



kamiCare

Fall Management Solution

Reducing Fall and Elopement Risks in Memory Care Facilities

**The Guide to Improving Safety, Security and Peace of Mind
For Loved Ones Living With Dementia**



Dementia and Alzheimer's Disease Affect 5.8 Million People in the United States, according to the Centers for Disease Control

Dementia is a type of cognitive impairment that causes loss of memory, language and problem-solving abilities along with a wide range of other physical and mental characteristics that restrict daily life.² Dementia – and Alzheimer's, a form of dementia – affect the cerebellum, the part of the brain located near the base of the skull. The cerebellum controls body movements, balance, motor learning, mental function, emotional processing and more.³ As such, as many as eighty percent of people with dementia fall annually⁴ and approximately 60% of people with dementia will wander and become lost.⁵

With the number of older adults living with dementia expected to increase dramatically in the next 15 years, it is critical that we prioritize safety among people living with dementia and enable caregivers with the best tools available.⁶

Seniors with Dementia Are at Significantly Higher Risk of Falling & Eloping

Falls

Falls in dementia patients are complex and can occur for many reasons. They often result in mortality or significant morbidity.

60%

60-80% of people with dementia fall annually.⁴

1/4

Falls cause 1 in 4 Alzheimer's hospitalizations.⁴

Those with dementia in assisted living facilities fall an average of 4.1 times per year, yet they are among the least likely to call for assistance when they cannot rise from the ground alone.⁴

Elopement

Elopement describes an incident when a person wanders off and leaves the premises of a safe area. It is a considerable risk to the individual's health, safety and welfare.⁷

60%

60% of people with dementia will wander and become lost at some point.⁷

1/2

If not found within 24 hours, up to half of those who get lost risk severe injury or death.⁵

In cases of elopement among dementia patients, 30% of those found were dead upon finding.⁸



Falls & Elopement Risks Increase in Dementia Patients For a Variety of Reasons

1. **Impaired Judgment & Perception** – Fall risk increases in those living with Alzheimer’s disease and dementia due to impaired judgment, a decline in perception and limited ability to communicate needs to caregivers.⁹
2. **Loss of Coordination & Balance** – Falls resulting from loss of balance while standing or walking are common due to the impact of the disease on the cerebellum.¹⁰



3. **Decreased Memory** – Wandering and elopement often occur because the person follows past routines like going to work or the grocery store. They may also get confused and attempt to go home or visit a loved one.¹¹
4. **Sensory Changes & Visual-Spatial Problems** – Because the cerebellum is responsible for visual guidance and navigation, a person with dementia may get lost even in a familiar places.

Other reasons for falls, wandering and elopement include:

- Unfamiliar environment
- Medication issues – Changes or excessive amounts
- Unmet physical needs
- Unmet emotional or psychological needs
- Confusion
- Sleep disorders

Falls Cost Long-Term Care Facilities an Average of \$8,417 per faller per year¹²

Falls make up more than 40% of all insurance claims¹³ and can lead to costly lawsuits, decreased occupancy rates and high staff turnover.¹⁴ Fall-related deaths and injuries like hip fractures and broken bones are prevalent among people living with dementia.⁶

Elopement-related Insurance Claims Average \$360,840 per year¹³

Skilled nursing facilities are licensed by the government, which means they are required by law to report any resident elopement. Facilities can still face an investigation and high fines, even if an individual is only outside for a few minutes and is found in a safe condition.⁸

Solutions for Improving Safety Among People Living with Dementia

Understanding the risk factors for falls and elopement will help to develop effective prevention strategies. Solutions that provide actionable insights on falls and elopement will help to improve an individual’s quality of life and reduce the cost of treating falls and elopement.



Reduce Falls In Dementia Patients with Detection

1. MAKE THE SPACE SAFER/EASY TO NAVIGATE

Whether you're helping with resident move-ins or are part of direct-care staff room design is imperative to safety:

- Remove floor obstacles, rugs, etc.
- Keep useful items within reach
- Handrails and grab bars
- Good lighting
- Ensure safe footwear
- Increase Bathroom Safety

2. PHYSICAL & COGNITIVE EXERCISE

- Physical exercise lowers anxiety and improves memory in people with dementia. Incorporate low-impact workouts that improve balance by strengthening leg muscles and maintaining bone density.
- Brain exercises, like counting backward or remembering the date of birth, also improve memory and may lead to fewer falls.

3. INCORPORATE FALL DETECTION TECHNOLOGY

Look for solutions that use advanced technology such as artificial intelligence to detect and prevent falls in seniors. These technologies can detect falls with high accuracy, preserve privacy and quickly alert caregivers if a fall occurs.

- AI sensors can track sudden changes in body position to alert caregivers that residents need attention. They often function at night using infrared technology and in partial view to accurately predict falls.
- Look for solutions that claim high accuracy/low false alert rates and prioritize privacy. They may blur patients or incorporate Edge-based AI in which all computing is done on the device itself.
- Look for solutions that send immediate alerts to caregivers for the appropriate course of action. Response escalation trees enable other caregivers to respond in case the first caregiver is not available.

Learn more about fall detection technologies [here](#).





Fall Detection Leads to Long-Term Prevention

95% of falls go unwitnessed, giving care teams little insight into their causes and limited information to make preventative changes. Vision technology solutions can offer a line of sight into the root cause of falls, giving a voice to those with cognitive impairments who can not advocate for themselves.

AI-based fall detection solutions prevent falls by recording activity that happened just before the fall and tracking the contributing factors that led to the fall. Risk factors may include the time of day and location.

With video evidence of what happened before and after the fall, care teams can determine the root cause of the fall and improve fall prevention practices. It can also be used to determine how quickly caregivers attended to the fall. See an example of fall detection technology in action [here](#).

Prevent Wandering & Reduce Elopement in Dementia Patients with Advanced Solutions

1. INCORPORATE ELOPEMENT TECHNOLOGY

Elopement technology can help reduce the need to watch flight-risk individuals while giving caregivers complete visibility. It can also significantly improve your staff morale and productivity, offers peace of mind for residents' families and offer your company differentiating services from competitors.

What to look for in elopement technology:

- Uses edge-AI with advanced AI models
- Affordable - uses your existing security cameras
- Provides 24x7 resident protection
- Sends alerts to caregivers instantly
- Is barrier-free: staff and visitors can safely and easily move around the facility

2. DISGUISE EXITS

Make exits less obvious to residents. For example: Painting murals on exit doors or creating never-ending walking paths within the building have proven effective at some facilities.

(Graham Co)

3. ALLOW FOR SUPERVISED WANDERING AND MENTAL STIMULATION

- When residents are allowed to walk around the facility, their physical health and mental well-being improves while decreasing the likelihood of wandering and elopement.¹⁵
- Residents may also wander if their room is dull or uninteresting. Adding decor, artwork or even a fish tank may better hold their attention and decrease the risk of elopement.¹⁵



The Importance of Safety Solutions Among People Living with Dementia & Alzheimer's

“Feeling safe is a primary psychological need of people with dementia because of their increased general vulnerability and reduced emotional safety. Failure to consider emotional safety could lead to emotional distress, which patients with dementia can experience as feelings of fear or loneliness.”⁶

The threat of falls and elopement among people with dementia and Alzheimer's is high. Families seeking a senior living community, assisted living or memory care for a loved one may be more likely to select a facility with unique safety solutions. There are several steps that long-term care facilities can take to help reduce the risk of falls and elopement among residents and to make residents and family members feel safer.



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