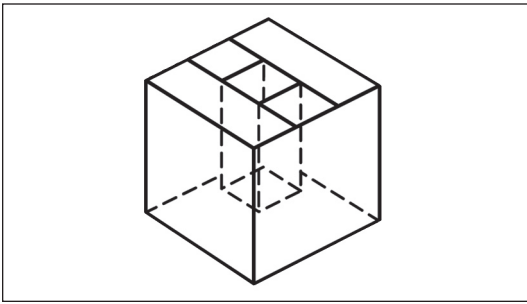


Figure 17 Square Leg Riser

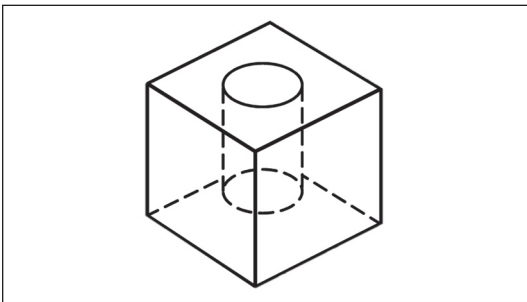


Figure 18 Round Leg Riser

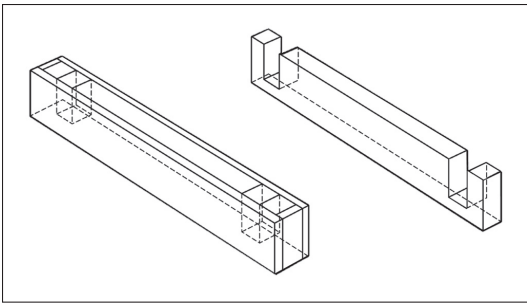


Figure 19 Brace Style Riser

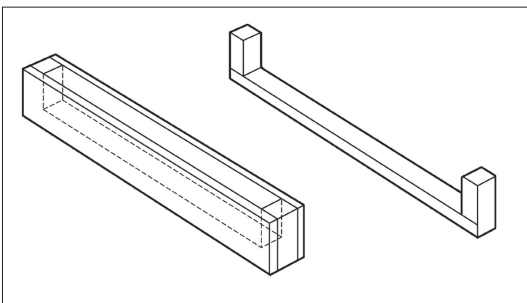


Figure 20 Platform riser

If the chair leg is square or rectangular, use plywood or hardwood to frame the leg with a box (Figure 17). Make sure there is a tight fit. Use glue and nails to make the box. Fasten each box onto the chair leg with a screw. If the chair leg is round, use a solid block of hardwood and drill a hole the size of the leg into the block (Figure 18). Fasten each box or block onto the leg with a screw. If the chair is large, use a brace style riser (Figure 19), for added support. Use $\frac{1}{2}$ – $\frac{3}{4}$ inch plywood to make two open-ended rectangles which extend from the front leg to the back leg. Cut an insert to fit inside the rectangle. Cut out or drill a section at either end for chair legs. Secure the insert into the rectangle with glue and nails or screws. Fasten each leg into the rectangle with a screw. If the chair has two wooden risers instead of four separate legs, make a platform riser (Figure 20). Measure the width and length of each side. Make two open-ended rectangles out of plywood. Make an insert for each one which fits inside the rectangle and allows chair risers to be screwed into place. **2) To lower the chair.** Find out from the therapist how many inches you need to remove from the chair legs. If the chair cannot be adjusted, exchange it for one that is the right height.

TASK 4. Check outdoor areas for safety.

Reason: Uneven pavement, moving cars or any other unsafe conditions may cause residents to fall when they go out of the building.

Instructions: Talk to the administrator and nursing staff to see what barriers, door alarms, door locks, signs or other things can be used to keep the resident out of unsafe areas. Purchase supplies as needed.

TASK 5. Label chair.

Reason: When a wheelchair has been adapted to a resident's special needs, it should only be used for that resident. However it is common for staff to switch wheelchairs between residents. To make it easier for staff to use the right chair, the resident's name should be on the wheelchair and on any of the resident's seating items.

Supplies: Paint pen with indelible ink, felt tip marker, resident name bracelets.

Instructions: Turn the chair over and write the resident's name on the bottom of the seat with the paint pen or write the resident's name on a resident name bracelet and attach it to the chair frame. Also attach one to the armrests and legrests if they can be removed and to any seating items.

TASK 6. Add brake extensions (Figure 21).

Reason: Residents must be able to reach the brakes, grab and lo them before transfer. If a chair moves while the resident is getting or out of it, a fall is likely.

Supplies: 16 inches of ½ inch steel electrical conduit from hardwa store, 2 rubber tips ¾ inch each, hammer, tape measure, hacksa file, sandpaper.

Instructions: Cut an 8 inch piece of conduit. Flatten one end w a hammer so that it fits over the brake lever. Remove the rubber from the brake lever. Slide the conduit over the brake lever about 2 inches. Ensure a tight fit. Put a rubber tip over the end of the conduit. Make sure there are no sharp edges. For purchase of break extensions, refer to sources in Appendix A.

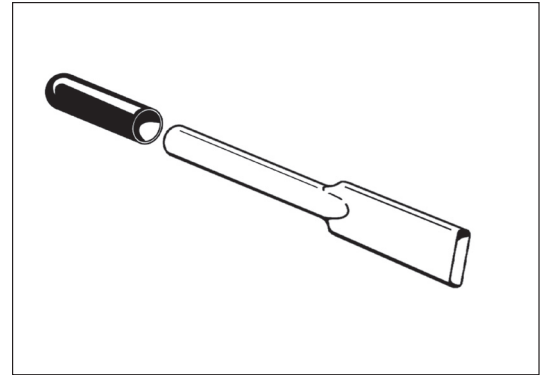


Figure 21 Brake Extension