

Direct Care Staff

Notes to Instructor

Topics to emphasize and discuss:

All staff members, volunteers and family members have some roll in fall prevention. While direct care carries most of the responsibility, discussion may center on how indirect care staff/volunteers may be used and how to foster positive family interaction.

It is also important for the staff to understand the changes in residents with dementias, both physical and mental. While dementias are generally progressive and it is inevitable that a person's abilities will decline, the care and interactions with staff and family greatly impact quality of life. It is important to monitor and report changes of a resident. Since a mixture of people see a resident at various times, someone may see something out of the ordinary that others would not. Timely discovery of a change or decline may facilitate interventions that could prevent a fall.

Secondly, it is important to understand impairments in reasoning, judgment and communication should not be interpreted as if the resident's behavior is intentional. We use the example of a resident insisting they have to use the bathroom repeatedly. Although it is tempting to repeatedly tell them they just went, perhaps they have an unmet need they cannot communicate. Discussion may center on ways to determine what the resident is trying to express and it may take several different approaches to find it.

- _____ 1. True or False: Alzheimer’s disease and dementia is the same thing?
- _____ 2. Which is an example of short term memory?
 - a. Remembering the name of someone you met this morning
 - b. Remembering the name of your first grade teacher
 - c. Remembering the name of all 50 states
- _____ 3. True or False: Because of the area deep in the brain that it affects first, Alzheimer’s tends to interfere with long-term memory before short-term memory.
- _____ 4. Which of the following is NOT a symptom of mild Alzheimer’s disease?
 - a. Increasing memory loss
 - b. Confusion about location of familiar places
 - c. Sudden decline in physical functioning
 - d. Taking longer to accomplish normal daily tasks
 - e. Mood and personality changes
- _____ 5. Which symptom(s) of dementia could increase a resident’s risk of falls?
 - a. Language difficulties
 - b. Impaired reasoning
 - c. Confusion
 - d. All of the above
- _____ 6. True or False: If a resident with dementia insists that she needs to go to the bathroom and you know that she has gone recently, you should try to reason with her to convince her that she doesn’t need to go again.
- _____ 7. True or False: The rate at which Alzheimer’s disease progresses – that is, gets worse – can vary from person to person.
- _____ 8. True or False: Re-orienting a person with Alzheimer’s dementia to time and place daily will help them remember.
- _____ 9. True or False: Advanced Alzheimer’s disease can produce incontinence of bladder and bowel.
- _____ 10. Which is the best statement about working with people who have dementia and fall prevention?
 - a. If I have a better understanding of how changes in the brain affects behavior, helping my residents with dementia will be less frustrating.
 - b. If I understand dementia symptoms and behavior, I can more effectively reduce my resident’s risk for falls.
 - c. Preventing falls in my residents with dementia will lead to better quality of life for them, better relationships with their families and greater job satisfaction for me.
 - d. All of the above



Understanding Alzheimer's and Related Dementia for Direct Care Staff

Dementia affects more than 60% of all nursing home residents. While facilities have specialized dementia units to provide care to residents in more advanced stages of dementia, residents with mild to moderate dementia may live in any area of a nursing home. Staff working on a dementia unit generally receives more specific training for caring for their residents. Staff working in other areas may be given some education regarding dementia but not necessarily detailed information.

Anyone working with elderly people, particularly in long-term care, is likely to be familiar with Alzheimer's disease and other forms of dementia. This section presents basic information about the changes in the brain that can result from Alzheimer's disease or other conditions, and the effects of those changes on a person's ability to function.

The goal of this program is to help you better understand residents with dementia so that you may be more effective in helping to reduce their risk for falls.

You never know when something you do might prevent serious injury to one of your residents.



Regardless of your job, you have an important role in preventing falls at your facility. In fact, everyone at your facility has an important role. To effectively reduce the incidence of falls and accidents at your facility, all:

- employees
- volunteers
- visitors

should be alert to situations that might pose a risk and then take appropriate action whenever needed.



We will start by explaining what we mean by the term “dementia.” It doesn’t actually refer to a disease – rather, it’s a group of symptoms that result from any one of several diseases or conditions. One of the most common causes of dementia among older adults is Alzheimer’s disease. Alzheimer’s causes changes in the brain that result in symptoms or behaviors we refer to as “dementia.” But, there are several other diseases or conditions, like a stroke, that can affect the brain and produce symptoms of dementia.

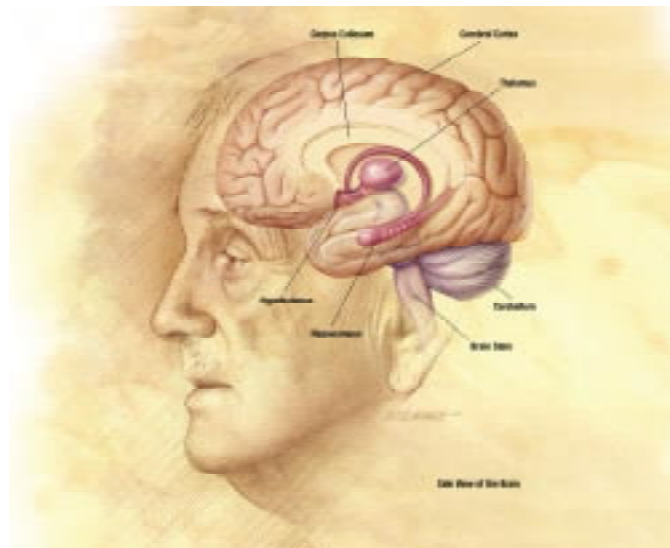
The most common symptoms of dementia are:

- a loss of memory,
- a loss of cognitive or “thinking” skills,
- a loss of language skills and
- increasing difficulty with how they perceive themselves or other objects in space – for example, the ability to accurately perceive where they are relative to a chair before they sit down.

With dementia, these losses are serious enough that they interfere with a person’s ability to do routine activities of daily life and can put a person at a very high risk for falling.

To better understand how changes in the brain affect behavior, we will take a closer look at what happens to the brain of a person with Alzheimer’s disease and what causes the symptoms of dementia you typically see. Keep in mind that dementia can be caused by other diseases and conditions. We’re using Alzheimer’s in the following examples simply because it is the most common cause of dementia.

The human brain is a remarkable organ. Weighing only about 3 pounds, the brain contains about 100 billion nerve cells, or neurons, that manage our bodily functions and allow us to speak, see, remember, feel and make decisions. We know that different areas of the brain are involved in different types of activities. For example, by using advanced imaging techniques, scientists have been able to produce pictures which show that different areas of the brain are more active when a person is listening to words, speaking words. Generally speaking, this outer part of the brain – called the cerebral cortex– is responsible for processing information received from the outside world through our senses, controlling voluntary movement, and our thought processes. We also know that another part of the brain is involved in controlling our heart rate, blood pressure and breathing, while other parts are involved in controlling emotions, storing and retrieving memories, and controlling our balance. In a normal, healthy brain all of these parts work together smoothly and reliably. The billions of neurons communicate with each other through a complex network of connections, sending millions of messages every second.



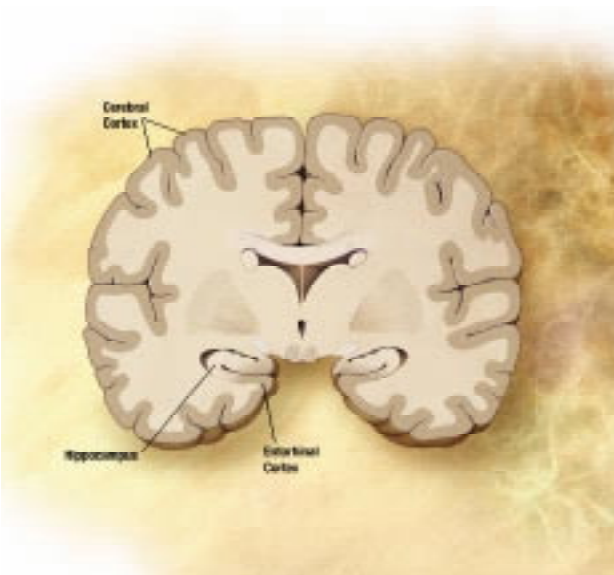
Unfortunately, in a brain affected by injury or disease, these communication pathways are interrupted, neurons die, and areas of the brain atrophy – or waste away.

Basically, Alzheimer's disease causes neurons, nerve cells in the brain, to stop working, lose connections with other nerve cells, and, finally, die. It begins in an area deep within the brain that's essential to the formation of memories. That is why the first visible sign of Alzheimer's is usually memory loss.



When we talk about memory, we often refer to "short-term memory" and "long-term memory." "Short-term memory" refers to our ability to recall very recent events or "temporary" information like a phone number after we look it up – remembering it just long enough to use it. "Long-term memory" refers to our ability to recall events, names or facts from the past.

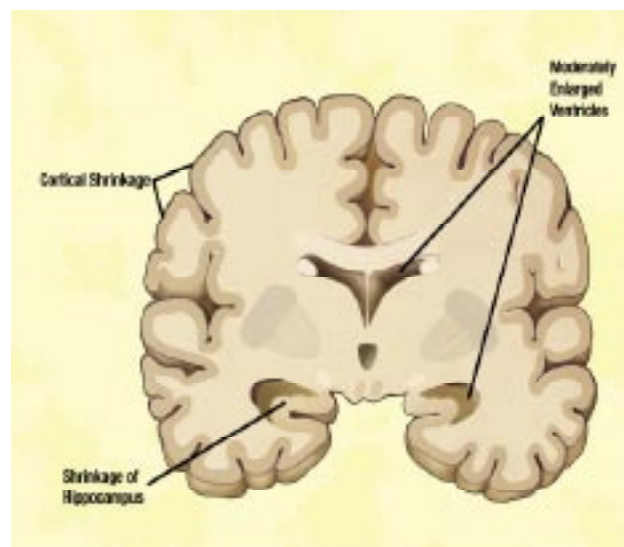
Because of the area of the brain it affects first, Alzheimer's disease tends to interfere with short-term memory before long-term memory. So, a person with Alzheimer's might be able to tell you about something she did many years ago, perhaps something from her childhood, but not remember what she had for breakfast today - or even that she had breakfast.



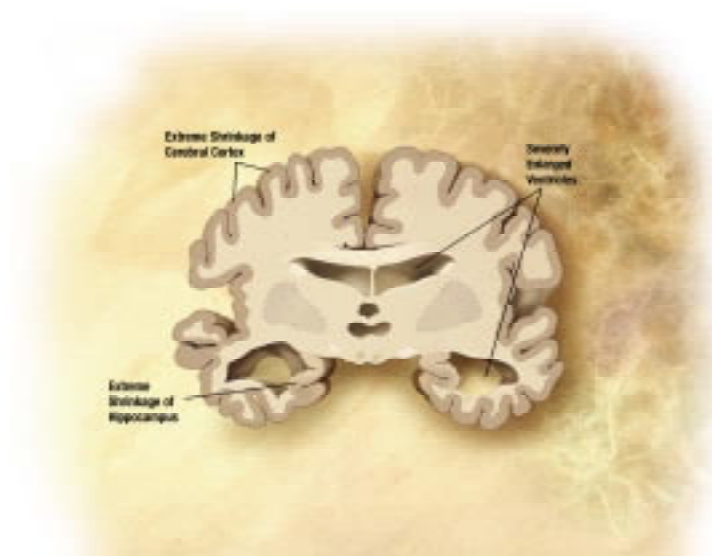
As the disease progresses to the outer layer of the brain, it begins to disrupt the functioning of the areas that control language, sensory processing (like hearing and seeing) and thinking. This leads to symptoms of the early stages of Alzheimer's disease, like:

- Increasing memory loss
- Confusion about the location of familiar places
- Taking longer to accomplish normal daily tasks
- Trouble handling money and paying bills
- Poor judgment leading to bad decisions; and
- Mood and personality changes.

Most people with mild Alzheimer's appear to be healthy, but show increasing difficulty making sense of the world around them.



The following is an illustration of the long term effects of Alzheimer's on the brain. There is significant shrinkage in various areas of the brain, as well as the enlargement of open spaces in the brain. These changes reflect the loss of brain tissue and a serious disruption of the brain's ability to process information and perform normally.



Among the symptoms of advanced Alzheimer's disease are:

- Disorientation about where they are or what day, month or year it is
- Disturbances of language and verbal communication such as using the wrong words or repeating phrases over and over
- Loss of self-care abilities, like bathing and dressing
- Incontinence of bladder and bowel; and
- Problems with walking.

There are many other symptoms that might be associated with Alzheimer's disease, and people's symptoms will change over time as the disease progresses. However, it's important to know that people with Alzheimer's disease don't all exhibit the same symptoms or the same rate of progression of the disease.



As adults age, they rely on their environment to compensate for increasing frailty and sensory loss. For example, people tend to use objects like tables and chairs for support as they become weaker or have problems with balance; or, they may rely on their memory of where things are located in a room if their eyesight begins to fail. When judgment, memory, and thinking processes are affected by the loss of brain tissue, like what happens with Alzheimer's, a person's ability to function in his or her environment is reduced and the risk for a fall or injury greatly increases.

Also, the disruption of normal thought processes might lead to the inability to remember how to perform common tasks such as how to get in or out of bed, or the inability to communicate what they're thinking or feeling.



For example, a person may become restless and attempt to get up because she feels hungry or feels the need to use the bathroom. If the part of the brain that controls speech is affected, the resident may not be able to tell you what she needs, even if you ask her. And, even if she has just gone to the bathroom, a person with dementia may not remember going and still feel the need to go.



When you see people acting this way, it's important to remember that changes in their brain may have affected their ability to use normal reasoning or judgment, or to express themselves or to understand what

you say to them. Trying to “reason” with them, or arguing with them or telling them what to do or what not to do may not work very well... leading to frustration for you and the person with dementia. In the section on “Risk Assessment and Problem-solving,” we'll show you some ways to work effectively with people with dementia – particularly in terms of helping to reduce their risk for falls.

To summarize, it is important to understand how symptoms of dementia can be caused by changes in the brain as a result of a disease process like Alzheimer's. Such changes in the brain can affect a person's physical functioning and decrease the ability to recognize limitations and express needs. Also, these symptoms of dementia are likely to change over time, as more areas of the brain are affected.

The quiz included in this module is a way of checking your understanding of the information that's been presented.

- _____ 1. True or False: Alzheimer's disease and dementia is the same thing?
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 - d. All of the above



1. True or False

Alzheimer's Disease and dementia are the same thing?

False Dementia is not an actual disease. It is a group of symptoms caused by a disease or condition. Alzheimer's is one disease that can cause dementia but there are many others such as stroke and Parkinson's disease.

2. Which is an example of short term memory?

a. Re-calling the name of someone you met this morning

Short term memory involves the recall of specific details of very recent experiences

3. True or False: Because of the area deep in the brain that it affects first, Alzheimer's tends to interfere with long-term memory before short-term memory.

False Alzheimer's tends to interfere with short-term memory before long-term memory. A person with Alzheimer's might easily recall the name of a childhood friend, but not recall what she had for lunch today.

4. Which of the following is NOT a symptom of **mild** Alzheimer's disease?

c. Sudden decline in physical functioning

Mild Alzheimer's disease does not cause a decline in physical functioning. Most people with mild Alzheimer's appear to be healthy, but show increasing difficulty making sense of the world around them. However, **advanced** Alzheimer's can cause problems with walking.

5. Which symptom(s) of dementia could increase a resident's risk of falls?

d. All of the above. All of these symptoms of dementia could increase the risk of falls. If a resident has language difficulties, she might not be able to ask for assistance when needed, she might get frustrated, and she might attempt to do things she shouldn't do without assistance. If a resident has impaired reasoning, she might not be able to plan how to negotiate a crowded hallway. If a resident is experiencing confusion, she might not be aware of her physical limitations and attempt to do something she is not capable of doing.

6. True or False

If a resident with dementia insists that she needs to go to the bathroom and you know that she has gone recently, you should try to reason with her to convince her that she doesn't need to go again.

False It's important to remember that changes in the brain may have affected the resident's ability to use normal reasoning or judgment. Trying to "reason" with a resident under these circumstances will most likely lead to frustration for you and the resident. The best approach is to take them to the bathroom; maybe they really have to go!

7. True or False: The rate at which Alzheimer's disease progresses – that is, gets worse – can vary from person to person.

True For some residents with Alzheimer's, the disease progresses very slowly, while others can deteriorate very rapidly.

8. True or False Re-orienting a person with Alzheimer's dementia to time and place daily will help them remember.

False. Due to loss of tissue in the area of the brain that stores short term memory, re-orienting a person to place or time would not be beneficial.

9. True or false Advanced Alzheimer's disease can produce incontinence of bladder and bowel.

True Bladder and bowel incontinence may be a symptom of advanced Alzheimer's, as a result of the serious disruption in the brain's ability to process information or control certain bodily functions.

10. Which is the best statement about working with people who have dementia and fall prevention?

d. All of the above.

A better understanding of how changes in the brain affect behavior should lead to all of these benefits for you and your residents.



Introduction to Strategies

Notes to Instructor

This section introduces intrinsic and extrinsic risk factors. It is important to stress to staff and family how the resident will change over time and be aware of even the smallest physical or mental changes. You may wish to discuss extrinsic factors in your facility. Conditions not normally considered a risk for falls, such as a change in floor surface, present additional challenges to residents with impaired perception.

Also introduced are “organizational risk factors” in which we include staffing and training. Because most of the direct care staff interviewed when developing this material cited short staffing as a problem, we did not want to overlook the issue. To address this concern, the program is designed to educate all staff in their role in falls management and discussion may center on how to involve everyone in the facility. Since many falls occur at a time when a resident is not engaged or supervision by direct care staff may be minimal, use of indirect care staff, volunteers and family may provide the added attention needed. Information provided in the section on problem solving is intended to stimulate creativity and use all available resources effectively.

- _____ 1. The prevention of falls in a nursing home is the responsibility of:
- a. Administration
 - b. Direct care staff-full time, part time and per diem
 - c. Indirect care staff- housekeeping, dietary, laundry, maintenance and clerical staff
 - d. Family members, visitors and volunteers
 - e. All of the above
- _____ 2. True or False
- If everyone does his or job properly, a facility should be able to prevent ALL falls.
- _____ 3. The three categories of risk factors are:
- a. Intrinsic, Extrinsic and Obvious
 - b. Organizational, Intrinsic and Extrinsic
 - c. Organizational, Extrinsic and Individual
- _____ 4. True or false
- Intrinsic risk factors for each resident will stay the same.
- _____ 5. True or false
- Use of restraints to prevent falls can actually increase the risk of falls.
- _____ 6. Successful fall management programs in long term care facilities should include:
- a. Commitment to a facility-wide approach that includes every employee and volunteer as well as family members.
 - b. A goal to create an environment that is safe, with sufficient staff to adequately monitor and assist residents as needed, while allowing as much individual freedom and autonomy as possible for residents, based on their capabilities.
 - c. Individualized fall prevention strategies based on each residents unique capabilities and intrinsic risk factors.
 - d. All of the above.



Introduction to Strategies for Reducing Falls for Direct Care Staff

Anyone who works in a long-term care facility knows how stressful it can be when a resident falls. Obviously, it's even worse if the person is injured. Head injuries or hip and other fractures are not only painful for the victim, but often lead to disabilities, loss of function, and life-threatening complications or co-morbidities among the elderly.

But even if there is no resulting injury, a fall can be very upsetting for the resident involved, other residents in the vicinity, the staff, and the family of the resident involved. When a fall occurs, everyone wants to know who is responsible and whether it could have been prevented. As you know, the quality assurance policies of your facility as well as several regulatory agencies require written documentation assessing the circumstances or hazards contributing to a resident's fall, any resulting injuries, and corrective actions that will be undertaken to reduce the risk of subsequent falls.

Regardless of the cause or contributing factors, it's not uncommon for staff to experience feelings of guilt, anger, or frustration when a resident falls.



Facility administrators also know that the potential consequences of a resident fall may include litigation from upset family members or further investigation and punitive action by oversight agencies – particularly if negligence is suspected.

In this section, we'll provide an overview of the factors that are known to contribute to falls in long-term care facilities, with special attention to factors related to symptoms of dementia. We'll also provide an introduction to strategies for managing the incidence of falls, again with special attention to residents with dementia.

As we discuss factors contributing to falls and strategies for reducing risks, it's important to keep in mind that the responsibility for fall management is shared among all of the people who work in a facility as well as volunteers and visitors. The assessment and management of falls at your facility should be a comprehensive team effort involving administration, direct care staff – including all part-time and contract staff, indirect care staff – like housekeeping, dietary, laundry, maintenance, and clerical staff, along with the participation of visitors. Everyone has an important role in implementing fall management strategies.

Also, it's important to recognize that it's not possible to totally eliminate falls at your facility. Your goal should be to minimize falls by carefully assessing risk factors, analyzing the circumstances for falls that do occur, and enlisting everyone's help in correcting problems and minimizing risk factors on a daily basis.

When considering factors that contribute to falls in long-term care facilities, it's helpful to think in terms of three categories of risk factors.

The first category includes characteristics of individual residents that may make them more or less likely to fall. These are called "intrinsic" factors and they pertain to the physical or mental health status of individual residents. That is, these are risk factors that are intrinsic to that person, regardless of his or her situation or environment. Examples of intrinsic factors that increase the likelihood of a resident falling are:



- Gait instability
- Lower limb weakness
- Balance problems
- Urinary incontinence or frequency
- The effects of certain drugs, particularly sedatives and hypnotics
- Visual impairment; and
- Dizziness.



In addition to these intrinsic risk factors, which are common among the general population of long-term care residents, those residents with dementia may also exhibit intrinsic factors like:

- Disorientation
- Anxiety and agitation
- Impaired judgment and decision-making skills
- Hallucinations
- Impaired perception and communication skills
- Failure to remember or realize physical impairments that limit their mobility; for example, a resident may forget that she needs assistance to walk and then attempt to get up out of her chair by herself – with predictable consequences.



The second category of risk factors is called “extrinsic” and includes such things as the physical environment, furniture, or clothing. In other words, these are factors unrelated to the resident’s health status. Examples are:

- Poor lighting
- Wet or shiny floor surfaces
- Physical obstacles like wastebaskets or furniture
- Walkers
- Restraints
- Wheelchair foot rests; and
- Inappropriate footwear or clothing that might cause tripping.

For residents with dementia, these extrinsic risk factors may pose an even greater risk for falling when combined with intrinsic risk factors like impaired perception and communication skills, hallucinations, disorientation and agitation. In fact, most falls in long-term care facilities occur when there is a combination of an extrinsic risk factor, like a slippery floor, and an intrinsic risk factor like poor visual acuity or gait problems.

The third category of risk factors, which we’ll refer to as “organizational issues,” is also extrinsic to the resident, but doesn’t pertain to the physical environment, furniture or clothing. These risk factors include staffing problems, inadequate training, or other organizational issues that make it difficult to provide adequate supervision, assistance to residents, or response to situations that might increase the chances for a falling incident. In fact, most long-term staff we talked to in developing this program cited short-staffing as a significant contributor to an elevated risk for resident falls and other accidents.

Before we leave this introduction to risk factors, here’s a short exercise to check your recognition of risk factors. Classify each of the following as intrinsic, extrinsic, or organizational risk factors.

1. The resident has a history of osteoporosis.

- a. **Intrinsic**
- b. Extrinsic
- c. Organizational

2. A bulb in the overhead light in the hallway is out.

- a. Intrinsic
- b. **Extrinsic**
- c. Organizational

3. The resident uses a portable oxygen system.

- a. Intrinsic
- b. **Extrinsic**
- c. Organizational

4. The resident is diabetic and prone to hypoglycemia.

- a. **Intrinsic**
- b. Extrinsic
- c. Organizational

5. During a shift change, several staff members of the direct-care staff are busy with reports.

- a. Intrinsic
- b. Extrinsic
- c. Organizational**

6. The resident is wearing pants that are too long, dragging on the floor.

- a. Intrinsic
- b. Extrinsic**
- c. Organizational

7. The resident has moderate Alzheimer's disease and becomes quite agitated when placed at a dining table with certain residents.

- a. Intrinsic
- b. Extrinsic**
- c. Organizational

Now that we've provided a brief introduction to the topic of risk factors, we'll provide a brief introduction to the topic of strategies for managing falls at your facility. Both of these topics will be discussed in more detail in the next section called "Risk Assessment and Problem-solving."

As we've mentioned before, the most effective strategies for managing falls in long-term care facilities involve everyone who works at the facility, with support from families of the residents. This should be a total team effort.

If you are viewing this in a group and time permits, you may want to pause the program at this point and discuss how you might get all employees at your facility, including indirect care staff like housekeeping, dietary, maintenance, clerical and volunteers involved in reducing the incidence of falls. If you have time, you also may want to talk about ways to get families of residents involved in your fall management efforts. We'll re-visit this topic again in the section on "Risk Assessment and Problem-solving."

Because each facility has its own unique culture, policies, procedures, environment, staffing patterns and resident population, there isn't one "best" approach that would work well in all long-term care facilities. Rather, there are many different "best practices" that have worked in a variety of long-term care settings.

The ideas and suggestions provided in this program should be evaluated to determine how well they would meet the unique needs of your facility and how feasible it would be to implement them within the unique environment of your organization.

There are some guiding principles that are common to successful fall management programs in long-term care facilities:

- Recognition that a comprehensive team approach to fall assessment and management is an integral part of the care process.
- Commitment to a facility-wide approach that includes every employee and volunteer as well as family members.
- A goal to create an environment that is safe, with sufficient staff to adequately monitor and assist residents as needed, while allowing as much individual freedom and autonomy as possible for residents, based on their capabilities.
- A systematic approach, involving an Interdisciplinary Falls Management Team, for collecting and analyzing data on falls at the facility and conducting thorough assessments of each incident in order to identify and address risk factors.
- Knowing that each resident has unique capabilities and intrinsic risk factors, so fall prevention strategies must be individualized.
- Recognition that the intrinsic risk factors for each resident will change over time as their physical and mental health status changes, and individualized care plans and fall-prevention strategies must be modified to accommodate these changes.

One of the clear trends in long-term care is to minimize the use of physical restraints. The research on falls supports the view that restraints should be minimized since they are likely to increase rather than decrease the risk for a fall.



When some form of restraint is necessary, there are some devices, like an enclosed walker, that give the resident a fair degree of freedom and mobility while still reducing their risk for a fall.

This concludes our introduction to risk factors and strategies for fall management. In the next section, “Risk Assessment and Problem-solving,” we’ll provide a more detailed look at assessing intrinsic, extrinsic and organizational risk factors, conducting post-fall assessments, and problem-solving to reduce the future risk of falls at your facility.



Introduction to Strategies for Reducing Falls for Direct Care Staff **Quiz**

- ___1. The prevention of falls in a nursing home is the responsibility of:
- Administration
 - Direct care staff-full time, part time and per diem
 - Indirect care staff- housekeeping, dietary, laundry, maintenance and clerical staff
 - Family members, visitors and volunteers
 - All of the above
- ___2. True or False
If everyone does his or job properly, a facility should be able to prevent ALL falls.
- ___3. The three categories of risk factors are:
- Intrinsic, Extrinsic and Obvious
 - Organizational, Intrinsic and Extrinsic
 - Organizational, Extrinsic and Individual
- ___4. True or false
Intrinsic risk factors for each resident will stay the same.
- ___5. True or false
Use of restraints to prevent falls can actually increase the risk of falls.
- ___6. Successful fall management programs in long term care facilities should include:
- Commitment to a facility-wide approach that includes every employee and volunteer as well as family members.
 - A goal to create an environment that is safe, with sufficient staff to adequately monitor and assist residents as needed, while allowing as much individual freedom and autonomy as possible for residents, based on their capabilities.
 - Individualized fall prevention strategies based on each residents unique capabilities and intrinsic risk factors.
 - All of the above.



Introduction to Strategies for Reducing Falls for Direct Care Staff and Indirect Care Staff

Answer Key

1. The prevention of falls in a nursing home is the responsibility of:
e. All of the above. Everyone at the facility, including family members, volunteers and visitors can play an important role in reducing the risk of falls.
2. True or False
A facility should be able to prevent ALL falls.
False. Your goal is to *minimize* falls by carefully assessing risk factors, analyzing cause of falls and ensure everyone knows their responsibility in minimizing risk factors on a daily basis. However, you shouldn't expect to prevent all falls.
3. The three categories of risk factors are:
b. Organizational, Intrinsic and Extrinsic
4. True or False
Intrinsic risk factors for each resident will stay the same.
False. As a resident's physical and mental health status changes, fall risk usually increases; therefore, fall prevention strategies must be modified to accommodate these changes.
5. True or False
Use of restraints to prevent falls can increase the risk of falls.
True. A restraint that restricts movement can cause a person to become frustrated and agitated. A person who is agitated has a higher likelihood of falling.
6. Successful fall management programs in long term care facilities should include:
d. All of the above. All of these strategies are important to a successful fall management program.



Risk Assessment and Problem-Solving

Notes to instructor

This section reviews the guiding principles of fall management and risk factors and introduces the process of fall risk assessment. General information is related to how a formal assessment may be conducted. The section labeled "Fall Risk Tool" provides more detailed information for RNs and LPNs. Nursing is recommended to complete a fall risk tool to avoid discrepancies between disciplines. In the section for therapists, it is recommended to provide care plan approaches to address functional mobility and performance of ADLs.

The Post Fall tool was conceived to assist with the process of "root cause analysis" and provide prompts to change care plan approaches and refer to other disciplines. It should be completed at the time of a fall or as soon as possible after a fall in an effort to get the most accurate details. Questions are intended to trigger possible causes. Post Fall reports can also be reviewed for trends in that resident.

It should be noted the Fall Risk Tool and the Post Fall Tool are not standardized but are based on assessments that have been validated.

Risk Assessment for Direct-care Staff

In this module, we will:

- Discuss risk assessment for both intrinsic and extrinsic factors;
- Describe suggested procedures for conducting a post-fall assessment; and
- Offer ideas for reducing the risk of falls, with special emphasis on residents with dementia.



Finally, we will give you some opportunities to practice what you have learned by presenting some situations that pose a risk for falling and asking you to do some problem-solving.

If this is your first time viewing this module, we suggest you follow this sequence of topics. However, if you are revisiting this module to review a specific topic, you may go directly to that topic by selecting it on the menu. At the end of each topic, you will be returned to this menu.



In the previous module, “Introduction to Strategies for Reducing Falls,” we presented some guiding principles that are common to successful fall management programs in long-term care facilities. Since some time may have passed since you viewed that module, we’ll review these guidelines because they provide an important foundation for the suggestions offered in this module.

A successful fall management program requires that you:

- Recognize that a team approach to fall assessment and management is an important part of the care process.
- Commit to a facility-wide approach that includes every employee and volunteer as well as family members.
- Create an environment that is safe, with enough staff to adequately monitor and assist residents as needed, while allowing as much independence as possible for residents, based on their capabilities.
- Collect and study data on falls at the facility and conduct a thorough assessment of each incident in order to identify and address risk factors.
- Know that each resident has unique capabilities and intrinsic risk factors, so fall prevention strategies must be individualized.
- Recognize that the intrinsic risk factors for each resident will change over time as their physical and mental health status changes. Individualized care plans and fall-prevention strategies must be adjusted periodically to meet their needs.

Keeping these guidelines in mind, let’s take a look at risk assessment for falls in long-term care settings, with special emphasis on residents with dementia.

In the previous module, “Introduction to Strategies for Reducing Falls,” we identified three categories of risk factors for falls: intrinsic, extrinsic and organizational. In this module, we’ll take a closer look at all three, starting with intrinsic risk factors.

As you recall, these are called intrinsic factors because they pertain to the physical or mental health status of individual residents. That is, these are risk factors that are intrinsic to a person, regardless of his or her situation or environment. Examples of intrinsic factors that increase the likelihood of a resident falling are:



- Unsteady gait
- Lower limb weakness
- Balance problems
- Incontinence
- The effects of certain drugs; and visual impairment.

Residents with dementia may also exhibit intrinsic factors like:

- Disorientation
- Anxiety and agitation
- Impaired judgment and decision-making skills
- Hallucinations; impaired vision or communication skills
- “Forgetting” to use an assistive device they require for mobility



Extrinsic factors, as you recall, are typically factors in the environment:

- Poor lighting
- Slippery floors
- Tripping hazards

Organizational factors include things like short-staffing or inadequate training.

When we talk about assessing someone’s risk for falling, we are really talking about two types of assessment. The first is the formal, written assessment using a standard tool to evaluate a wide variety of risk factors. The second type of risk assessment is the informal, day-to-day observation of the resident, looking for any temporary condition that might put the resident at greater risk. Both types of assessment are important. Let’s look at the formal assessment first.

When should you conduct a formal assessment of a resident's risk for falling? There are at least three situations when a resident should be assessed formally:

- Prior to or at the time of admission to a long-term care facility
- At re-admission to long-term care following a hospital stay
- Whenever there is a change in the resident's health or functional status, which might be indicated in a resident's quarterly MDS

Each facility has its own fall risk assessment tool. Typically, these look at a resident's level of risk in several categories such as:

- A history of falls
- Mental status – conditions like disorientation or a diagnosis of dementia or Alzheimer's
- Cardiovascular and pulmonary – conditions like low blood pressure or respiratory disease
- Neuromuscular – conditions like Multiple Sclerosis, unsteady gait, or incontinence
- Orthopedic – conditions like osteoporosis or loss of a limb
- Vision – conditions like cataracts or glaucoma
- Pain
- Physical functioning – such as the need for a walker for ambulation
- Medications
- Difficulties with communication – such as aphasia or language problems
- And other factors like the need for continuous oxygen.

This program describes the use of a Fall Risk Tool that you may wish to adopt for use at your facility. This tool was modeled after the MDS Resident Assessment Protocols for falls or "RAPS," *EQUIP's* fall assessment, and other similar tools. It is a comprehensive assessment designed to identify fall risk factors and assist in the development of care plan approaches to prevent falls. You may use it in its entirety or you may incorporate some of its features into your own tool. We recommend that this tool be completed by your nursing staff, including LPNs if appropriate. To avoid discrepancies between disciplines in the assessment of fall risk, we suggest therapists make recommendations for fall prevention based on gait, balance and functional assessments.

If you are an RN or LPN, or you would simply like to know more about a Fall Risk Tool, you may select the button labeled "Fall Risk Tool" for a more detailed description of a tool developed by the creators of this program.

If you are a therapist, you may select the button labeled "Fall Risk Assessment for Therapists" for a brief discussion of your role in the team's overall assessment of a resident's risk.

A third option is to select the button labeled "Continue", which will skip over the discussion of the Fall Risk Tool

Once a resident has been assessed and found to be at a moderate or high risk for falling, every member of the care team, as well as family members, should be aware of the specific factors that put that resident at risk. Although some risk factors might be temporary or subject to modification, most types of intrinsic risk factors, such as dementia or chronic disease conditions, cannot be reduced. In fact, these risk factors are likely to worsen over time.

It's very important that the care staff and family members understand the specific risk factors for an individual resident and how to take these risks into consideration to respond in ways that can minimize the chances of the resident falling. We'll explore some of these strategies in the discussion on problem-solving later in this module.

When you know that a resident is at risk for falling, what are some ways you can share this information with other members of your team as well as with family members? Remember, it's not sufficient to simply communicate that a resident is at risk for falling. You have to share the reasons for such an elevated risk.

(Pause for Discussion)

Now that we've discussed intrinsic risk factors, let's look at extrinsic risk factors for falls. As you may recall, extrinsic risk factors include such things as the physical environment, furniture, or clothing. In other words, these are factors unrelated to the resident's health status.



As we have mentioned before, examples of extrinsic risk factors are:

- Poor lighting
- Wet or shiny floor surfaces



- Physical obstacles like wastebaskets or furniture
- Walkers
- Use of portable oxygen equipment
- Restraints



- Wheelchair foot rests
- Inappropriate footwear or clothing that might cause tripping.

For residents with dementia, these extrinsic risk factors may pose an even greater risk for falling when combined with intrinsic risk factors like impaired vision and communication skills, hallucinations, disorientation and restlessness. In fact, most falls in long-term care facilities occur when there is a combination of an extrinsic risk factor, like a slippery floor, and an intrinsic risk factor like poor visual acuity or gait problems.

Many extrinsic risk factors are temporary situations in the physical environment, like wet floors or tripping hazards in hallways. Unlike intrinsic risk factors, extrinsic factors might appear at any time and nearly all can be reduced or eliminated by simple actions of alert staff members or family members. Even if you can't eliminate every risk factor, eliminating as many as possible can reduce the chances of injury if a resident does fall.



All staff members including those without direct care responsibilities, like volunteers, housekeepers, and maintenance, food service and clerical staff members, have an important role in looking for extrinsic risk factors and taking corrective action when necessary. Another section in this program addresses the role of indirect care staff in reducing risks for falls at your facility.

Let's look at a few examples of extrinsic risk factors and see if you can identify them. Imagine that you're stopping by to check on a resident in his room.

Take a look around this room.

Can you find at least three extrinsic risk factors?



Some of the extrinsic risk factors are:

- The resident's walker is on the other side of the room, rather than next to his chair, so he might be unsteady moving from his chair to the walker.
- The resident's shoes are off; so he is more likely to slip and fall with only socks on his feet.
- A cup of water has spilled on the floor, creating a slipping hazard.

Do you see any others?

Here is a hallway at a long-term care facility. What extrinsic risk factors do you observe? See if you can find at least two.



Some of the extrinsic risk factors for falls in this hallway are:

- The laundry hamper is an obstacle that people might bump into or might have difficulty getting around.
- The vacuum cleaner cord is an obvious tripping hazard.
- Two others are a little more subtle: There is a change in the carpet color. This might be confusing to someone with impaired vision.
- A change in floor surface from carpet to tile at a threshold may also be difficult for someone with impaired walking.

Do you see any other risk factors?

As with intrinsic risk factors, it's important that the entire care team and family members be aware of extrinsic risk factors and respond quickly when such risk factors appear. One way to raise everyone's awareness of extrinsic risk factors is through this training program. What are some additional ways to ensure that all staff and family members know what to look for in terms of extrinsic risk factors?

(Pause for Discussion)

A third category of risk we've mentioned previously includes organizational factors like staffing problems, inadequate training, or other organizational issues that make it difficult to provide adequate supervision, assistance to residents, or a quick response to situations that might increase the chances for a falling incident. Many long-term staff we talked to in developing this program cited short-staffing as a significant contributor to an elevated risk for resident falls and other accidents. Like intrinsic and extrinsic risk factors, there are systems a facility adopts to address such issues. We will discuss them in the section on problem solving.

We'll now return to the menu of topics for this module, but if you're viewing this program with a group, you may want to take this opportunity to discuss ways that you can coordinate efforts among all staff and family members to be alert to extrinsic risk factors as well as organizational issues at your facility.

Fall Risk Tool Description and Instructions

This Risk Assessment Tool was modeled after the *MDS falls RAPS*, *EQUIP's* fall assessment and several other assessments. It is a comprehensive assessment designed to identify fall risk factors and assist in development of care plan approaches to prevent falls.

The tool is divided into **Risk Categories**, which is the broader classification of risk.

Under each category specific **Conditions** are listed that are related to the affected system or area. Listed conditions are the most common but not all-inclusive.

The **Risk Factor** is the assignment of a numerical value when one or more of the Conditions are present in each Risk Category.

The Fall Risk tool should be completed:

1. Upon admission
2. After re-admission from a hospital stay
3. The resident has had a significant change.

It may be useful to review the Risk Assessment tool at least quarterly or annually to ensure all conditions that present a risk for fall have a care plan approach. You may choose to review this more often for residents who have a history of numerous falls.

Scoring

1. For each **Risk Category**, check or highlight each **Condition** present in the resident's medical history.
2. Score **only 1 point** per category even if one or more conditions are checked.
3. Total the number of **Risk Factors** and assign a **Fall Risk** as per the scoring key at the bottom of the page.
4. Note that *Any Fall* in the past *12 Months* is an **AUTOMATIC HIGH RISK**.

Care Planning

When care planning, approaches will address the **Condition** that may contribute to a fall.

For example: The resident scores 1 point if they are prescribed any of the medications listed in the **Medication Risk Category**, but you will individually care plan for each medication they are on. If they are taking diuretics, the care plan approach may include more frequent toileting.

See example of completed Fall Risk Tool with care plan approaches.

Fall Risk Tool

Risk Category	Condition	Risk Factor	Risk Category	Condition	Risk Factor
Cognitive Status	Wanders		Possible Indications of Pain	Depression	
	Alzheimer's diagnosis			Restlessness	
	Dementia diagnosis			Apathy	
	Intermittent confusion			Anxiety	
	Disoriented x3				
Cardiovascular and Pulmonary	Syncope		Physical Functioning	Ambulates with device or uses furniture as support	
	Hypotension-Orthostatic or due to medication			Needs assistance for: Ambulation	
	Cardiac dysrhythmias			Transfers	
	Dizziness			Bed Mobility	
	Neuropathy			Anxiety	
	PVD				
	COPD/respiratory				
Neuromuscular	Parkinson's		Medications	Anesthetics	
	CVA			Antihistamines	
	Multiple Sclerosis			Antihypertensive	
	Seizures			Laxitives	
	Recent weight loss			Diuretics	
	Bowel incontinence			Hypnotics	
	Bladder incontinence			Narcotics	
	Unsteady static balance			Psychotropic	
	Unsteady gait			Sedatives	
	Pain-daily, moderate or severe			Medication change in last 5 days	
Orthopedic	Loss of Limbs		Communications	Impaired speech	
	DJD/Arthritis			Impaired hearing	
	Osteoporosis			Language barrier	
	History of fractures				
	Any contractures				
	Low back pain				
Vision / Perception	Cataracts		Environment	Alarm or use of restraint	
	Macular degeneration			Uses O2 continuously	
	Glaucoma			Room is a double	
	Legally blind			Room is cluttered	
	Sees halos, rings, lights or curtain over eyes			Unable to wear or prefers inappropriate shoes	
	Needs glasses but does not wear			Furniture is unstable	

Any history of falls in the last 12 months- Automatic High Risk

Risk Level Score by Sum of Risk Factors

Score 1 point for one or more risk factors in each category

0-3 Lower Risk

1-6 Moderate Risk

6-10 High Risk

Fall Risk Tool

Risk Category	Condition	Risk Factor	Risk Category	Condition	Risk Factor
Cognitive Status	Wanders		Possible Indications of Pain	Depression	
	Alzheimer's diagnosis			Restlessness	
	Dementia diagnosis			Apathy	
	Intermittent confusion			Anxiety	
	Disoriented x3				
Cardiovascular and Pulmonary	Syncope		Physical Functioning	Ambulates with device or uses furniture as support	1
	Hypotension-Orthostatic or due to medication			Needs assistance for: Ambulation	
	Cardiac dysrhythmias			Transfers	
	Dizziness			Bed Mobility	
	Neuropathy			Anxiety	
	PVD				
	COPD/respiratory				
Neuromuscular	Parkinson's	1	Medications	Anesthetics	
	CVA			Antihistamines	
	Multiple Sclerosis			Antihypertensive	
	Seizures			Laxitives	
	Recent weight loss			Diuretics	
	Bowel incontinence			Hypnotics	
	Bladder incontinence			Narcotics	
	Unsteady static balance			Psychotropic	
	Unsteady gait			Sedatives	
	Pain-daily, moderate or severe			Medication change in last 5 days	
Orthopedic	Loss of Limbs		Communications	Impaired speech	
	DJD/Arthritis			Impaired hearing	
	Osteoporosis			Language barrier	
	History of fractures				
	Any contractures				
	Low back pain				
Vision / Perception	Cataracts		Environment	Alarm or use of restraint	
	Macular degeneration			Uses O2 continuously	
	Glaucoma			Room is a double	
	Legally blind			Room is cluttered	
	Sees halos, rings, lights or curtain over eyes			Unable to wear or prefers inappropriate shoes	
	Needs glasses but does not wear			Furniture is unstable	

Any history of falls in the last 12 months- Automatic High Risk

Risk Level Score by Sum of Risk Factors
 Score 1 point for one or more risk factors in each category
0-3 Lower Risk
1-6 Moderate Risk
6-10 High Risk

Risk Level Score by Sum of Risk Factors

Score 1 point for one or more risk factors in each category

0-3 Lower Risk

1-6 Moderate Risk

6-10 High Risk

Care plan approaches to prevent falls:

1. Incontinence: Toilet q 2hrs
2. Confusion, unsteady gait: monitor for use of assistive device.
3. Parkinsons, unsteady gait: increase supervision at end of medication cycle (12pm and 6pm).
4. PT referral for gait and strength training

Role of Therapy in Fall Prevention and Special Considerations for Residents with Dementia

The central theme of this training is to emphasize that everyone associated with a long term care facility has a role in fall prevention. Residents with dementia pose a greater challenge when it comes to formulating procedures to keep them safe and injury free. As part of the interdisciplinary care plan team, a therapist's input regarding falls can be crucial. Whether you are a physical, occupational or recreational therapist, your clinical expertise and observational skills are a valuable contribution to a resident's plan of care.

This section will discuss assessment and development of appropriate care plan approaches for residents with dementia. The goal of recommendations and interventions are to minimize the risk of falls while maintaining the ability to perform functional activities.

Assessment of an individual with Alzheimer's Disease or other dementias with most standardized tests may be difficult or not possible at all. Evaluation of risk factors will predict the likelihood of a fall but it is the therapist's observations of functional mobility and performance of activities of daily living that will identify the actions that may challenge a resident's balance. Examination of risk factors in relation to how they affect balance can be your clue to effective interventions and staff training. We know balance is maintained via the vestibular system, visual and somatosensory input. In early or mid stages dementia, these systems may be intact. However, cognitively impaired resident's lack of safety awareness and good judgment, diminish their ability to anticipate challenges to balance.

A simple evaluation for vestibular input would be assessing body sway during static standing with eyes open and eyes closed. If body sway significantly increases with eyes closed, they may have a vestibular impairment. Further assessment may reveal nystagmus, dizziness or loss of balance with head movements. Therefore, the resident's risk for falls may be increased when they are turning their head or distracted by movement in busy hallways. Your care plan approaches may include monitoring the resident more closely in high traffic areas, recommending staff and family instruct the resident to stop walking if distractions are nearing them, and not calling out their name to get their attention when they are walking or transferring.

The Functional Reach test can be used to determine the risk of fall. If the resident cannot reach forward at least 6 inches without moving their feet, their risk for fall is increased. This test may be modified for the resident with dementia by giving them an object to reach for in a pre-measured setting. While many residents with dementia may not follow directions in order to complete functional mobility tests such as the Berg Balance Scale or Tinetti Mobility Test, components will indicate an increased risk for falling. Careful observation of transfers, turning, stepping over objects and gait will provide information to develop not only fall prevention strategies but therapeutic interventions as well.

Care plan approaches should be formulated after careful observation during performance of activities of daily living such as dressing, adjusting clothing during toileting and any other activities that involve standing and reaching. Because agitation is sometimes a precursor to a fall, staff may need additional training to effectively communicate instructions for task segmentation and decrease frustration during performance of ADLs. Care plans may need to list specific directions or commands for staff to use in order to maintain consistency during instruction of ADLs.

Residents with dementia, particularly Alzheimer's Disease can present with either severe apathy and depression or become over stimulated by the environment. Sensory integration techniques have been used successfully to decrease agitation, improve function and reduce falls. The use of light, soft music, visually relaxing pictures and smells can have a positive effect on mood and behavior. The practice of movement patterns, such as Tai Chi, is also an effective sensory integration technique.

Additional examples of fall prevention approaches are provided in the DVD and the appendices of this handbook.

Even after the most thorough assessment and staff training are completed, and with interventions put in place, falls will occur. Review of the incident should include using the Post Fall Tool to determine root cause followed by brainstorming to prevent another fall. We're sure you know how frustrating this can be with residents who frequently fall. And, it is likely that some staff will have an emotional response to a fall, especially if an injury is involved. As part of the interdisciplinary falls management team, your therapists' objective view may bring attention to some details not noticed by those working daily with the resident.

We know therapy interventions require extensive creativity to achieve desired outcomes, especially when it comes to working with residents who are cognitively impaired. Therefore, their contributions to the team may not only be inventive and practical, but may be the "spark" the team needs to be inspired to think imaginatively in order to resolve more difficult problems.

Examples of creative problem solving from the facilities involved in this project can be found throughout the DVD and in additional material included in this handbook.

Name: <i>Mrs. B</i>					
ID #: <i>0000</i>					
Date: <i>00/00/00</i>			Time of fall or time found on floor: <i>2:30 PM</i>		
POST FALL TOOL					
SECTION 1 Complete immediately after a fall			Immediate Care Plan Approach(es):		
Fall in Bedroom			YES	NO	<i>Apply non-skid socks whenever Mrs. B is in bed and has her shoes off.</i>
Was the fall observed?				X	
Was the call bell in reach?				NA	
Was the call bell functioning?***				NA	
Was an alarm present?			X		
Was the alarm functioning?			X		
Were needed items within reach? (Ex: water, TV remote, tissues, phone etc.)			X		
Any paper or dropped item on the floor?				X	
Was a reacher available?*				NA	
Was bed in lowest position?			X		
Floor wet?			X		
Shoes/appropriate footwear worn?				X	
Glasses on?				X	
Any clutter or furniture out of place?			X		
Assistive device within reach?			X		
Device used and properly functioning?*			X		
Time last toileted:			<i>1:50 PM</i>		<i>Dementia with confusion</i>
Time of last snack or drink:			<i>Lunch 12:30 PM</i>		
Brief description of WHY this person fell: <i>Mrs. B was napping, bed alarm alerted staff. Mrs. B was FOF next to bed in stocking feet. Feet and pants were wet. Mrs. B was incontinent and slipped on the wet floor. She was not wearing her glasses or appropriate footwear.</i>					
Fall in Bathroom			YES	NO	
Was the fall observed?					
Was the call bell in reach?					
Was the call bell functioning?***					
Assistive device used and properly functioning?*					
Was the floor wet?					
Was the resident incontinent?					
Time last toileted:					
Was the light on?					
Was the fall backward onto the toilet?*					
Was a raised toilet seat or higher toilet available?*					
Was a grab bar available?					
Was the area cluttered?					
Brief description of WHY this person fell:					
Fall in places other than bedroom or bathroom			YES	NO	
Was the fall observed?					
Was an alarm present?					
Was the alarm functioning?					
Was an assistive device used appropriately?					
Was the device working properly?					
Was the path blocked by object or person?					
Floor wet?					
Shoes/appropriate footwear worn?					
Glasses on?					
Time last toileted:					
Time of last snack or drink:					
Brief description of WHY this person fell:					
Signature _____ Date _____			Signature _____ Date _____		

Problem Solving

Notes to the instructor

During initial trials of this program, some staff feedback requested “solutions” for fall reduction. This section is intended summarize and provide the tools to produce those solutions. The uniqueness of every resident and circumstances surrounding a fall should be stressed. What works for one situation may not work the next time. The following principles, which are also presented at the beginning of the case studies, and can be used as a “formula” for effective problem solving.

1. Understand the problem: What are the risk factors? What is the root cause? Ask at least 5 why questions. Do we need more information? Involve the entire care plan team.
2. List possible approaches. Think creatively! What may seem out of the ordinary just may work.
3. Implement new approaches
4. Re-evaluate your approach. What worked? What didn't?

For practice, you could use some of the falls that have occurred in your facility to conduct a root cause analysis and brainstorm approaches to prevent the fall from re-occurring. Additionally, knowing as much as possible about the resident is significant. Remind staff that long term memories are often preserved and the resident may be functioning in the past. What was their routine at home? What was their occupation? The answers to questions like these may lead to an effective intervention. The case studies presented in the following section explore some of these possibilities. Furthermore, encourage the involvement of the many versus the few. Each person who has contact with a resident has valuable information that should be shared.

Creativity needs to extend to the implementation of approaches. As stated throughout this program, all staff can be utilized but may not know ways they can contribute. Here again is the opportunity to emphasize teamwork and how to use each team member more effectively. Discuss how the direct care staff may work together to provide care for several residents at one time plus all the other duties of the day. For example, if a CNA has charting or items to clean up after care but also has residents who need attention, a group activity may be set up with another direct care staff (and indirect care staff, volunteers or family) while the clean up is completed. After one completes their tasks, they would take over active engagement. Encourage senior staff members to take the lead to demonstrate and promote teamwork.

- ___ 1. Above all, a successful falls management program requires:
- The recreation therapy department to provide more activities.
 - A facility-wide commitment to a team effort that creates a safe environment but also allows residents to be as independent as possible.
 - More staff.
 - Increase use of restraints.
- ___ 2. Assessing each incident and collecting information about falls is important because..
- It helps to identify and address risk factors
 - It's part of the resident's medical record and required by the health department.
 - You need the information to fill out the resident's next MDS
- ___ 3. True or False: A resident's intrinsic risk factors will stay the same as they get older.
- ___
- Organizational
 - Intrinsic
 - Extrinsic
 - None of the above. Pain is not a risk factor for falls
- ___ 5. Which is an example of an extrinsic risk factor for falls?
- Unsteady gait
 - Medication that may cause drowsiness
 - Short staffing
 - Inappropriate foot wear
- ___ 6. When should a formal risk assessment be done?
- Upon Admission and quarterly
 - Upon Admission or re-admission from hospitalization and annually
 - Upon Admission, re-admission from hospitalization and if there is a significant change in functional or health status.
- ___ 7. True or False: Difficulties with communication can be a risk factor for falls.
- ___ 8. True or False: An intrinsic fall risk factor may be temporary.
- ___ 9. Which of the following is an example of an extrinsic risk factor?
- Resident walks with the help of 1 person
 - Resident walks with her shoes off.
 - Resident wears glasses
 - All of the above.

- ____ 10. When a fall does occur, after assessing the resident and providing appropriate care, what would be the most appropriate action?
- a. Fill out an incident report.
 - b. Immediately perform a post fall “root cause analysis” with every one involved and develop a new care plan approach.
 - c. Fill out an incident report and a follow-up report the next day.
- ____ 11. Effective problem solving to reduce falls requires:
- a. A thorough assessment of a resident’s risk for falling
 - b. A thorough assessment of extrinsic factors that could cause a fall
 - c. A thorough assessment of organizational factors that contribute to falls
 - d. A team approach involving all people (staff and family) who can offer insight or advice to create individualized solutions for a specific resident.
 - e. All of the above.
- ____ 12. Identifying the root cause of a fall is useful to:
- a. Help determine the appropriate strategies to prevent it from happening again.
 - b. Determine responsibility.
 - c. Prove there needs to be more staff on the unit.

Problem Solving to Reduce Risk for Direct Care Staff

We know that there are many different intrinsic, extrinsic and organizational factors that can contribute to the incidence of falls in long-term care facilities. We also know that for residents with dementia, symptoms like confusion, impaired vision, impaired judgment, or an impaired ability to communicate their needs may contribute to an increased risk for falls.

Let's assume that you conduct a thorough assessment of each resident's risk for falling and this assessment is updated when appropriate, that every staff member is constantly on the lookout for potential environmental factors, like tripping hazards, that might contribute to falls, and that you have a good process in place for prevention and for reviewing the circumstances contributing to falls when they do occur. In other words, let's assume you have the right tools and procedures in place for an effective fall management program. What's missing?

As you probably guessed from the title of this section, it's important to have an effective approach to problem-solving in order to implement preventative measures and re-assess those measures if falls occur. Every facility has unique environmental features, programs, activities, and staffing patterns. Likewise, every resident has unique capabilities, personality characteristics and intrinsic risk factors. Consequently, there aren't simple solutions that work for every situation. **The best solutions are the ones you create based on the unique mix of intrinsic and extrinsic risk factors for a particular resident in particular situations, taking into consideration the organizational factors (like staffing patterns) that apply to your facility.**

With this in mind, there are several ideas we'd like you to consider when it comes to problem-solving to reduce the incidence of falls at your facility. Please keep in mind that some of these will work in some facilities but not others. Hopefully, these ideas will inspire your thinking about how you and your co-workers (including direct- and in-direct care staff), along with family members can work together to minimize the risk of falling for each resident entrusted to your care.

Root Cause Analysis

One element of effective problem-solving is identifying the "root cause" of a fall. To help you with this, we suggest you ask at least five "why" questions when analyzing the circumstances that may have contributed to a fall. Each question digs deeper into the "root cause" of the problem. We'll explain by using the example of a resident who fell on her way to the bathroom.

The first, and most basic, question is:

"Why did this person fall?" Perhaps your answer is that she fell because she didn't use her walker and didn't seek assistance.

The next question might be, "Why did she need to get to the bathroom in such a hurry that she didn't bother getting her walker or asking for assistance?" This might lead to a discussion of what factors contributed to her bladder urgency. Was it because of a urinary tract infection? Did her medications contribute? In other words, were there intrinsic risk factors that contributed to her urgency?

Another question might be, "Why wasn't assistance provided?" Did she request assistance, but couldn't wait for it to arrive? (A possible organizational risk factor.) Or, did she fail to realize that she needed assistance due to dementia? (An intrinsic risk factor.)

Another question might be, “What was she wearing on her feet?” Perhaps her shoes were off and she was in her “stocking feet,” making it very risky to walk across the linoleum floor.

As you can see, asking several questions, particularly “Why?” questions is very helpful in uncovering the factors that may have contributed to a resident’s fall. Don’t settle for the answer to the first question, it usually takes some “digging” to get to the root cause!



Since this program has been developed by people who work in long-term care facilities, we understand there are limitations on how much time staff members can spend with residents. However, we also know that there are many interesting and creative ways to maximize the amount of time your staff, including direct- and indirect-care staff members, spends interacting with residents – particularly those who are at higher risk for falling. We also know there are many ways to provide activities that actively engage residents.



Environmental Changes:

- Lighting
- Gait or unit entryway
- Decoration/Pictures
- Non-skid surfaces
- No overhead paging
- Simple carpeting
- Staff education and awareness

(Pause for Discussion)

- ___ 1. Above all, a successful falls management program requires:
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 - A facility-wide commitment to a team effort that creates a safe environment but also allows residents to be as independent as possible.
 - More staff.
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- ___ 6. When should a formal risk assessment be done?
- Upon Admission and quarterly
 - Upon Admission or re-admission from hospitalization and annually
 - Upon Admission, re-admission from hospitalization and if there is a significant change in functional or health status.
- ___ 7. True or False: Difficulties with communication can be a risk factor for falls.
- ___ 8. True or False: An intrinsic fall risk factor may be temporary.
- ___ 9. Which of the following is an example of an extrinsic risk factor?
- Resident walks with the help of 1 person
 - Resident walks with her shoes off.
 - Resident wears glasses
 - All of the above.

- ____ 10. When a fall does occur, after assessing the resident and providing appropriate care, what would be the most appropriate action?
- Fill out an incident report.
 - Immediately perform a post fall “root cause analysis” with every one involved and develop a new care plan approach.
 - Fill out an incident report and a follow-up report the next day.
- ____ 11. Effective problem solving to reduce falls requires:
- A thorough assessment of a resident’s risk for falling
 - A thorough assessment of extrinsic factors that could cause a fall
 - A thorough assessment of organizational factors that contribute to falls
 - A team approach involving all people (staff and family) who can offer insight or advice to create individualized solutions for a specific resident.
 - All of the above.
- ____ 12. Identifying the root cause of a fall is useful to:
- Help determine the appropriate strategies to prevent it from happening again.
 - Determine responsibility.
 - Prove there needs to be more staff on the unit.

1. Above all, a successful falls management program requires:
 - b. A facility-wide commitment to a team effort that creates a safe environment but also allows residents to be as independent as possible.**

It is not any one department that will ensure a successful program. ANY staff member could engage residents to keep them safe. More staff is not always the answer. More importantly, it is the way the staff works together as a team that will determine a successful falls management program. Restraints can actually increase the incidence of falls.

2. Assessing each incident and collecting information about falls is important because..
 - a. It helps to identify and address risk factors**

3. True or False: A resident's intrinsic risk factors will stay the same as they get older.
False Intrinsic risk factors change over time as the resident's mental and physical functioning changes. Care plan approaches for fall prevention must be constantly re-evaluated.

4. Pain would be included in which risk category for falling:

- b. Intrinsic**

Pain is an intrinsic risk factor since it pertains to the physical status of the individual resident.

5. Which is an example of an extrinsic risk factor for falls?

- d. Inappropriate footwear**

Inappropriate footwear is an extrinsic risk factor since it is not related to a resident's physical status.

Unsteady gait is an intrinsic risk factor since it pertains to the physical status of the individual resident.

Medication that might cause drowsiness is an intrinsic risk factor since it pertains to the potential to affect the physical status of the individual resident.

Short staffing is an organizational risk factor.

6. When should a *formal* risk assessment be done?

- c. Upon Admission, re-admission from hospitalization and if there is a significant change in functional or health status.**

7. True or False: Difficulties with communication can be a risk factor for falls.

True. If a resident is unable to make her needs known, she may become restless or upset and attempt to get what she needs on her own. If you are not able to determine her needs, she may resist your assistance while your trying to "guess" what she wants.

- ____ 8. True or False: An intrinsic fall risk factor may be temporary.

True Although most intrinsic risk factors related to chronic disease cannot be reduced and may worsen, a resident with an increase in his congestive heart failure or a hip fracture can rehabilitate to his previous functional status.

9. Which of the following is an example of an extrinsic risk factor?

- b. Resident walks with her shoes off.**

A resident walking with one person is an example of an intrinsic risk factor related to decreased strength and balance. As long as the resident is wearing glasses, this would be an intrinsic risk factor related to poor vision.

____ 10. When a fall does occur, after assessing the resident and providing appropriate care, what would be the most appropriate action?

b. Immediately perform a post fall “root cause analysis” with every one involved and develop a new care plan approach.

It's important to immediately perform a post fall “root cause analysis” with every one involved and develop a new care plan approach.

____ 11. Effective problem solving to reduce falls requires:

e. All of the above.

All of these are important to effective problem solving to reduce falls.

____ 12. Identifying the root cause of a fall is useful to:

a. Help determine the appropriate strategies to prevent it from happening again.

Identifying the root cause of a fall will be very helpful in finding appropriate strategies to prevent another fall from happening under similar circumstances. Although a root cause analysis may indicate a shortage of staff contributed to a fall, the primary goal of finding the root cause is to determine it from happening again. Many factors beyond staffing may be addressed.



Case Studies

Now that you've seen some examples of how some facilities have made changes to reduce the risks for falls, we'll give you a chance to practice problem-solving. We'll present three case studies in which staff members are discussing risk factors for a resident, and how to minimize these, or they're doing a post-fall analysis. After presenting the information, we'll give you an opportunity to do some problem-solving. Keep the following principles for effective problem solving in mind as you review each case.

1. Understand the problem: What are the risk factors? What is the root cause? Ask at least 5 why questions. Do we need more information? Involve the *entire* care plan team.
2. List possible approaches. Think creatively! What may seem out of the ordinary just may work.
3. Implement new approaches.
4. Re-evaluate your approach. What worked? What didn't?

We've provided a few suggestions of our own to compare to yours.

Case Study Number 1 Mrs. T.

Mrs. T is an 80 year old who was recently admitted to a nursing home for rehabilitation due to a hip fracture from a fall at home. Medical diagnoses include: Alzheimer's Disease, recurrent urinary tract infections, and hypertension (HTN). Mrs. T is married and was cared for by her husband until her fall. Mrs. T always took pride in her appearance. She was becoming much more confused at home and fell down the steps going out of her home unassisted. She required a total hip replacement. Since her admission, she has been very lethargic and difficult to arouse. Staff members have noticed she appears much more alert and coherent when in activities and enjoys participating, especially in music programs. Due increased care needs, it expected that Mrs. T would remain in the nursing home.

What are Mrs. T's risk factors for falls?

List a care plan approach to address each factor.

What other information about Mrs. T would be helpful in developing her care plan?

Which team members would you enlist to assist in fall prevention?

Some additional information was provided in her social history:

She is a retired music teacher who regularly attended the theater and classical performances.

Her husband says she is "very set in her ways".

Some of Mrs. T's risk factors for falls are: Recurrent UTI's, HTN, confusion, lethargy, pain and decreased strength due to hip replacement, inappropriate footwear, difficulty accepting change and history of a fall.

Here are some suggestions regarding Mrs. T. There are many possibilities, so your ideas could be a little different.

Recurrent UTI's: Monitor urine for changes in color or odor. Mrs. T already has confusion and lethargy, signs of a UTI, so her care team will need to observe carefully for any subtle changes.

HTN: If Mrs. T is on medication that lowers her blood pressure, her BP should be monitored regularly and she should be observed for orthostatic hypotension.

Confusion, lethargy: This could be due to having undergone an operation with general anesthesia. It takes longer for the effects of anesthesia to go away in the elderly. Get a report from her family if this is normal for her.

Here are some approaches that enlist the help of other team members.

Pain: Following a total hip replacement, Mrs. T is very likely to have pain. While pain medications may be effective, they may also contribute to confusion and lethargy. You may consult Physical Therapy and Occupational Therapy for alternative modalities to relieve pain. A change of position can be pain relieving and Mrs. T may require assistance to change positions, stand or walk several times a day.

Decreased strength due to hip replacement: Communication with therapies is important in order to be consistent with method of transfers, walking and activities of daily living. Mrs. T has impaired short-term memory, therefore consistency is VERY important when teaching a skill. She may have not used a walker before and will need MANY reminders and guidance. If everyone does something a little different when teaching the skill or does not consistently use the walker, it will be more difficult for Mrs. T to adapt.

Inappropriate footwear and difficulty accepting change: Mrs. T loves high heels and according to her family, will not wear anything else. Don't insist that she wear "sensible shoes", as this may contribute to agitation and more falls. It may be helpful to enlist the assistance of your Social Worker and her family in order to get more appropriate shoes on her feet. Remember, a thorough history can provide insight to Mrs. T's likes, dislikes and the best way to approach her. Most of all, try to be empathetic and patient. After all, would you want strangers taking your shoes away when you need them for the theater?

A history of a Fall: Puts Mrs. T. at an Automatic High Risk for falls. A policy your facility may employ is the use of chair or bed alarms. However, it will be quite important to ensure Mrs. T is engaged in an activity whenever possible. Your Recreation Therapist can give you ideas and supplies to help you when residents are not in a formal program.

Family can give you insight to what they like the most. Indirect care staff are an excellent resource when staff is in short supply.

Remember, the best strategies for preventing falls take into account the unique characteristics of the individual resident, the environment and staffing patterns of your facility and the programs, activities and resources available. A strategy that works well for one resident may not be effective for another. It's important to monitor the success of each strategy and make adjustments if a particular strategy doesn't seem to be working or the resident's condition changes so that other risk factors might arise.

Case Study Number 2: Mr. W.

Mr. W. is an 87 year old widower who is diagnosed with Alzheimer's Dementia, Glaucoma, and Diabetes. He lived with his daughter and was admitted to a special care Dementia unit due to wandering and increased care needs. He is a retired night watchman. Mr. W. is disoriented to time and place. He is verbal but conversations are often rambling and disjointed. He asks for his wife and often talks about where he worked. One year ago, Mr. W. was independent to ambulate on the unit without device. He constantly wandered the unit, rarely sitting, even for meals. Due to progression of his disease process, he has shown significant declines in mobility. Mr. W. attempts to walk without a device and frequently falls due to poor vision and unsteady gait. Physical Therapy attempted gait training with a walker but Mr. W. would become agitated and push the walker and the therapist aside. He attempted to climb out of a merry walker. His care plan states he should be kept in a supervised area when awake and has a chair alarm. Mr. W. has been known to remove the alarm. He naps during the day but is up most of the night. His care plan calls for a bed alarm and he is to be checked every 30



A staff member finds Mr. W. on the floor of his room at 2:10 am after being alerted by the bed alarm. He had been checked at 2 am and appeared to be sleeping. The floor is tile and Mr. W. is wearing socks because his feet are cold. He was not incontinent. When asked what he was trying to get up for Mr. W. stated: "It's time. You have to be on time".

Complete the post fall assessment tool to determine the "root cause" of Mr. W's fall.

What do you think Mr. W. meant by "it's time"?

What other information would help determine root cause?

What new care plan approaches would be appropriate?

What disciplines could you refer to for evaluation or assistance?

Did you use "5 Whys to determine a possible root cause?

Why does Mr. W. wear socks to bed? Could he have slipped on the tile?

Did you notice the bed sheets? Why did he become entangled in his blankets? Could the blankets have been too heavy for him to move aside?

Why is Mr. W. always awake during the night? Mr. W's history states he was a night watchman.

Why would he have been trying to get out of bed? His job was to walk through a factory warehouse at regular intervals.

Why was he repeating "It's time"? He also had to insert a key into a box to verify he checked an area. Possibly, Mr. W. was "at work" and "it's time" to use the key.

Here are some suggestions regarding Mr. W. There are many possibilities, so your ideas could be a little different.

If Mr. W. prefers to wear socks to bed because his feet are cold, could his family provide socks with non-skid soles? This approach may be a good "immediate response" to the fall.

Would warmer pajamas and lighter blankets improve his safety or should Therapies evaluate his bed mobility?

Mr W's lifestyle was to be awake at night and asleep during the day. Could the environment be changed to accommodate his "schedule"? How could the facility make it possible for Mr. W. to "check the area" during the night? Could reassuring Mr. W. that every thing is ok, decrease anxiety and agitation?

Was the bed alarm really effective in this case?

"Brainstorming" with your falls team may result in some ideas that are very different from traditional approaches to preventing falls.

As we said previously, the best strategies for preventing falls take into account the characteristics of the resident, the environment and staffing patterns of your facility, and the programs, activities and resources available. A strategy that works well for one resident may not be effective for another. It's important to monitor the success of each strategy and make adjustments if a particular strategy doesn't seem to be working or the resident's condition changes so that other risk factors might arise.

Case Study Number 3: Mrs. G.

Mrs. G. is an 89 year old former housewife with the diagnoses of Alzheimer's Dementia, Atrial Fibrillation, Parkinson's Disease and Congestive Heart Failure. She has been living in the nursing home for about 1 year. She walks independently with a walker and is independent with eating. She has a history of 1 fall 6 months ago; while going to the bathroom independently, she accidentally urinated on the floor and slipped on the wet surface. She requires assistance for dressing, bathing and toileting. Mrs. G. wears glasses and frequently is found looking for them in other resident rooms. While Mrs. G. is hard of hearing, she makes her needs known. Mrs. G's family is very supportive and visits often. Her interests include exercise, walking, reading, prayer, bingo and word games. Mrs. G. is often found wandering in the halls and does not regularly participate in group activities. Medications are Lasix, Sinemet, Digoxin and Coumadin.



Mrs. G. recently experienced an exacerbation of congestive heart failure and was hospitalized. She returned in a very weakened state and requires oxygen on at all times.

How has Mrs. G's functional status changed?

What new risks for falls are present?

What special challenges does Mrs. G. present with for fall prevention?

Suggest 3 care plan approaches to prevent falls and preserve resident's preferences.

What other staff members could you enlist to ensure Mrs. G's safety?

Here are some suggestions regarding Mrs. G. There are many possibilities, so your ideas could be a little different.

Mrs. G. has returned from the hospital in a very weakened state. She has decreased strength and endurance. Her transfers and walking have decreased and she is now in a wheelchair. She will require a Therapy evaluation and possibly rehabilitation.

Due to her congestive heart failure, it is possible her Lasix was increased. She may require more frequent toileting or become restless if she has the constant urge to go.

She now requires oxygen on at all times. The tubing presents a tripping hazard. Also, Mrs. G. may remove the oxygen causing her to become light headed and further impair balance.

Mrs. G. was independent with functional mobility. Will she realize she cannot get up by herself? Initially, Mrs. G. will require increased supervision and assistance. Due to increased care needs, all staff will need to work together to keep Mrs. G. safe. One way may be to involve her in small group activities. She enjoys exercise and *any* staff member may lead a short program like the CAREx DVD included in this training.