

# Standing Strong: Reducing Fall-Related Injuries Through Nurse-Driven Interventions

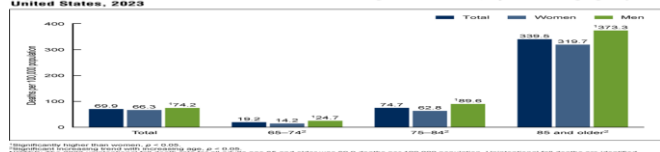
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## Introduction

Nearly one million falls are reported each year (Li & Surineni's 2024). Falls are a leading cause of injury, hospitalization, and death among older adults with 25% of older adults being affected by falls, increasing their rate of morbidity and mortality (Park et al., 2024). Falls in older adults account for approximately 17 million years of life lost due to mortality associated with falls (Eckstrom et al., 2024). As healthcare systems face increasing pressure to improve outcomes and reduce avoidable harm, evidence-based fall prevention strategies are essential (Mc Lennan et al., 2025). Research supports nurse-led interventions particularly those focused on education and individualized risk assessment as effective in reducing falls and related injuries (Morris et al., 2022). This project aims to evaluate whether implementing structured patient education on fall prevention, compared to no formal fall prevention intervention, leads to a decrease in fall-related injuries in older adults over a 6-month period.

Figure 1. Rate of unintentional fall deaths for adults age 65 and older, by sex and age group: United States, 2023



## PICOT

### Research Question

In older adults, does implementing structured patient education on fall prevention, compared to no fall prevention intervention, reduce the incidence of fall-related injuries over a 6-month period?

### PICOT Breakdown

- P:** Older adults
- I:** Structured patient education on fall prevention
- C:** No fall prevention intervention
- O:** Reduced fall-related injuries
- T:** Over a 6-month period

## Evidence-Based Intervention

### Evidence-Based Intervention

- Initial fall risk assessment using TUG, Berg, or STEADI
- Targeted education for high-risk patients
- Nurse-led sessions using teach-back method
- Multilingual, literacy-friendly handouts
- Health Literacy should be considered in fall prevention strategy according to Park et al., (2024)
- Reinforcement at 1-month and 3-month follow ups
- Embed fall prevention into routine practice so it become standardized according to McLennan et al., (2025). "It is vital for the successful implementation of the fall precautions interventions that nurses have leadership's support" (McLennan et al., 2025).
- Assess knowledge gaps within the nurses and address it so they can be better prepared to teach patients.
- Optimize the safety of bedside environments
- Optimizing the safety of equipment for patient attachments (especially IV poles).
- Refining interdisciplinary staff communication process about patient's mobility status
- Staff must receive education regarding delirium identification and management according to McLennan et al., (2025)

Our intervention begins with a structured falls risk assessment. Based on results, nurses deliver tailored education using CDC STEADI resources, teach-back, and follow-up visits.

## Literature Review

### Search Strategy:

Using CINAHL, EbscoHost, ScienceDirect, and PubMed, a literature search was performed to gather evidence-based practice on the use of incorporating fall risk assessments and targeted education to reduce the risk of falls in older adults.

### Search Criteria:

To be included in the literature review, articles must be from reputable medical journals, peer reviewed, and published between the years 2021-2025.

### Key words and phrases:

The following key words were entered into the various websites search engines:

- Fall Risk
- Geriatric
- Fall Prevention
- Older Adults
- Fall Risk Assessment
- Fall Risk Screening

### Literature Review:

- Morris et al. (2022), conducted a comprehensive systematic review and meta-analysis aimed at preventing patient falls. They found that patient and staff education was the only intervention that yielded significant reduction in fall rates. In contrast, interventions such as bed or chair alarms, wearable sensors, and standardized risk assessment tools did not show meaningful impact on fall reduction. They highlight the importance of nurse-led education interventions in successfully reducing patient falls. This provides substantial evidence to support patient education as a fall prevention intervention.
- Dykes et al. (2023) performed a cost-benefit analysis of evidence-based fall prevention programs. The average financial cost associated with in-patient falls was \$62,000. Implementation of fall risk programs reduced falls by 19%. This reduction in falls resulted in a cost savings of approximately \$14,600 per 1,000 patient-days, with a five-year cumulative savings of over \$22 million. This study highlights the financial benefits of nurse-driven fall prevention programs
- Li and Surineni's (2024), narrative review addressed the challenges of in-patient falls in older adults. Nearly one million falls are reported each year resulting in over 250,000 injuries and 11,000 deaths. Risk factors for falls include age, mobility impairment and cognitive decline. Environmental factors include poor lighting, slippery surfaces, and medication adverse effects. This study highlights the need for individualized risk assessment, environmental modifications, and incorporation of technology to be most effective.
- Mc Lennan et al. (2025) highlights how falls are a serious safety problem for older adults causing injury and financial burden. This study discussed the need for multifaceted fall prevention interventions to be embedded into everyday practice to ensure success. Successful implementation increased staff confidence in implementing interventions, understanding their role, and an increased ability to prevent patient falls.
- Park et al. (2024) reviewed the effects of health literacy on fall prevention. They cite that falls affect over 25% of older adults globally. Community falls are more prevalent than in-patient falls. Fall cause a loss of mobility and increase morbidity and mortality. Risk factors include age, sex, history of falls, cognitive and mental status, low health literacy, vision difficulties, spine injury, and stroke. They suggest that health literacy via education, and digital and printed materials should be included in fall prevention programs.

Analysis of the quality of evidence

Level of Evidence	Number of Studies	Overall Quality
I	1	High- Systematic Review and Meta Analysis
II	1	Moderate High- scoping review
III	0	
IV	2	Moderate- mixed methods, cohort study
V	2	Moderate Low-narrative review

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## Expected Outcome

### Anticipated Results:

- 20-30% reduction in fall and fall injuries. A fall is defined as an incident resulting in a person coming to a sudden rest inadvertently on the ground floor or other lower levels according to Park et al., (2024).
- Increased patient awareness and engagement
- Improved nursing satisfaction and patient safety.
- Staff perceived confidence in implementing multicomponent fall prevention interventions according to McLennan et al., (2025).
- Recognize that a recent model of patient safety management identified that patients play an important role in the active management of safety according to Park et al., (2024).
- Patient participation should be considered as a vital approach to patient safety.
- According to Park et al., (2024) Patient's health literacy and engagement must be considered and any gap found must be mitigated.

We expect that this combined approach will reduce falls and fall-related injuries, increase adherence to safety strategies, and strengthen nurse-patient relationships. Additionally, we must consider that low health literacy is associated with adverse fall-related outcomes and fall prevention programs that consider health literacy could improve fall incidence according to Park et al., (2024).

## Conclusion

Reducing fall-related injuries among older adults calls for a proactive, collaborative approach that includes both healthcare providers and patients. This project reinforces the effectiveness of nurse-led fall prevention interventions that begin with structured risk assessments and are followed by targeted patient education. By focusing on health literacy, cultural considerations, and patient engagement, these strategies support safer environments and improved outcomes. Our anticipated results include a 20-30% reduction in falls and related injuries, improved patient engagement, and greater nurse satisfaction. Importantly, these interventions empower patients to become active participants in their own safety. As Park et al. (2024) emphasize, patients play a vital role in managing safety, and addressing health literacy gaps is critical for success. Furthermore, when nurses are confident in delivering multicomponent interventions and supported by leadership, the impact is not only measurable but sustainable. Incorporating fall prevention into routine care, while promoting patient education and interdisciplinary collaboration, will help create safer clinical settings. Ultimately, this approach strengthens the nurse-patient relationship, increases adherence to safety strategies, and supports a culture of prevention that benefits both individuals and healthcare systems.

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