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Investing in Evidence-based Exercise to Prevent Falls in Older Adults

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The Problem of Falls in Older Adults

Falls are the leading cause of injury and injury-related death among adults aged 65 and older – an alarming reality that demands proactive intervention, as this population is expected to nearly double by 2060. Each year, roughly one-third of older adults experience a fall, half of whom fall more than once. The incidence of falls increases nearly 40% for those with cognitive impairments and 33% for those with mobility limitations. The consequences are often devastating, as falls can be life-changing and even fatal. An estimated $50 billion is spent on medical costs related to non-fatal fall injuries, and $754 million is spent related to fatal falls yearly in the US. Common fall-related injuries can include hip and wrist fractures, concussions, scrapes, and bruises.

Fortunately, falls are not inevitable. Evidence shows that targeted exercise interventions can substantially reduce fall risk, offering an opportunity to save lives, lower healthcare costs, and improve the well-being of millions of older Americans. To realize these benefits, policymakers should prioritize investments in evidence-based exercise programs, support training for fitness professionals in fall prevention techniques, and ensure older adults, including those living with dementia, have access to safe, effective exercise opportunities in both community and residential care settings.

Exercise Reduces Falls in Older Adults

For community-dwelling older adults (adults living outside residential care facilities), engaging in challenging lower-body strength and balance training 3 times per week can reduce the risk of falls by about 33%. The CDC provides a list of evidence-based programs that have proved effective in fall prevention while generating cost savings for the healthcare system, including reduced Medicare expenditures.

However, not all forms of exercise offer the same protective benefits. For example, engaging in brisk walking can increase fall risk among frail older adults by promoting rushed paces and reducing attention to environmental hazards. While walking at a normal pace is beneficial for general health, it should not be relied upon as a standalone intervention to prevent falls.

Active community-dwelling older adults who meet or exceed physical activity guidelines (150 minutes per week of moderate-to-vigorous physical activity, which can include brisk walking) have a significantly lower risk for both injurious and non-injurious falls compared to older adults who do not meet these guidelines. Conversely, sedentary behavior is associated with increased fall risk. To mitigate this risk, older adults should take regular breaks from prolonged sitting or lying down and incorporate light physical activity into their daily routines.

While most existing research on fall prevention focuses on older adults without dementia, our emerging research suggests that individuals living with dementia can also benefit from targeted exercise interventions. Our work has shown that challenging strength and balance training is not only feasible for older adults with dementia in residential care but may also improve mobility, reduce fall risk, and support cognitive function. Investing in structured exercise is a promising strategy to enhance safety and quality of life for older adults with dementia.

The Current State of Fall Prevention

Despite strong evidence supporting exercise for fall prevention, access to evidence-based programs remains limited. Many nursing homes do not offer structured exercise programs, and when they do, physical or occupational therapy is typically available only to select residents with a prescription and insurance coverage. In community settings, most exercise programs do not include evidence-based exercise. Common offerings like walking groups, flexibility sessions, or seated exercise programs often fail to incorporate the challenging balance and lower-body strength training necessary to reduce fall risk. To be effective, fall prevention programs should include challenging lower-body strength and balance at least 3 times per week.

Research shows that it is never too late to be physically active. Even individuals who adopt an active lifestyle later in life can still decrease their risk for falls through exercise. Yet, structural support for delivering effective fall prevention programs is lacking. While several federal initiatives, such as the CDC's Stopping Elderly Accidents, Deaths & Injuries (STEADI) program, provide fall prevention resources for healthcare providers, few large-scale programs offer evidence-based exercise interventions directly to older adults.

At the local level, fall prevention efforts vary widely. Some states fund fall prevention programs through public health departments, but coverage is inconsistent, and access is often limited to urban areas. In nursing homes, individualized exercise programs are typically only available to residents eligible for physical or occupational therapy.

Currently, no national funding mechanism exists to specifically support the widespread delivery of strength and balance training that meets evidence-based standards for fall prevention.

Policy Recommendations

An investment in evidence-based exercise programs can reduce Medicare costs by reducing falls and improving the quality of life of older adults.

To reduce fall-related injuries and associated healthcare costs, we recommend:

- Federal grants to states and localities to expand access to evidence-based strength and balance training programs in both community and residential care settings.
- Train and fund fitness professionals to deliver these programs safely and effectively.
- Prioritize and fund research and development of fall prevention strategies specifically tailored to older adults living with dementia.

Falls are preventable — and with strategic investment in exercise interventions, we can protect older Americans and strengthen our healthcare system.

To read Deborah Jehu's research on fall prevention, see Risk factors for recurrent falls in older adults: A systematic review with meta-analysis.