

In Canada, the average cost per fall requiring hospitalization is approaching \$30,000.<sup>1</sup> This significant economic burden highlights the need for increased falls prevention programs. Physiotherapy is highly effective in preventing and reducing the risk of falls, and in the assessment and management of fall-related injuries in older adults.

## Role of Physiotherapy in Falls Prevention and Fall-related Injuries

Physiotherapists are integral to inter-professional falls prevention programs and rehabilitation services for older adults who have experienced a fall. Physiotherapy effectively improves strength, motor function and balance in older adults at risk of falling and those with fall-related injuries.<sup>2</sup>

Physiotherapists assess individuals to screen for risk of falls and manage falls prevention programs. Physiotherapists prescribe specific exercises, activities and interventions, and provide advice on managing environmental risks. Falls prevention programs reduce both the risk and rate of falls and fall-related morbidity resulting in overall decreased costs to the health care system.<sup>2</sup> It is estimated that falls and fall-related injuries cost the Canadian health care system approximately \$2.8 billion a year with \$980 million alone spent on treating injuries related to falls.<sup>3</sup>

## Impact on Patient Experience

Falls are a major cause of injury, disability and mortality in seniors.

- Physiotherapy interventions to prevent falls improves patient confidence and reduces the fear of falling that restricts physical activity.<sup>3</sup>
- Patient acceptance of falls prevention programs is high.<sup>2</sup>
- Patients value the benefits of targeted falls prevention programs, including physiotherapy, for reducing the risk of falls and preventing the occurrence of falls.<sup>5</sup>

## Impact on Population Health

Physiotherapist screening, assessment and interventions to prevent falls and fall-related injuries improves quality of life (QOL) by removing restrictions of activities that come from a fear of falling.<sup>5</sup>

- Physiotherapy programs, including balance and strength retraining, reduce mortality, hospitalization rates and transfers to nursing homes resulting in better patient outcomes.<sup>6</sup>
- Multidisciplinary falls prevention programs decrease the incidence of falls, fall-related morbidity and costs to the health care system.<sup>7</sup>
- Balance training by a physiotherapist improves QOL, physical function, strength, balance, social interaction and overall wellbeing.<sup>8</sup>

## Impact on Health Care Costs

The reduction in health care costs associated with implementing a falls prevention program more than offsets the cost of the prevention programmes for specific patient populations.<sup>7,9</sup>

- The incremental cost-effectiveness ratio<sup>1</sup> of a falls prevention program for high risk adults is estimated to be \$5,310 per fall averted.<sup>9</sup>
- The cost of treating a fall is 1.85 times higher than implementing a falls prevention program.<sup>10</sup>
- Physiotherapist screening for risk of falls, and patient education, results in 2.2 fewer falls per 100 patients and reduces cost spent on resources to prevent and treat fall-related injuries by \$2,804 per 100 inpatient falls prevented.<sup>5</sup>

## Summary

The treatment of falls and fall related injuries is a significant economic burden. Physiotherapist-led exercise programs reduces both the risk and the rate of falls in older adults, while improving physical functioning, balance and muscle strength. Falls prevention programs are more cost-effective than treating fall-related injuries. Physiotherapist screening for risk of falls reduces both the number of falls and the costs of fall-related treatment.

### Key References:

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The value of a health care service is more than its proven cost-effectiveness. Quality of life, access, and continuity of care and integration of services are equally important criteria when looking at the broader concept of value.