



# National Fall Prevention Week – Tech for Alzheimer’s Patients’ Caregivers

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## Technology for Preventing Falls

National Fall Prevention Week is coming up from September 22nd to the 28th, it is a perfect time to go over how caregivers can take the appropriate steps to ensure patient safety.

### **What Is National Fall Prevention Week?**

For many older adults, falls are the leading cause of injury, death, and hospital admissions for trauma. When these patients fall, it may take a toll on their quality of life and independence.

National Fall Prevention Week is about health care providers and caregiver agencies working together to raise awareness about the seriousness of falls, ways to reduce falling risks, and preventative strategies.

### **The Research**

According to the National Council on Aging, falls are the leading cause of both death and hospitalization for trauma among senior citizens.

This is a particular concern for those with Alzheimer's or dementia as they may inadvertently place themselves in situations that tend to lead to falls.

### **Technology Solutions for Alzheimer's Patients**

Fortunately, there are an array of technological solutions that you can use to help keep your loved one or patient safe and healthy.

#### **Motion Detectors**

Motion sensing devices can accurately detect changes in location and positioning.

Some models on the market are intended to be carried around or attached to the patient's clothing, and they will catch when that person falls down or as they are falling.

An alert will be sent whenever a drop is detected, and some models allow the senior to press a manual alarm button in case the unit fails to automatically trigger or even if they feel unbalanced and need the aid of their caregiver.

Researchers are also working on in-shoe sensors that will proactively monitor the wearer's gait and send a

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warning to caregivers when it seems as though the person may experience a fall soon.

## **Video Monitoring Equipment**

Video-based monitoring uses cameras in rooms to capture continuous real-time images or clips of the patient.

If a caregiver is in a different place than their patient or loved one, they may be able to keep an eye on them through video surveillance systems.

This system may help caregivers to provide better help if they see that they are:

- Losing their balance
- Look a bit wobbly
- Show signs of dizziness
- If they see them falling or has already fallen

Additionally, most video-monitoring systems are easily accessed through a person's smartphone.

If a caregiver is away from the senior's home, they will still be able to check up on them remotely and take the proper action if they see something amiss.

## **Alarms**

Many types of small, lightweight devices can be easily carried around or worn on clothing.

When someone falls, he or she can press a button to notify health care personnel. These devices are inexpensive and straightforward to understand, but they're also pretty limited in what they can do.

If the victim of a fall becomes unconscious or otherwise unable to access the button, then this hardware won't be of any use.

Another type of alarm can be installed to a patient's wheelchair or stationary furniture to inform a caregiver whenever he or she tries to get up unassisted.

## **Smart Lighting**

Today's smart lighting products allow you to program a daily schedule so that the lights will be illuminated in various rooms depending on the habits of the user.

Poor lighting has been identified as a contributing factor in many falls, and so this technology can aid in preventing many of them.

When combined with the motion sensors described above, lights can be configured to turn on and off whenever someone enters and exits a room, further decreasing the chances of a fall.

The senior can control the lights manually from a remote or a phone, so there's no need to get up and walk to a light switch, risking even more falls.

## **Stair Lifts**

Stairs are a double whammy for elders because not only are they difficult to traverse unassisted, but falls on staircases tend to lead to more severe injuries than those on level surfaces.

While a stair lift is a significant investment, it does allow people to access additional stories of their homes in safety and comfort. After placing themselves in the seat of the stair lift, users need only activate a button to begin

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their ascent or descent.

There are also standing lifts available for those who have trouble seating themselves. These lifts contain a platform on which the person can stand while he or she moves up or down the stairs.

### **Smartphones**

A modern smartphone already contains many of the elements discussed above.

Because most people already have them, there may be less resistance to using a phone to prevent and dealing with falls than other solutions.

SmartGait is developing a system that uses a smartphone worn on a waist belt to record images while someone walks around. Whenever the pattern of a user's steps indicates that a fall may occur soon, caregivers are alerted.

Of course, the phone still retains its normal function of allowing the owner to call for help manually if necessary.

### **Review Safety Precautions**

National Fall Prevention Week shouldn't be the only reason for caregivers to discuss safety measures for their patients and loved ones. You should often go over different strategies and prevention techniques to ensure their safety as they age at home and go about their days.

Make sure to take into consideration your options with technologies such as the above, as these gadgets can significantly help caregivers of those with Alzheimer's disease or dementia.