

Environmental Scan: Seniors and Veterans Falls Prevention Initiatives in British Columbia

Executive Summary

February 2005

Authors

Dr. Vicky Scott, Senior Advisor on Falls Prevention, British Columbia Injury Research & Prevention Unit

Dr. Elaine Gallagher, Professor, University of Victoria School of Nursing

Dr. Mariana Brussoni, Associate Director, British Columbia Injury Research & Prevention Unit

Kristine Votova, Doctoral Student, University of Victoria

Dorry Smith, Researcher, British Columbia Injury Research & Prevention Unit



Foreword: The British Columbia Injury Research and Prevention Unit (BCIRPU), directed by Dr. Ian Pike, was established by the Ministry of Health and the Minister's Injury Prevention Advisory Committee in August 1997. BCIRPU opened its doors in January 1998. It is housed within the Centre for Community Child Health Research (CCCHR) at Children's & Women's Health Centre of British Columbia and supported by BC Research Institute for Children's & Women's Health. The primary purpose of the Unit includes "The reproduction of unintentional injuries in BC, through the support and evaluation of effective prevention measures, and the establishment of ongoing injury surveillance across the province."

Authors: *Drs. Vicky Scott, Elaine Gallagher and Mariana Brussoni, Kristine Votova, Dorry Smith*

Acknowledgements: The project team at the BC Injury Research and Prevention Unit (BCIRPU) extend their appreciation to the Ministry of Health Services, Population Health and Wellness, Department of Children, Women & Seniors and Health Canada for the funding provided for this project. The office of the Provincial Health Officer and Technical Assistant staff on the Ministry of Health, Facilities Management and Support Services were also instrumental in assisting with data collection through the provision of an on-line Falls Inventory Form on the government web site. The authors also thank all those who assisted in the pilot testing and distribution of the inventory form, as well as those who made submissions to the inventory and those who participated in the in-depth interviews.

BC Injury Research and Prevention Unit

L408-4480 Oak Street

Vancouver, BC V6H 3V4

Email: injury@cw.bc.ca

Phone: (604) 875-3776 Fax: (604) 875-3569

Webpage: www.injuryresearch.bc.ca

Reproduction, in its original form, is permitted for background use for private study, education instruction and research, provided appropriate credit is given to the BC Injury Research and Prevention Unit. Citation in editorial copy, for newsprint, radio and television is permitted. The material may not be reproduced for commercial use or profit, promotion, resale, or publication in whole or in part without written permission for the BC Injury Research and Prevention Unit.

February, 2005

Background and Purpose

For seniors aged of 65 and older, it is estimated that one in three persons will likely experience at least one fall per year and many will fall multiple times (O'Loughlin, 1993). In BC, falls among the elderly exceed all other causes of injury. Injuries from falls account for 85 percent of all injuries to the elderly and in 1998 cost British Columbia \$180 million in direct health costs.

The purpose of this scan was to collect and analyze data related to existing initiatives designed to promote the reduction of falls and fall-related injuries among seniors and veterans in British Columbia (BC). This work is intended to help disseminate information about how falls can be prevented, promote networking, and contribute to a collective effort currently underway in the province to reduce falls and injuries among older persons.

These findings will also serve to reflect the changes that have taken place since the previous scan completed in March 2001, when only 12 falls prevention initiatives were found to be operating in BC (Scott, Dukeshire, Gallagher, & Scanlan, 2001). In addition, the scan is intended to help practitioners and researchers to better understand the critical factors that have helped to move this important issue forward and what can be done to help sustain this effort in the future.

Methods

Epidemiological data on falls among older adults in British Columbia was extracted from vital statistic and hospital separation databases. Inventory data was collected using a province-wide survey of falls prevention initiatives in all community and healthcare settings serving seniors; a survey tool was developed to collect data on thirteen key elements of each falls prevention initiative. Critical factors of success were gathered from in-depth interviews with key informants of selected initiatives that demonstrated models of excellence.

For an initiative to be included in the inventory, it had to meet each of the following criteria: 1) the principal goal had to be falls and fall-related injury prevention; 2) initiative had to be primarily targeted to adults aged 65 and older in community and/or institutional settings; 3) initiative had to be based in BC; 4) initiative had to be operating now or within the last two years, or would be initiated within two years (of survey date: 2004).

Participants were able to access and submit the survey form either online through the Ministry of Health's or BCIRPU's website; if requested, paper copies were sent out by mail and returned by mail or facsimile. SPSS Version 12.0 for Windows was used to create a database of all reported data and to calculate sums and percentages.

Results and Conclusions

In total, 116 inventories were submitted from individuals coordinating or participating in falls prevention initiatives in BC. As compared to the 12 initiatives reported in the previous scan conducted in 2001, this is a nine-fold increase in reported falls prevention initiatives (Scott, et al., 2001). The initiatives were organized into seven categories based on the healthcare setting or provider. The below table illustrates the number and percentage of falls-prevention initiatives reported in each category.

Community/ Pre-frail and Well-elderly	Long-term Care/ Frail and Cognitively Impaired Elderly	Acute Care/ Geriatric Rehabilitation Services	Cross- Site	Research	Policy	Private Providers
37 (32%)	35 (30%)	6 (5%)	13 (11%)	13 (11%)	9 (8%)	3 (3%)

The percentage of total initiatives by region was found to exceed the percentage of those aged 65 years and over for Vancouver Coastal (35.5% to 24%), Northern (8% to 4%) and Interior Health Authorities (23% to 21%). The percentage of initiatives was lower than the percentage of those aged 65 years and over for the Fraser (15% to 30%) and Vancouver Island (10.5% to 21%) Health Authorities.

Over half (51%) of the initiatives employed a multifactorial approach to falls prevention and 29 percent used clinical assessment as their main approach. Those involved in the planning and delivery of most initiatives tended to be nurses (77%), physiotherapists (75%), occupational therapists (57%) or seniors (48%). Many products and resources have been produced by these initiatives, including 40 checklists, 38 risk assessment tools, 31 policies and protocol, 29 fall risk screening tools, 28 brochures and 24 training manuals or packages. The majority of initiatives were funded by health authorities (69%) and most initiatives (77) have no projected end date.

It is evident from this environmental scan that there is a growing recognition among healthcare providers and community groups of the importance of the need for seniors' falls prevention strategies and interventions. The nine-fold growth in the number of falls prevention initiatives reported since the previous scan in March 2001 is a strong indication of this.

Hospital separation and vital statistic data are beginning to demonstrate a slight decline in falls rates for some age groups in some areas in the province; falls rates are decreasing over the same time that initiatives are increasing. It is evident that, thus far, falls prevention resources have been well-utilized and are worth investing in as a strategy for health promotion.

Several conclusions and implications arose from the in-depth inquiry of selected initiatives, including the finding that in order to be successful, fall prevention programs require strong leadership and commitment, good information on local risk magnitude, and a cultural shift in the organization that will support both individual and population based health promotion efforts.

As our population continues to age, the health delivery system must be prepared and equipped to address a wide range of seniors' health issues. More original research on falls prevention interventions is needed as well as evaluation support. Although a growing number of initiatives exist, few have systematic evaluation. Falls and related injuries are a significant cause of morbidity and mortality among seniors that will continue to impact community services and health care delivery if appropriate and timely interventions are not put into practice.

Key Recommendations

Healthcare Setting/Provider	Recommendation
Acute Care / Geriatric Rehabilitation Facilities	<ul style="list-style-type: none"> • Perform a falls-risk assessment upon admission, when patient’s health changes and at regular intervals. • Conduct surveillance of falls and fall-related injuries, paying close attention to activity and location at the time of the fall.
Community / Pre-frail and Well-Elderly Service Providers	<ul style="list-style-type: none"> • Carry out thorough falls-risk assessment and health screening, including falls history, current medications, vision problems and level of mobility of every first-time client. • An environmental assessment of a client’s home and their interaction with their surrounds should be conducted upon first meeting a client; fall-related risks should be modified with appropriate measures, utilizing resources available, such national assistance programs. • Consideration should be given to safe pedestrian routes, building codes that reflect the needs of seniors, accessible transportation systems and a process for reporting and repairing hazards.
Long-Term Care Facilities	<ul style="list-style-type: none"> • Apply universal falls precautions for all residents as part of a facility-wide policy that reflects current best practices. • Conduct regular surveillance of falls and fall-related injuries. The location and activity at the time of the fall are particularly important for guiding appropriate improvements. • Falls-risk assessment should occur upon resident’s admission to the facility, when a resident’s health changes and at regular intervals. Appropriate interventions should be considered and implemented.
Cross-Site	<ul style="list-style-type: none"> • Employ a multi-disciplinary healthcare team, including those at risk, in the development, implementation and evaluation of initiatives. • Incorporate evaluation into any falls prevention program to measure the effectiveness in its process, impact and outcome. • Allow time for planning of initiative or program; build on local strengths and resources. Invite input from a variety of experts and healthcare professionals. • Attend to the needs of persons who are disadvantaged because of language barriers, economic hardship or physical or mental limitations. • Identify a local champion and make falls-prevention a clear mandate in the description of their roles and responsibilities.
Regional Health Authorities	<ul style="list-style-type: none"> • Allocate appropriate resources to falls prevention initiatives that represent a cross-section of healthcare settings for seniors. The number of initiatives should match regional needs and population. • Partner with municipal jurisdictions to promote safety in the design of public places, public transportation and infrastructure appropriate to seniors’ needs and abilities. Consult with Health Canada/Veterans

Affairs Canada concerning community-based initiatives.

References

O'Loughlin, J.L., Roitaille, Y., Boivin, J.F., & Suissa, S., (1993). Incidence of and risk factors for falls and injurious falls among community-dwelling elderly. American Journal of Epidemiology, 137(3), 342-254.

Scott, V., Dukeshire, S., Gallagher, E., & Scanlan, A. (2001). An Inventory of Canadian Programs for the Prevention of Falls & Fall-related Injuries Among Seniors Living in the Community. Prepared on behalf of the Federal/Provincial/Territorial Committee of Officials (Seniors) for the Ministers Responsible for Seniors. Ottawa: Health Canada, Division of Aging and Seniors.