

Summary of Fall Prevention Initiatives in the Greater Toronto Area (GTA)

Purpose

This summary serves as an accompanying document to the *Inventory of Fall Prevention Initiatives in the GTA* and provides a broad overview of the work completed by the GTA Rehab Network Community Rehab Task Group in the area of fall prevention.

Background

Falls among seniors in the community has been identified as key issue throughout the Community Care Access Centres (CCACs) and other GTA Rehab Network members. A joint committee of the Network, CCACs and community partners was established to: *a) assess the availability of fall prevention programs in the GTA; b) identify potential gaps in services; and c) explore potential opportunities to support the implementation of best practices in fall prevention programs in the community.* Task group members included representatives from Baycrest, Central CCAC, Central West CCAC, SmartRisk, Toronto Central CCAC, Toronto Public Health and Toronto Rehab.

A review of the literature found that falls among seniors occur at great cost to the individual and the healthcare system. Falls are identified as a major public health problem by the WHO¹ and are defined as “inadvertently coming to rest on the ground or other lower level, excluding intentional change in position to rest in furniture, wall or other objects.”²

More than 80% of seniors’ falls occur at home³. These unintentional falls:

- Are the source of 70% of major injuries among people aged 65 and older in Canada⁴;
- Are the primary reason for hospitalization of 77% of males and 88% of females aged 65 and older⁵; and
- Are linked to 39% of all injury deaths in Canada⁶.

The long lasting impacts of a fall are well documented; falls are known to cause more than 90% of all hip fractures in seniors, which are known to have a strong association with death⁷; it has been shown that 20% of seniors die within a year of the fracture⁸. Hip fractures, and the subsequent impacts on quality of life, function, and/or mortality, create a significant burden for individuals, their families and the health care system⁹.

The resultant direct and indirect costs for clients, their caregivers and the health care system are an ongoing area of concern, including the usage and costs of inpatient hospital stays, emergency room visits, and long term care services:

- Falls in people aged 65 and older are linked to a high use of immediate health care services. A report on seniors falls by the Public Health Agency of Canada identified that “Nearly three quarters (72%) of people 65 years and older sought medical treatment from a health professional within 48 hours of injury. 65% were treated in the emergency department within 48 hours of the incident¹⁰.”
- Falls are also linked to longer lengths of stay in hospital. The Public health Agency of Canada reported that “the average length of hospital stay for a fall injury was consistently longer (by about 40%) than the average length of stay for all causes of hospitalization for seniors age 65 and over¹¹.”

- The impacts of a fall often result in long term care needs and as a result, “families are often unable to provide care, and 40% of all nursing home admissions occur as a result of falls by older people¹².”
- Falls are costly to the health care system. An Ontario study found that the “direct healthcare costs for treating a hip fracture, in the hospital and afterwards average about \$27,000 over a year” and “range from about \$21,000 for a patient who is discharged home from hospital to roughly \$44,000 for a patient discharged to long term care¹³.”
- A reduction in falls would be beneficial for both seniors and for the health care system. “A 20% reduction in falls would translate to an estimated 7,500 fewer hospitalizations and 1,800 fewer permanently disabled seniors. The overall national savings could amount to \$138 million annually¹⁴.”
- The rate of fall-related hospitalizations for seniors may increase, particularly in the age group of 85 and over, with a growth in the older population and in the number of people living with chronic conditions¹⁵.

Best Practice in Fall Prevention

Fall prevention services which include assessment of health and environmental risk factors and targeted interventions have been shown to be highly effective in reducing falls in the community^{16,17}. ***In order to align with best practices, fall prevention programs should be comprehensive,¹⁸ multi-factorial^{19,20,21} and include the following three components:***

1. Individualized risk assessment

A risk assessment is recommended²². In particular, it is recommended that a brief risk assessment is used to identify those who require a more comprehensive evaluation based on risk factors.²³ Such assessments include a review of environmental hazards, including the home^{24,25}; vision screening²⁶; medication management²⁷; and nutritional assessment.²⁸

2. Exercise

Exercise programs have been shown to reduce the risk of fall recurrence²⁹. These programs include: strength training^{30,31}; balance training^{32,33}; gait training³⁴; and advice on the appropriate use of assistive devices³⁵.

In particular, exercise programs “lasting 10 weeks or longer” and “involving strength and balance training by a trained-health professional”³⁶, have been shown to have a strong impact in reducing falls among community-dwelling seniors. Evidence also indicates that “group exercise programs [have been] shown to be less effective than individually prescribed exercises with the exception of a group programme using the Tai Chi intervention....”³⁷

3. Education

Education with clients, caregivers and providers is recommended as part of a comprehensive approach. It is important to recognize, however, that education alone does not reduce the risk of falls^{38,39,40}. Topics covered through educational efforts may include: improving environmental safety, how to safely change positions, managing weather conditions, and reducing fear of falling, among others.

Alignment of a Fall Prevention Strategy within Current LHIN Priorities

Many of the GTA Local Health Integration Network (LHIN) Integrated Health Service Plans (IHSP) currently list priorities which may align with a fall prevention strategy. Most LHINs have, for example, identified chronic disease management as a priority. Toronto Central (TC) and Central East (CE) LHINs have prioritized initiatives to assist frail seniors and Central (C) LHIN has highlighted the need to enhance primary care especially where inadequate access has been identified.

Analysis of Existing Fall Prevention Services in the GTA

An inventory (Appendix A) was completed in winter 2010 to update the GTA portion of the *Inventory of Fall Prevention Initiatives in Canada – 2005⁴¹*. Where available, additional program listings were identified and added through the GTA Rehab Network Rehab Finder tool (<http://www.gtarehabnetwork.ca/RehabFinder.asp>) and other sources. Although community-based recreational programs (e.g. through the YMCA, Parks and Recreation) are acknowledged as a valuable component of a comprehensive fall prevention strategy, these were not included within the scope of this inventory.

The inventory included examples of different types of intervention in the area of fall prevention for seniors in the community, such as:

- General awareness programs (e.g. general public awareness campaigns)
- Educational materials or products (e.g. educational brochures, home safety devices)
- Fall prevention training programs (e.g. ‘train the trainer’ or direct provider training)
- Individualized risk assessment and/or intervention (may include home assessment, treatment, exercise, etc.)

Some of the programs identified were specific to falls, whereas others were general programs which addressed falls.

Analysis of Fall-Specific Programs

Approximately half of the programs in the inventory were programs whose scope of service was specifically falls-related.

Among the fall-specific programs:

- 47% included some aspect of the three components of best practice in fall prevention: education, exercise and individualized risk assessment. These programs were:

Community Care East York	Fall Prevention Program
Credit Valley Hospital	The Strong and Steady Fall Prevention Program
Halton Healthcare Services	Geriatric Outpatient Service – Strong and Steady Fall Prevention Program
Halton Region Health Department	Home Visiting Program for Older Adults at High Risk of Falling
Markham Stouffville Hospital	Markham Stouffville Falls Clinic
Sunnybrook Health Sciences Centre	Falls Screening Clinic and Intervention Program

Toronto Public Health*	Falls Intervention Team
Trillium Health Centre	Fall Prevention/Bone Health Clinic and Exercise/Education Program
University Health Network – Toronto Western Hospital	Fall Prevention Program

*With community partners such as North York General Hospital, Sunnybrook Health Sciences Centre, Flemingdon Community Health Centre, University Health Network and City of Toronto Supportive Housing.

- 53% offered one or two components of best practice in fall prevention.

Of these remaining programs, the majority offered only resources (e.g. products) or general educational programs to increase awareness among seniors and/or the general public (e.g. media campaigns, presentations, general education). General awareness services may be seasonal or provided ad hoc. The ad hoc or seasonal nature of some of these services may be related to one-time funding which impacts sustainability of programs. The remaining programs offered a combination of education and risk assessment or training programs (e.g. train-the-trainer or direct provider training).

Of note, many of the programs included indicated that they were not linked with other program, either across organizations, sectors (e.g. recreational settings vs. community vs. hospital-based) or across regions.

Analysis of General Programs

General programs were also identified and analyzed through the inventory. Such programs included geriatric programs, osteoporosis management programs and general outpatient rehab programs. These programs had a broader scope of service, but still provided some fall-related assessment and treatment.

Among the general programs:

- 31% offered some aspect of the three components of best practice in fall prevention: education, exercise and individualized risk assessment. These programs included:

Baycrest	Community Assessment and Treatment Team - Day Treatment Centre
Baycrest, North York General Hospital, Yee Hong Centre and Toronto Public Health	The Power Program
St. Joseph's Health Centre	Outpatient Physiotherapy
Sunnybrook Health Sciences Centre	Geriatric Day Hospital
Toronto Rehab	Geriatric Rehabilitation Day Hospital

- 69% included one or two components of best practice in fall prevention.

A Need for Coordinated Service within and Across LHINs

Fall prevention is a concern for primary health care providers who are most often the link for community dwelling seniors and the health care system. Because it has been identified that an individual program may not provide all components of a comprehensive fall prevention program, coordination of existing services, and knowledge of risk assessments and decision making protocols would assist providers in engaging available resources in a timely manner.

At the time of this task group's review, coordinated services were in the process of being implemented in Mississauga Halton (MH) LHIN. The MH LHIN had brought together representatives from across the continuum of care to develop a framework for fall prevention. Although it had not been evaluated at the time of this task group's work, the MH LHIN framework was designed as a basis for understanding of the responsibilities of each sector and identifying the role each sector could play in the prevention and management of falls. The MH LHIN initiative was based on cross-sectoral partnerships, including recreational, community, and institutional based services, for effective and strategic action⁴². The LHIN did not develop a separate or unique program, but rather was seeking to maximize existing programs in the community.

In order to build a sustainable and cohesive fall prevention strategy, resources and LHIN support is essential to support the broad scope involved in a multifactorial, cross-sectoral approach to supporting client safety in the community.

An Opportunity to Enhance Delivery of Existing Services

The primary challenge in the area of fall prevention is not simply that of program availability, but in a) ensuring that programs provide all components of best practice and/or b) ensuring that programs are coordinated so that individuals still receive all components of a comprehensive fall prevention program (i.e. individualized risk assessment, exercise, education), even if it is from multiple providers.

The inventory will be shared widely to support referrers in identifying fall prevention programs for their clients. Given the breadth of programming already available, it may be advantageous to link programs together to form a comprehensive intervention for clients, rather than re-creating new programs. As such, this inventory may form a foundation for future analysis and collaboration to support clients in mitigating falls and maintaining their health and independence in the community.

Summary of Findings

While there are a variety of programs in the GTA which contribute to preventing and managing falls among community-dwelling seniors, there appears to be an opportunity for enhanced coordination amongst these programs. From a client's perspective, access is likely available for a component of a comprehensive fall prevention program, however, they do not necessarily receive all of the education, exercise and risk assessment within a single program. As such, based on evidence that outlines the need for a comprehensive and multifactorial fall prevention program, and based on an analysis of available services, future efforts may be best directed at strategically coordinating existing services. Furthermore, future initiatives may benefit from learning from the experiences of others initiatives, such as that in the Mississauga Halton LHIN, where coordinated fall prevention initiatives involved direct engagement with primary health providers and a range of community providers.

The work completed by the GTA Rehab Network's Community Rehab Task Group provides a foundation for future work in leveraging and coordinating existing fall prevention initiatives and programs in order to provide a streamlined system of coordinated care for seniors.

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