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AHCA is committed to assisting skilled nursing and long term and post-acute providers in their efforts to improve the quality of care provided to their residents. In keeping with this commitment, AHCA has developed this “Safety Toolkit.” The purpose of this toolkit is to provide resources to assist facilities in establishing and maintaining a culture of safety. The resources within this document are a synthesis of regulations and best practices related to falls, alarms, bed rails and restraints. The intention is for facilities to use this toolkit as a valued resource as they review and scrutinize their own practices to promote this mission. This publication is not intended to render legal advice. Neither AHCA, its board of directors, nor the authors of this publication make any warranty, express or implied, or assumes any legal liability for the accuracy, completeness, or usefulness of any information herein, or represents that its use would not infringe upon privately owned rights. Further, no liability is assumed with respect to the use of, or for damages flowing, resulting from the use of any information, method, or process disclosed in this publication.

Table of Contents

REGULATORY 4

F689 Free of Accident Hazards/Supervision/Devices 5

F604 Right to be Free of Physical Restraints 10

F700 Bed Rails 15

FALLS 19

Oregon Patient Safety Commission

Falls Investigation Guide Toolkit: How-To Guide 20

SBAR Communication Worksheet 29

Falls Investigation Guide Documentation Checklist 32

Falls Investigation Form 34

RESTRAINTS & ALARMS 50

Guidance for Industry and FDA Staff –

Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment 51

Policy Considerations 54

Process/Procedure Considerations 55

Risk Intervention 58

Bed Rail Safety Guidelines 59

Potential Zones of Entrapment 60

Restraints: Side Rail Utilization Assessment 68

VAN SAFETY 70

Transportation Program – Best Practice Recommendations for Van Safety 71

Daily Van Walk Around Inspection Checklist 75

Monthly Inspection Check for Facility Van 76

Scheduled Maintenance Facility Van 77

Semi-Annual Checklist for Facility Van 78

Step by Step Return Demonstration Checklist 79

Transport Staff Responsibilities Form 81

RESOURCES & REFERENCES 82

REGULATORY

F689 ACCIDENT AND HAZARDS

§483.25(d) Accidents.

The facility must ensure that –

§483.25(d)(1) The resident environment remains as free of accident hazards as is possible; and

§483.25(d)(2)Each resident receives adequate supervision and assistance devices to prevent accidents.

INTENT: 483.25(D)

The intent of this requirement is to ensure the facility provides an environment that is free from accident hazards over which the facility has control and provides supervision and assistive devices to each resident to prevent avoidable accidents. This includes:

- Identifying hazard(s) and risk(s);
- Evaluating and analyzing hazard(s) and risk(s);
- Implementing interventions to reduce hazard(s) and risk(s); and
- Monitoring for effectiveness and modifying interventions when necessary.

A SYSTEMS APPROACH

Processes in a facility's interdisciplinary systematic approach may include:

- Identification of hazards, including inadequate supervision, and a resident's risks of potentially avoidable accidents in the resident environment;
- Evaluation and analysis of hazards and risks;
- Implementation of individualized, resident-centered interventions, including adequate supervision and assistive devices, to reduce individual risks related to hazards in the environment; and
- Monitoring for effectiveness and modification of interventions when necessary.

A key element of a systematic approach is the consistent application of a process to address identified hazards and/or risks. Risks may pertain to individual residents, groups of residents, or the entire facility. Hazards may include, but are not limited to, aspects of the physical plant, equipment, and devices that are defective or are not used properly (per manufacturer's specifications), are disabled/removed, or are not individually adapted or fitted to the resident's needs.

- An effective system not only proactively identifies environmental hazards and the resident's risk for an avoidable accident, but also evaluates the resident's need for supervision.

Identifying and addressing risks, including the potential for accidents, includes consideration of the environment, the resident's risk factors, and the need for supervision, care, and assistive devices. This will allow the facility to communicate information about observed hazards, identify resident-specific information, develop and implement an individualized care plan based on the Resident Assessment Instrument (RAI) to address each resident's needs and goals, and to monitor the results of the planned interventions. The care plan should strive to balance the resident's wishes with the potential impact on other residents.

A systematic approach enables the facility to evaluate safety throughout its environment and among all staff, and make appropriate adjustments in training and competency testing as required. Each resident or representative and their family members and representatives should be aware of the risks and potential hazards related to falls and of various devices used to reduce fall risk. Furthermore, a systematic approach enables leadership and direct care staff to work together to revise policies and procedures, based on feedback from workers who are most familiar with the residents and care processes. Effective facility systems address how to:

- communicate the observations of hazards,
- record resident specific information, and
- monitor data related to care processes that potentially lead to accidents.

Identification of Hazards and Risks

Identification of hazards and risks is the process through which the facility becomes aware of potential hazards in the resident environment and the risk of a resident having an avoidable accident. All staff (e.g., professional, administrative, maintenance, etc.) are to be involved in observing and identifying potential hazards in the environment, while taking into consideration the unique characteristics and abilities of each resident. The facility should make a reasonable effort to identify the hazards and risk factors for each resident. Various sources provide information about hazards and risks in the resident environment. These sources may include, but are not limited to, Quality Assessment and Assurance (QAA) activities, environmental rounds, MDS/CAAs data, medical history and physical exam, facility assessment as required in F838, and individual observation. This information is to be documented and communicated across all disciplines.

Evaluation and Analysis

Evaluation and analysis is the process of examining data to identify specific hazards and risks and to develop targeted interventions to reduce the potential for accidents. Interdisciplinary involvement is a critical component of this process. Analysis may include, for example, considering the severity of hazards, the immediacy of risk, and trends such as time of day, location, etc.

Both the facility-centered and resident-directed approaches include evaluating hazards and accident risk data which includes prior accidents/incidents, analysis to identify the root causes of each hazard and accident risk, and identifying or developing interventions based on the severity of the hazards and immediacy of risk. Evaluations also look at trends such as time of day, location, etc.

Implementation of Interventions

Implementation refers to using specific interventions to try to reduce a resident's risks from hazards in the environment. The process includes: Communicating the interventions to all relevant staff, assigning responsibility, providing training as needed, documenting interventions (e.g., plans of action developed by the Quality Assurance Committee or care plans for the individual resident), and ensuring that the interventions are put into action.

Interventions are based on the results of the evaluation and analysis of information about hazards and risks and are consistent with professional standards, including evidence-based practice. Development of interim safety measures may be necessary if interventions cannot immediately be implemented fully.

Facility-based interventions may include, but are not limited to, educating staff, repairing the device/equipment, and developing or revising policies and procedures. Resident-directed approaches may include implementing specific interventions as part of the plan of care, supervising staff and residents, etc. Facility records document the implementation of these interventions.

Monitoring and Modification

Monitoring is the process of evaluating the effectiveness of care plan interventions. Modification is the process of adjusting interventions as needed to make them more effective in addressing hazards and risks.

Monitoring and modification processes include:

- Ensuring that interventions are implemented correctly and consistently;
- Evaluating the effectiveness of interventions;
- Modifying or replacing interventions as needed and
- Evaluating the effectiveness of new interventions.

An example of facility-specific modification is additional training of staff when equipment has been upgraded, while a resident-specific modification is revising the care plan to reflect the resident's current condition and risk factors that may have changed since the previous assessment.

For example, a facility implements a position change alarm for a newly admitted resident with a history of falls. After completing a comprehensive assessment of the resident, facility staff identify the resident's routines and patterns, remove the alarm, implementing more individualized interventions that address the actual cause of why a resident may be changing position (e.g. has been in one position too long or is trying to reach for a personal item) which could lead to a fall.

Supervision

Supervision is an intervention and a means of mitigating accident risk. Facilities are obligated to provide adequate supervision to prevent accidents. Adequacy of supervision is defined by type and frequency, based on the individual resident's assessed needs, and identified hazards in the resident environment. Adequate supervision may vary from resident to resident and from time to time for the same resident. Devices such as position change alarms may help to monitor a resident's movement temporarily, but do not eliminate the need for adequate supervision.

The resident environment may contain temporary hazards (e.g., construction, painting, housekeeping activities, etc.) that warrant additional supervision or alternative measures such as barriers to prevent access to affected areas of the resident environment.

Adequate supervision to prevent accidents is enhanced when the facility:

- Accurately assesses a resident and/or the resident environment to determine whether supervision to avoid an accident is necessary; and/or
- Determines that supervision of the resident was necessary and provides supervision based on the individual resident's assessed needs and the risks identified in the environment.

Falls and unsafe wandering/elopement are of particular concern. The following section reviews these issues along with some common potential hazards.

Falls - The MDS defines a fall as unintentionally coming to rest on the ground, floor, or other lower level but not as a result of an overwhelming external force (e.g., resident pushes another resident). An episode where a resident lost his/her balance and would have fallen, if not for another person or if he or she had not caught him/herself, is considered a fall. A fall without injury is still a fall. Unless there is evidence suggesting otherwise, when a resident is found on the floor, a fall is considered to have occurred.

NOTE: *Challenging a resident's balance and training him/her to recover from loss of balance is an intentional therapeutic intervention. The losses of balance that occur during supervised therapeutic interventions are not considered a fall.*

Some factors that may result in resident falls include, but are not limited to:

- Environmental hazards, such as wet floors, poor lighting, incorrect bed height and/or width, or improperly fitted or maintained wheelchairs;8
- Unsafe or absent footwear;
- Underlying chronic medical conditions, such as arthritis, heart failure, anemia and neurological disorders;
- Acute change in condition such as fever, infection, delirium;
- Medication side effects;
- Orthostatic hypotension;
- Lower extremity weakness;
- Balance disorders;
- Poor grip strength;,
- Functional impairments (difficulty rising from a chair, getting on or off toilet, etc.);
- Gait disorders;
- Cognitive impairment;
- Visual deficits;
- Pain; and
- Incontinence.

Muscle weakness and gait problems account for about 24% of nursing home falls and environmental hazards cause16% to 27% of falls for residents.9

Older persons have both a high incidence of falls and a high susceptibility to injury.10 Serious potential consequences of falls include physical injuries, pain, increased risk of death, impaired function, fear of falling, and self-imposed limitations on activities leading to social isolation.11 Evaluation of all of the causal factors leading to a resident fall assists the facility in developing and implementing relevant, consistent, and individualized interventions to prevent future occurrences.

Proper actions following a fall include:

- Ascertaining if there were injuries, and providing treatment as necessary;
- Determining what may have caused or contributed to the fall, including ascertaining what the resident was trying to do before he or she fell;
- Addressing the risk factors for the fall such as the resident's medical conditions(s), facility environment issues, or staffing issues; and
- Revising the resident's plan of care and/or facility practices, as needed, to reduce the likelihood of another fall.

NOTE: *A fall by a resident does not necessarily indicate a deficient practice because not every fall can be avoided.*

Position Change Alarms:

Facilities often implement position change alarms as a fall prevention strategy or in response to a resident fall. The alarms are designed to alert staff that the resident has changed position, increasing the risk for falling. However, the efficacy of alarms to prevent falls has not been proven and a study of hospitalized patients concluded these devices may only alert staff that a fall has already occurred. The same study also noted false alarms are a common problem leading to "alarm fatigue," where staff no longer respond to the sound of an alarm.12 A study on bed-exit alarms concluded the alarms are not a substitute for staff assisting residents and bed- exit alarms may not always function reliably for residents who weigh less than 100 pounds or who are restless.13 Individual facility efforts to reduce use of alarms have shown falls actually decrease when alarms are eliminated, and replaced with other interventions such as purposeful checks to proactively address resident needs, adjusting staff to cover times of day when most falls occur, assessing resident routines, and making individualized environmental or care changes that suit each resident.14 For example, brighter lighting might help a resident with macular degeneration ambulate more easily in his or her room but would cause glare and make walking more difficult for a resident with cataracts.15

Facilities must implement comprehensive, resident-centered fall prevention plans for each resident at risk for falls or with a history of falls. While position change alarms are not prohibited from being included as part of a plan, they should not be the primary or sole intervention to prevent falls. If facility staff choose to implement alarms, they should document their use aimed at assisting the staff to assess patterns and routines of the resident. Use of these devices, like any care planning intervention, must be based on assessment of the resident and monitored for efficacy on an on-going basis. Position change alarms have been used to monitor a resident's movement in chairs or beds, etc. However, there must be sufficient staff and supervision to meet the resident's needs and staff must be vigilant in order to respond to alarms a timely manner. Alarms do not replace necessary supervision. Facilities must take steps to identify issues that place the resident at risk for falls and implement approaches to address those risks in a manner that enables the resident to achieve or maintain his or her highest practicable physical, mental, and psychosocial well-being.

F604 RIGHT TO BE FREE OF PHYSICAL RESTRAINTS

§483.10(e) Respect and Dignity.

§483.10(e)(1) The right to be free from any physical or chemical restraints imposed for purposes of discipline or convenience, and not required to treat the resident's medical symptoms, consistent with §483.12(a)(2).

§483.12(a) The facility must—

§483.12(a)(2) Ensure that the resident is free from physical or chemical restraints imposed for purposes of discipline or convenience and that are not required to treat the resident's medical symptoms. When the use of restraints is indicated, the facility must use the least restrictive alternative for the least amount of time and document ongoing re-evaluation of the need for restraints.

INTENT

The intent of this requirement is for each resident to attain and maintain his/her highest practicable well-being in an environment that:

- Prohibits the use of physical restraints for discipline or convenience;
- Prohibits the use of physical restraints to unnecessarily inhibit a resident's freedom of movement or activity; and
- Limits physical restraint use to circumstances in which the resident has medical symptoms that may warrant the use of restraints.

When a physical restraint is used, the facility must:

- Use the least restrictive restraint for the least amount of time; and
- Provide ongoing re-evaluation of the need for the physical restraint.

Assessment, Care Planning, and Documentation for the Use of a Physical Restraint

The regulation limits the use of any physical restraint to circumstances in which the resident has medical symptoms that warrant the use of restraints. There must be documentation identifying the medical symptom being treated and an order for the use of the specific type of restraint. However, the practitioner's order alone (without supporting clinical documentation) is not sufficient to warrant the use of the restraint. The facility is accountable for the process to meet the minimum requirements of the regulation including appropriate assessment, care planning by the interdisciplinary team, and documentation of the medical symptoms and use of the physical restraint for the least amount of time possible and provide ongoing re-evaluation.

The resident or resident representative may request the use of a physical restraint; however, the nursing home is responsible for evaluating the appropriateness of the request, and must determine if the resident has a medical symptom that must be treated and must include the practitioner in the review and discussion. If there are no medical symptoms identified that require treatment, the use of the restraint is prohibited. Also, a resident, or the resident representative, has the right to refuse treatment; however, he/she does not have the right to demand a restraint be used when it is not necessary to treat a medical symptom.

Facilities are responsible for knowing the effects devices have on its residents. If a device has a restraining effect on a resident, and is not administered to treat a medical symptom, the device is acting as a physical restraint. The restraining effects to the resident may have been caused intentionally or unintentionally by staff, and would indicate an action of discipline or convenience. In the case of an unintentional physical restraint, the facility did not intend to restrain a resident, but a device is being used that has that same effect, and is not being used to treat a medical symptom. These effects may result in convenience for the staff, as the resident may require less effort than previously required.

The use of a restraint must be individualized and be based upon the resident's condition and medical symptoms that must be treated. While a physical restraint may be used to treat an identified medical symptom for one resident, the use of the same type of restraint may not be appropriate to treat other residents with the same medical symptom. If a resident is identified with a physical restraint, the facility must be able to provide evidence that ensures:

- The resident's medical symptom that requires the use of a physical restraint has been identified;
- A practitioner's order is in place for the use of the specific physical restraint based upon the identified medical symptom;

NOTE: *If a resident is recently admitted to the facility and a restraint was used in a previous health care setting, the facility must still conduct an assessment to determine the existence of medical symptoms that warrant the continued use of the restraint.*

- Interventions, including less restrictive alternatives were attempted to treat the medical symptom but were ineffective;
- The resident/representative was informed of potential risks and benefits of all options under consideration including using a restraint, not using a restraint, and alternatives to restraint use;

NOTE: *The resident, or resident representative (if applicable), has the right to refuse the use of a restraint and may withdraw consent to use of the restraint at any time. If so, the refusal must be documented in the resident's record. The facility is expected to assess the resident and determine how resident's needs will be met if the resident refuses/declines treatment.*

- The length of time the restraint is anticipated to be used to treat the medical symptom, the identification of who may apply the restraint, where and how the restraint is to be applied and used, the time and frequency the restraint should be released, and who may determine when the medical symptom has resolved in order to discontinue use of the restraint;
- The type of specific direct monitoring and supervision provided during the use of the restraint, including documentation of the monitoring;
- The identification of how the resident may request staff assistance and how needs will be met during use of the restraint, such as for re-positioning, hydration, meals, using the bathroom and hygiene;
- The resident's record includes ongoing re-evaluation for the need for a restraint and is effective in treating the medical symptom; and
- The development and implementation of interventions to prevent and address any risks related to the use of the restraint (See also the Long-Term Care Facility Resident Assessment Instrument User's Manual, Version 3.0, Chapter 3, Section P-Restraints for further guidance and 42 CFR 483.25(d) [F689] for concerns related to ensuring the resident receives adequate supervision to prevent accidents).

NOTE: *Falls do not constitute self-injurious behavior or a medical symptom that warrants the use of a physical restraint. Although restraints have been traditionally used as a falls prevention approach, they have major, serious drawbacks and can contribute to serious injuries. There is no evidence that the use of physical restraints, including, but not limited to, bed rails and position change alarms, will prevent or reduce falls. Additionally, falls that occur while a person is physically restrained often result in more severe injuries (e.g., strangulation, entrapment).*

Convenience and/or Discipline

A facility must not impose physical restraints for purposes of discipline or convenience. The facility is prohibited from obtaining permission from the resident, or resident representative, for the use of restraints when the restraint is not necessary to treat the resident's medical symptoms. Anecdotally, it has been reported that staff will inform a resident, or the resident representative, that a restraint will be beneficial to the resident to prevent a fall or to safeguard the resident who may be wandering into other resident's rooms. However, in these instances, the surveyor should consider whether the restraint was used for the sake of staff convenience.

Reasons for using restraints for staff convenience or discipline may include:

- Staff state that a resident was placed in a restraint because staff are too busy to monitor the resident, and their workload includes too many residents to provide monitoring;
- Staff believe that the resident does not exercise good judgment, including that he/she forgets about his/her physical limitations in standing, walking, or using the bathroom alone and will not wait for staff assistance;
- Staff state that family have requested that the resident be restrained, as they are concerned about the resident falling especially during high activity times, such as during meals, when the staff are busy with other residents;
- Staff have identified to management that there is not enough staff on a particular shift or during the weekend and staffing levels were not changed;
- Staff state that new staff and/or temporary staff do not know the resident, how to approach, and/or how to address behavioral symptoms or care needs so they apply physical restraints;
- Lack of staff education regarding the alternatives to the use of restraints as a method for preventing falls and accidents;
- Staff have negative feelings or a lack of respect towards the resident, and restrain the resident to teach him/her a lesson;
- In response to a resident's wandering behavior, staff become frustrated and restrain a resident to a wheelchair; and
- When a resident is confused and becomes combative when care is provided and staff hold the resident's arms and legs down to complete the care (NOTE: This example differs from an emergency situation where staff briefly hold a resident for the sole purpose of providing necessary immediate medical care ordered by a practitioner).

Situations where a facility uses a physical restraint, or device acting as a physical restraint, that is not for treating a medical symptom, whether intentionally or unintentionally by staff, would indicate an action of discipline or convenience. An example that illustrates unintentional use of a physical restraint for staff convenience is when a staff member places a resident with limited mobility in a beanbag chair while other residents receive assistance during high activity times.

Determination of Use of Restraints for a Period of Imminent Danger to the Safety and Well- Being of the Resident

Some facilities have identified that a situation occurred in which the resident(s) is in "imminent danger" and there was fear for the safety and well-being of the resident(s) due to violent behavior, such as physically attacking others. In these situations, the order from the practitioner and supporting documentation for the use of a restraint must be obtained either during the application of the restraint, or immediately after the restraint has been applied. The failure to immediately obtain an order is viewed as the application of restraint without an order and supporting documentation. Facilities may have a policy specifying who can initiate the application of restraint prior to obtaining an order from the practitioner.

If application of a restraint occurs, the facility must:

- Determine that a physical restraint is a measure of last resort to protect the safety of the resident or others;
- Provide ongoing direct monitoring and assessment of the resident's condition during use of the restraint;
- Provide assessment by the staff and practitioner to address other interventions that may address the symptoms or cause of the situation (e.g., identification of an infection process or delirium, presence of pain);
- Ensure that the resident and other residents are protected until the resident's behavioral symptoms have subsided, or until the resident is transferred to another setting;
- Discontinue the use of the restraint as soon as the imminent danger ends; and
- Immediately notify the resident representative of the symptoms and temporary intervention implemented.

Documentation must reflect what the resident was doing and what happened that presented the imminent danger, interventions that were attempted, response to those interventions, whether the resident was transferred to another setting for evaluation, whether the use of a physical restraint was ordered by the practitioner, and the medical symptom(s) and cause(s) that were identified.

Determination of Use of Bed Rails as a Restraint

Facilities must use a person-centered approach when determining the use of bed rails, which would include conducting a comprehensive assessment, and identifying the medical symptom being treated by using bed rails. Bed rails may have the effect of restraining one individual but not another, depending on the individual resident's conditions and circumstances.

Residents who are cognitively impaired are at a higher risk of entrapment and injury or death caused by restraints. Residents in a bed with bed rails have attempted to exit through, between, under, over, or around bed rails or have attempted to crawl over the foot board, which places them at risk of serious injury or death. Serious injury from a fall is more likely from a bed with raised bed rails than from a bed where bed rails are not used. In many cases, the risk of using the bed rails may be greater than the risk of not using them as the risk of restraint-related injury and death is significant. For example, a resident who has no voluntary movement may still exhibit involuntary movements. Involuntary movements, resident weight, and gravity's effects may lead to the resident's body shifting toward the edge of the bed, increasing the risk for entrapment, when bed rails are used. Also refer to 42 CFR 483.25(n) – Bed Rails (tag F700).

The use of partial bed rails may assist an independent resident to enter and exit the bed independently and would not be considered a physical restraint. To determine if a bed rail is being used as a restraint, the resident must be able to easily and voluntarily get in and out of bed when the equipment is in use. If the resident cannot easily and voluntarily release the bed rails, the use of the bed rails may be considered a restraint.

Determination of the Use of Position Change Alarms as Restraints

Position change alarms are any physical or electronic device that monitors resident movement and alerts the staff when movement is detected. Types of position change alarms include chair and bed sensor pads, bedside alarmed mats, alarms clipped to a resident's clothing, seatbelt alarms, and infrared beam motion detectors. Position change alarms do not include alarms intended to monitor for unsafe wandering such as door or elevator alarms.

While position change alarms may be implemented to monitor a resident's movements, for some residents, the use of position change alarms that are audible to the resident(s) may have the unintended consequence of inhibiting freedom of movement. For example, a resident may be afraid to move to avoid setting off the alarm and creating noise that is a nuisance to the resident(s) and staff, or is embarrassing to the resident. For this resident, a position change alarm may have the potential effect of a physical restraint.

Examples of negative potential or actual outcomes which may result from the use of position change alarms as a physical restraint, include:

- Loss of dignity;
- Decreased mobility;
- Bowel and bladder incontinence;
- Sleep disturbances due to the sound of the alarm or because the resident is afraid to move in bed thereby setting off the alarm; and
- Confusion, fear, agitation, anxiety, or irritation in response to the sound of the alarm as residents may mistake the alarm as a warning or as something they need to get away from.

F700 BED RAILS

§483.25(n) Bed Rails.

The facility must attempt to use appropriate alternatives prior to installing a side or bed rail. If a bed or side rail is used, the facility must ensure correct installation, use, and maintenance of bed rails, including but not limited to the following elements.

§483.25(n)(1) Assess the resident for risk of entrapment from bed rails prior to installation.

§483.25(n)(2) Review the risks and benefits of bed rails with the resident or resident representative and obtain informed consent prior to installation.

§483.25(n)(3) Ensure that the bed's dimensions are appropriate for the resident's size and weight.

§483.25(n)(4) Follow the manufacturers' recommendations and specifications for installing and maintaining bed rails.

INTENT 483.25(N)

The intent of this requirement is to ensure that prior to the installation of bed rails, the facility has attempted to use alternatives; if the alternatives that were attempted were not adequate to meet the resident's needs, the resident is assessed for the use of bed rails, which includes a review of risks including entrapment; and informed consent is obtained from the resident or if applicable, the resident representative. The facility must ensure the bed is appropriate for the resident and that bed rails are properly installed and maintained.

GUIDANCE §483.25(N)

Even when bed rails are properly designed to reduce the risk of entrapment or falls, are compatible with the bed and mattress, and are used appropriately, they can present a hazard to certain individuals, particularly to people with physical limitations or altered mental status, such as dementia or delirium.

Resident Assessment

After a facility has attempted alternatives to bed rails and determined that these alternatives do not meet the resident's needs, the facility must assess the resident for the risks of entrapment and possible benefits of bed rails. In determining whether to use bed rails to meet the needs of a resident, the following components of the resident assessment should be considered including, but not limited to:

- Medical diagnosis, conditions, symptoms, and/or behavioral symptoms;
- Size and weight
- Sleep habits
- Medication(s)
- Acute medical or surgical interventionsnderlying medical conditions
- Existence of delirium
- Ability to toilet self safely
- Cognition
- Communication
- Mobility (in and out of bed)
- Risk of falling.

In addition, the resident assessment must include an evaluation of the alternatives to the use of a bed rail that were attempted and how these alternatives failed to meet the resident's assessed needs.

The facility must also assess the resident's risk from using bed rails. The following includes potential risks regarding the use of bed rails as identified by the Food and Drug Administration's Hospital Bed Safety Workgroup Clinical Guidance For the Assessment and Implementation of Bed Rails In Hospitals, Long Term Care Facilities, and Home Care Settings (April 2003) and have been adapted for survey or guidance:

- Accident hazards
  - The resident could attempt to climb over, around, between, or through the rails, or over the foot board,
  - A resident or part of his/her body could be caught between rails, the openings of the rails, or between the bed rails and mattress.
- Barrier to residents from safely getting out of bed
- A resident could crawl over rails and fall from greater heights increasing the risk for serious injury
- A resident could attempt to get out of bed over the foot board
- Physical restraint
  - Hinders residents from independently getting out of bed thereby confining them to their beds
  - Creates a barrier to performing routine activities such as going to the bathroom or retrieving items in his/her room
- Other potential negative physical outcomes
  - Decline in resident function, such as muscle functioning/balance
  - Skin integrity issues
  - Decline in other areas of activities of daily living such as using the bathroom, continence, eating, hydration, walking, and mobility
- Other potential negative psychosocial outcomes
  - Creates an undignified self-image and alter the resident's self-esteem
  - Contributes to feelings of isolation
  - Induces agitation or anxiety

These potential risks can be exacerbated by improper match of the bed rail to bed frame, improper installation and maintenance, and use with other devices or supports that remain when the bed rail is removed.

Entrapment may occur when a resident is caught between the mattress and bed rail or in the bed rail itself. Although, not all bed rails create a risk for entrapment, injury may still occur. It varies depending on the resident. Residents most at risk for entrapment are those who are frail or elderly or those who have conditions such as agitation, delirium, confusion, pain, uncontrolled body movement, hypoxia, fecal impaction, acute urinary retention, etc. that may cause them to move about the bed or try to exit from the bed. The untimeliness of assistance using the bathroom and inappropriate positioning or other care-related activities can contribute to the risk of entrapment.

Informed Consent

After alternatives have been attempted and prior to installation, the facility must obtain informed consent from the resident or if applicable, the resident representative for the use of bed rails.

The facility should maintain evidence that it has provided sufficient information so that the resident or resident representative could make an informed decision. Information that the facility must provide to the resident, or resident representative include, but are not limited to:

- What assessed medical needs would be addressed by the use of bed rails;
- The resident's benefits from the use of bed rails and the likelihood of these benefits;
- The resident's risks from the use of bed rails and how these risks will be mitigated; and
- Alternatives attempted that failed to meet the resident's needs and alternatives considered but not attempted because they were considered to be inappropriate.

The information should be presented to the resident, or if applicable, the resident representative, so that it could be understood and that consent can be given voluntarily, free from coercion.

Installation and Maintenance of Bed Rails

Assuring the correct installation and maintenance of bed rails is an essential component in reducing the risk of injury resulting from entrapment or falls. The FDA and the United States Consumer Product Safety Commission (CPSC) has recommended the following initial and ongoing actions to prevent deaths and injuries from entrapment and/or falls from bed rails:

- Before bed rails are installed, the facility should:
  - Check with the manufacturer(s) to make sure the bed rails, mattress, and bed frame are compatible, since most bed rails and mattresses are purchased separately from the bed frame.

NOTE: *The FDA has published (1) the Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment as a resource to reduce entrapments resulting from hospital beds and (2) Practice Hospital Bed Safety as to the proper dimensions and distance of various parts of the beds (i.e.; distance between bed frames and mattresses, bed rails and mattresses, etc.)*

- Rails should be selected and placed to discourage climbing over rails to get in and out of bed, which could lead to falling over bed rails.
- When installing and using bed rails, the facility should:
  - Ensure that the bed's dimensions are appropriate for the resident.
  - Confirm that the bed rails to be installed are appropriate for the size and weight of the resident using the bed.
  - Install bed rails using the manufacturer's instructions to ensure a proper fit.
  - Inspect and regularly check the mattress and bed rails for areas of possible entrapment.
  - Regardless of mattress width, length, and/or depth, the bed frame, bed rail and mattress should leave no gap wide enough to entrap a resident's head or body. Gaps can be created by movement or compression of the mattress which may be caused by resident weight, resident movement or bed position, or by using a specialty mattress, such as an air mattress, mattress pad or water bed.
  - Check bed rails regularly to make sure they are still installed correctly as rails may shift or loosen over time.

In addition, ongoing precautions may include following manufacturer equipment alerts and recalls and increasing resident supervision.

The use of a specialty air-filled mattress or a therapeutic air-filled bed may also present an entrapment risk that is different from rail entrapment with a regular mattress. The high compressibility of an air-filled mattress compared to a regular conventional mattress requires appropriate precautions when used for a resident at risk for entrapment. An air-filled mattress compresses on the side to which a person moves, thus raising the center of the mattress and lowering the side. This may make it easier for a resident to slide off the mattress or against the rail. Mattress compression widens the space between the mattress and rail. When a resident is between the mattress and rail, the mattress can

re-expand and press the chest, neck, or head against the rail. While using air therapy to prevent and treat pressure injuries, facilities should also take precautions to reduce the risk of entrapment. Precautions may include following manufacturer equipment alerts and increasing supervision.

Facilities must also conduct routine preventive maintenance of beds and bed rails to ensure they meet current safety standards and are not in need of repair. For concerns regarding installation and maintenance of the beds or bed rails, see guidance for 42 CFR 483.90(d)(3), F909.

Ongoing Monitoring and Supervision

Assuring the correct use of an installed bed rail, and maintenance of bed rails is an essential component in reducing the risk of injury. After the installation of bed rails, it is expected that the facility will continue to provide necessary treatment and care, in accordance with professional standards of practice and the resident's choices. This should be evidenced in the resident's record, and include the following components, but are not limited to:

- The type of specific direct monitoring and supervision provided during the use of the bed rails, including documentation of the monitoring;
- The identification of how needs will be met during use of the bed rails, such as for re positioning, hydration, meals, use of the bathroom and hygiene;
- Ongoing assessment to assure that the bed rail is used to meet the resident's needs;
- Ongoing evaluation of risks;
- The identification of who may determine when the bed rail will be discontinued; and
- The identification and interventions to address any residual effects of the bed rail (e.g., generalized weakness, skin breakdown).

KEY ELEMENTS OF NONCOMPLIANCE

To cite deficient practice at F700, the surveyor's investigation will generally show that the facility failed to do one or more of the following:

- Identify and use appropriate alternative(s) prior to installing a bed rail;
- Assess the resident for risk of entrapment prior to installing a bed rail;
- Assess the risk versus benefits of using a bed rail and review them with the resident or if applicable, the resident's representative;
- Obtain informed consent for the installation and use of bed rails prior to the installation.
- Ensure appropriate dimensions of the bed, based on the resident's size and weight;
- Ensure correct installation of bed rails, including adherence to manufacturer's recommendations and/or specifications;
- Ensure correct use of an installed bed or side rail; and/or
- Ensure scheduled maintenance of any bed rail in use according to manufacturer's recommendations and specifications.


FALLS

Components of an Effective Investigation Process

Applying Root Cause Analysis to Falls Investigations

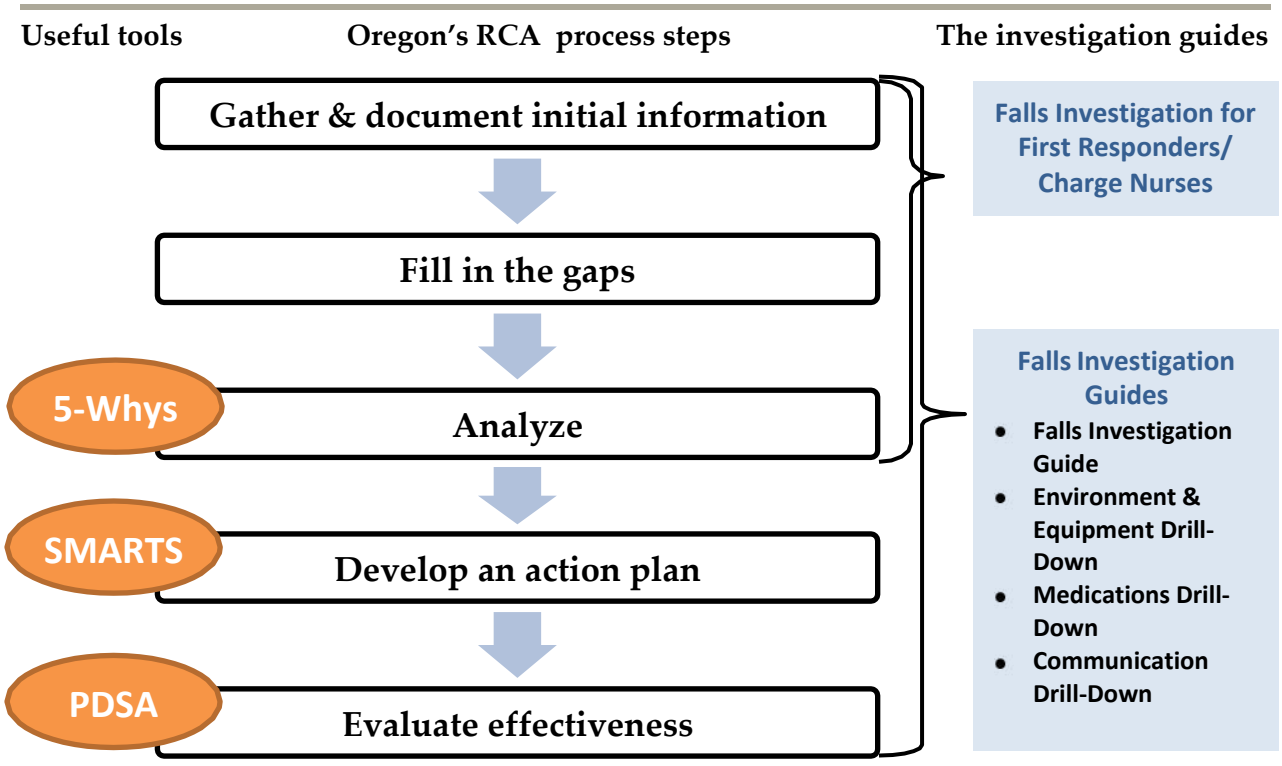
To understand why falls or other adverse events occur, improvement experts champion the use of root cause analysis (RCA). RCA requires a systematic, intensive, and in-depth review to learn the most basic reasons for the adverse event. The approach has a formal logic and a defined methodology. The goal is to understand the problem in sufficient depth to effectively eliminate the risk of future injury. RCA can be used to analyze a single fall as well as to look at multiple falls so that patterns can be identified and system wide changes can be made. For more information on RCA, please refer to *Oregon's Guide to Root Cause Analysis in Long Term Care, Investigating with a Different Lens.* (Available at: http://library.state.or.us/repository/2010/201009130912581/index.pdf). The Falls Investigation Guides walk the investigator(s) through the RCA process in order to:

- Determine what happened.
- Identify factors that contributed to the event (i.e., the fall(s)).
- Develop an action plan to reduce the likelihood of a similar event.

The components of an effective RCA outlined in *Oregon's Guide to Root Cause Analysis* are:

1. Gather and document initial information
2. Fill in the gaps
3. Analyze
4. Develop an action plan
5. Implement action plan and evaluate results

The diagram below summarizes how the Falls Investigation Guides correspond to the steps in an RCA. Additional quality improvement tools to assist you in your investigation are noted to the left. Information about these tools can be found within the Falls Investigation Guides and in the Glossary of Terms.



How Does Your Investigation Measure Up?

You can compare your facility's current practices related to falls investigations with those outlined in the Falls Investigation Guides using the *Falls Investigation Guide Documentation Checklist* located in Appendix A. Note that this document is not meant to replace the guides, which contain much more detail and process information. It is, however, a tool to help you identify any gaps you may currently have in your processes.

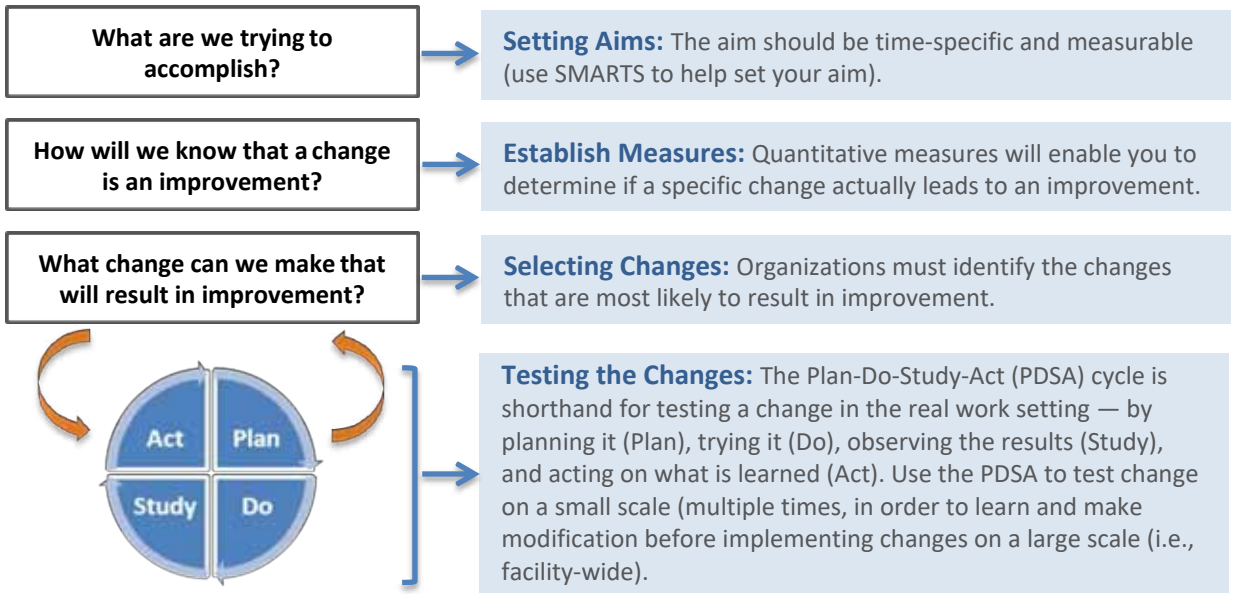
Implementing Change and Sustaining Improvement

Once a facility has decided to make a change in how it investigates falls, it is important to plan the change in order to ensure effective implementation. One tool that can help structure this process is the Model for Improvement; a simple tool for accelerating improvement. It is not meant to replace change models that organizations may already be using, but rather to accelerate improvement. This model has been used very successfully by hundreds of health care organizations to improve many different health care processes and outcomes.

The Model for Improvement has two parts:

1. Three fundamental questions (can be answered in any order)
2. The Plan-Do-Study-Act (PDSA) cycle to test and implement change. The PDSA cycle helps guide the test to determine if the change is an improvement.

Model for Improvement



For more information on the Model for Improvement visit the Institute for Healthcare Improvement at: ihi.org.

After testing your change on a small scale, learning from each test, and modifying the change through several PDSA cycles, you can implement the change on a broader scale. Once implemented, it is important to make sure your change continues to have the intended impact (i.e., are you still meeting your aim?). Monitor your progress by tracking your measure. You may find that you need to modify your approach over time using the PDSA cycle. It is also possible for your aim to change, in which case you can begin the Model for Improvement again by asking the three fundamental questions. See How to Integrate the Falls Guides into the Investigation Process for an outline of what this might look like in your facility.

The Falls Investigation Guides

The Falls Investigation Guides are a series of guides that walk the investigator(s) through a fall investigation. The Falls Investigation Guide and the three Drill-Downs are intended to be used together and offer detailed information related to different components of the investigation process (see description of each guide below). The Falls Investigation Guide for First Responders is a condensed version of the other guides which includes only the initial steps in the investigation. The Guides are located in the next 10 pages of this How-to Guide and are intended to be printed front to back; ordering is as follows:

Falls Investigation Guide

This guide, which follows the RCA process, serves as a roadmap for the investigation indicating the sequence of events post-fall, through action plan development and monitoring for effectiveness. During the "Analyze" portion of the investigation, the guide refers the investigator(s) to three "Drill-Down" guides to assist with identification of contributing factors related to the following areas:

- Environment and equipment
- Medications
- Communication

(2 pages, back: Contributing Factors and 5-Whys)

Environment and Equipment Drill-Down

This guide walks the investigator(s) through potential contributing factors related to the environment and equipment. It is referenced in the Falls Investigation Guide as follows:

(2 pages, back: Equipment Resource List)

Medications Drill-Down

This guide walks the investigator(s) through potential contributing factors related to medication use (i.e., medication review, possible drug side-effects, possible interactions, etc.). It is referenced in the Falls Investigation Guide as follows:

(2 pages, back: blank)

Communication Drill-Down

This guide walks the investigator through potential contributing factors related to the communication. It is referenced in the Falls Investigation Summary Guide as follows:

(2 pages, back: SBAR Communication Worksheet)

Falls Investigation Guide for First Responders

This is a condensed version of the guides, which walks a first responder through the initial steps of the investigation process. The intent is that the investigation will be handed off to another individual, based on facility structure and policy, who will follow the investigation though completion.

(2 pages, back: contributing factor "Drill-Downs" summary to review factors related to environment and equipment, medications, and communication)

Falls Investigation Guide

Fall Occurs

Fall Protocol Components (per facility policy)

Immediately Ensure Resident is Safe, Assess and Treat for Injury
- Put any preliminary preventative steps into place

Make Required Notifications

Nurse or CBC Health Services
- 911 (if applicable)
- Physician (use **SBAR**)
- Admin & DNS (or leadership team)
- Resident's responsible party

Admin or DNS
- Notify Adult Protective Services if abuse/neglect suspected

Situation
Background
Assessment
Recommendation

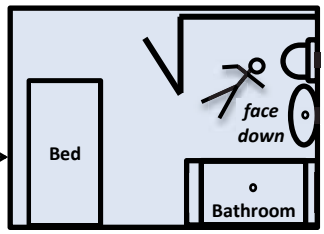
(See back of Communication Drill-Down)

Investigation Components (Root Cause Analysis)

Begin Investigation

#1 – Gather & Document Initial Information

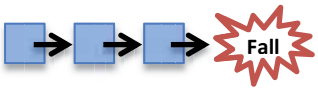
- Interview staff and others closely involved (last to see the resident, first responder, witness, resident, visitors, etc.)
- What do they think happened (sequence of events) and why (contributing factors)
- Use open-ended questions (e.g. "Tell me about…")
- Make a diagram of the scene at time of discovery, attach it to the investigation (show position of furniture, door/doorways, equipment, other relevant features)
  - Draw a stick figure to indicate where resident fell/was found (label as face-up or face-down)



Document Event
- Update care communication tools
  - Alert charting
  - 24-hr. report
  - Temporary care/service plan
- New physician order (note & implement)
- Begin incident report (or other facility document)

#2 – Fill in the Gaps

Review Findings
- Identify gaps and gather any missing information (i.e., review record, fall history, interview/re-interviews, plan of care, etc.)
- Outline the sequence of events leading up to the fall
- List possible contributing factors



#3 – Analyze

Document Analysis Findings

Identify Contributing Factors
- Possible contributing factors to consider:
  - Environment and equipment related
  - Medication related
  - Communication related
  - Were identified fall prevention/risk interventions in place?
  - Care/service plan appropriate, updated, and followed?
- Use the **5-Whys** to uncover root causes (see back)

See Environment & Equipment Drill-Down

See Medication Drill-Down

See Communication Drill-Down

#4 – Action Plan Development

Considerations for Action Plan
- Include resident and/or responsible party
  - Review risks/benefits
  - Ask for alternative ideas to prevent recurrence
  - Review proposed changes to care/service plan
- Consider:
  - Resident's needs, goals, and preferences
  - Effectiveness of previous plans
  - Managed risk agreement
  - Supervision plan
- Review:
  - Regulations and best practices
  - Policies and procedures
  - Care/service plan

- Include Interdisciplinary Team (IDT) in process
- Ask, "What can we do to keep similar events from happening again?" (System-level, not just resident- level)
- Address identified root causes
- Develop an action plan with **SMARTS**

Specific
Measurable
Attainable
Realistic
Timely
Supported

#5 – Evaluation of Effectiveness

Test the Plan (PDSA)

Plan: Formulate action steps
Do: Implement steps on trial basis
Study: Monitor effectiveness for set time period
Act: Review effectiveness, revise or adopt plan

Implement the Plan & Monitor for Effectiveness
- Track and trend data over time
- Share results with Safety and Quality Committees

Document Action Plan & Results
- Update care communication tools
  - Care/service plan (or document reasons for no change)

Adverse Event Report (if applicable)
- Complete/send to Oregon Patient Safety Commission within 30 days of discovery (for hospitalization or death)

Developed by the Oregon Patient Safety Commission's Nursing Home Expert Panel, V. 1.0

Contributing Factors & 5 Whys

Contributing Factors

Note: this chart is meant to provide examples of possible contributing factors and is not considered all-inclusive.

Communication

- With physician or RN practitioner
  - Hand-offs or shift reports
  - Involving resident transfers
  - Available information
  - Between departments
  - Between healthcare personnel & resident/family
- With other organizations or outside providers
- Among healthcare personnel (includes temporary/agency staff)
- Hard to read handwriting/fax

Organizational Factors

- Overall culture of safety
- Unit staffing levels
- Shift leadership/management
- Adequacy of budget
- Systems to identify risks
- Internal reporting
- Commitment to resident safety
- Accountability for resident safety
- Staffing turnover
- Temporary staffing and lack of communication
- Staff assignment/work allocation

Care Management

- Developing a care plan
- Implementing a care plan
- Following a care plan
- Updating a care plan
- Availability of resources
- Responding to a change of condition
- Resident consent process

Resident Factors

- Language/culture
- Family dynamics/relationships
- Mental status
- Behavioral problems
- Sensory impairment
- Resident assumption of risk
- Underlying medical conditions
  - Pain
  - Neuromuscular
  - Orthopedic
  - Cardiovascular
  - Recent condition change
  - Dialysis
  - Neurological

Equipment, Software, or Material Defects

- Equipment meeting code, specifications, or regulations
- Defective/non-working equipment
  - Software
  - Equipment design (function, displays, or controls)

Policies & Procedures

- Absent
- Too complicated
- Outdated
- Not followed / Not compliant

Training & Supervision

- Job orientation
- Continuing education
- Staff supervision
- Skills demonstration
- Availability of training programs
- In service education/competency training

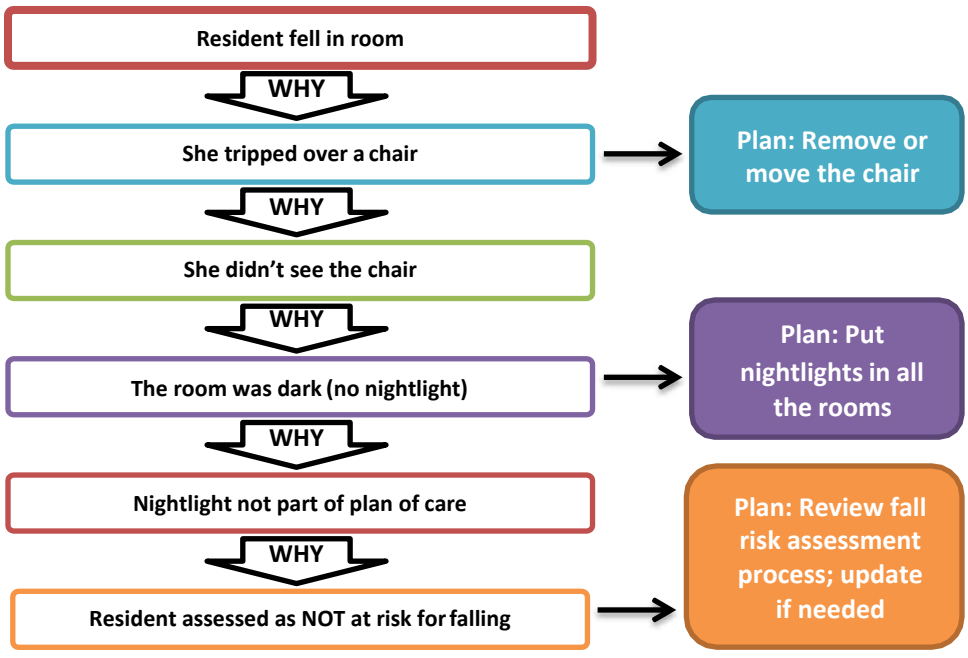
Work Area/Environment

- Work area design specifications
- Distractions
- Interruptions
- Relief/float healthcare staff

Using the 5-Whys

The 5-Whys

A question-asking method used to uncover the underlying cause of an event (see example to right). Uncovering the root causes(s) leads to action plans that are more likely to prevent the event from happening again.

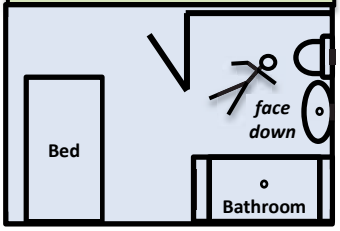


Developed by the Oregon Patient Safety Commission's Nursing Home Expert Panel

Environment & Equipment Drill-Down

Review Contributing Factors Related to Environment and Equipment

Review Diagram of the Scene, Revisit as Necessary



Environment

General Contributing Factors

- Lighting
- Flooring (wet, shiny, contrast, uneven)
- Equipment placement
- Furniture placement
- Room to move freely in the space/turn radius
- Others present (residents, staff, visitors, etc.)

Contributing Factors That Impact How a Resident Interacts with Their Environment
(Keep general contributing factors in mind for each)

- Footwear/clothing
- Mobility
- Prosthesis/splint
- Dominant side re:
  - Equipment
  - Furniture
  - Doors and doorways
  - Bathroom fixtures
- Sensory impairments (eyesight, hearing)
- Cognition
- Resident assumption of risk
- Behavioral problems/issues
- Underlying medical conditions:
  - Pain
  - Neuromuscular
  - Orthopedic
  - Cardiovascular
  - Recent condition change
  - Dialysis
  - Neurological

Equipment

General Contributing Factors

- Defective/nonworking equipment (in good repair?)
- Equipment design (function, displays, controls, etc.)
- Use specified in care/service plan (and up-to date)
- Appropriate for resident?
- Proper placement (re: dominant side, within reach, etc.)
- Equipment meeting code, regulations
- Entrapment/safety risk

Specific Equipment Related Contributing Factors
(Keep general contributing factors in mind for each)

Bed
- Height/position
- Brakes on/off
- Mattress (type)

Side-rails
- Full/half/other
- Transfer cane
- Padding

Fall mat
- Thickness

Bathroom equipment
- Toilet seat raise
- Grab bars
- Toilet height
- Commode present
- Toileting schedule

Call light
- See general contributing factors

Alarms
- On/attached to resident?
- Turned on?
- Functioning/working?
- Sounding?
- When was it placed?

Assistive devices and transfer equipment
- In need of repair (exposed metal, torn vinyl, etc.)
- Are brakes on/off?
- Are footrests up/down/off?
- Is wheelchair cushion present/with or without nonskid material?
- Is resident positioned appropriately?
- Is device adjusted/fitted properly? (e.g., seat height/depth, foot placement)

If Immediate Risk Identified, Take Steps to Ensure Resident Safety and Prevent Recurrence

- Remove, replace, and/or repair hazard or equipment

Return to Falls Investigation Guide
(#3 – Analysis: Identify Contributing Factors)

Use the Drill-Downs to Review Contributing Factors Related to: Environment& Equipment, Medications, and Communication

Environment & Equipment Drill-Down

START

Review Diagram of the Scene, Revisit as Necessary

Environment

General Contributing Factors

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- Is resident positioned appropriately?
- Is device adjusted/fitted properly? (e.g., seat height/depth, foot placement)

Medication Drill-Down

START

Note: A more thorough review of medications to be completed by nurse manger (to include interactions and medication class)

General Contributing Factors

- New medications?
- Changes? (i.e., dose, time, etc.)
- When was last dose given?
- Has there been a med error in the last 24 hrs.?

Side Effects

Did resident exhibit signs of or complain of:

- Weakness?
- Acute delirium?
- Dizziness?
- Clammy skin?
- Gait disturbance?
- Dehydration?
- Impaired vision?
- Agitation?
- Impulsiveness?
- Resistance to care?

Consult Pharmacist & Physician (as appropriate)

Communication Drill-Down

START

Points of Communication Exchange to Consider

- Handoffs or shift reports
- Between departments
- With physician or NP
- Between staff & resident/family
- Involving resident transfers
- Among staff
- With other providers
- Care communication tools (i.e., care/service plan, 24-hour report, alert charting, etc.)

General Contributing Factors

- Lack of information provided and/or available (verbal and written)
- Language barriers
- Hard to read handwriting/fax
- Forms difficult to use
- Communication not adequate (accurate, complete, understood)

Environmental/Work Area Contributing Factors

- Distractions and interruptions
- Work area design
- Work allocation/work load
- Stress levels

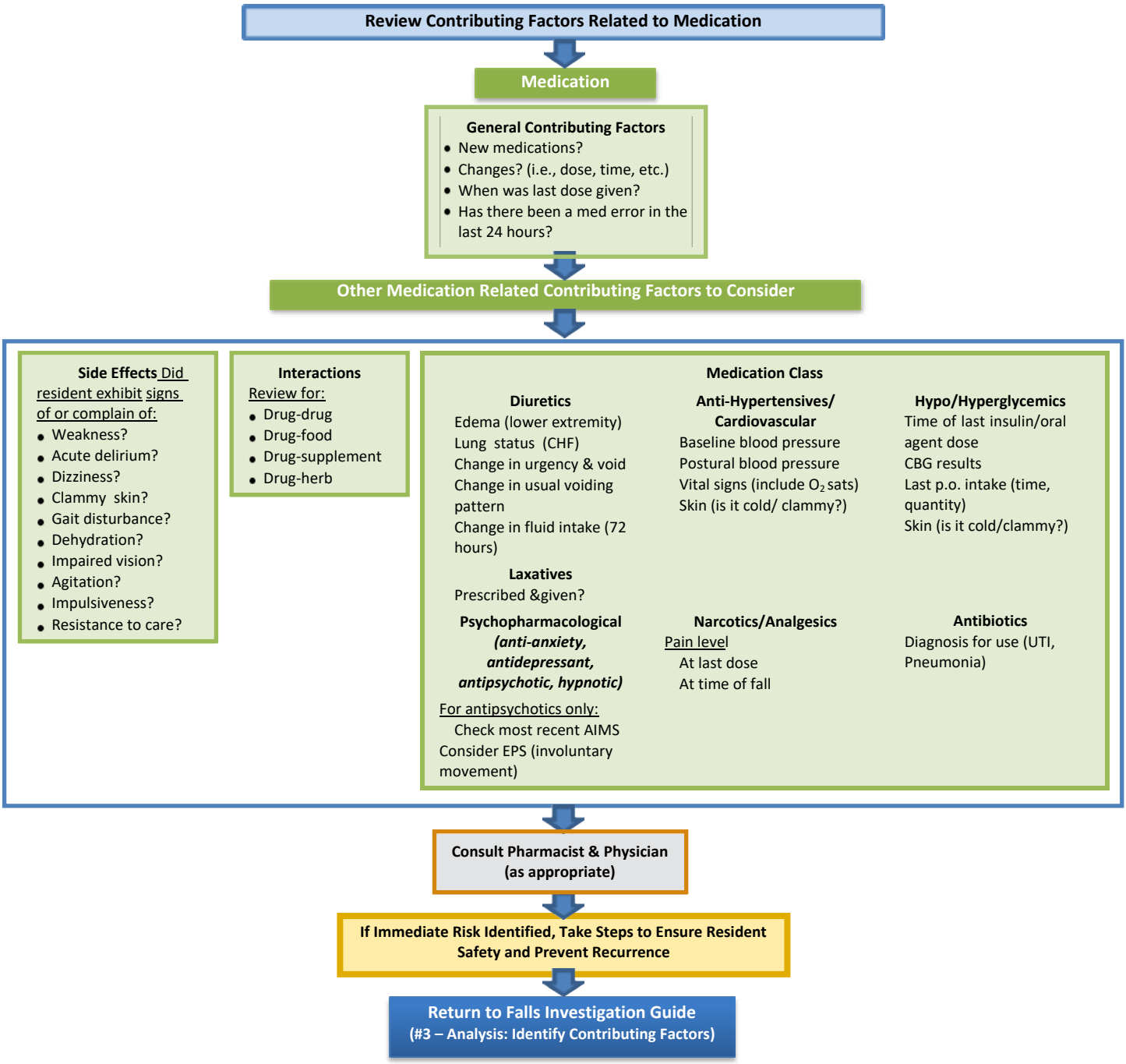
Resident related Contributing Factors

- Language/culture
- Sensory impairment
- Family dynamics
- Cognition
- Resident assumption of risk
- Behavioral issues s
- Underlying medical conditions:
  - Pain
  - Neuromuscular
  - Orthopedic
  - Cardiovascular
  - Recent condition change
  - Dialysis
  - Neurological

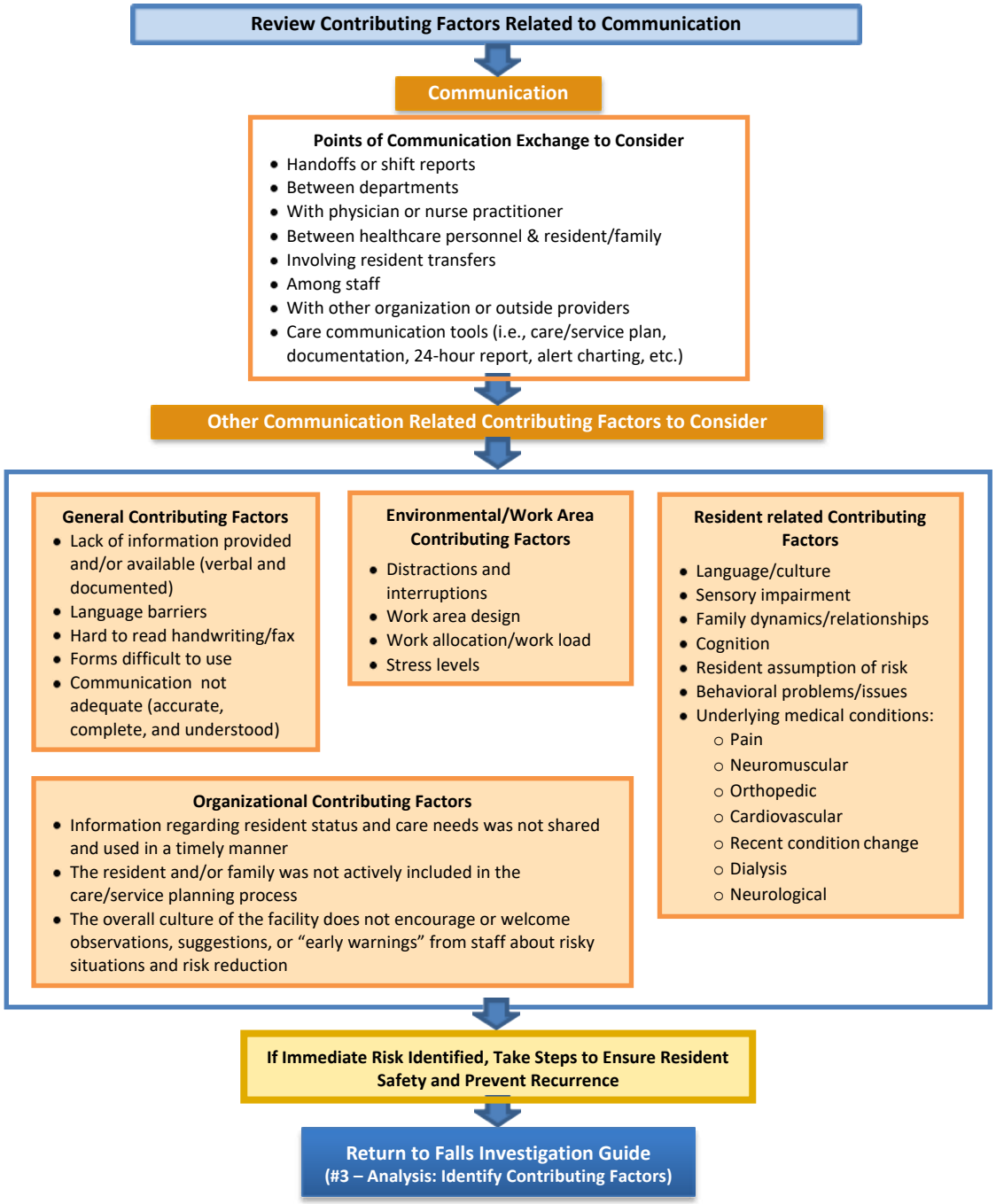
If Immediate Risk Identified, Take Steps to Ensure Resident Safety and Prevent Recurrence

Return to Falls Investigation Guide
For First Responders
(#3 – Analysis: Identify Contributing Factors)

Medication Drill-Down



Communication Drill-Down



SBAR Communication Worksheet

PREP	**Have the following available before calling the Physician, Nurse Practitioner, etc.** • Your assessment of the resident • Resident's chart including most recent progress notes & notes from previous shift • List of current medications, allergies, labs (provide date & time of test(s) done & results of previous test(s) for comparison) • Most recent vital signs • Code status **Use the following modalities to contact the Physician, N.P., etc.:** • Direct page • Call/answering service • Office (during weekdays) • Home or cell phone **Before assuming that the Physician, N.P., etc., is not responding, utilize all modalities. Use appropriate protocol as needed to ensure safe resident care.**
S	**Situation** **I am calling about** <resident name, facility, unit> **The problem I am calling about is** <fall, med error, code, etc.> **Vital signs are:** Blood pressure ___/___; Pulse:___; Respiration:___; Temp:___ **I have just assessed the resident personally and am concerned about the** • Blood pressure, pulse, respiration and/or temp, because it is not within normal limits • Other <state your concern>
B	**Background** **The resident's current mental status is** <confused, agitated, combative, lethargic, etc.> • This is different than baseline <state how> **The skin is** <pale, mottled, diaphoretic, extremities cold or warm, etc.> • This is different than baseline <state how> **The resident is on oxygen.** ____ _____ • The resident has been on (l/min) or (%) oxygen for (min or hr) • The oximeter is reading____% • The oximeter does not detect a good pulse & is giving erratic readings. • This is different than baseline <state how> **The resident's current medications include** <state current, relevant medications> **The resident's current treatments include** <state current, relevant treatments>
A	**Assessment** **This is what I think the problem is** <say what you think the problem is> **The problem seems to be** <cardiac, infection, neurologic, respiratory, etc.> **I am not sure what the problem is, but the resident is deteriorating.** **The resident seems to be unstable & may get worse; we need to do something.**
R	**Recommendation** **I suggest or request that you** <state what you want or would like to see done> • Transfer the resident to the ED • Come see the resident or schedule an appointment • Order a consult, medication, treatment, etc. • Talk to the resident and/or representative about the code status **If a change in medication or treatment is ordered, then ask:** • When do you want to start the new order? • Do you want to discontinue other medications or treatments? • How often do you want vital signs? • How long do you expect this problem to last? • If the resident does not get better, when do you want us to call again? **Document the change in the resident's condition and physician notification.**

Falls Investigation Guide
For First Responders

Fall Occurs

Fall Protocol Components (per facility policy)

Immediately Ensure Resident is Safe, Assess and Treat for Injury
- Put any preliminary preventative steps into place

Make Required Notifications

Nurse or CBC Health Services
- 911 (if applicable)
- Physician (use **SBAR**)
- Admin & DNS (or leadership team)
- Resident's responsible party

Admin or DNS
- Notify Adult Protective Services if abuse/neglect suspected

Situation
Background
Assessment
Recommendation

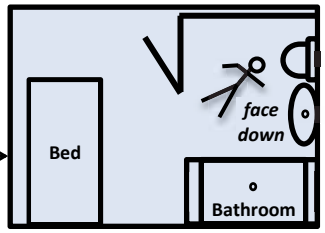
(See back of Communication Drill-Down)

Investigation Components (Root Cause Analysis)

Begin Investigation

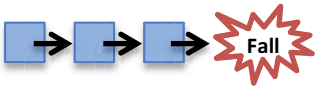
Document Event
- Update care communication tools
  - Alert charting
  - 24-hr. report
  - Temporary care/service plan
- New physician order (note & implement)
- Begin incident report (or other facility document)

#1 – Gather & Document Initial Information
- Interview staff and others closely involved (last to see the resident, first responder, witness, resident, visitors, etc.)
- What do they think happened (sequence of events) and why (contributing factors)
- Use open-ended questions (e.g. "Tell me about…")
- Make a diagram of the scene at time of discovery, attach it to the investigation (show position of furniture, door/doorways, equipment, other relevant features)
  - Draw a stick figure to indicate where resident fell/was found (label as face-up or face-down)



#2 – Fill in the Gaps

Review Findings
- Identify gaps and gather any missing information (i.e., review record, fall history, interview/re-interviews, plan of care, etc.)
- Outline the sequence of events leading up to the fall
- List all possible contributing factors



#3 – Analyze

Document Analysis Findings

Identify Contributing Factors
- Contributing factors to consider:
  - Environment and equipment related
  - Medication related
  - Communication related
  - Were identified fall prevention/risk interventions in place?
  - Care/service plan appropriate, updated, and followed?
- Use the **5-Whys** to uncover root causes (see below)

See Environment & Equipment Drill-Down

See Medication Drill-Down

See Communication Drill-Down

Handoff Investigation (per facility policy)

Give to the individual who will review the initial investigation and:
1. Develop an action plan to prevent recurrence
2. Monitor the effectiveness of the plan

The 5-Whys

A question-asking method used to uncover the underlying cause of an event (see example to right). Uncovering the root causes(s) leads to action plans that are more likely to prevent the event from happening again.

Resident fell in room

why

She tripped over a chair → **Plan: Remove or move the chair**

why

She didn't see the chair

why

The room was dark (no nightlight) → **Plan: Put nightlights in all the rooms**

why

Nightlight not part of plan of care

why

Resident assessed as NOT at risk for falling → **Plan: Review fall risk assessment process; update if needed**

Developed by the Oregon Patient Safety Commission's Nursing Home Expert Panel, V. 1.0

Use the Drill-Downs to Review Contributing Factors Related to: Environment& Equipment, Medications, and Communication

Environment & Equipment Drill-Down

START

Review Diagram of the Scene, Revisit as Necessary

Environment

General Contributing Factors

- Lighting
- Flooring (wet, shiny, contrast, uneven)
- Equipment placement
- Furniture placement
- Room to move freely in the space/turn radius
- Others present (residents, staff, visitors, etc.)

Contributing Factors That Impact How a Resident Interacts with Their Environment
(Keep general contributing factors in mind for each)

- Footwear/clothing
- Mobility
- Prosthesis/splint
- Dominant side re:
  - Equipment
  - Furniture
  - Doors and doorways
  - Bathroom fixtures
- Sensory impairments (eyesight, hearing)
- Cognition
- Resident assumption of risk
- Behavioral problems/issues
- Underlying medical conditions:
  - Pain
  - Neuromuscular
  - Orthopedic
  - Cardiovascular
  - Recent condition change
  - Dialysis
  - Neurological

Equipment

General Contributing Factors

- Defective/nonworking equipment (in good repair?)
- Equipment design (function, displays, controls, etc.)
- Use specified in care/service plan (and up-to date)
- Appropriate for resident?
- Proper placement (re: dominant side, within reach, etc.)
- Equipment meeting code, regulations
- Entrapment/safety risk

Specific Equipment Related Contributing Factors
(Keep general contributing factors in mind for each)

Bed
- Height/position
- Brakes on/off
- Mattress (type)

Side-rails
- Full/half/other
- Transfer cane
- Padding

Fall mat
- Thickness

Bathroom equipment
- Toilet seat raise
- Grab bars
- Toilet height
- Commode present
- Toileting schedule

Call light
- See general contributing factors

Alarms
- On/attached to resident?
- Turned on?
- Functioning/working?
- Sounding?
- When was it placed?

Assistive devices and transfer equipment
- In need of repair (exposed metal, torn vinyl, etc.)
- Are brakes on/off?
- Are footrests up/down/off?
- Is wheelchair cushion present/with or without nonskid material?
- Is resident positioned appropriately?
- Is device adjusted/fitted properly? (e.g., seat height/depth, foot placement)

Medication Drill-Down

START

Note: A more thorough review of medications to be completed by nurse manger (to include interactions and medication class)

General Contributing Factors

- New medications?
- Changes? (i.e., dose, time, etc.)
- When was last dose given?
- Has there been a med error in the last 24 hrs.?

Side Effects

Did resident exhibit signs of or complain of:

- Weakness?
- Acute delirium?
- Dizziness?
- Clammy skin?
- Gait disturbance?
- Dehydration?
- Impaired vision?
- Agitation?
- Impulsiveness?
- Resistance to care?

Consult Pharmacist & Physician (as appropriate)

Communication Drill-Down

START

Points of Communication Exchange to Consider

- Handoffs or shift reports
- Between departments
- With physician or NP
- Between staff & resident/family
- Involving resident transfers
- Among staff
- With other providers
- Care communication tools (i.e., care/service plan, 24-hour report, alert charting, etc.)

General Contributing Factors

- Lack of information provided and/or available (verbal and written)
- Language barriers
- Hard to read handwriting/fax
- Forms difficult to use
- Communication not adequate (accurate, complete, understood)

Environmental/Work Area Contributing Factors

- Distractions and interruptions
- Work area design
- Work allocation/work load
- Stress levels

Resident related Contributing Factors

- Language/culture
- Sensory impairment
- Family dynamics
- Cognition
- Resident assumption of risk
- Behavioral issues s
- Underlying medical conditions:
  - Pain
  - Neuromuscular
  - Orthopedic
  - Cardiovascular
  - Recent condition change
  - Dialysis
  - Neurological

If Immediate Risk Identified, Take Steps to Ensure Resident Safety and Prevent Recurrence

Return to Falls Investigation Guide
For First Responders
(#3 – Analysis: Identify Contributing Factors)

Appendix A: Falls Investigation Guide Documentation Checklist

The checklist below identifies the recommended components of a falls investigation as outlined in the Falls Investigation Guides and *Oregon's Root Cause Analysis (RCA)* process. Review your current process and indicate which of the "Recommended Investigation Components" are a part of your system with a "✓" in the box to the right.

	Recommended Investigation Components (✓ if present)	
Pre-Investigation	Immediate plan to protect the resident & ensure safety	❒
	Notifications	
	• The physician (using **SBAR**) and/or 911 (who, time)	❒
	• Resident's responsible party (who, time)	❒
	• If applicable (i.e., abuse/neglect suspected), appropriate state agencies (i.e., Adult Protective Services or other)	❒
Gather & document initial information	**Interviews to determine what happened (sequence of events) and why it happened**	
	• With staff and others closely involved (include last to see the resident, first responder, witnesses, family, etc.)	❒
	• With the resident	❒
	A drawing/diagram of the scene at the time of discovery	❒
	Documentation of initial findings	
	• Determination whether or not the care/service plan was followed	❒
	• Updates to care communication tools (i.e., Alert charting, 24-hr. report, Temporary care/service plan, etc.)	❒
Fill in the gaps	• Begin incident report (or other facility documentation), to be completed per facility protocol	❒
	Review of initial findings by the Interdisciplinary Team (IDT) to fill in any gaps (i.e., sequence of events leading up to the fall, possible contributing factors, etc.)	❒
Analyze	**Analyze to identify contributing factors**	
	• Environmental/equipment related contributing factors (i.e., resident factors that impact how they interact with environment, equipment: functional appropriate, and, care planned, etc.)	❒
	• Medication related contributing factors (i.e., current medications and administration, side-effects, interactions, issues associated with medication class)	❒
	• Communication related contributing factors (i.e., consider all possible points of communication exchange, organizational factors, environmental factors, resident related factors, etc.)	❒
	• Evaluation to determine if identified fall prevention/risk intervention in place (consider appropriateness for resident, changes made as a result of previous falls, resident acceptance of risk)	❒
	• Evaluation to determine appropriateness of current care/service plan (up to date)	❒
Develop an action plan	Identification of **root cause(s)** (use **5-Whys**)	❒
	An action plan to address root causes and prevent recurrence	
	• Include resident and/or representative in the process	❒
	• Use **SMARTS** framework (i.e., Specific, Measureable, Attainable, Realistic, Timely, Supported)	❒
	• Consider effectives of previous plans (interventions tried, both successful and unsuccessful)	❒
	• Communication of any adjustments made to the care/service plan (to resident and/or representative and staff; update all applicable care communication tools)	❒
Implement action plan and evaluate results (ongoing)	• Test the plan on a small scale before full implementation (**PDSA** cycles)	❒
	Identification of next steps (full implementation of action plan if successful, revise action plan and re-test (using **PDSA)** if unsuccessful)	❒
	Monitor effectiveness of plan over time (modify as necessary)	❒
	If applicable, completion of an Oregon Patient Safety Commission adverse event report	❒

Appendix B: Fall Investigation Form Examples

1. **Example: Falls Investigation Form**

   Developed by the Nursing Home Expert Panel

   This form follows the investigation process outlined in the Falls Investigation Guides. It was developed to use as a comparison tool for your current investigation forms/processes or to be incorporated into individual facility investigation forms and modified as necessary to meet facility needs while maintaining critical investigation components recommended in this guide. A Word version of this form is also available on OPSC's website. You can insert your individual facility name and make it your own. Note that both nursing home and CBC staff position titles are used side-by-side in the form. Your facility may choose to revise the form to reflect your facility specific staff position titles.

2. **Example: Nursing Facility Falls Investigation Form**

   Provided courtesy of Rose Villa, Portland, OR

   As a pilot participant testing the guides, Rose Villa created their own falls investigation form based on their experience using the Falls Investigation Guides. This form is available in Word format only on OPSC's website and is not included within this document. You are encouraged to insert your individual facility name and make it your own.

3. **Example: CBC Falls Investigation Form**

   Provided courtesy of Mount Angel Towers, Mount Angel, OR

   Also a pilot participant testing the guides, Mount Angel Towers created their own falls investigation form based on their experience using the Falls Investigation Guides. This form is available in Word format only on the OPSC's website and is not included within this document. You are encouraged to insert your individual facility name and make it your own.

Falls Investigation Form

First-Responder: Complete the first five pages in order to gather initial information about what happened and why you think it may have happened. Once complete, pass this form off to the individual (per facility protocol) who will complete the investigation process.

Resident Name:

Name/Title of Person Completing Form:

Date of Fall: **Time of Fall:** **Shift:**

Immediate Assessment of Resident

☐ Y ☐ N	Did the resident sustain an Injury as a result of fall? If yes, explain:
☐ Y ☐ N	Were any immediate measures put into place to protect the resident and ensure safety? Explain:
Vitals	T: Pulse: R: BP: Orthostatic PB:

Notifications

☐	The physician (SBAR) – Name: [☐ Phone ☐ Fax]	Time:
☐	Resident's responsible party – Name:	Time:
☐	Administrator or Executive Director	Time:
☐	DNS or RN Health Service Dir.	Time:

Gather Initial Information

Interviews

Use open ended questions (e.g., "Tell me a little more about…") and document the following using their words (attach additional pages as necessary):

Name: Staff or others closely involved (e.g., witness, visitors, etc.)	Location at time of fall	What happened?	Why they think the fall happened
Resident			

Name: Staff or others closely involved (e.g., witness, visitors, etc.)	Location at time of fall	What happened?	Why they think the fall happened
First Responder			

Draw a Diagram of the Scene

Draw a diagram of the scene at the time of discovery in the box below (show furniture, door/doorways, equipment, and other relevant features). Draw a stick-figure to indicate where resident fell/was found (note if face-up or face-down).

Update Care Communication Tools

☐	Alert Charting	Time:
☐	24-Hour Report	Time:
☐	Temporary Care/Service Plan	Time:

Identify Contributing Factors

Use the table below to help you determine what factors may have contributed to the fall. Complete the table as follows:

1. Identify which of the "Possible Contributing Factors" is applicable to the resident (✓ "Applies to Resident/Situation").
2. Determine which items could have been a contributing factor (CF) to the fall (✓ "CF to Fall").
3. Explain any items selected as contributing factors in the "CF to Fall" column.
4. For those items identified as "CF to Fall," identify if it is currently addressed in the resident's care/service plan (✓ "Part of CP").

Possible Contributing Factors	Applies to Resident	CF to Fall	If "CF to Fall," explain:	Part of CP
Resident Factors				
Cognition	☐	☐		☐
Eyesight/Visual Field	☐	☐		☐
Footwear/Clothing	☐	☐		☐
Mobility	☐	☐		☐
Hearing	☐	☐		☐
Prosthesis/Splint	☐	☐		☐
Dominant Side				
Equipment	☐	☐		☐
Furniture	☐	☐		☐
Doors/Doorways	☐	☐		☐
Bathroom fixtures	☐	☐		☐
Underlying Medical Conditions				
Pain	☐	☐		☐
Neuromuscular	☐	☐		☐
Orthopedic	☐	☐		☐
Cardiovascular	☐	☐		☐
Recent condition change	☐	☐		☐
Dialysis	☐	☐		☐
Dementia	☐	☐		☐
Neurological (not dementia)	☐	☐		☐
Environment				
Lighting	☐	☐		☐
Floor (wet, shiny, contrast, uneven)	☐	☐		☐
Equipment placement	☐	☐		☐
Furniture placement	☐	☐		☐
Room to move freely/turn radius	☐	☐		☐
Others present (staff, visitors, residents, etc.)	☐	☐		☐
Bed				
Height/position	☐	☐		☐
Brakes on/off	☐	☐		☐
Mattress-type	☐	☐		☐
Side-rails				
Full/half/other:_____	☐	☐		☐
Up/Down	☐	☐		☐
Transfer cane	☐	☐		☐
Padding	☐	☐		☐
Fall Mats				
Thickness	☐	☐		☐
Placement re: dominant side	☐	☐		☐

Possible Contributing Factors	Applies to Resident	CF to Fall	If "CF to Fall," explain:	Part of CP
Call Light				
Within reach of resident	☐	☐		☐
Functioning/working	☐	☐		☐
Appropriate for resident use	☐	☐		☐
Placement re: dominant side	☐	☐		☐
Bathroom				
Toilet seat riser	☐	☐		☐
Grab bars	☐	☐		☐
Toilet height	☐	☐		☐
Commode present	☐	☐		☐
Toileting schedule	☐	☐		☐
Restraints & Supportive Devices				
Proper application	☐	☐		☐
Appropriate for resident	☐	☐		☐
Alarms				
Appropriate for resident	☐	☐		☐
Attached to resident	☐	☐		☐
Turned on	☐	☐		☐
Functioning/working	☐	☐		☐
Sounding	☐	☐		☐
Assistive Devices/Transfer Equipment				
Device present	☐	☐		☐
Appropriate for resident	☐	☐		☐
Within resident's reach	☐	☐		☐
In need of repair (exposed metal or vinyl)	☐	☐		☐
Brakes on/off	☐	☐		☐
Footrests up/down/off	☐	☐		☐
Wheelchair cushion with non-skid pad	☐	☐		☐
Appropriate positioning	☐	☐		☐
Appropriate fitting (seat height, depth, foot placement)	☐	☐		☐
Medications				
Time of last dose: _____	☐	☐		☐
New medication	☐	☐		☐
Med. change in the last 24 hours (dose, time, etc.)	☐	☐		☐
Med error in the last 24 hours	☐	☐		☐
Drug side effects	☐	☐		☐
Possible Contributing Factors	**Applies to Situation**	**CF to Fall**	**If "CF to Fall," explain:**	**Part of CP**
Points of Communication Exchange				
Handoffs/shift reports	☐	☐		☐
Between departments	☐	☐		☐
Involving patient/resident transfers	☐	☐		☐
Between staff & resident/family	☐	☐		☐
Among staff	☐	☐		☐
With other organizations/providers	☐	☐		☐
Care communication tools (i.e., care plan, documentation, 24-hour report, alert charting, etc.)	☐	☐		☐

Possible Contributing Factors	Applies to Situation	CF to Fall	If "CF to Fall," explain:	Part of CP
General Communication Factors				
Lack of information	☐	☐		☐
Language barriers	☐	☐		☐
Hard to read handwriting/fax	☐	☐		☐
Adequate communication (accurate, complete, understood)	☐	☐		☐
Environmental/Work Area				
Distractions and interruptions	☐	☐		☐
Work area design	☐	☐		☐
Work allocation/work load	☐	☐		☐
Stress levels	☐	☐		☐
Resident Factors				
Language/culture	☐	☐		☐
Sensory impairment	☐	☐		☐
Family dynamics/relationships	☐	☐		☐
Cognition	☐	☐		☐
Resident assumption of risk	☐	☐		☐
Behavioral problems/issues	☐	☐		☐
Organization Factors				
Resident status info. shared/ used in a timely manner	☐	☐		☐
Resident/Family involved in Care planning process	☐	☐		☐
Culture encourages reporting safety issues	☐	☐		☐

Fall History

☐ Y ☐ N	Has the resident had a fall in the last 30 days? If yes, date:
☐ Y ☐ N	If yes (to above), was there an injury as a result of the fall? If yes, explain:

Conclusions – Root Cause(s)

Use the 5-whys to determine **root cause(s)** of this fall (there are likely multiple root causes). Continue to ask "why" until you can't ask "why" any longer.

What do you believe to be the root cause(s) of this fall (list below)?

When complete, sign below and give this form to the individual (per facility protocol) who will complete the investigation processes and begin action planning.

Signature: **Date:**

Name, Title (please print):

Investigation Review, Follow-up & Action Planning

Review the initial investigation and complete the following section (typically the RCM in a nursing home or other facility specified staff in the CBC setting). Once complete, pass this form off to the individual(s) (per facility protocol) who will complete final review.

Use the table below to help you determine what medication related factors may have contributed to the fall. Complete the table as follows:

1. Identify which of the "Possible Contributing Factors" is applicable to the resident (✓ "Applies to Resident").
2. Determine which items could have been a contributing factor (CF) to the fall (✓ "CF to Fall").
3. Explain any items selected as contributing factors in the "CF to Fall" column.
4. For those items identified as "CF to Fall," identify if it is currently addressed in the resident's care/service plan (✓ "Part of CP").
5. Consult Pharmacist and Physician as appropriate.

Possible Contributing Factors	Applies to Resident	CF to Fall	If "CF to Fall," explain:	Part of CP
Medications				
Time of last dose: _____	☐	☐		☐
New medication	☐	☐		☐
Med. change in the last 24 hours (dose, time, etc.)	☐	☐		☐
Med error in the last 24 hours	☐	☐		☐
Drug side effects	☐	☐		☐
Diuretics				
Edema (lower extremity)	☐	☐		☐
Lung status (CHF)	☐	☐		☐
Change in urgency & void	☐	☐		☐
Change in fluid intake (last 72 hours)	☐	☐		☐
Laxatives				
Prescribed	☐	☐		☐
Given	☐	☐		☐
Anti-psychotics				
Most recent AIM	☐	☐		☐
EPS (involuntary movement)	☐	☐		☐
Narcotics/Analgesics				
Pain level at last dose:_____	☐	☐		☐
Pain level at time of fall:_____	☐	☐		☐
Anti-Hypertensives /Cardiovascular				
Baseline BP:_____	☐	☐		☐
Postural BP:_____	☐	☐		☐
Vital Signs: P:_____R:_____ BP:_____O_2 sats: _____	☐	☐		☐
Skin (cold/clammy)	☐	☐		☐
Hypo-/Hyperglycemics				
Time of last insulin/oral agent dose:_____	☐	☐		☐
Last p.o. intake time:_____	☐	☐		☐
Skin (cold/clammy)	☐	☐		☐
CBG Results	☐	☐		☐

Conclusions – Root Cause(s)

Use the 5-whys to determine **root cause(s)** of this fall (there are likely multiple root causes). Continue to ask "why" until you can't ask "why" any longer.

What do you believe to be the root cause(s) of this fall (list below)?

Develop an Action Plan

Develop and action plan that (1) addresses identified root cause(s), (2) uses SMARTS framework (Specific, Measureable, Attainable, Realistic, Timely, Supported), (3) and answers the question, "What can we do to keep similar events from happening again?" (Describe action plan below)

☐	Resident and/or responsible party included in the process (consider goals and preferences)
☐	Effectiveness of previous plans considered (interventions tried, both successful and unsuccessful) List previous interventions:

Communicate Action Plan

☐ Y ☐ N	Care/Service plan revised to reflect action plan? If no, explain why:

The following were notified of the new action plan: ☐ Resident ☐ Nursing staff ☐ CNA/care staff ☐ DNS/RN Health Service Dir.	Date:
Other staff notified (as needed): ☐ Dietary ☐ Maintenance ☐ Housekeeping ☐ Social Services ☐ Activities ☐ Others (list):	Date:

Monitor Effectiveness of Action Plan

Monitoring Plan

The action plan will be monitored as follows:	Timeframe (how long?):

When complete, sign below and give this form to the individual(s) (per facility protocol) who will complete the final review.

Signature:	**Date:**

Name, Title (please print):

Final Review

Final Reviewers (typically clinical management and administration, e.g., DNS and Administrator or RN Health Service Dir. and Executive Dir.)**:** Review the fall investigation and action plan and complete the section below.

Final Reviewer (DNS or RN Health Service Dir.)

Additional comments, questions, or changes related to fall investigation and action plan:

Final Reviewer (Administrator or Executive Dir.)

Additional comments, questions, or changes related to fall investigation and action plan:

Notifications

☐ Y ☐ N	Has abuse been ruled out?
☐ Y ☐ N	If no (above), has Adult Protective Services been notified? If no, explain why:
☐ Y ☐ N	If fall resulted in in hospitalization or death, was an adverse event report submitted to the Oregon Patient Safety Commission (applies to NH program participants only)? If no, explain why:

Signature: Date:

Name, Title (please print):

Administrator Signature: Date:

Name, Title (please print):

Appendix C: Integrating the Guides into the Investigation Process

Using the Guides

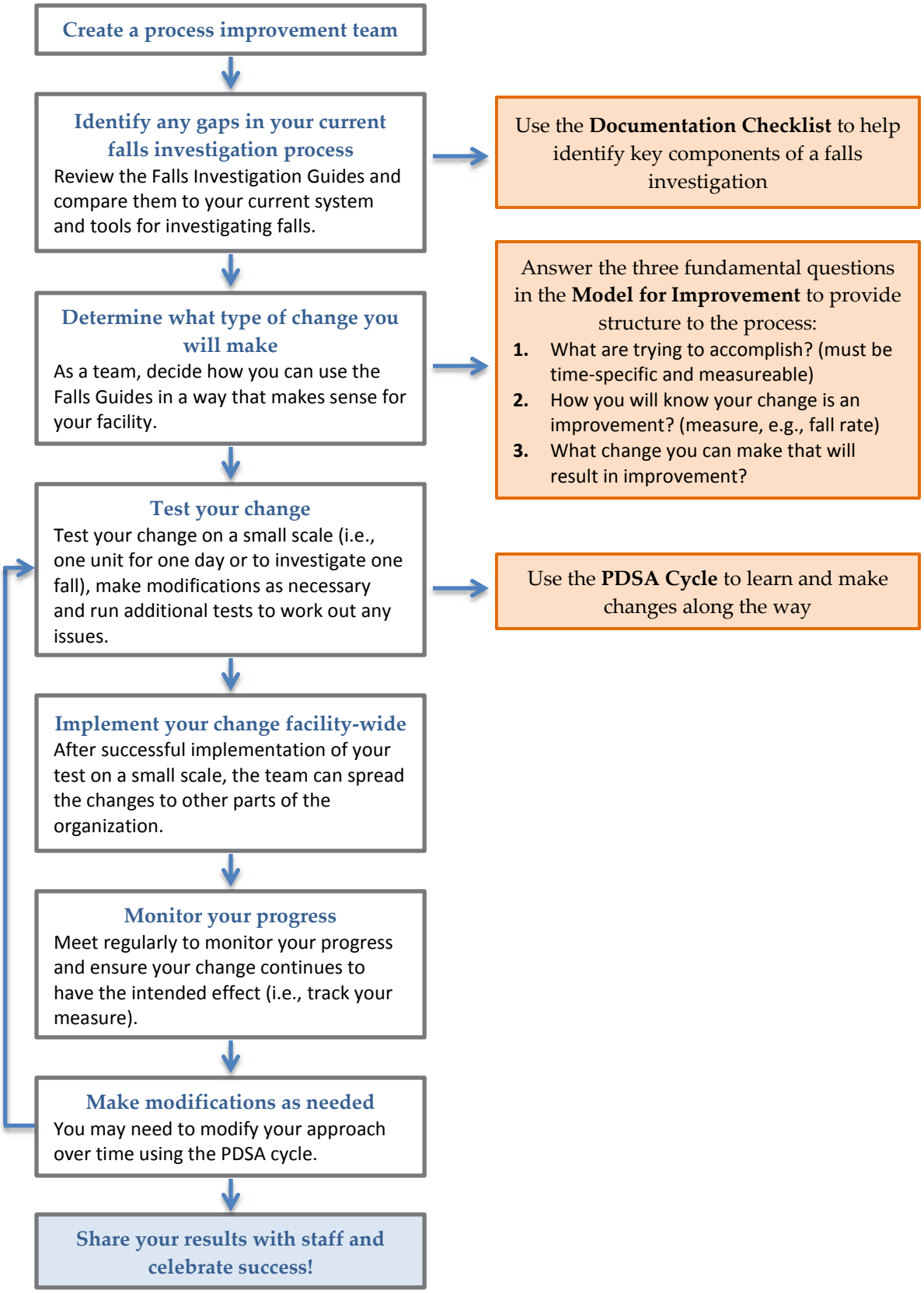
The table below describes an incident investigation and findings from a facility without utilizing the Falls Investigation Guides ("Old"), an investigation and findings utilizing the guides ("New"), and an investigation process guidelines crosswalk. Each investigation (the "Old" and "New") is compared against the investigation process guidelines to determine if it contains the necessary components; a "Y" (yes) or "N" indicates if the investigation met the guidelines. Utilize the *Falls Investigation Guide Documentation Checklist* (Appendix A) to ensure your investigation has the necessary components.

Incident: A resident stood quickly from her wheelchair and lost her balance. A staff member who was standing by was able to grab hold of the gait belt currently on the resident and assist her to the floor.

Old Incident Investigation (without the guides)	Y/N	Investigation Process Guidelines	Y/N	New Incident Investigation (with the guides)
Investigation summary: Resident stood quickly from chair. Resident lost balance. Staff member standing nearby eased resident to floor. In room, lights on. No injuries. Alarm was on the chair and alarm sounded. **Findings:** • Documentation noted, "Successful incident" (Panel interpretation: current facility practices related to falls protocol were followed). • No documentation of changes to plan of care interventions to prevent recurrence; all interventions in place. • No documented reference as to why resident was standing up. • Interviews with residents, staff and/or witnesses not documented. • Resident noted to be "impulsive" and "unpredictable." **Action Plan:** None	N	• Thorough investigation to evaluate and identify the risks for falls (antecedents, interviews) documented.	Y	**Investigation summary:** Resident was in room prior to dinner and staff came to escort resident to meal. Resident had the sudden urge to go to the bathroom, standing quickly. Resident lost balance and staff was able to ease them to the floor. Alarm began to sound once resident began to fall. **Findings:** Resident has history of being impulsive and attempting to stand independently. Resident was not wearing shoes or slip-resistant socks at time of fall. Resident had to wait in his room to come to the dining room with one-on-one assistance; he becomes agitated while waiting. Recent medication change likely cause of urinary urgency. **Action Plan:** Plan of care will be updated to include safe footwear when resident is out of bed. Resident's plan of care also updated to include reminder to use bathroom before meals and activities and an assisted walk around the building before being seated for a meal. New plan of care interventions will be shared with all staff and monitored for 7 days. If successful, they will be fully implemented. If not, new interventions will be planned and implemented.
	N	• Investigation of cause of accident including, if indicated, revised interventions to plan of care to prevent recurrence.	Y	
	N	• Documentation of monitoring the effectiveness of the interventions and modifying them as necessary.	Y	
	N	• Plan of care implemented consistently.	Y	
	N	• Plan of care interventions based on minimizing resident's risks to try to prevent avoidable accidents.	Y	
	N	• Plan of care modified as needed based on response, outcomes, and needs of resident.	Y	
	N	• Reporting or documentation of reporting to a state agency if abuse/neglect suspected.	Y	

How to Integrate the Falls Guides into the Investigation Process

The process map below outlines how the Falls Guides could be integrated into your current investigation process. Several quality improvement tools introduced in this How-to Guide are used.



Appendix D: Glossary of Terms

5 Whys

A question-asking method used to uncover the underlying cause(s) of an event. Uncovering the root cause(s) leads to an action plan that is more likely to prevent the event from happening again. An example of utilizing the 5-whys process to investigate the causes of fall is outlined below. Columns A, B, and C follow different causes that contributed to the same event through the 5-whys process.

Problem/Event Resident found on floor of bathroom sitting with back against the wall near the door. Puddle of liquid pooled in front of toilet and sink.		
Why?		
Resident stated he had to go to the bathroom; after pushing call light and waiting he decided to walk unassisted to the bathroom.		
Why?		
A	**B**	**C**
Resident had increased fluid intake that day causing new urinary urgency at night.	Call light did not register on staff pagers.	Resident's walker out of reach
Why?		
New medication led to increased fluid intake and new urinary urgency.	Call light in room disconnected from paging system.	Resident had historically slept through the night; walker put away to keep thoroughfare open.
Why?		
Increase in new medication only recorded in MAR; changes to care plan not yet made.	Maintenance done paging system earlier in the week & reconnection test indicated it was working.	Medication changes did not prompt care plan changes.
Why?		
Only managers are authorized to make care plan changes (none present at time of medication change).	Reconnection testing done by one individual who mis-marked the audit form indicating that this call light was working.	Only managers are authorized to make care plan changes (none present at time of medication change).
Action Plan (with SMARTS)		
Immediately implement a Manager-On-Duty program to ensure management staff are available (in-person or on-call) to review and approve care plan changes. Review the policy & procedure regarding care plan changes within two weeks. Consider making changes to enable non-management staff to make care plan changes. Once updated, monitor the new policy & procedure for 30 days for effectiveness then fully implement with a tracking/monitoring plan.	Following any maintenance of the call light system reconnection will be verified using a two-person check. This will begin with two staff members re-testing every call light by the end of the day tomorrow. Random audits of call lights will occur at least weekly using the two-person check. Monitor the new plan for 30 days for effectiveness then fully implement and track monthly	Review the medication administration system. Review how new medication orders can be used to prompt care plan changes within two weeks in conjunction with the care plan policy and procedure review.

Contributing Factors

An aspect of the situation or care process that plays a part in the adverse event; these are usually system-level, not person-focused; adverse events are usually the result of many contributing factors.

Plan-Do-Study/Check-Act (PDS/CA)

PDS/CA is shorthand for testing a change by planning it, trying it, observing the results, and acting on what is learned. This is the scientific method used for action-oriented learning. (Source: ihi.org)

Plan: Formulate action steps.
Do: Implement steps on a trial basis.
Study/Check: Monitor effectiveness of action steps for specified time (1 week, 30 days, etc.)
Act: Review effectiveness of plan, then adopt steps or revise plan

Model for Improvement

A model to test change quickly that combines the PDSA and the following three questions:

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in an improvement?

Root Cause Analysis (RCA)

A systematic process for identifying the most basic or causal factor(s) underlying variation in performance; the intensive, in-depth analysis of a problem event to learn the most basic reason(s) for the problem which if corrected will minimize the recurrence of that event. For more information on RCA, please refer to *Oregon's Guide to Root Cause Analysis in Long Term Care, Investigating with a Different Lens.* (Available at: http://library.state.or.us/repository/2010/201009130912581/index.pdf). A model of how RCA is used to investigate a fall is also available in Appendix E.

The RCA process involves:

- Determining what happened.
- Identifying what factors contributed to the event.
- Developing an action plan to reduce the likelihood of a similar event.

The steps in Oregon's Root Cause Analysis process are:

1. Gather & document initial information
2. Fill in the gaps
3. Analyze
4. Develop an action plan
5. Evaluate results

SBAR Communication (Situation-Background-Assessment-Recommendation)

SBAR is a technique that provides a framework for communication between members of the health care team about a resident's condition. SBAR is an easy-to-remember, concrete mechanism useful for framing any conversation, especially critical ones, requiring a clinician's immediate attention and action. It allows for an easy and focused way to set expectations for what will be communicated, and how, between members of the team, which is essential for developing teamwork and fostering a culture of patient safety. (Source: ihi.org)

SMARTS for Action Planning

SMARTS is technique used to map out action plans. This step-by-step approach give action plans the structure required to see results. Action plans with SMARTS are:

- **S**pecific (identify who, what, where, when, how, why)
- **M**easurable (set criteria for tracking progress toward completion)
- **A**ttainable (there is a reasonable chance of success)
- **R**ealistic (willing and able to work on it)
- **T**imely (set time frame and end date)
- **S**upported (determine resources to support your action plan, i.e., organization commitment, outside resources such as books, articles, courses, other LTC experts)

Appendix E: Additional Resources

1. **Resource — Root Cause Analysis Case Example**
   This resource walks you through a fall investigation using root cause analysis.

2. **Tool — PDSA Worksheet for Testing Change**
   Provided courtesy of Acumentra Health

3. **Article — Putting Patient Safety First: Creating a culture of patient safety in a nursing facility improves clinical outcomes and diminishes liability**
   Brownlee, Maurice, A., RN. Putting Patient Safety First: Creating a culture of patient safety in a nursing facility improves clinical outcomes and diminishes liability. A new CMS initiative can help. *Provider Magazine*. April 2009; 39–43.

4. **Article — Rethinking the Use of Position Change Alarms**
   (available online only, see link below)
   Brady, Cathie, Frank, Barbara, Rader, Joanne. *Rethinking the Use of Position Change Alarms.* January, 2007. http://anha.org/members/documents/RethinkingUsePositionAlarms_072208.pdf. Accessed August 22, 2010.

5. **Resource — State Operations Manual Appendix PP – Guidance to Surveyors for Long Term Care Facilities**
   (available online only, see link below)
   cms.gov/manuals/Downloads/som107ap_pp_guidelines_ltcf.pdf. Accessed February 22, 2011.

6. **Resource — Oregon Administrative Rules for Long Term Care Settings (i.e., nursing facilities and different community-based care settings)**
   (available online only, see link below)
   oregon.gov/DHS/spwpd/ltc/ltc_guide/whataremychoices.shtml. Accessed February 22, 2011.

Root Cause Analysis Case Example

Event

Resident fell at the bedside while on her way to the restroom. She was found on the floor with a bleeding skin tear to her left hand and an abrasion to her left knee; her wheelchair was tipped forward. The physician was notified and a treatment for her left hand skin tear was ordered as well as an x-ray to her left knee and right hip.

Gather & Document Information

Documentation/Chart:

- 78 year old, female
- Diagnoses: Right hip pinning, urinary urgency, congestive heart Failure (CHF), hypertension (HTN)
- Current medications: Blood thinner, two anti-hypertensive meds, a diuretic, pain meds as needed.
- History: Had a fall at home after getting caught in her dog's leash which resulted in a fractured right hip. Was admitted to the hospital for surgery (hip pinning) and is now in a skilled nursing facility for rehabilitation.

Staff Interview/Observation:

- Resident was witnessed resting in her bed at 1030 and aide moved the bedside table close to bed in preparation for lunch.
- A staff member heard her call out at 1115.
- The aide that found the resident on her left knee, her left hand was bleeding, and her right leg was extended straight and in alignment with her body.
- The resident does not use side rails.
- The resident's wheel chair was behind her, but tipped forward.
- Resident's wheelchair brakes were not locked.

Resident Interview:

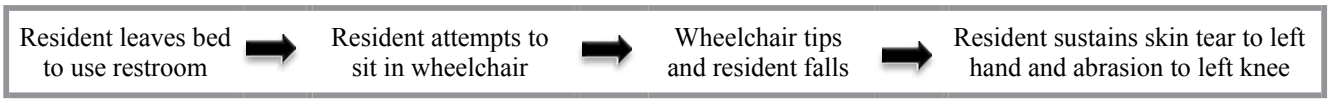
- The resident states she was getting up to use the bathroom.
- The resident does not complain of any increase in right hip pain and her surgical incision is intact.
- She does state that her left knee is painful as is her left hand where she hit it on the bedside table.
- The resident stated that she tried to sit in her wheelchair because she became dizzy on standing.

Other Data Sources:

- _____
- _____
- _____
- _____

Fill in the Gaps

- Identify possible contributing factors
- Identify the sequence of events in order to clearly understand what took place and the problem/issue:



Analysis

- Identify contributing factors
- Use the 5-Whys to uncover root causes (continue asking "why")

Develop an Action Plan

- Include Interdisciplinary Team (IDT) in process
- Ask, "What can we do to keep similar events from happening again?" (on a system-level)
- Address identified root causes
- Develop action plans with SMARTS (specific, measurable, attainable, realistic, timely, supported)

Evaluate Results

- Use PDSA to plan, test, and implement action plans (PDSA: Plan, Do, Study, Act)
- Track and trend data over time to ensure action plan met intended goal

PDSA Worksheet for Testing Change

Achieving your goal will require multiple small tests of change to reach and efficient process and the desired results.

3 Fundamental Questions for Improvement

1. **What are we trying to accomplish (AIM)?**
2. **How will we know that a change is an improvement (MEASURE)?**
3. **What changes can we make that will lead to improvement (CHANGE)?**

Plan

What is your first (or next) test of change?	**Test population?**	**When to be done?**
List the tasks needed to set up this test of change: **1.** **2.** **3.** **4.**	**Who is responsible?**	**When to be done?**
Predict what will happen when test is carried out:	**Measures to determine whether prediction succeeds:**	

Do

Describe what happened when you ran the test (i.e., what was done, measured results, observations).

Study

Describe how measured results and observations compared with the predictions.

Act

Determine next steps (i.e., modify idea and retest {Adapt}, spread idea {Adopt}, test a new idea {Abandon this idea}).

Adapted from a worksheet developed by the Institute for Healthcare Improvement. This material was prepared by Acumentra Health, Oregon's Medicare Quality Improvement Organization, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. 9SOW-OR-NHR-09-04 7/10/09

RESTRAINTS & ALARMS

Are Restraints Prohibited by CMS?

CMS is committed to reducing unnecessary physical restraints in nursing homes and ensuring that residents are free of physical restraints unless deemed necessary and appropriate as permitted by regulation. Proper interpretation of the physical restraint definition is necessary to understand if nursing homes are accurately assessing manual methods or physical or mechanical devices, materials or equipment as physical restraints and meeting the federal requirement for restraint use (see Centers for Medicare & Medicaid Services. [2007, June 22]. Memorandum to State Survey Agency Directors from CMS Director, Survey and Certification Group: Clarification of Terms Used in the Definition of Physical Restraints as Applied to the Requirements for Long Term Care Facilities. Retrieved December 18, 2012, from http://www.cms.gov/Medicare/Provider-Enrollment-andCertification/SurveyCertificationGenInfo/downloads/SCLetter07-22.pdf).

Federal regulations and CMS guidelines do not prohibit use of physical restraints in nursing homes, except when they are imposed for discipline or convenience and are not required to treat the resident's medical symptoms. The regulation specifically states, "The resident has the right to be free from any physical or chemical restraints imposed for the purposes of discipline or convenience and not required to treat the resident's medical symptoms" (42 CFR 483.10(e)(1) and 483.12). Research and standards of practice show that physical restraints have many negative side effects and risks that far outweigh any benefit from their use.

DEFINITION

PHYSICAL RESTRAINTS

Any manual method or physical or mechanical device, material or equipment attached or adjacent to the resident's body that the individual cannot remove easily, which restricts freedom of movement or normal access to one's body

(State Operations Manual, Appendix PP).

Prior to using any physical restraint, the nursing home must assess the resident to properly identify the resident's needs and the medical symptom(s) that the restraint is being employed to address. If a physical restraint is needed to treat the resident's medical symptom, the nursing home is responsible for assessing the appropriateness of that restraint. When the decision is made to use a physical restraint, CMS encourages, to the extent possible, gradual restraint reduction because there are many negative outcomes associated with restraint use. While a restraint-free environment is not a federal requirement, the use of physical restraints should be the exception, not the rule.

Health-related Quality of Life

- Although the requirements describe the narrow instances when physical restraints may be used, growing evidence supports that physical restraints have a limited role in medical care. Physical restraints limit mobility and increase the risk for a number of adverse outcomes, such as functional decline, agitation, diminished sense of dignity, depression, and pressure ulcers.
- Residents who are cognitively impaired are at a higher risk of entrapment and injury or death caused by physical restraints. It is vital that physical restraints used on this population be carefully considered and monitored. In many cases, the risk of using the physical restraint may be greater than the risk of it not being used.
- The risk of restraint-related injury and death is significant when physical restraints are used.

Planning for Care

- When the use of physical restraints is considered, thorough assessment of problems to be addressed by restraint use is necessary to determine reversible causes and contributing factors and to identify alternative methods of treating non-reversible issues.

- When the interdisciplinary team determines that the use of physical restraints is the appropriate course of action, and there is a signed physician order that gives the medical symptom supporting the use of the restraint, the least restrictive manual method or physical or mechanical device, material or equipment that will meet the resident's needs must be selected.
- Care planning must focus on preventing the adverse effects of physical restraint use.

Steps for Assessment

1. Review the resident's medical record (e.g., physician orders, nurses' notes, nursing assistant documentation) to determine if physical restraints were used during the 7-day look-back period.
2. Consult the nursing staff to determine the resident's cognitive and physical status/limitations.
3. Considering the physical restraint definition as well as the clarifications listed below, observe the resident to determine the effect the restraint has on the resident's normal function. Do not focus on the type, intent, or reason behind its use.
4. Evaluate whether the resident can easily and voluntarily remove any manual method or physical or mechanical device, material, or equipment attached or adjacent to his or her body. If the resident cannot easily and voluntarily do this, continue with the assessment to determine whether or not the manual method or physical or mechanical device, material or equipment restrict freedom of movement or restrict the resident's access to his or her own body.
5. Any manual method or physical or mechanical device, material or equipment should be classified as a restraint only when it meets the criteria of the physical restraint definition. This can only be determined on a case-by-case basis by individually assessing each and every manual method or physical or mechanical device, material or equipment (whether or not it is listed specifically on the MDS) attached or adjacent to the resident's body, and the effect it has on the resident.
6. Determine if the manual method or physical or mechanical device, material, or equipment meets the definition of a physical restraint as clarified below. Remember, the decision about coding any manual method or physical or mechanical device, material, equipment as a restraint depends on the effect it has on the resident.
7. Any manual method or physical or mechanical device, material, or equipment that meets the definition of a physical restraint must have:
   - physician documentation of a medical symptom that supports the use of the restraint,
   - a physician's order for the type of restraint and parameters of use, and
   - a care plan and a process in place for systematic and gradual restraint reduction (and/or elimination, if possible), as appropriate.

Clarifications

- **"Remove easily"** means that the manual method or physical or mechanical device, material, or equipment can be removed intentionally by the resident in the same manner as it was applied by the staff (e.g., side rails are put down or not climbed over, buckles are intentionally unbuckled, ties or knots are intentionally untied), considering the resident's physical condition and ability to accomplish his or her objective (e.g., transfer to a chair, get to the bathroom in time).
- **"Freedom of movement"** means any change in place or position for the body or any part of the body that the person is physically able to control or access.
- **"Medical symptoms/diagnoses"** are defined as an indication or characteristic of a physical or psychological condition. Objective findings derived from clinical evaluation of the resident's subjective symptoms and medical diagnoses should be considered when determining the

presence of medical symptom(s) that might support restraint use. **The resident's subjective symptoms may not be used as the sole basis for using a restraint. In addition, the resident's medical symptoms/diagnoses should not be viewed in isolation; rather, the medical symptoms identified should become the context in which to determine the most appropriate method of treatment related to the resident's condition, circumstances, and environment, and not a way to justify restraint use.**

- The identification of medical symptoms should assist the nursing home in determining if the specific medical symptom can be improved or addressed by using other, less restrictive interventions. The nursing home should perform all due diligence and document this process to ensure that they have exhausted alternative treatments and less restrictive measures before a physical restraint is employed to treat the medical symptom, protect the resident's safety, help the resident attain or maintain his or her highest level of physical or psychological well-being and support the resident's goals, wishes, independence, and self-direction.
- **Physical restraints as an intervention do not treat the underlying causes of medical symptoms. Therefore, as with other interventions, physical restraints should not be used without also seeking to identify and address the physical or psychological condition causing the medical symptom**.
- Physical restraints may be used, if warranted, as a temporary symptomatic intervention while the actual cause of the medical symptom is being evaluated and managed. Additionally, physical restraints may be used as a symptomatic intervention when they are immediately necessary to prevent a resident from injuring himself/herself or others and/or to prevent the resident from interfering with life-sustaining treatment when no other less restrictive or less risky interventions exist.
- Therefore, a clear link must exist between physical restraint use and how it benefits the resident by addressing the specific medical symptom. If it is determined, after thorough evaluation and attempts at using alternative treatments and less restrictive methods, that a physical restraint must still be employed, the medical symptoms that support the use of the restraint must be documented in the resident's medical record, ongoing assessments, and care plans. There also must be a physician's order reflecting the use of the physical restraint and the specific medical symptom being treated by its use. The physician's order alone is not sufficient to employ the use of a physical restraint. CMS will hold the nursing home ultimately accountable for the appropriateness of that determination.

Health-Related Quality of Life

- An alarm is any physical or electronic device that monitors resident movement and alerts the staff, by either audible or inaudible means, when movement is detected, and may include bed, chair and floor sensor pads, cords that clip to the resident's clothing, motion sensors, door alarms, or elopement/wandering devices.
- While often used as an intervention in a resident's fall prevention strategy, the efficacy of alarms to prevent falls has not been proven; therefore, alarm use must not be the primary or sole intervention in the plan.
- The use of an alarm as part of the resident's plan of care does not eliminate the need for adequate supervision, nor does the alarm replace individualized, person-centered care planning.
- Adverse consequences of alarm use include, but are not limited to, fear, anxiety, or agitation related to the alarm sound; decreased mobility; sleep disturbances; and infringement on freedom of movement, dignity, and privacy.

Planning for Care

- Individualized, person-centered care planning surrounding the resident's use of an alarm is important to the resident's overall well-being.
- When the use of an alarm is considered as an intervention in the resident's safety strategy, use must be based on the assessment of the resident and monitored for efficacy on an ongoing basis, including the assessment of unintended consequences of the alarm use and alternative interventions.
- There are times when the use of an alarm may meet the definition of a restraint, as the alarm may restrict the resident's freedom of movement and may not be easily removed by the resident.
- When an alarm is used as an intervention in the resident's safety strategy, the effect the alarm has on the resident must be evaluated individually for that resident.

Steps for Assessment

1. Review the resident's medical record (e.g., physician orders, nurses' notes, nursing assistant documentation) to determine if alarms were used during the 7-day look-back period.
2. Consult the nursing staff to determine the resident's cognitive and physical status/limitations.
3. Evaluate whether the alarm affects the resident's freedom of movement when the alarm/device is in place. For example, does the resident avoid standing up or repositioning himself/herself due to fear of setting off the alarm?

Policy Considerations

1. Regardless of the purpose for which bed rails are being used or considered, a decision to utilize or remove those in current use should occur within the framework of an individual patient assessment.
2. Because individuals may differ in their sleeping and nighttime habits, creation of a safe bed environment that takes into account patients' medical needs, comfort, and freedom of movement should be based on individualized patient assessment by an interdisciplinary team.
   - The composition of the interdisciplinary team may vary depending upon the nature of the care and service setting and the patient's individual needs. Team members for consideration should include, but are not limited to: nursing, social services, and dietary personnel; physicians (or their designees); medical director; rehabilitation and occupational therapists; patient; family (or authorized representative); and medical equipment suppliers.
   - The patient and family (or authorized representative) play a key role in the creation of a safe and comfortable bed and sleeping environment. These individuals can provide information about the patient's previous sleeping habits and bed environment that caregivers need to design the bed environment. Their participation in discussions facilitates creation of a bed and sleeping environment that meets patients' needs.
3. Use of bed rails should be based on patients' assessed medical needs and should be documented clearly and approved by the interdisciplinary team.
   - Bed rail effectiveness should be reviewed on a regular basis.
   - The patient's chart should include a risk-benefit assessment that identifies why other care interventions are not appropriate or not effective if they were previously attempted and determined not to be the treatment of choice for the patient. (See Appendix 1: Glossary for patient/caregiver assist items.)

4. Bed rail use for treatment of a medical symptom or condition should be accompanied by a care plan (treatment program) designed for that symptom or condition.
   - The plan should present clear directions for further investigation of less restrictive care interventions.
   - The documentation should describe the attempts to use less restrictive care interventions and, if indicated, their failure to meet patients' assessed needs.
5. Bed rail use for patient's mobility and/or transferring, for example turning and positioning within the bed and providing a hand-hold for getting into or out of bed, should be accompanied by a care plan.
   - The patient should be encouraged to participate in care planning to help design a safe and comfortable bed environment.
   - The care plan should:
   - include educating the patient about possible bed rail danger to enable the patient to make an informed decision; and
   - address options for reducing the risks of the rail use.
6. The process of reducing and/or eliminating existing use of bed rails should be undertaken incrementally using an individualized, systematic, and documented approach.
7. Creating a safe bed environment does not necessarily preclude the use of bed rails. However, a decision to use them should be based on a comprehensive assessment and identification of the patient's needs, which include comparing the potential for injury or death associated with use or non-use of bed rails to the benefits for an individual patient. In creating a safe bed environment, the following general principles should be applied:
   - Avoid the autom*atic* use of bed rails of any size or shape.
   - Restrict the use of physical restraints, including chest, abdominal, wrist, or ankle restraints of any kind on individuals in bed.
   - Inspect, evaluate, maintain, and upgrade equipment (beds/mattresses/bed rails) to identify and remove potential fall and entrapment hazards and appropriately match the equipment to patient needs, considering all relevant risk factors.
   - Re-assess the patient's needs and re-evaluate the equipment if an episode of entrapment or near-entrapment occurs, with or without serious injury. This should be done immediately because fatal "repeat" events can occur within minutes of the first episode.

Process/Procedure Considerations

The items listed below are not meant to be all-inclusive. Caregivers may identify other concerns that need to be addressed.

1. Individualized Patient Assessment
   Any decision regarding bed rail use or removal from use should be made within the framework of an individual patient assessment. If a bed rail has been determined to be necessary, steps should be taken to reduce the known risks associated with its use. The individual patient assessment includes
   - Medical diagnosis, conditions, symptoms, and/or behavioral symptoms
   - Sleep habits
   - Medication
   - Acute medical or surgical interventions
   - Underlying medical conditions
   - Existence of delirium
   - Ability to toilet self safely
   - Cognition

- Communication
- Mobility (in and out of bed)
- Risk of falling

2. Sleeping environment assessment
   This assessment includes elements or conditions that may affect the patient's ability to sleep and may be considered in evaluating areas to address in a patient's care plan.
   - Comfort
     - pain
     - hypoxia
     - grieving
     - loneliness
     - hunger, thirst
     - hydration
     - calorie intake and protein calories
     - boredom
     - amount of time spent in bed
     - light levels
     - temperature

   - Understanding of self and family
     - hobbies, interests, religion
     - pictures of family

   - Proximity to toilet
     - toilet within view
     - toilet accessible
     - strategy (patient with or without help from caregiver) for toileting

   - Appropriate bed
     - comfortable
     - safe
     - height
     - mattress/overlay
     - mattress edge definition (if necessary)
     - support for turning (if necessary)
     - strategy for safe egress
     - elevation for head of bed

   - Support by Caregivers
     - individualized toileting schedule
     - routine comfort assessment
     - skin care and hygiene
     - emotional and physical support

   - Medical Stabilization
     - treatment of underlying acute medical problems
     - dosages and types of medication
     - effects of long-term use of hypnotics
     - pain treatment strategy

– caution with orthostatic medications (diuretics, short-acting antihypertensives) – diuretics (if indicated) not given at night
– diabetic snack given at night
– treatment for nocturnal esophageal reflux
– bowel elimination plan for regularity

3. Treatment Programs/Care Plans
   - Address diagnoses, symptoms, conditions, and/or behavioral symptoms for which the use of a bed rail is being considered.
   - Identify nursing/medical and environmental interventions (e.g., for a patient with a life-long habit of staying up at night, provide nighttime activity).
   - If clinical and environmental interventions have proven to be unsuccessful in meeting the patient's assessed needs or a determination has been made that the risk of bed rail use is lower than that of other interventions or of not using them, bed rails may be used. Documentation of the risk-benefit assessment should be in the patient's medical chart.
   - The team should review the treatment program and determine its effects on the patient through an ongoing cycle of evaluation that includes assessment of outcomes and adverse effects.
   - When planning care for the patient for whom a low bed is selected, consideration should be given to potential effects on the patient such as restraining desired voluntary movement or creating an unwanted psychological effect by being placed close to the floor. The individualized care plan and risk benefit considerations should address these issues and the plan modified accordingly.
   - General guidance:

      a. A patient is assessed to be at low risk for injury, as defined by these factors:
         - transfers safely to and from the bed to a wheelchair without assistance;
         - ambulates without assistance to and from the toilet without falling;
         - has not fallen, or is unlikely to fall, out of bed; and
         - notifies staff appropriately using call system.

         Consider using a bed for this patient without a bed rail.

      b. A patient is assessed to be unsafe in bed, or at high risk for injury, as defined by these factors:
         - inability to transfer safely to and from the bed to a wheelchair;
         - previous entrapment or near-entrapment episode;
         - inability to ambulate to and from the toilet without falling;
         - history of bed-related serious injury;
         - episodes of falling out of bed, or likelihood that such episodes will occur; or
         - inconsistent in notifying staff of needs or unable to access the call system.

         Consider placing this patient in an adjustable height bed that can go very low to the floor for sleeping and raised for transfers and activities of daily living care, or an alternative such as a concave mattress as determined by the interdisciplinary care team. Use a high-impact mat next to the bed.

      c. A patient is assessed to require a bed in a low position but has difficulty getting into the low bed from the standing position:

         Consider an adjustable-height bed. If this is not available, consider adding a quarter rail or transfer device (See Appendix 1: Glossary) to a low bed for the patient to hold for support while entering the low bed. When selecting a support hold, consider:
         - Such rails should contain cross bars close enough to prevent the passage of the patient's head or body part through the rail and fit closely enough to the mattress to prevent entrapment.

- Other interventions exist, such as secured vertical poles used for transferring in and out of bed. These poles, which are secured into the ceiling and floor, have weight limits. Tape applied to the pole may increase traction. They are generally used with more cognitively functional individuals.

d. A patient is assessed to need a low bed, but an assessment determines that the patient is in danger of hurting him/herself while exiting from the low bed or is in danger of an unstable transfer after standing up by grabbing onto a bed side table or sink:
Consider using a bed alarm to alert nursing staff when patient is leaving the bed.
- Base the decision on the individual patient's clinical condition and assessment.
- Carefully consider the use of bed alarms for the patient who is agitated or confused.

e. Steps should be taken to reduce risk of injury to patients and caregivers. Keep the bed in the lowest position with the wheels locked when occupied, adjusting the level for activities such as administering care or for patient transfers in/out of bed:
- Place a high impact mat next to the low bed to cushion falls from the low bed as long as this does not create a greater risk of accident to the patient or caregivers.
- Raise the bed to give care and lower it when finished. If the bed is not adjustable, utilize body mechanics techniques such as kneeling on one or both knees on the high impact mat rather than bending over.
- Store the high impact mat when it is not in use.
- Assess area for objects that may cause injury.
- Move furniture far enough away from the bed to avoid risk of injury.
- Train caregivers on the proper use of low beds and proper body mechanics.

Risk Intervention

Assessment of risk should be part of the individual patient's assessment, and steps to address the risk should be incorporated into the patient's care plan. The following are examples of risk intervention approaches.

1. Nursing
- Provide individually scheduled toileting.
- Develop a schedule for turning and positioning.
- Clean urine and/or feces promptly.
- Elevate head of bed for patients with congestive heart failure (CHF), chronic obstructive pulmonary disease (COPD), reflux, and actively infusing enteral fluids.
- Position patients to maximize comfort and change positions in a timely manner, maintaining comfort and reducing risk for skin breakdown.
- Accommodate patients' preferred bedtime habits whenever possible.
- Restrict use of physical restraints on patients in bed.
- When medically indicated, use padded bed rails for individuals with an active seizure disorder or active movement disorder.
- Provide distractions such as music, television, or food and fluids for patients who do not sleep through the night.
- Provide calming interventions and pain relief.
- Plan time during the day to provide periods of physical activity that help promote a restful sleep.

- Re-evaluate and revise patient's treatment program as needed if an episode of entrapment or near-entrapment occurs with or without serious injury.

2. **Medical**
   - Minimize use of medications that alter mental status.
   - Use alternatives to sleeping medications.
   - Dispense diuretics before the late afternoon/evening.
   - Treat pain.
   - Screen and treat for hypoxia.
   - Assess the clinical status of delirious patients to rule out reversible etiologies.
   - Promote mobility and fitness, e.g., restorative care to enhance abilities to stand safely and to walk.
3. **Patient and Family**
   - Seek and utilize input about the patient from the patient and family (or authorized representative) to assist in identifying nursing and medical risk interventions.
   - If patients or family members ask about using bed rails, encourage them to talk to the health care team about whether bed rails are indicated.
   - Since the patient and family are integral members of the team, they should be encouraged to learn about bed safety and appropriate care options.

Bed Rail Safety Guidelines

If it is determined that bed rails are required and that other environmental or treatment considerations may not meet the individual patient's assessed needs, or have been tried and were unsuccessful in meeting the patient's assessed needs, then close attention must be given to the design of the rails and the relationship between rails and other parts of the bed.

1. The bars within the bed rails should be closely spaced to prevent a patient's head from passing through the openings and becoming entrapped.
2. The mattress to bed rail interface should prevent an individual from falling between the mattress and bed rails and possibly smothering.
3. Care should be taken that the mattress does not shrink over time or after cleaning. Such shrinkage increases the potential space between the rails and the mattress.
4. Check for compression of the mattress' outside perimeter. Easily compressed perimeters can increase the gaps between the mattress and the bed rail.
5. Ensure that the mattress is appropriately sized for the selected bed frame, as not all beds and mattresses are interchangeable.
6. The space between the bed rails and the mattress and the headboard and the mattress should be filled either by an added firm inlay or a mattress that creates an interface with the bed rail that prevents an individual from falling between the mattress and bed rails.
7. Latches securing bed rails should be stable so that the bed rails will not fall when shaken.
8. Older bed rail designs that have tapered or winged ends are not appropriate for use with patients assessed to be at risk for entrapment.
9. Maintenance and monitoring of the bed, mattress, and accessories such as patient/caregiver assist items (See Appendix 1: Glossary) should be ongoing.

The body part dimensions used to develop FDA's dimensional limit recommendations are summarized in Table 2 below.

Table 2 Key Body Part Dimensions	
Key Body Part	**Dimension**
Head	120 mm (4 ¾ inches)
Neck	60 mm (2 3/8 inches) and an angle > 60 degree
Chest	318 mm (12 ½ inches)

Potential Zones of Entrapment

This guidance describes seven zones in the hospital bed system where there is a potential for patient entrapment. Entrapment may occur in flat or articulated bed positions, with the rails fully raised or in intermediate positions. Descriptions of the seven entrapment zones appear on pages 15-21 in this guidance. Summary drawings of entrapment for all of the zones appear in Appendix E.

The seven areas in the bed system where there is a potential for entrapment are identified in the drawing below.

Zone 1: Within the Rail

Zone 2: Under the Rail, Between the Rail Supports or Next to a Single Rail Support

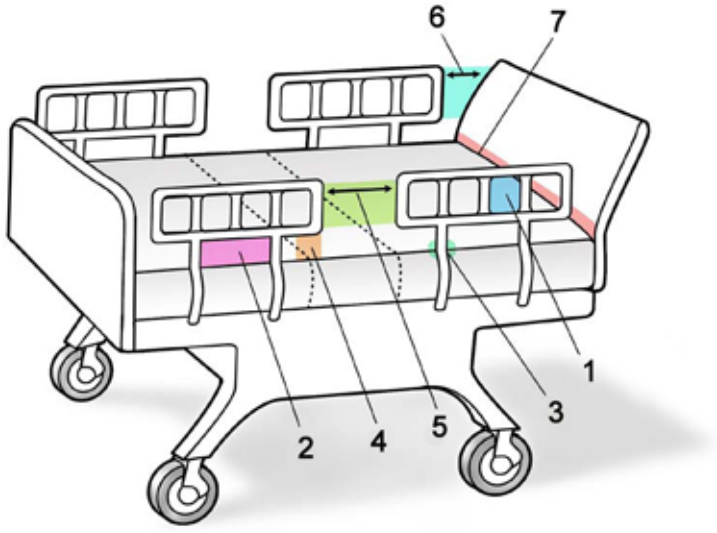
Zone 3: Between the Rail and the Mattress

Zone 4: Under the Rail, at the Ends of the Rail

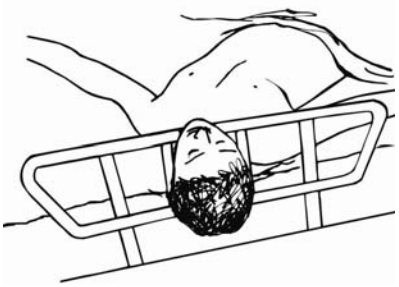
Zone 5: Between Split Bed Rails

Zone 6: Between the End of the Rail and the Side Edge of the Head or Foot Board

Zone 7: Between the Head or Foot Board and the Mattress End

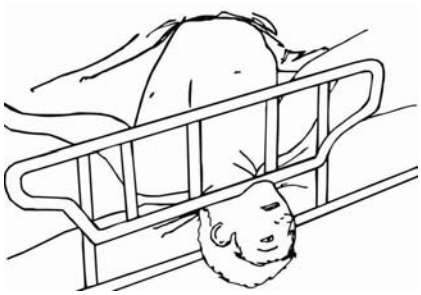


Zone 1 – Within the Rail



Zone 1 is any open space within the perimeter of the rail. Openings in the rail should be small enough to prevent the head from entering. A loosened bar or rail can change the size of the space. The HBSW and IEC recommend that the space be less than 120 mm (4 ¾ inches), representing head breadth.

Zone 2 – Under the Rail, Between the Rail Supports or Next to a Single Rail Support



Preventing the head from entering under the rail would most likely prevent neck entrapment in this space. FDA recommends that this space be small enough to prevent head entrapment, less than 120 mm (4 ¾ inches). IEC recommends the same dimensions but measures the space without the mattress in place.

Zone 3 – Between the Rail and the Mattress

This area is the space between the inside surface of the rail and the mattress compressed by the weight of a patient's head. The space should be small enough to prevent head entrapment when taking into account the mattress compressibility, any lateral shift of the mattress or rail, and degree of play from loosened rails. HBSW and IEC recommend a dimension of less than 120 mm (4 ¾ inches) because the head is presumed to enter the space before the neck. FDA is recommending a dimensional limit of less than 120 mm (4 ¾ inches) for the area between the inside surface of the rail and the compressed mattress.

Zone 4 – Under the Rail at the Ends of the Rail

This space is the gap that forms between the mattress compressed by the patient, and the lowermost portion of the rail, at the end of the rail. Factors that may increase the gap size are: mattress compressibility, lateral shift of the mattress or rail, and degree of play from loosened rails. The space poses a risk for entrapment of a patient's neck. It may change with different rail height positions and as the head or foot sections of the bed are raised and lowered. The space may increase, decrease, become less accessible, or disappear entirely. Thus, in some positions, the potential for entrapment in this zone may still exist when the deck is articulated.

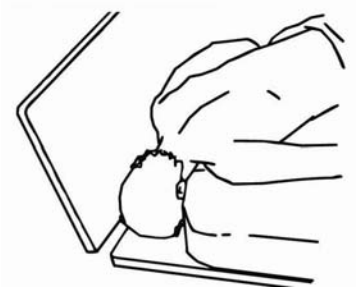
Zone 5 – Between Split Bed Rails

This zone occurs when partial length head and foot side rails (split rails) are used on the same side of the bed. The space between the split rails may present a risk of either neck entrapment or chest entrapment between the rails if a patient attempts to, or accidentally, exits the bed at this location. In addition, any V-shaped opening between the rails may present a risk of entrapment due to wedging. FDA recognizes this area as a potential for entrapment and encourages facilities and manufacturers to report entrapment events at this zone.

Zone 6 – Between the End of the Rail and the Side Edge of the Head or Foot Board

Zone 6 is the space between the end of the rail and the side edge of the headboard or footboard. This space may present a risk of either neck entrapment or chest entrapment. In addition, any V-shaped opening between the end of the rail and the head or footboard may present a risk of entrapment due to wedging. This space may change when raising or lowering the head or foot sections of the bed. This space may increase, decrease, become less accessible, or disappear entirely. Thus, in some positions, the potential for entrapment may exist when the deck is articulated. FDA recognizes this area as a potential for entrapment and encourages facilities and manufacturers to report entrapment events at this zone.

Zone 7 – Between the Head or Foot Board and the End of the Mattress



Zone 7 is the space between the inside surface of the head board or foot board and the end of the mattress. This space may present a risk of head entrapment when taking into account the mattress compressibility, any shift of the mattress, and degree of play from loosened head or foot boards. FDA recognizes this area as a potential for entrapment and encourages facilities and manufacturers to report entrapment events at this zone.

Table 3 Summary of FDA Hospital Bed Dimensional Limit Recommendations

Zone	Dimensional Limit Recommendations
1 Within the rail	<120 mm (< 4 3/4 “)
2 Under the rail, between rail supports or next to a single rail support	< 120 mm (< 4 3/4 “)
3 Between rail and mattress	<120 mm (< 4 3/4 “)
4 Under the rail, at the ends of the rail	<60 mm (< 2 3/8 “) AND >60° angle

Summary of Test Zones

The four (4) tests in these instructions measure gaps within bed systems where a patient could become trapped. Each test measures a different area, or zone, where entrapment can occur:

Zone 1: Within the rail

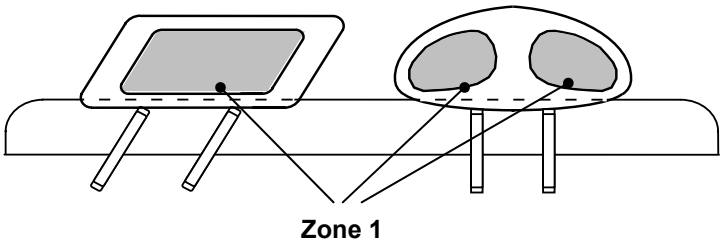


Figure 1. The Zone 1 test assesses the potential for head entrapment within the rail (shaded areas).

Zone 2: Under the rail between the rail supports or next to a single support

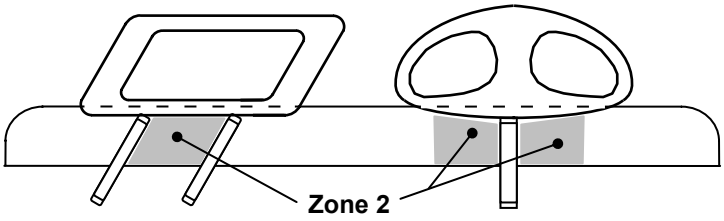


Figure 2. The Zone 2 test assesses the potential for head entrapment under the rail, between the rail supports (or next to a single rail support) (shaded areas).

Zone 3: Between the rail and the mattress

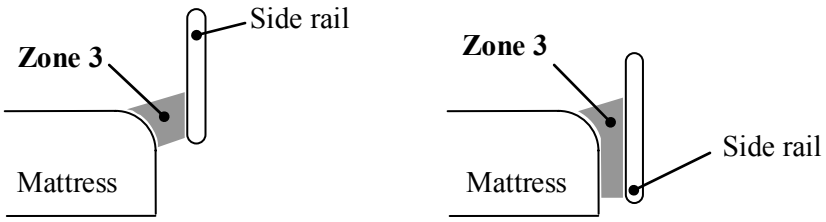


Figure 3. The Zone 3 test assesses the potential for head entrapment between the edge of the mattress and the inside of the rail (shaded areas).

Zone 4: Under the rail at the end of the rail

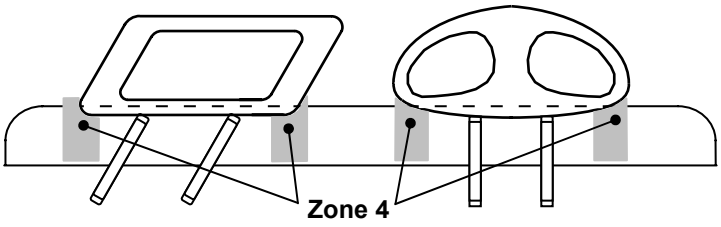


Figure 4. The Zone 4 test assesses the potential for neck entrapment between the top of the mattress compressed by the patient and the lower-most portion of the rail at the end of the rail (shaded areas).

Description of Test Tools

Each test requires the use of simple tools, including a cone, a cylinder, and a spring scale. Your tools may look slightly different from the tools in the figures, but they will work the same way.

Cone and Cylinder Tool

The cone and cylinder is a combination tool (see Figure 5). It can be easily taken apart so that the cone and cylinder can be used separately. Tests 1, 2 and 3 use only the cone. Test 4 uses the combined assembled tool.

- The diameter of the large end of the cone represents the width of a small adult head (120 mm, or approximately 4 ¾ inches).
- The diameter of the cylinder represents the size of a small adult neck (60 mm, or approximately 2 $^{3}/_{8}$ inches).
- The cone and cylinder together weigh 15 lbs. This represents the combined weight of an adult head (12 lbs.) and neck (3 lbs.).
- The red area of the cylinder defines contact angles in which the neck could become wedged (60 degrees or narrower),

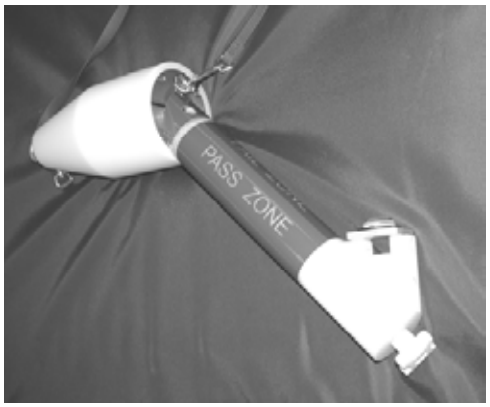


Figure 5. Cone and cylinder tool.

The cone tool includes the following features:

- A loop at the end for attaching a spring scale.
- A safety strap.
- A marked center line on the large face of the cone.

The cylinder includes the following features:

- Red and green zones for identifying pass/fail at siderail ends.
- A level to aid in tool positioning.

To prevent personal injury during the measurement process, attach the strap to a secure point on the bed and shorten the length of the safety strap enough to keep the tool from dropping on your feet if it should fall during a test. Make sure the strap is long enough to not interfere with the test measurement.

Tool Assembly and Disassembly

Note: General procedures for tools with a screw-type connection are described here. (Your tool may have a different type of connection.) Follow the instructions supplied with your tools for more detailed information.

To take the cone and cylinder tool apart:

1. Turn the knob to loosen and remove the connection shaft.

2. Pull the cylinder from the cone.

To put the cone and cylinder tool together:

1. Align the red and green areas of the cone and cylinder.

2. Insert the pins of the cone into the cylinder.

3. Insert the connection shaft and turn the knob to tighten.

SAMPLE DATASHEET

Restraints: Side Rail Utilization Assessment

Complete this form as you go through the decision-making process of determining whether a side rail is appropriate for a particular resident. Save it with the resident's chart to document your decisions.

Resident Preference:	*Yes*	No	Comments
Is resident able to state preference about side rails?			
Has resident/legal surrogate requested side rails?			
What type of side rail does resident/legal surrogate prefer? (circle choices)	Full Half Quarter	1 rail -or- 2 rails	
Has resident/legal surrogate been informed about side rail risks and signed statement of understanding?			

Fall/Injury Risk Determination:	*Yes*	No	Comments
Does resident have history of falls? — Any cause?			
Does resident have a history of falls from the bed?			
Does resident attempt to get out of bed by climbing over/around side rails?			
Has resident ever sustained bruises, skin tears, lacerations or fractures from a side rail?			
Has resident ever become entangled in the side rail or entrapped between the mattress and the side rail?			
Is OT/PT and/or Maintenance assessment needed for equipment problems (locks, side rail flush to mattress, other positioning aids)?			

Mobility Assessment:	*Yes*	No	Comments
Is resident *immobile* (comatose, paralyzed, no spontaneous movement)?			
If primarily *immobile*, does the resident have enough *mobility* to turn or slide to one side?			
If *mobile*, does resident make any attempt to get out of bed?			
If *mobile*, can resident get in/out of bed safely without any human assistance or assistive device?			
If *mobile*, is the resident at risk for orthostatic hypotension or does resident have difficulty with balance/trunk control?			
If *mobile*, does resident have decreased safety awareness due to confusion or judgement problems?			
Is OT/PT evaluation needed for transferring and/or ambulation skills?			

Evaluation of Alternatives:	**Tried?**	**Works?**
Call bell (or bulb-type bell) in reach		
Scheduled bathroom assistance at night		
Decrease time in bed		

Adapted from: Capezuti, E. (2000). Preventing falls and injuries while reducing side rail use. *Annals of Long-Term Care*, 8(6), 57-63.

continued >>

Restraints: Side Rail Utilization Assessment (page 2)

Evaluation of Alternatives (continued):	Tried?	Works?
Increased frequency of monitoring		
Placement of assistive devices at bedside		
Restorative care to increase abilities to stand/walk		
Half or quarter rail for bed mobility/positioning or to enable transfer		
Pillows/cushions as bed boundary marker or curved mattress		
Bed alarm		
Low bed (top of mattress = 100-120% of lower leg length)		
High impact mat on floor beside bed		
Other (explain):		

Other Individual Concerns: Use the following space to provide a detailed description of any other factors that would be helpful in making a decision, especially regarding the resident's response to side rails, feelings about removal of side rails, or other possible alternatives to side rail.

Side Rail Prevention/Reduction Committee Recommendations: Check boxes to indicate team's decision.

	No side rail is indicated because: (check one of the following options)
☐	Resident is immobile and makes no attempt to exit or shift in bed.
☐	Resident is able to safely enter and exit bed.
☐	Other interventions to prevent and/or reduce falls/injuries are currently in place: *(list)*
☐	One full side rail is indicated to assist in bed mobility. *(Circle one):* *Right* ◯ *Left* ◯
☐	Both full side rails are used, but are not a restraint, because resident is immobile.
☐	Both full side rails are used at resident/legal surrogate insistence. A waiver of responsibility has been signed.
☐	Both full side rails are the least restrictive device, based on resident physical and/or emotional needs.
☐	Half or quarter rail *(circle one)* will be used to assist in positioning and/or transfer.

Evaluator (signature/title): _____ Date: _____

Resident/Legal Surrogate (signature): _____ Date: _____

Comments:

Resident: _____ Room: _____ Physician: _____

Originally developed by Primaris, the Medicare Quality Improvement Organization for Missouri.
This material was prepared by TMF Health Quality Institute, the Medicare Quality Improvement Organization for Texas, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. 9SOW-TX-PS-09-42

TMF Health Quality Institute

VAN SAFETY

Transportation Program – Best Practice Recommendations for Van Safety

OVERVIEW

Resident Transportation Program

1. **<u>Main point to stress: Do not wait for a problem to be prepared with a solution</u>**.
Just as we do not wait for an ice storm to see if our generator works, we cannot wait for an incident to test our transportation program. Proactive and Prevention are the KEY.

2. This program is of the utmost importance, given the same respect as our I & A program, Dining & weight loss program, or Skin management program

3. Our transportation program is not just a facility staff member loading a resident on the facility van and taking to them to a doctor's appointment.

4. The program must consist of components including but not limited to a specific protocol, a specific job description, knowledge/understanding of the manufacturer's guidelines, a skills check of our transportation drivers, and a transportation maintenance program

Consider the steps to your protocols for weight or skin management systems. We have been very keen to include details in our weight and skin management protocols and we must have the same tenacity with our transportation program protocols. We must have detailed protocols for this program and strictly adhere to the protocols in order to create the safest environment possible for our residents.

It is best practice for each nursing home to have established systems of approach for educating, assessing, evaluating, and monitoring the safe transport of the residents as specified by the home's van use protocols and according to the manufacturer's guidelines for all operating components of the van.

Just as we test the fire alarms with unannounced drills, it is recommended to have unannounced inspections and observations of our transport staff, as well as, unrehearsed scenarios of "what would you do if"… to better prepare our transport driver for the unexpected. Utilize the monthly deficiencies cited under F689 related to van incidents from the top tag reports to help with these scenarios.

Transportation Program – Best Practice Recommendations for Van Safety

Essential Program Components:

- Any staff member that drives the van will have a valid Arkansas driver's license
- When utilizing the van to transport residents, refer to your home's policy and procedure to determine who will drive the van or accompany the resident.
- Any staff member driving the van must complete and pass all components of the "transporting by van" competency test and demonstrate complete knowledge of all aspects of the vehicle, including loading / unloading resident with lift; securing the wheelchair properly to the floor; utilizing the vehicles shoulder restraints / seat belts to secure resident
- It is the responsibility of the staff member driving the van to provide a valid driver's license and maintain a current copy in their personnel file

Transport Staff Education:

- Transport staff members trained on manufacturer's instructions of all components of van. It is recommended to utilize the manufacturer's DVD demo if available or utilize the manufacturer's website for product specific videos and material
- Transport staff members should perform return demonstration of use of all van equipment immediately following manufacturer's instruction
- Transport staff, before each use, ensure the van and all equipment are fully functioning (**Daily Van Walk-Around Inspection Checklist**), and cell phone is charged (for emergency use) – immediately alert maintenance if concerns are noted
- Before leaving the nursing home, the transport staff should have contact numbers of the appointment staff to notify if running behind
- Transport staff should be informed of the resident's code status and home's protocol to follow
- Inform staff of protocol to follow if an incident occurs while on the road: i.e., resident slips out of wheelchair, resident becomes ill or distressed, other unplanned event. Examples may include:
    - Immediately get off road to a safe spot
    - Dial 911 and contact nursing home
    - Assist / comfort resident until help arrives
- Inform staff, if resident is injured in the van while traveling, a timeline of events and how they were handled will be needed in their statement; such as, how the resident was injured; type of injury; when was the facility called and who they spoke to; what instruction was given; when / how was resident taken to hospital
- Read, review and sign the **Transportation Staff Responsibilities Form**

Transportation Program – Best Practice Recommendations for Van Safety

- Ensure staff is prepared to answer questions related to van protocol, including restraint use and be prepared to return demonstrate all steps at any requested time
    - Have you ever been trained on the proper way to secure a wheelchair in the van prior to transporting a resident?
    - What would you do if the restraints or other equipment was not properly working in the van?
    - What would you do if something stops working while you are using the van?
- Who / How to immediately report maintenance / safety / equipment concerns; or when equipment does not meet the needs of the resident (i.e., standard seat belt is too short to secure resident)
- Conditions / safety concerns that will cause van to be immediately removed from service
- Transport staff must have readily available, a copy of the manufacturer's guidelines for all operating components of the van – (van, lift, restraints; it is recommended to have copies stored in the van and in a designated back up location)

Maintenance Supervisor or Designee

- Designated maintenance supervisor or other designee to be fully trained on all of the van's equipment based on the manufacturer's guidelines
- Maintain the documentation of the routine maintenance of the vehicle and all equipment on a log per manufacturer's guidelines.
    - **Monthly Inspection Check for Facility Van**
    - **Scheduled Maintenance Facility Van**
    - **Semi-Annual Checklist for Facility Van**
    - **Daily Van Walk Around Inspection Checklist**
- Re-train as recommended by a qualified professional (dealer) on the use of van lift and restraint systems and maintain documentation
- Perform return demonstration training requests with Transportation Staff of all steps: loading /unloading; securing the wheelchair; securing the resident - requests should be upon orientation and then unannounced, at least quarterly or when/if there has been a change or update to equipment)
- It is recommended to have a backup person to this individual. If you are using this vehicle in your disaster plan in an evacuation event, consider who has been trained to drive
- Arrange for completion of scheduled maintenance to the van to be performed at the dealership according to the manufacturer's guidelines (scheduled maintenance checklist)
- Prepare the van with emergency supplies: First aid kit, blankets, rain jacket, umbrella, incontinent supplies, emergency contact numbers, flashlights, snacks, bottled water, etc.
- During return demonstration and training of a transport driver, if there is hesitation, a missed or skipped step or the driver does not follow a step by step process, START OVER! Every step is key to creating an unavoidable accident environment.
- Report to administrator all van maintenance or safety concerns and the status of the repair

Transportation Program – Best Practice Recommendations for Van Safety

Administration

- Responsible for ensuring all components of the Transportation Program are well established, assessed frequently, and monitored consistently to establish an Unavoidable safety environment
- Responsible for determining if the van must be immediately removed from service due to safety or maintenance concerns
- Ensure seat belt extenders and other adaptive devices are available according to the resident's needs
- Assess and determine protocol if the resident being transported is a Full Code; including the steps taken to ensure driver is informed
- Conduct timely and thorough investigation of all van incidents. OLTC will need the following information:
    - Documentation that the van driver was trained on the manufacturer's recommendations regarding:
        - Van lift
        - Loading / Unloading the resident in and out the van
        - Securing the wheelchair to the floor properly
        - Was the resident secured in the wheelchair with a seatbelt
    - Copy of the manufacturer's recommendations on the utilization of all van equipment
    - Copy of the resident's care plan
        - Is the resident appropriate for van transport or require additional supervision?
    - If resident was injured in the van while en route, submit a timeline of events and how they were handled (how the resident was injured; type of injury; when the facility was called; was resident taken to hospital) events and times must be documented
    - Resident's level of injury – life threatening or died from the accident
- Prepare witness(es) statements
    - Interview other residents, family (if permitted to ride in van) or staff riding in van
- Determine through a thorough investigation the cause of the incident and immediately begin interventions to prevent reoccurrence
- Review the Transportation Program monthly to ensure all steps are being completed
- Conduct unannounced random checks of the vehicle, staff loading / unloading and observe staff performing return demonstrations
    - Create a "step by step" return demonstration check off using the manufacturer's guidelines. Utilize the "Blank Template for Step by Step Checklist" from these recommendations. All steps must be written and performed in the exact order as stated in the guidelines.

DAILY VAN WALK AROUND INSPECTION CHECKLIST **MONTH_____ 20_____**

Please use a check mark to show that the item is operational. Please use a dash if the item is missing and not operational.
If not operational or missing, **report it to the Administrator immediately!!**

ITEM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
WHEELCHAIR LOCKS																															
LIFT OPERATIONAL																															
TAG ON VEHICLE / DATE																															
INSURANCE CARD PRESENT / DATE																															
EMERGENCY KIT / SUPPLIES																															
FIRE EXTIMGUISHER																															
WINDSHIELD CONDITION																															
WINDSHIELD WIPERS & FLUID																															
MIRRORS INSIDE																															
MIRRORS OUTSIDE																															
HEADLIGHTS / TAIL LIGHTS																															
BACK UP LIGHTS																															
EMERGENCY FLASHERS																															
TURN SIGNALS																															
BRAKE LIGHTS																															
ALL SEAT BELTS FUNCTIONAL																															
HORN																															
ENGINE OIL																															
TIRE PRESSURE																															
TIRE CONDITION																															
INSPECTED BY: (INITIALS)																															

ADDITIONAL COPIES: website: afmc.org/aipp Email: aipp@afmc.org

MONTHLY INSPECTION CHECK FOR FACILITY VAN (TO BE COMPLETED BY MAINTENANCE DEPARTMENT)

YEAR: _____

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
ENGINE OIL												
FUNCTION OF ALL INTERIOR AND EXTERIOR LIGHTS												
TIRES FOR WEAR AND PROPER PRESSURE, INCLUDING SPARE												
WINDSHIELD WASHER FLUID LEVEL												
ADDITIONAL COMMENTS / CONCERNS												
CONCERNS REPORTED TO: (LIST NAME)												
INSPECTED BY: (INITIALS FOR EACH MONTH)												

DESCRIBE HOW CONCERNS ABOVE WERE RESOLVED INCLUDE DATE: _____

_____

SCHEDULED MAINTENANCE FACILITY VAN -- WORK TO BE DONE BY DEALERSHIP

MAINTENANCE (refer to owner's manual for frequency and other recommended services to be performed by dealer) RECORD FREQUENCY IN MILES (from owner's manual or dealer recommendation) below each service item below					
SERVICE TO BE PERFORMED					
CHANGE OIL & FILTER Every _____ MILES	DATE				
	MILEAGE				
INSPECT WHEELS AND RELATED COMPONENTS FOR ABNORMAL NOISE, WEAR, LOOSENESS OR DRAG Every _____ MILES	DATE				
	MILEAGE				
ROTATE TIRES, INSPECT TIRE WEAR AND MESURE TREAD DEPTH Every _____ MILES	DATE				
	MILEAGE				
PERFORM A MULTI POINT INSPECTION Every _____ MILES	DATE				
	MILEAGE				
INSPECT AUTOMATIC TRANSMISSION FLUID LEVEL Every _____ MILES	DATE				
	MILEAGE				
INSPECT BRAKE PADS, SHOES, ROTORS, DRUMS, BRAKE LININGS, HOSE AND PARKING BRAKE Every _____ MILES	DATE				
	MILEAGE				
INSPECT ENGINE COOLING SYSTEM CONCENTRATION AND HOSES Every _____ MILES	DATE				
	MILEAGE				
INSPECT EXHAUST SYSTEM Every _____ MILES	DATE				
	MILEAGE				

SEMI-ANNUAL CHECKLIST FOR FACILITY VAN

TO BE DONE BY MAINTENANCE DEPARTMENT YEAR _____

SERVICE	SEPTEMBER	MARCH
BATTERY CONNECTIONS; CLEAN IF NECESSARY		
BODY AND DOOR DRAIN HOLES FOR OBSTRUCTIONS; CLEAN IF NECESSARY		
COOLING SYSTEM FLUID LEVEL AND COOLANT STRENGTH		
DOOR WEATHERSTRIPS FOR WEAR; LUBRICATE IF NECESSARY		
HINGES/LATCHES/OUTSIDE LOCKS FOR PROPER OPERATION; LUBRICATE IF NECESSARY		
PARKING BRAKE FOR PROPER OPERATION		
SAFETY BELTS AND SEAT LATCHES FOR WEAR AND FUNCTION		
SAFETY WARNING LAMPS (BRAKE, ABS, AIR BAG, SAFETY BELT) FOR OPERATION		
WASHER SPRAY/WIPER OPERATION; CLEAN AND REPLACE BLADES AS NECESSARY		
INSPECTION PERFORMED BY:	NAME: DATE:	NAME: DATE:

Transportation Program – Best Practice Recommendations for Van Safety

Step by Step Return Demonstration Checklist

Use this blank template to create a step by step return demonstration check off. The steps must come from the manufacturer's guidelines. The steps of this checklist must be written AND performed in the order as listed in the guidelines.

Employee Name _____ Date _____

Evaluator Name _____ Date _____

Equipment demonstrated: _____

During return demonstration and training of a transport driver, if there is hesitation, a missed or skipped step or the driver does not follow a step by step process, **START OVER** and set the date for re-evaluation. Every step is key to creating an unavoidable accident environment.

LIST STEP BY STEP INSTRUCTIONS FROM MANUFACTURER'S GUIDELINES	Demonstrated CORRECTLY? Yes or No	COMMENTS

Transportation Program – Best Practice Recommendations for Van Safety

This skill has been demonstrated to show competency

Employee signature _____ Date _____

Evaluator's signature _____ Date

Copy of Valid AR Driver's License?

A current copy of the satisfactory completion of this demonstration checkoff and AR driver's license retained per home's policy?

Transportation Program – Best Practice Recommendations for Van Safety

TRANSPORT STAFF RESPONSIBILITES FORM

As part of my job duties of being a transport driver for _____(nursing home), I understand:

1. I must wear my seatbelt at all times, when I am driving the vehicle. This is state law and I will be terminated if I do not comply. According to Arkansas Code Ann. 27-37-702, "(a) Each driver and all passengers in any motor vehicle operated on a street or highway in this state shall wear a properly adjusted and fastened seatbelt properly secured to the vehicle."
2. The resident(s) that is being transported in a wheelchair will have the wheelchair securely attached to the body of the van and will maintain a center position in the van during transport.
3. The resident in the wheelchair will have a properly adjusted and fastened seatbelt on at all times when the vehicle is moving.
4. I will immediately notify the nursing home if/when I receive a moving violation citation from a law enforcement officer and within one (1) day of the violation while driving my personal vehicle.
5. I will write out and explain to the Administrator/Designee any previous moving violations, prior to being hired or as part of my employment, when I am trained to drive the van; this will include, the location of the warning or whether I have been ticketed due to a moving violation.
6. I accept the responsibility of providing a copy of my current driver's license to be maintained in my personnel file.
7. I will ensure that all reported safety concerns have been resolved by appropriate personnel before operating the van.

I understand that any violation of the above will result in my immediate termination.

Print name: _____

Signature: _____ Date: _____

Witness: _____ Date: _____

RESOURCES & REFERENCES

F689 – Free of Accident Hazards/Supervision/Devices
https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf

F604 – Right to be Free of Physical Restraints
https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf

F700 – Bed Rails
https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf

Oregon Patient Safety Commission – Falls Investigation Guide Toolkit: How-To Guide
https://oregonpatientsafety.org/docs/resources/Falls_Investigation_Guide_Toolkit_How-To-Guide_2017.pdf

CMS's RAI Version 3.0 Manual – Section P: Restraints and Alarms
https://downloads.cms.gov/files/1-MDS-30-RAI-Manual-v1-16-October-1-2018.pdf

Guidance for Industry and FDA Staff – Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment
https://www.fda.gov/downloads/medicaldevices/deviceregulationandguidance/guidancedocuments/ucm072729.pdf

Restraints: Side Rail Utilization Assessment
https://www.tmfqin.org/Portals/0/Resource%20Center/Nursing%20Home%20Quality%20Improvement/Reducing%20Use%20of%20Restraints/SideRailUtilizationAssessment.pdf

Transportation Program – Best Practice Recommendations for Van Safety
https://arhealthcare.com/education-and-events/tools-and-resources

Clinical Guidance for the Assessment and Implementation of Bed Rails in Hospitals, Long Term Care Facilities, and Home Care Settings
https://www.fda.gov/downloads/HospitalBeds/UCM397178.pdf

Accidents Critical Element Pathway – Form CMS 20127 (5/2017)
https://www.arhealthcare.com/sites/default/files/2018-03/CMS-20127%20Accidents.pdf

Physical Restraints Critical Element Pathway – Form CMS 20077 (5/2017)
https://www.arhealthcare.com/sites/default/files/2018-03/CMS-20077%20Physical%20Restraints.pdf

Sufficient and Competent Nurse Staffing Review – Form CMS-20062 (2/2017)
https://www.arhealthcare.com/sites/default/files/2018-03/CMS-20062%20Sufficient%20and%20Competent%20Staff.pdf

These resources are also available online at
https://arhealthcare.com/education-and-events/tools-and-resources

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