White Paper: The Value of the Home Health Solution for Preventing Falls among Medicare Beneficiaries

Falls, primarily among the rapidly growing population of older Americans, are a serious national health problem. They can result in life-threatening injuries, which send the elderly to hospitals, nursing homes or other costly institutions and cost the nation billions of dollars. Home health therapy programs can help seniors to deal effectively with balance dysfunction, allowing them to be more mobile, live more independently at home, avoid dangerous falls and potentially save the nation significant medical expenditures.

The information below, drawn from authoritative sources, gives a snapshot of this national problem and the critical role of home health services to address the concerns.

Overview
- In 2007, falls in the U.S. resulted in 21,700 deaths, more than 7.9 million injuries and visits to emergency rooms by 1.8 million older adults.
- Fall injuries can lead to premature nursing home admissions.
- By 2020, the annual direct and indirect cost of fall injuries is expected to reach $54.9 billion (in 2007 dollars).
- Among aging Americans who fall, 20% to 30% suffer moderate to severe injuries that make it hard for them to get around or live independently and increase their chances of early death.

Home Health Solutions for Preventing Falls in the Home

Home health balance therapy programs have become widely available to Medicare beneficiaries and offer important solutions for resolving the root causes leading to dangerous falls and helping seniors to maintain an independent lifestyle at home for as long as possible.

Demographic and Health Issues Contribute to Falls
The aging population, with a rise in chronic health conditions and accompanying disabilities, contributes significantly to the incidence of dangerous falls. The U.S. population age 65 and over is expected to increase 77.5% between 2010 and 2030, according to the U.S. Census Bureau, adding another 31.2 million people to this age group in the next two decades. Today, approximately 13% of the U.S. population is 65 or over and this figure will increase to almost 20% by 2030.¹

The U.S. Centers for Disease Control and Prevention says that 80% of older adults have at least one chronic health condition and half have at least two.² Chronic diseases cause 7 in 10 deaths each year in the U.S. More than 75% of healthcare costs are due to chronic conditions. Approximately one quarter of individuals living with a chronic condition experience significant limitations in daily activities.³
A Problem of National Proportions
Falls that cause serious injury or death are a widespread national problem and a serious health issue for older Americans. According to the National Safety Council, more than 21,700 Americans died in 2007 as a result of falls and more than 7.9 million were injured by a fall, including over 1.8 million older adults who had a fall-related injury that resulted in an emergency room visit. Falls, the NSC says, are the leading cause of injury-related deaths among adults 73 and older and the second-leading cause of death from ages 60 to 72.4

Real Dangers for Patients
“Falls and mobility problems are two of the most common and serious concerns facing older adults,” said a report in the Annals of Internal Medicine titled, “Quality Indicators for the Management and Prevention of Falls and Mobility Problems in Vulnerable Elders.”5 “In addition to reducing function and causing considerable morbidity and mortality, falls and instability precipitate premature nursing home admissions. Impaired gait and balance, which rank among the most significant underlying causes of falls, are also common consequences of falls. Because older adults often do not report these problems to physicians, they may go undetected until after preventable injury and disabilities have occurred.”

The New England Journal of Medicine, in an article titled, “Falls, Injuries Due to Falls and the Risk of Admission to a Nursing Home,”6 concluded that “among older people living in the community, falls are a strong predictor of placement in a skilled-nursing facility; interventions that prevent falls and their sequelae (aftereffects) may therefore delay or reduce the frequency of nursing home admissions.”

A Significant Cost to the Nation
A CDC compilation of recent research revealed these conclusions about the high cost of dangerous falls7:
- In 2000, the total direct cost of all fall injuries for people 65 and older exceeded $19 billion: $0.2 billion for fatal falls and $19 billion for nonfatal falls.
- By 2020, the annual direct and indirect cost of fall injuries is expected to reach $54.9 billion (in 2007 dollars).

Quality of Life Issues for the Elderly
Beyond the personal and medical costs, dangerous falls can also take a significant toll on both patients and families. Numerous national surveys have shown that most aging Americans prefer to live independently at home for as long as possible. However, research compiled by the CDC7 revealed that, among those who fall, 20% to 30% suffer moderate to severe injuries that make it hard for them to get around or live independently and increase their chances of early death. The CDC also noted that the direct costs of fall injuries do not account for their long-term effects, such as disability, dependence on others, lost time from work and household duties, and reduced quality of life.

Root Causes of Balance Dysfunction
There are a number of root causes for balance problems that lead to dangerous falls, including health issues involving vision, the inner ear, or sensation and coordination. Pain and numbness in the feet, as a result of diabetes or other health problems, can also create balance dysfunction, as can problems with the brain or heart.
According to the National Institutes of Health\(^8\), aging, infections, head injury, certain medicines, or problems with blood circulation, including stroke, may also cause dizziness and other balance difficulties, as can a lack of strength or flexibility. Certain medications or elevated blood pressure can make someone prone to falling, as can a lack of strength or flexibility.

Upper respiratory infections and other viral infections, as well as stress, fatigue, allergies, smoking, or alcohol use, also can increase the risk for labyrinthitis, an inflammation of the inner ear that can lead to balance problems. An elderly person’s cluttered living area and environment can also create hazards that result in dangerous falls.

**The Home Health Therapy Solution**

Home health balance therapy programs have become widely available to America’s elderly and they offer important solutions for resolving the root causes leading to dangerous falls and helping seniors to maintain an independent lifestyle at home for as long as possible. Home health providers have successfully treated tens of thousands of older patients, helping them to become more mobile and preventing the kinds of fall injuries that can lead to hospitalizations, lengthy nursing home stays, or even death.

Traditional therapy programs treat balance problems with “gait training,” which is essentially teaching someone how to walk. Such programs also usually include general strengthening exercises. The latest home health therapy advances focus on the root causes of balance dysfunction. In consultation with the patient’s physician, home health nurses and therapists – sometimes with advanced training -- develop a customized treatment plan that involves physical therapy at home and may also include electronic methods, such as anodyne therapy, which employs infrared light to increase circulation and sensation, and reduce pain.

Home balance therapy programs offer a number of important advantages over similar institutional care:

- Home therapy patients receive one-on-one treatment and are not subject to the more limited group therapy sometimes found in institutions.
- Patients suffering from balance dysfunction can find it difficult to travel to outpatient rehabilitation programs because they are not mobile enough or cannot find a caregiver to transport them.
- Home therapy patients are treated in their own daily living environments, so they do not have to re-learn certain functions as they might after returning home from a rehab facility.
- Home therapy allows nurses and therapists the opportunity to closely monitor patients and report back to physicians on changes in their conditions. Home health clinicians can also examine patients’ home environments and reduce or eliminate hazards that could contribute to dangerous falls.

Because the idea behind home therapy is to address dangerous falls before they occur, it can be highly cost-effective in addressing this critical national problem. For example, the CDC cited a study of people age 72 and older in which the average healthcare cost of a fall injury totaled $19,440.\(^7\) This amount, which included hospital, nursing home, emergency room and home health care, but not doctors’ services, can be several times the cost to provide preventive home balance therapy to a Medicare patient.

**Independent Research Supports Home Therapy**

A growing body of independent research continues to emerge on the success of home health in treating the elderly for balance dysfunction and other illnesses. For example, a recent study in the *British Medical Journal* of more than 200 people age 60 or over living at home or in
residential care revealed a 55% drop in the rate of falls when patients were given home treatment by a physical therapist, an analysis of potential home hazards and corrective measures to improve the home environment.\(^9\) New Zealand researchers, also publishing in the *British Medical Journal*, reported a 46% reduction in falls among patients age 75 or older who received an exercise program at home at a relatively low cost per fall prevented.\(^{10}\)

**The Conclusion**

Fall prevention programs conducted by physical therapists and other home health clinicians can be highly effective in limiting fall injuries, thus reducing the adverse impact on patients and on national health expenditures.

**Footnotes**

6. http://content.nejm.org/cgi/content/abstract/337/18/1279
c2102?maxtoshow=&hits=10&RESULTFORMAT=&fulltext=balance&searchid=1&FIRSTINDEX=10&sortspec=date&resourcetype=HWCIT