1
FALLS IN SENIORS

The Health and Emergency Medical Services Committee recommends that

1. The Presentation by Jennifer Churchill, Director, Community Development and Sandra Vessel, Manager, Workplace Wellness Program and Substance Abuse Prevention Program regarding the Falls Intervention Team (FIT) Project: A Collaborative Falls Prevention Project be received

2. The recommendations contained in the following report, October 21, 2004, from the Commissioner of Health Services be adopted.

1. RECOMMENDATIONS

It is recommended that:

1. Staff be authorized to pursue further funding for Falls Intervention Team (FIT) programming and initiatives.

2. The three additional FTEs required to further this project and ensure The Region's continued participation be subject to the 2005 Business Plan and Budget process.

2. PURPOSE

The purpose of this report is to describe the impact of falls in seniors and to profile the significantly positive results of a pilot project designed and implemented to address falls in the elderly, in which York Region Health Services has taken a leadership role.

3. BACKGROUND

Falls in the seniors population are a major cause of serious injury and death, as well as a cause of premature institutionalization and loss of independence. Falls also pose an enormous economic burden on the health care system. Our rapidly aging population will become an increasing burden on our health care system unless we can identify cost effective strategies to intervene (*The Economic Burden of Unintended Injuries, SmartRisk, 1998*).

3.1 Personal and Economic Impact of Falls

It is estimated that falls among seniors costs Canada's health care system $2.8 billion annually (*Veterans Affairs Canada 2002*). Reducing the number of falls in Canada's elderly population by only 25% could potentially result in a net savings to the country's health care system of $138 million annually (*SmartRisk 2003*).

In Ontario, falls are the sixth leading cause of death for seniors and the number one cause of injury (*Ontario Trauma Registry 1999*). Seniors account for 42% of all hospital admissions due to injury and 67% of all injury-related hospital days. A 20% reduction in falls in Ontario seniors would lead to 3,000 fewer hospitalizations and 700 fewer permanently disabled citizens.

The Rapid Risk Factor Surveillance System (RRFSS) has been used to monitor fall-related injuries among York Region residents. RRFSS results for January 2003 to June 2004 show that 21% of York Region residents aged 65 and over reported having a fall in the past 12 months. Approximately 8% reported that their fall was serious and resulted in an injury that was serious enough to make it difficult to walk, get dressed or do most normal daily activities. Based on York Region population figures for 2003, it is estimated that 16,500 seniors had a fall and 6,400 seniors had a fall that results in an injury that was serious enough to affect daily activities in the past 12 months. Even these figures are felt to underestimate the magnitude of this issue as the data represents self-reported falls by seniors themselves and refers only those seniors who are still living in the community.

During the period of 1993 to 1997, the direct costs for acute hospital in-patient care beds due to seniors' falls in York Region averaged over $3 million annually (*Simcoe-York District Health Council*). Over the five-year period 1997 to 2001, there were over 4,631 falls-related hospitalizations among York Region seniors.

3.2 Changing Demographics

The number of York Region seniors 65 years and over is expected to triple by 2026, to 263,000. The senior population is expected to grow from 9.4% (in 2002) to 19.2% of the total York Region population by 2028 (York Region Planning and Development Services Department).

3.3 Mandate of Public Health Branch Related to Falls in Seniors

The Public Health Branch is clearly mandated by the Ministry of Health and Long-Term Care *Mandatory Health Programs and Services Guidelines, 1997,* "to reduce the rate of fall related injuries in the elderly (aged 65+ years) that lead to hospitalization or death by 20% by the year 2010."

Since the Public Health Falls Prevention Program began in 1993, staff have educated over 19,000 seniors in groups and distributed over 50,000 educational materials related to falls prevention; provided personalized assessment and counselling to over 900 seniors at community falls prevention clinics; conducted falls prevention media campaigns for seniors and for their caregivers; and advocated for safer environments. Evaluation of these initiatives over time showed that the frailest seniors who fall most frequently and require the most health care as a result were not being reached. A different strategy was required.

4. ANALYSIS AND OPTIONS

4.1 Falls Intervention Team (FIT) Pilot Project

In response to the need for services accessible to high risk, vulnerable, hard-to-reach seniors in York Region, the FIT pilot project was developed.
Between May 2001 and April 2004, following a comprehensive needs assessment and review of the literature on falls in the elderly, staff of York Region Health Services partnered with Toronto Public Health and Baycrest Centre for Geriatric Care to design and pilot this new program.

The FIT pilot project utilized a mobile multi-disciplinary team of public health nurses and physiotherapists who conducted 6–7 home visits per senior registered in the program over a period of 12 weeks, providing comprehensive risk assessment, an exercise regimen, teaching regarding falls risk factors such as balance, medication use and hypotension, and recommending safety improvements for the home environment. There were a total of 130 seniors in the program.

The results of the pilot project were positive. Statistically significant changes occurred in the project participants in all risk factors for falls. Specifically, balance, strength and self-confidence increased. Additionally, there was an 87.5% reduction in the number of falls by participants over the nine-month period during which they were monitored. This reduction was determined by a third party assessor who compiled a history of participant falls over the previous 12 months, and compared that to participant falls following the FIT pilot project.

Seniors and their families in the project found the program easy to adopt and were thrilled with the results:

- From a 94-year-old with severe arthritis, “You have helped to do the most important thing to me—to be able to stay in my own home.”

- From an 86-year old veteran, “I just love the exercises that you have taught me, they are so easy to do and I am so energized, feeling younger than I have in ten years.”

- From the daughter of a client, “I can’t believe the difference and in such a short time. Mom no longer needs to hold on to me when walking and Mom can climb into my car without my help—she seems like her old self.”

The FIT Project is now widely-regarded by professionals in the field as a best practice intervention for falls prevention for seniors and has received international recognition through conference presentations in Canada and at a World Injury Prevention Conference in Vienna, Austria.

4.2 Relationship to Vision 2026

This program engaged the community in a comprehensive manner in addressing an important health need of York Region seniors. A Community Advisory Committee was established as an integral part of the project plan. The group, consisting of seniors,

veterans and over 20 service-provider agencies such as hospitals, the Community Care Access Centre, long-term care and community care providers participated and informed decision-making throughout all phases of the project.

5. FINANCIAL IMPLICATIONS

The FIT pilot project was funded by a grant from Health Canada/Veteran Affairs in the amount of $273,382. Baycrest Centre for Geriatric Care received and administered the three-year grant, which was spent on the following: marketing, training, purchase of laptops, software, and hiring a Project Co-ordinator (Table 1).

Table 1
Summary of Funding for FIT Pilot Project

Year	Health Canada Funding for Baycrest Project	York Region In-kind Contributions
2000-2001	$ 46,109	$ 39,200
2001-2002	47,273	102,635
2002-2003	95,000	182,025
2003-2004	85,000	193,178
Total	$273,382	$517,038

In addition, all three partners shared the additional resourcing required for this project through in-kind contributions. In this regard, York Region contributed an estimated total of $517,038 over the course of the last four years. This included the portion of time over the course of this project of two managers and two public health nurses. It is anticipated that the Health Canada funding for the FIT Pilot Project will be awarded by February 2005.

In the 2005 budget, the Health Services Department will be recommending that 3.0 dedicated FTEs be hired at a cost of approximately $288,600 (salaries, benefits, mileage, etc.) to further this project and ensure The Region's continued participation. This request would be eligible for 55% provincial funding in 2005. This recommendation will be subject to the 2005 Business Plan and Budget review process.

6. LOCAL MUNICIPAL IMPACT

In York Region, this project was piloted only in Vaughan and Richmond Hill due to the limited funding and the fact that these municipalities are included in the Baycrest Centre for Geriatric Care catchment area. If the program is resourced appropriately, this program could be accessible to seniors across York Region.

7. CONCLUSION

York Region Health Services has repeatedly demonstrated leadership in developing effective and innovative strategies to meet the health needs of its citizens. The FIT pilot project is no exception. Recognized as a best practice initiative, its results show both improvement to seniors' quality of life as well as a decrease in falls in the elderly and the consequent economic burden placed on the health care system. The three key partners are continuing to meet to explore options for the expansion and the long-term sustainability of the program. To this end, it is recommended that staff be given the authority to pursue further funding for FIT programming and initiatives. All partners are committed to continuing with FIT programming regardless of successful funding outcomes.

The Senior Management Group has reviewed this report.