Creating Effective Systems to Manage Wandering Behavior

MAY 2005

Guidance for Long Term Care Facilities in New York State
# Table of Contents

<table>
<thead>
<tr>
<th>Title</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Causes of Unsafe Wandering Behaviors</td>
<td>2</td>
</tr>
<tr>
<td>Key Components of an Effective System to Address Unsafe Wandering Behavior</td>
<td>4</td>
</tr>
<tr>
<td>• Leadership</td>
<td>4</td>
</tr>
<tr>
<td>• Assessment/Care Planning</td>
<td>7</td>
</tr>
<tr>
<td>• Policies &amp; Procedures/Staff Training</td>
<td>10</td>
</tr>
<tr>
<td>• Environmental Considerations</td>
<td>13</td>
</tr>
<tr>
<td>• Facility Investigation</td>
<td>19</td>
</tr>
<tr>
<td>Conclusion</td>
<td>20</td>
</tr>
</tbody>
</table>
INTRODUCTION

In early 2004, a cognitively impaired nursing home resident accessed a remote doorway in the facility and found herself on the roof. The facility was unaware that she was not on her unit until several hours later. Sometime after a search was initiated, she was located on the roof, suffering from severe hypothermia. She died at the hospital a short time later.

Other incidents involving residents leaving nursing facilities undetected occurred later in the year. As a result of these events, many questions were raised. How this could have happened? What can be done to prevent such incidents from occurring again?

The Department of Health examined its complaint investigation and survey program data, and found an increase in the number of incidents reported to the Department involving unsafe resident wandering and elopement compared to prior years.

On October 8, 2004, the Department issued a letter to all New York State nursing homes that identified basic issues for facilities to consider in addressing unsafe wandering and elopement to safeguard residents. In addition, survey staff were alerted to more closely review facility systems to identify, prevent, and respond to unsafe wandering behavior.

The Department also engaged the provider community to address this issue. It convened a workgroup to develop a tool that nursing homes could use to implement effective systems in addressing these behaviors. The workgroup met from October 2004 through February 2005.

The workgroup identified the causes of and contributing factors to unsafe behaviors to help facilities understand these issues better. The group also identified four key areas essential to successfully managing wandering behavior: Leadership, Assessment/Care Planning, Policy/Procedures, and Environment. Every facility can prevent unsafe wandering with a well coordinated, multidimensional approach that integrates all the key areas. This document discusses each key component area.

In developing this document, the workgroup reviewed several tools used in the field. These tools – sample policies and procedures, recommended interventions, risk assessment tools, and other related documents, as well as a bibliography – will be made available soon directly through statewide provider associations.

The sample tools available through the associations are not required or mandated by the Department of Health. They are instruments currently being used in the field, which may help facilities better understand issues related to unsafe wandering and elopement, and be better prepared to address them. Nursing home leaders should review them and determine if they might be applied or modified for use in their facilities.

This document was developed to be an aid to nursing homes in ensuring that they have effective systems in place to 1) assess, identify, and manage wandering behavior in a way that respects resident dignity and autonomy; and 2) prevent and respond to unsafe behaviors, so that resident harm or other adverse outcomes are avoided.
CAUSES OF UNSAFE WANDERING BEHAVIOR

Wandering is a safe and healthy behavior for many nursing home residents. For some residents, wandering about the halls may reflect a need for exercise, activity, or to relieve stress. Many residents wander seeking stimulation that is relevant to their past or interests. Being mobile is a positive activity, for physical, mental, and emotional well being. Residents should be encouraged to engage in these behaviors when it they are in the resident’s best interests.

However, when this behavior causes or is likely to cause harm to the resident or other residents, it becomes an unsafe behavior that the facility must address. When the wandering is disruptive to other residents and has an impact on their quality of life, for example, when residents enter the rooms of other residents or disrupt the belongings of other residents, the facility must also intervene. In its most extreme form, wandering may result in elopement. Unsafe wandering within the facility, and eloping from the nursing home, are both behaviors that all nursing homes have a responsibility to prevent.

Unsafe wandering is wandering that is disruptive to other residents or places the wandering resident or other residents at risk of harm.

Elopement occurs when a resident successfully leaves the nursing facility undetected and unsupervised, and enters into harm’s way.

Residents attempt to elope from the facility for a variety of reasons that may not always be immediately apparent. Factors that contribute to these actions include:

- agitation, anxiety, boredom, or stress;
- disorientation to surroundings;
- past patterns (leaving to go to work or meet the school bus); and
- links or associations (the individual seeing a door or their hat or coat).

Some literature suggests that elopements are especially pronounced during the first few weeks after a resident’s initial placement in a nursing home because it is such a significant change in the individual’s familiar environment. Monitoring the resident’s behavior during this time is important.

Elopement is not an issue exclusively related to dementia residents. Cognitively intact residents may also attempt to elope. The reasons for these residents seeking to leave the facility are as complex as those of other residents and require specific interventions relating to the cause.

Frequently, these residents are younger and may not be as physically compromised as others. Frustration with the lack of other available discharge locations, boredom, and the perceived lack of freedom and individuality often cause younger, cognitively intact residents to attempt to elope from the facility. Other significant issues often related to younger residents are substance abuse problems and noncompliance with facility rules and regulations.
Balancing the protection of residents and the preservation of resident rights presents some unique challenges for facilities for all residents, perhaps more so for this type of resident. Interventions to manage wandering behavior to prevent elopement and other at-risk behaviors may be very different for this population of residents than for other residents of the facility.

Nursing facilities can, and should, address these resident-related issues. However, unsafe behaviors, including elopement, have often resulted from a facility’s failure to address resident issues, and from gaps in a facility’s program to identify and manage wandering behavior, and to prevent unsafe behaviors, including elopement.

All residents need to remain involved in their community and are guaranteed this right as part of both Federal and State regulations. Nursing facility systems must include strategies that ensure resident safety, while respecting and supporting the rights of residents to be mobile, be involved in their community, and maintain dignity.

The characteristics of systems that have proven to effectively achieve this goal are discussed throughout the following section of this document.
KEY COMPONENTS OF AN EFFECTIVE SYSTEM TO ADDRESS UNSAFE WANDERING

Systems that effectively identify and manage wandering behavior, that prevent and respond to unsafe behaviors are multidimensional. They are flexible so that they can be administered to meet the individual needs of each resident. However, these strategies are effective in four critical areas: leadership, assessment/care planning, policies & procedures/staff training, and environment.

Leadership

The governance body/owner(s) and senior leaders of a nursing home are responsible for the ethics, vision, actions, and performance of the organization. Senior leaders are responsible to the governance body/owner(s), residents, and families for their actions and performance. An organization’s leaders, with support and guidance from governance bodies/owner(s), set the tone, directions, and expectations for the facility to be a high-performing organization.

Common elements of high-performing and effective health care organizations are:

- The delivery of patient-focused care;
- A priority for organizational and personal learning;
- A focus on recognizing and valuing staff;
- Managing by fact and for innovation;
- A commitment to social responsibility; and
- A systems-based perspective focused on results, value, and quality improvement.

None of these elements can exist without visionary leaders who establish these concepts as organizational priorities and devote appropriate resources to those activities. These elements are key to implementing and maintaining an effective approach to managing wandering behavior.

Leadership: Resident Elopement/Unsafe Wandering

Leaders ensure the creation of strategies, systems, and methods for achieving excellence in all aspects of resident care. Nursing home leaders must maintain resident safety while respecting a resident’s right to live life and make independent decisions. This is challenging when addressing resident safety and wandering.

Leaders are responsible for identifying, creating and overseeing the implementation of all organizational processes related to the management of wandering behaviors. The leadership determines the culture and philosophy of a facility. If the leadership is committed to preventing unsafe wandering and elopement, it must communicate that commitment to staff and implement systems that are consistent with that commitment.
Effective leadership will engage all staff to determine possible solutions. The management of wandering behavior is the responsibility of everyone working at the facility, including housekeeping, dietary, and maintenance. Residents and families should also participate in decisions.

Leaders must identify the need for, demand creation of, and oversee the implementation of organizational processes that respond to every aspect of this issue.

The aforementioned elements drive an organization’s prevention of and response to an elopement event. An effective response is ensured through the knowledge, education, and practice of staff using the organization’s systems and processes.

Effective leadership impacts each of the other components of successful wandering behavior management strategies. The principles identified in each category are critical to establishing and supporting an organizational culture that respects resident rights, and serves to assure and sustain quality of care and improvement of resident outcomes.

**Leadership: Policies and Procedures/Staff Education & Training**

- Leaders encourage staff to implement systems that maximize excellent care and services. This is accomplished by adopting state-of-the-art procedures, innovations, evidence-based approaches, and best practices.
- Leaders ensure that a resident safety program is implemented throughout the organization to integrate the actions of all disciplines and departments.
- Leaders and their staff adhere to the established policies, procedures, regulatory, and legal requirements of care for resident safety. To address unsafe wandering, these may include resident assessment, management of behavior, defining “missing resident”, response system which includes reporting, search, and rescue, and elopement drills.
- Leaders encourage creativity and accountability, support individuality, recognize good work in their staff members, and provide proper supervision.
- Leaders facilitate the perspective that learning must be embedded in the daily operations of the organization. This means that learning:
  - Is a regular part of daily work;
  - Is practiced at personal, departmental/work unit, and organizational levels;
  - Results in solving problems at their source (“root cause”);
  - Is focused on building and sharing knowledge throughout your organization; and
  - Is driven by opportunities to effect significant, meaningful change. Sources for learning include staff’s ideas, input, best practice sharing, and benchmarking.
Leaders recognize and educate staff about the importance and value of a resident’s family and social supports to creating a safe environment for a resident. This value is demonstrated when the staff members learn about a resident’s personal history and understand how it influences the resident’s current behavior. Together and with this knowledge, staff and families can collaborate on care planning and implementation to maintain a safe environment.

**Leadership: Assessment/Care Planning**
- Leaders assure appropriate and timely assessments for all residents; this includes assessment of the risk of unsafe wandering and elopement behaviors.
- Leaders affirm the importance of person-centered care by establishing systems to ensure that resident’s choices are elicited, valued, and met through care plans.
- Leaders identify and promote long-term investments associated with health care excellence. Investment in creating and sustaining an assessment system focused on health care outcomes is critical.
- Leaders emphasize the importance of each resident’s quality of life by meeting their need for security and care, by supporting their personal growth, and by promoting their intellectual and spiritual health and social well-being.

**Leadership: Environment**
- Leaders are responsible for creating a physical environment consistent with the organization’s mission and with the goal of enhancing quality of life for each resident. In short, this means creating a “home” for each resident.
- Leaders oversee the maintenance of safe, clean, and appealing surroundings that adhere to codes of safety, public health, and local law. This includes operational details such as the characteristics of the physical plant, interior and exterior environs, entrances, and the reliance on technology.

**Leadership: Quality Improvement**
- Leaders teach a systems-approach to quality improvement by encouraging teamwork, interdisciplinary collaboration, and reliance on proven quality improvement tools. A systems perspective means managing your whole organization, as well as its components, to achieve success.
- Leaders set performance improvement priorities and identify how the organization adjusts priorities in response to unusual or urgent events. Success in today’s health care environment also demands agility; a capacity for rapid change and flexibility.
- Leaders measure and assess the effectiveness of performance improvement and safety activities. They emphasize the importance of teamwork and interdisciplinary practices that utilize a continuous quality improvement methodology. Analysis entails using data to determine trends, projections, and cause and effect that might not otherwise be evident.
As these principles suggest, effective leadership establishes a culture of care and systems that balance resident individuality, respect, and dignity with high quality care and resident safety. To prevent unsafe wandering behavior, leaders should establish the management of wandering behavior as a priority and develop a system through the creation of policies and procedures. This includes training staff on those policies and procedures to implement the system, and ensuring ongoing competency of staff through continuous training, drills, and evaluation. Those systems begin with resident assessment and care planning.

**Assessment/Care Planning**

All facilities are required to assess/reassess residents and develop care plans based on the needs identified in the assessment. While the process may differ from facility to facility, the outcome should be the same. That is, the facility shall ensure that all residents have a care plan that fully addresses their specific needs assuring the highest quality of care and most meaningful quality of life. In order for this to occur the care plan has to be *individualized*. As much information about who the resident is, what their background is, their likes and dislikes, and their patterns and routines should be determined.

Upon admission, each resident’s assessment should include an evaluation of the risk of elopement and unsafe wandering. In the initial assessment when the facility may not be fully familiar with the resident, the information pertaining to a resident’s risk may have to come from family or from a prior provider. It is understandable that families may be reluctant to share important information about the resident’s wandering or other behavioral issues if they sense this information may be potentially threatening to the resident’s admission. This is unfortunate, as the knowledge of this information is critical to the facility in developing a care plan.

It is important for the facility to gather, from whatever sources are available, information about the resident’s past patterns and routines so that risk of unsafe wandering behavior can be understood. Since unsafe wandering often occurs shortly after admission, a period in which the resident is monitored to determine if this behavior is an issue is necessary. If the resident does wander or attempt to elope, information about the patterns of the resident, time and place the unsafe wandering occurs, and behaviors that precede the unsafe wandering can be identified and used to modify the care plan as appropriate.

The following factors need to be considered as part of the assessment:

- Is the resident independently mobile?
- Is the resident cognitively intact?
- Does the resident have competent decision making capability?
- Does the resident wander?
- Does the resident have exit-seeking behavior?
- Is there a past history of unsafe wandering or exiting a home or facility without the needed supervision?
- Does the resident accept their current residency in the facility?
• Does the resident verbalize a desire to leave?
• Has the resident asked questions about the facility’s rules about leaving the facility?
• Is there a special event/anniversary coming due that the resident normally would attend?
• Is the resident exhibiting restlessness and/or agitation?

The care plan is developed based on the results of the assessment. All care plans should be shared with the staff that is expected to carry them out. This is challenging, considering staff changes, use of per diem staff, and changes in care plans resulting from resident improvement or deterioration. However, in some of the Department of Health’s citations, staff’s lack of knowledge of the resident’s risk status or care plan contributed to the unsafe behavior and resulting harm. Had staff been aware of these factors, the adverse resident outcome could have been avoided.

**Facilities must have a dynamic care planning process that ensures that staff members are aware of the resident needs as well as any changes made by the clinical team.** While staff training on the broad issues around unsafe wandering and elopement is important, resident specific small-unit meetings may also provide more individual resident information that the staff requires.

**Care plans to manage wandering behavior should include activities that are relevant to the resident’s interests and background.** This will help address boredom or lack of stimulation. It will also contribute to care for the resident at specific dates (anniversaries, birthdays) that might be traumatic or cause anxiety in the resident. Accounting for resident background will also help reduce or prevent unsafe behavior, such as keeping a resident who was a school bus driver busy when the school year is about to begin.

They should also consider time of day. Studies demonstrate that unsafe wandering is more likely to occur at four times in a day: after every meal and at the afternoon change of shift. Therefore, care plans can reduce the risk of unsafe behaviors by incorporating planned activities such as supervised walks or task oriented projects for the residents during these times.

Any effective care plan -- whether a problem-oriented type or a resident-centered plan developed from the resident’s perspective -- is interdisciplinary in nature. Developing and implementing care plans for wandering behavior involves all disciplines and departments. In addition, facilities should consider expanding the role of recreation to address causative factors such as boredom, stress, and anxiety, which may be at the root of unsafe wandering for some residents. As always, family should be involved as well.
Two keys to successful assessment and care planning are the establishment of policies and procedures for these activities, and effective staff training on the policies and procedures. These ensure a standard and uniform approach that will result in consistent and accurate risk assessment, and the development of appropriate care plans that will be carried out with knowledge of facility philosophy and individual resident circumstances. Establishing appropriate policies and procedures and ensuring staff competency on them are critical to the success of the wandering behavior management system.
Policies And Procedures / Staff Training

The main goal of facility policies and procedures to manage wandering behavior should be to maintain a safe environment while respecting residents’ rights. Effective systems involve a multifaceted approach, and policies and procedures should be established for all components of the strategy. However, if staff cannot carry out the system, it will not achieve the goals for which it was established. Staff training is critical to success. A model that can be useful is one that:

- Identifies all aspects of the wandering behavior management system
- Develops policies and procedures for each aspect, including staff roles & responsibilities
- Trains all staff, including all departments and disciplines, employees and per diem staff
- Tests staff to ensure comprehension and competency
- Periodically evaluates staff to ensure ongoing competency, using drills, exercises, etc.
- Periodically re-evaluates policies and procedures and adjust as necessary

This approach will assist facilities in ensuring that no gaps exist in the wandering behavior management system. It will ensure that nursing homes have policies and procedures to address risk identification, behavior management, and unsafe behavior prevention and response. These can be articulated in three categories: Wandering Behavior Management Policies, Exiting Facility Policies, and Missing Resident Policies. Below are aspects of a policy content that may be useful to consider for incorporation into facility policies:

- Wandering Behavior Management Policies
  - Identifying residents at risk for wandering
  - Assessment content & frequency
  - Ongoing risk assessment
  - Ongoing activity to engage residents
  - Composition of an interdisciplinary team involved in communication about risk
  - Communication with staff, family, and visitors regarding risk
  - Development of individualized plan of care to reduce risk
  - Use of behavior logs
  - Supervision and periodic checks
  - Inclusion of resident photo in medical record
  - Development and maintenance of at-risk resident list/photograph repository
  - Use of identification bracelets/anklets
Secured exit doors with alarms or delayed egress features

Personal Alarms

Identification of interdisciplinary team involved in communication about alarm

Alternatives to alarms if resident resists

Ongoing maintenance and monitoring of alarms

Exiting Facility Policies

Eligibility for Leaving Safely

Resident rights and therapeutic nature of leave

Ongoing assessment to determine eligibility to leave safely

Informed consent process

Residents who are cognitively intact and can knowingly sign the consent form

Limitations of the leave

Residents with authorized leave not returning in time

Observed leave of facility grounds without a pass

Documentation of individual circumstances

Leave Against Medical Advice (AMA)

Absent Without Leave and unplanned discharges (AWOL)

Distinction of procedure between residents cognitively intact versus residents who are not cognitively intact

Search and investigative procedures (see missing resident category)

Communication chain – internal & external

Missing Resident Policies

Missing Resident

Redirection of resident when unsafe wandering or elopement attempt occurs

Identify circumstances to actively search and investigation of missing resident

Search protocol of building and grounds, including staff roles

Investigative procedure for identifying potential destinations, including staff roles

Missing resident drills

Communication to relevant authorities

Periodic practice of resident “head count” that includes names of residents
• Analyze incident with systems-based approach, such as root cause analysis
• Emergency communications
• Examples of emergency situations
• Off-hours/weekends/holidays situations

Facilities should review their resident populations and current wandering behavior management systems to determine if existing policies and procedures are adequate and appropriate. Policies should be relevant to the facility; as such, those listed above may or may not be appropriate. Policies that are appropriate for cognitive residents may require modification for cognitively impaired individuals. Policies that are designed for ambulatory residents may be inappropriate for those who are not. Facilities should tailor policies to the needs of their residents.

Many of the policies necessary for an effective system relate to facility design and environment. The next section discusses this topic in more detail and provides some guidance on how facilities can structure the environment to encourage resident autonomy and ensure safety.
Environmental Considerations

The goal of all facilities is to assure that residents live in a safe environment. Understanding how the physical design of the environment, geographic location, and equipment impact residents is critical in meeting this goal.

Managing environmental factors to reduce a resident’s ability to wander into unsafe or unsupervised areas and/or elope from the facility is challenging. It requires frequent system examination. When facilities analyze all factors and implement proactive preventive environmental enhancements, the risk of unsafe behavior can be reduced or eliminated.

Facilities’ environments and the populations they serve vary greatly, making each nursing home’s risk different. Both of these factors should be considered when developing and implementing effective strategies to prevent elopement. Potential conflicts between resident safety, autonomy, independence, privacy, and the provision of home-like environments can significantly challenge the leaders of the organization when developing an approach.

Environmental strategies should be multidimensional. Preventive measures include written policies and procedures, the use of technologies appropriate to the facility’s design, and other creative strategies to warn staff of unsafe wandering and elopement attempts. No single approach by itself will be successful for all residents at risk. Using a combination of available interventions has been demonstrated to most likely reduce the risk of unsafe wandering and adverse resident outcome.

Selecting an Environmental Approach

Nursing home leadership should ensure that the environment is consistent with the facility’s philosophy of care. The first step in planning an environment to effectively manage wandering behavior is to fully define the scope of the issue. For instance:

- Consider the number of at-risk residents, their cognitive and mobility status, relative risk, and the size and number of entry/exit points to your facility.
- Consider what areas of the facility and grounds need to be monitored including exterior and interior doors, elevators, outdoor areas, etc.
- Consider which wander management technologies fit with your facility’s needs and philosophies.
  - Some solutions are designed to address a single point of entry/exit; others are more comprehensive in their approach.
  - Some solutions provide an alert every time a door is opened by anyone (door alarms). Others provide alerts and selectively lock doors only when monitored residents move into unsafe areas (elopement management systems).
Creating a Homelike Atmosphere

All homes should ensure a homelike atmosphere, in resident rooms and throughout the building. Nursing homes need to create an environment that is homelike and comforting to the resident. Creating such an environment can significantly reduce the likelihood of unsafe wandering behaviors and their resulting adverse outcomes. Decorate rooms with favorite pictures, books, personal furnishings etc., to provide a sense of comfort and familiarity.

Modifications to the existing environment throughout the building may be very effective. Place clocks and calendars in various spots around the facility. Remove "trigger" items such as hat, coat, keys, purses etc., that signal to the person it is time to leave the structure.

In addition, facilities need to reduce activity that can result in excessive resident stimulation. Constant paging, TV and radio noises, and the hustle and bustle of staff may all result in and prompt the resident to wander or elope. This may be especially true at four times in a day that wandering or exit seeking behavior might escalate: after every meal and at the afternoon change of shift. Monitoring of residents and egress points might be increased during these times.

Provide comfortable chairs and rockers, as well as quiet and comfortable places for the resident and guests to sit. Reduce clutter in resident rooms and social areas. Provide at-risk residents with a non-dementia companion resident. Use approaches such as meditative music and aromatherapy to create a more peaceful and calming atmosphere. Add textures to resident areas that may be soothing. **Review information about the resident and interview individuals familiar with the resident, to identify specific items that would provide comfort to the resident and personalize the environment.**

To respect resident rights and encourage autonomy, use the least restrictive tools possible. When other interventions are necessary, they should be selected carefully. A "one size fits all" approach will not be effective.
Selecting Technologies

The selection of specific wander management technologies will affect all aspects of your organization. Some may involve a fundamental change in the way your organization uses information to monitor and care for residents. Involve all stakeholders in your organization, including caregivers, families, and residents, in discussions, such as:

- Front-line caregivers who will be using the technology;
- Staff responsible for purchasing decisions;
- Administrative leadership;
- Nursing leadership;
- Rehabilitation professionals;
- Plant operations;
- Resident representatives;
- Family representatives;
- Community leaders; and
- Insurance/legal representatives.

Evaluate how various technological solutions fit with your organization's philosophy on creating a home-like environment. Door alarms and elopement management systems offer various options for alerting caregivers to an exiting resident, including:

- Overhead paging;
- Audible alarms;
- Visual indication at the main console; and
- Vibrating pagers.

Audible alerts at monitored exits enable anyone in the area to respond to the alert immediately, but the noise may be disruptive to residents and staff if it occurs often. Silent alerts, such as those sent to caregiver pagers, may be more compatible with a home-like environment, but depending on the layout and function of your facility, it may take longer for a caregiver to respond to a resident at risk for elopement. Providers needing additional information on elopement and the environment are directed to the resource section of this document.
Facilities should also evaluate how certain technologies balance resident safety and resident privacy, dignity, and independence. How does the solution align with your facility's philosophy on resident privacy and dignity? For example, visual deterrents and simple door alarms are meant to "discourage" residents from entering unsafe areas. They have no adverse privacy issues. However, they do not provide the security of locked doors. As a result, solutions such as these may not provide caregivers with enough comfort to encourage independence and exploration.

Elopement management systems, meanwhile, have the ability to automatically lock doors and elevators, preventing a resident from entering unsafe areas or leaving the facility. As a result, these technologies may provide caregivers with the security they need to encourage independent exploration within the facility and secured outdoor areas.

Some solutions, such as elopement management systems and tracking systems, require the use of resident-worn transmitters. The use of these devices may be considered by some to be an intrusion upon the privacy and dignity of the resident. Transmitters can come in several forms including wrist and ankle bands, watches, and pendants. Consider how the aesthetics of the transmitter can play a role in resident dignity.

Facilities should also consider how much caregiver training and education will be needed. Amounts will vary, however, when considering high-tech systems. The amount and quality of caregiver education regarding the system can have an effect on the success of implementation.

Different approaches to wander management may raise different types of regulatory concerns. For example, elopement management systems and alarm systems that automatically lock doors need to comply with local fire codes. Resident-worn transmitters and tracking devices may have implications for residents' rights. Facilities should discuss potential technologies with both local and Department of Health survey officials to assure compliance with code and regulations.

Implementing Your System

Implementing change in a facility is challenging and must be undertaken with care. Take steps to facilitate acceptance of system-wide change within your facility. For example, you will want to consider:

- Involving front-line caregivers in defining the scope of the issue, the decision to adopt the technology, and decisions regarding the implementation of the technology;
- Clearly communicating how the new system works and how it will improve upon the way things are currently done; and
- Ensuring that caregivers have a point person to turn to with questions.
Environmental Strategies to Manage Wandering Behavior

A safe, homelike environment that promotes resident quality of life and ensure safety is multidimensional. Facilities should review all potential alternatives, such as the tools listed below, when developing their plans. Organizations must continue to monitor new technologies, literature and trends to assure current standards are utilized to optimize quality of care and quality of life for their residents.

- **Visual Deterrents**
  - Use Stop signs;
  - Provide sitting areas near outside windows so residents can track seasons and time of day;
  - Camouflage doors by painting or applying wallpaper, to make it less obvious (see appendix: CMS Interpretation);
  - Use signage that helps residents locate the bedroom and bathrooms more easily. Signage that is meant to be read/interpreted by the person with dementia should be highlighted, while signage for staff or visitors should be given less emphasis (hues and values that are more similar to the background);
  - Place photographs on the doors to assist with navigating inside the environment, including a photo of the individual on the door to his or her own room; and
  - Use nightlights and gates at stairwells to protect night wanderers.

- **Physical Devices**
  - Door alarms;
  - Automatic door locking system;
  - Monitoring bracelets;
  - Safe places for walking or exploration;
  - Electronic surveillance to monitor residents and their whereabouts in the facility;
  - Visual surveillance on doors that are monitored by staff either directly or indirectly and;
  - Mobile locators.
  - Install unfamiliar style door handles or use child-proof door covers on doors that are not part of an exit path;
  - Place locks at the bottom of doors or other areas where the person is not familiar that are not part of an exit path;
  - Install special door handles;
  - Place locks at the bottom of doors or other areas where the person is not familiar; and
  - Use child-proof door covers to prevent the individual from turning the knob;
Exit Control

Careful consideration and consultation with all oversight authorities should occur before any modifications restricting or limiting exiting are made. Unrestricted exiting is a basic principle of fire safety and building codes. Exiting includes movement from anywhere in the building to the outside and ultimately to a public street. Numerous local and other state and federal agencies in addition to the NYS Department of Health and the Centers for Medicare and Medicaid Services regulate fire safety within nursing homes. Nursing homes are strongly advised to contact all building and fire safety oversight authorities before modifying or restricting building egress.

Exit Control Measures to Consider:

- Install fencing or plant hedges around the facility (gates to allow movement to the public way and fire fighter access would usually be necessary; locked gates may or may not be permitted);
- Landscape the outside of each exit using fencing enclosures or hedges (at a minimum unobstructed movement to a safe distance from the building is generally required: see above regarding movement to the public way);
- Use physical barriers (locked and secured windows, etc);
- Place exit doors along halls instead of at end of hall (renovations/new constructions);
- Use a strip of cloth (usually fastened with Velcro) across doors; and
- Consider the number and need for doors to the exterior and eliminating or locking unnecessary doors to the exterior and doors currently designated as exits that may not be required by fire safety and building codes.

These mechanisms include low technology and high-technology options. Either can be effective, depending on the composition and needs of residents. Most visual devices that are placed on or across doorways, or simple battery-operated door alarms that monitor a single door, involve little technology. Other, more complex alarm systems are available that monitor multiple doors and elevators.

Many of these systems, that can monitor many doors, elevators, and outdoor areas, involve the use of resident worn transmitters. These transmitters enable the system to identify residents at risk for elopement and for staff to take action, while allowing other residents, caregivers, and visitors to come and go without the need to interact with the system. Some elopement management systems also provide caregivers with the ability to locate residents within the facility. Some tracking systems enable caregivers and local authorities to locate residents who have left the facility.
FACILITY INVESTIGATION

Root cause analysis is a critical process in investigating and understanding why events occur. By understanding the cause of the incident, a facility can analyze what occurred and set in place steps to prevent recurrence. Root cause analyses will identify deficits in policy and procedures, staff training, or other areas that, if addressed, will prevent continued system failures.

In several events in which a nursing home was cited for deficiencies related to unsafe wandering, the facility failed to conduct a root cause analysis following an elopement. For example, when a resident exited and was returned to the facility, there was no exploration of how the resident exited and what might be done to prevent recurrence. In other instances, when it was determined that a resident left through a door and the alarm failed to go off when the resident left, the particular door was addressed but other doors were not. In this case, only addressing the surface problem will not insure resident safety.

Seek out organizations such as the statewide provider associations to investigate how root cause analysis can assist facilities in implementing an appropriate investigative process. It is essential that root cause analysis be part of exploring the causes of unsafe wandering behaviors to prevent recurrence of adverse events.

Failure Modes and Effects Analysis (FMEA) is a way to anticipate potential problems in a system, process, design, or service before it is fully developed and implemented. One of the main advantages of this type of analysis is that it allows the development team to proactively address solutions and reduce the potential for failure. Taking the time to explore as many potential negative outcomes as possible before implementation can lead to a successful launch of a new approach to care or service.

Essentially, a FMEA team determines the likelihood of a negative occurrence (potential frequency) and the potential severity of that outcome and assigns a risk rating to that outcome. Outcomes greater than a threshold established by the team are addressed prior to implementation. This way the team can mitigate potential failures and produce customer-friendly results. For many years, engineers have used FMEA to make sure that products are safe before going to market. Increasingly, healthcare organizations are using FMEA to ensure safety in critical process design/re-design. FMEA improves quality and reliability throughout the development cycle.
CONCLUSION

There are many reasons that residents engage in unsafe wandering behaviors. It is essential for facilities to determine each individual’s risk and the factors that contribute most to the individual’s risk. Nursing facilities must also develop resident specific strategies to address those factors in a way that prevents unsafe acts.

Each facility is unique in terms of its physical environment, the number and characteristics of the residents they serve, and the experience and expertise of the staff who care for residents. However, the fundamental aspects of an effective wandering behavior management system are common:

• involved and committed leadership;
• sound assessment and care planning;
• current and appropriate policies and procedures;
• staff members who are knowledgeable and well trained; and
• An environment which recognizes the interrelationship between safety and resident rights, and supports both.

These are all key factors that facilities must develop and implement if residents are to be encouraged to engage in healthy behaviors that support freedom and autonomy, in a safe environment. Systems that effectively manage wandering will prevent adverse resident outcome and ensure a life of dignity, freedom, and respect for nursing home residents.
## Managing Wandering Behavior
### Workgroup Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Alvord</td>
<td>New York State Department of Health</td>
</tr>
<tr>
<td>Kristin Armstrong-Ross</td>
<td>New York State Department of Health</td>
</tr>
<tr>
<td>Ann Belcher</td>
<td>Northeast Center for Special Care, Lake Katrine</td>
</tr>
<tr>
<td>Sandra Biggi</td>
<td>New York Association of Home and Services for the Aging, Albany</td>
</tr>
<tr>
<td>David Bruso</td>
<td>New York State Department of Health</td>
</tr>
<tr>
<td>Mary Clifford</td>
<td>Clove Lakes Health Care and Rehabilitation Center Inc., Staten Island</td>
</tr>
<tr>
<td>Charlotte Del</td>
<td>Hebrew Home for the Aged, Bronx</td>
</tr>
<tr>
<td>Michelle Edwards</td>
<td>Retired Nursing Home, Brooklyn</td>
</tr>
<tr>
<td>Linda Elizabeth</td>
<td>Associated Geriatric Information Network Inc.</td>
</tr>
<tr>
<td>Elliott Frost</td>
<td>New York State Department of Health</td>
</tr>
<tr>
<td>Catherine Gill</td>
<td>St. Luke's Health Services, Oswego</td>
</tr>
<tr>
<td>Kathy Grimes</td>
<td>F.F. Thompson Continuing Center, Canandaigua</td>
</tr>
<tr>
<td>Clare Horn</td>
<td>Morningside House Nursing Home, Bronx</td>
</tr>
<tr>
<td>Joyce Jovett</td>
<td>New York State Department of Health</td>
</tr>
<tr>
<td>Cosmo LaCosta</td>
<td>Silvercrest Extended Care Facility, Jamaica</td>
</tr>
<tr>
<td>Debbie LeBarron</td>
<td>Health Care Association of New York State, Rensselaer</td>
</tr>
<tr>
<td>Nancy Leveille</td>
<td>New York State Health Facilities Associations, Albany</td>
</tr>
<tr>
<td>Zaldy Mateo</td>
<td>St. Barnabas Nursing Home, Bronx</td>
</tr>
<tr>
<td>Barbara Nodiff</td>
<td>Associated Geriatric Information Network Inc.</td>
</tr>
<tr>
<td>Mary Beth Ryan</td>
<td>New York State Department of Health</td>
</tr>
<tr>
<td>Linda Smith</td>
<td>New York State Department of Health</td>
</tr>
<tr>
<td>Roxanne Tena-Nelson</td>
<td>Continuing Care Leadership Coalition, New York</td>
</tr>
<tr>
<td>Nancy Tucker</td>
<td>New York Association of Homes and Services for the Aging, Albany</td>
</tr>
<tr>
<td>Carol Tunney</td>
<td>Elant at Newburgh, Newburgh</td>
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