

Alberta Seniors' Falls Prevention Network Bulletin

Bulletin 17 (June/July, 2009)



Seniors Falls Prevention Awareness Campaign

Looking back

In November 2008, the Alberta Centre for Injury Control & Research (ACICR) and the Alberta Medical Association developed an information and advocacy campaign called *Finding Balance* focused on reducing the number of falls among seniors in Alberta.

The major sponsors of the 2008 campaign were ACICR, Alberta Health and Wellness, the Alberta Medical Association, the Alberta Physiotherapy Association, Global TV, and Newcap Radio.

Finding Balance is guided by an Advisory Committee with representation from a broad range of constituencies which are directly affected by seniors' falls. Members include seniors/seniors' groups, provincial organizations supporting seniors' health, health care professionals such as physicians, nurses, pharmacists, and rehabilitation specialists, and representatives from all health regions.

The campaign's themes were based on current research and evidence-based practice. The themes of the informational materials were:

- Check Your Medications – Talk to your Doctor or Pharmacist
- Keep Active – Exercise for Strength and Balance

Campaign activities included:

- Production and distribution of posters and fliers
- Television and radio commercials and purchased air-time
- Media relations
- Civic proclamations
- Local activities

Evaluation results

In July 2008 a pre-campaign benchmark omnibus telephone survey was conducted to gauge perceptions, knowledge and behaviour related to injury due to falls among Alberta seniors. The survey was conducted with adults over the age of 50. A post-campaign survey was conducted in January 2009 to assess the impact of the *Finding Balance* campaign on these measures. The following are some highlights of the survey findings.

- Following the completion of the *Finding Balance* communications campaign, one in five (20%) Alberta seniors indicated that they had seen or heard some communications about preventing seniors from falling. Women were particularly likely to recall communications about preventing seniors from falling (25% versus 15% of men).
- One in ten (11%) Alberta seniors recalled seeing or hearing something about the *Finding Balance* communications campaign.
- The proportion of Alberta seniors who were personally concerned about having a bad fall rose significantly since July 2008 (55%, up from 46%). The proportion who were worried about a friend or family member having a bad fall also rose significantly (77%, up from 71%).

- In keeping with seniors' growing concern about having a bad fall, there was an increase in the proportion of Alberta seniors who were taking measures to prevent falls (64%, up from 54%).
- Alberta seniors who were aware of the *Finding Balance* campaign were more likely to say they were exercising in order to reduce the risk of falling than were Alberta seniors who were not aware of the campaign (44% versus 23% respectively).
- More than half (56%) of Alberta seniors believed seniors need to hear more about the risk of falls and measures they can take to prevent falling.

A copy of the complete final report is available [here](#).

Looking ahead

Plans are currently underway for the 2009 *Finding Balance* campaign. The same strategies will be employed again this year with a few changes based on experience gained in 2008.

We will shift the budget used to purchase radio advertising to increased television advertising since research indicated only 3% of our target audience who recalled the campaign did so via radio ads.

We will develop a larger network of spokespeople for the campaign and increase the training we provide them to ensure consistent messaging is given across the province.

We are also planning to develop a practitioner's section in the website with more resources to support local falls prevention activities and events offered in conjunction with the campaign such as a standard community PowerPoint presentation, a list of potential activities to promote Seniors' Falls Prevention Month, a falls risk self-assessment form, and more.

For additional information about the coming campaign, contact ACICR at 780-492-6019 or acicr@ualberta.ca.

Seniors' Week 2009 in Alberta

Seniors' Week 2009 was launched officially by Alberta Seniors and Community Supports on June 1st. Network members participated in activities across the province to promote seniors' week and falls prevention. Here are some of the activities.

Finding Balance Display

Finding Balance participated at the official launch of Seniors' Week at the Calgary Zoo. More than one thousand seniors attended the event where dignitaries and other special guests paid tribute to older Albertans. The *Finding Balance* display was prominent, located next to stage and featured the campaign posters and key messages. The *Finding Balance* representative distributed the campaign fliers and connected with many seniors who visited the display and picked up the resources. *Finding Balance* was also mentioned in the Minister's speech as a key program for seniors. Leftover fliers were given to the Ministry to distribute at the various Seniors Week events around the province.

The Bucket List

Alberta Senior's Week provided an opportunity to increase awareness of falls prevention with a display and a presentation at a local senior's centre, Seniors' Association of Greater Edmonton (SAGE). The display consisted of several tables in a large room focusing on different topics including *A Million Messages* display board and fact sheets, footwear, physical activity, nutrition, and lighting. Each of these tables had a mix of samples, handouts, and local resources. For example, the physical activity table had a bocce ball set, tennis rackets, a Frisbee, and other games. There were pictures of people dancing, bowling and swimming. Handouts included the

Physical Activity Guide for Older Adults and information on seniors' programs at the nearby YMCA.

"The Bucket List" was the theme for the formal presentation. Pieces of paper with different questions on them were put into a sand bucket, and people in the audience chose a piece of paper. The question allowed for discussion on various topics. An example question was, "Can your shoes do the 'Twist'?" which explained how to determine what makes a supportive shoe. Another question was, "What do Fidel Castro, George Burns, the Queen Mother, and Pope John Paul II have in common?" to point out how common falls can be. This was an engaging and fun format to address falls prevention. For more information, contact Rosalie Freund-Heritage, Falls Prevention Coordinator Alberta Health Services, Edmonton at: Rosalie.Freund@albertahealthservices.ca

Seniors – A Strength of Alberta

187 seniors from Lamont County converged on Ukraina Park in the town of Mundare to celebrate Senior's Week on June 1st. The theme for the 2009 Senior's Week Proclamation was Seniors – A Strength of Alberta. The Lamont County Senior's Collaboration committee together with the Lamont County Family Community Support Services and Alberta Health Services Health Promotion partnered to plan and deliver the day's activities which included information sharing, visiting, presentations and a barbeque luncheon.

Free transportation was provided with a local handivan service, but many seniors chose to drive themselves. A local band delivered excellent music, a nutritious meal was served and door prizes were given away thanks to the generous donations of many local businesses. A representative from Alberta Seniors and Community Supports was on hand to provide information and resources to seniors addressing changes to the drug plan. Alberta Health Services Health Promotion delivered a short presentation on the benefits of physical activity promoting the indoor walking programs and sources of educational resources in their respective towns. The seniors were asked to complete a short evaluation of the day and these were all positive. Noteworthy was the comment from one senior who said "It's always good and it's free". For more information contact Loretta Kroeker, Health Promotion Facilitator, Alberta Health Services, Vegreville at loretta.kroeker@albertahealthservices.ca

Safer Health Care Now! Falls Collaborative in Long Term Care

After a year and a half, the closing congress of the National Collaborative on the Prevention of Falls in Long-Term Care brought together the 31 improvement teams from across the country on May 25 and 26, 2009 in Edmonton.

The collaborative was a great success, 16 per cent of the teams achieved or exceeded a 40 per cent or higher reduction in falls, and 13 percent reached the target of a 40 per cent reduction in falls resulting in injury. These outcomes indicate that a significant reduction in falls can be achieved, and that it can be done in the long-term care sector. Significant changes in process measures (practice change) have emerged through this work and will continue through the efforts of committed staff throughout the country. Information sharing will continue through the Safer Healthcare Now! Canadian Patient Safety Institute's Community of Practice at www.saferhealthcarenow.ca which will be available to all users in July 2009.

For more information contact Alison Musseau, Best Practice Leader/Infection Control Practitioner Alberta Health Services, Edmonton Seniors Health, Integrated Facility Living at Alison.Musseau@albertahealthservices.ca

Educational Opportunities

Alberta Seniors' Falls Prevention Network Teleconference - *The Serious Side of Gravity: Preventing Falls and Fall-Related Injuries*

A recording of this teleconference has been posted for access by those who were not able to attend the teleconference last month. In this presentation, Dr. Fabio Feldman, PhD presented details about the Fraser Health Falls Prevention Mobile Clinic as well as research projects being conducted in the Injury Prevention and Mobility Lab at Simon Fraser University. You may access the recording at www.acicr.ualberta.ca under "Networking" found in the left column of the web page.

Canadian Falls Prevention Curriculum© - An E-Learning Course

Registration is now open for the October 02, 2009 to October 30, 2009 course. For more information and to register, go to: <http://www.uvcs.uvic.ca/health/>

Those working with older adults in long term care, acute care, and home care will acquire the knowledge and skills needed to apply an evidence-based approach to the prevention of falls and fall-related injuries. Learn how to design, implement, and evaluate a falls prevention program. Facilitated instruction leads you through a process to develop strategies and interventions; apply current programs; understand the reliability and validity of existing resources and tools for screening and assessing fall risk. This distance course begins with a workshop on how to access online components of this course, locate website resources, and communicate with the instructor and other students using online discussion tools to participate in interactive activities throughout this course.

Resources

Move 'n Mingle Falls Prevention Curriculum

This fall prevention curriculum was developed as part of the *Move 'n Mingle Fall Prevention Program* coordinated by the Healthy Aging Program of Alberta Health Services – Calgary Zone. For the past two years, it has been delivered by Seniors Resource Nurses along with the exercise classes as part of the *Move 'n Mingle* program in Calgary. Following this two year pilot stage, evaluations were completed, revisions have been made and it is now ready to be shared with others who want to promote falls prevention.

The Fall Prevention curriculum consists of an Introduction and eight modules:

Module 1: Fall Basics: Staying on Your Feet

Module 2: Pay Attention to Keep Safe

Module 3: Strength, Balance, and Hip Protectors

Module 4: Healthy Bones

Module 5: Footwear & Foot Care

Module 6: Home and Neighbourhood Safety

Module 7: Tools to Stay Safe and Independent

Module 8: Medications

You may access the Move 'n Mingle Falls Prevention Curriculum online free of charge at:

<http://www.calgaryhealthregion.ca/programs/aging/viewcurriculum.htm>

TAKE ACTION: Prevent a fall before it happens

This 20 page book provides a falls risk checklist where people can do a quick self check to see if they have any falls risks, followed by information on each risk factor directing the reader on steps they can take to stay safe and prevent a fall. There are also instructions for how to get up from a fall and how to help someone else get up from a fall. The font is large and the reading level is about grade five. It is geared for older adults living alone or receiving care.

This booklet was developed by the Falls Collaborative in Edmonton. The content was written with input from all health professionals involved in falls prevention and across health sectors. There was also input from community dwelling older adults.

Take Action is now available to order. The cost will be \$1.02 per book. There will be 100 books per bundle so orders will need to be in multiples of 100 and the minimum order will be 100 for a cost of \$102.00. There will be a shipping fee if orders are placed from outside Edmonton.

A pdf version is also now available on the former Capital Health website at www.capitalhealth.ca/seniors Click on the "Falls and the Older Adult" link and you'll find it under *Slips, Trips, and Falls*.

If you would like more information on how to order the book, contact Rosalie Freund-Heritage, Falls Prevention Coordinator, at 780-735-8812 or rosalie.freund@albertahealthservices.ca.

From the Literature

Exercise

Martial arts fall training to prevent hip fractures in the elderly.

Groen BE, Smulders E, de Kam D, Duysens J, Weerdesteyn V. *Osteoporosis Int* 2009; ePub(ePub): ePub.

Six male and nineteen female healthy seniors (60 to 81 years of age) completed a five-session martial arts fall training where they learned to change a sideways fall starting from a kneeling position into a rolling movement. After fall training, fall performance from a kneeling position was improved by a mean increase of 1.6 on a ten-point scale ($P < 0.001$). Hip impact force was reduced by a mean of 8% (0.20 N/N, $P = 0.016$). Fear of falling was reduced by 0.88 on a VAS scale ($P = 0.005$). Authors note that additional research is needed to determine whether older individuals will be able to apply martial arts fall techniques during unexpected falls from a standing position in daily life and whether this will result in less hip fractures.

Prevention - Community

What Works Better for Community-Dwelling Older People at Risk to Fall? A Meta-Analysis of Multifactorial Versus Physical Exercise-Alone Interventions.

Petridou ET, Manti EG, Ntinapogias AG, Negri E, Szczerbinska K. *J Aging Health* 2009; ePub(ePub): ePub.

A meta-analysis of 10 studies from 5 multifactorial interventions and 5 exercise-alone interventions meeting the prescribed inclusion criteria was conducted to compare and quantify the effectiveness of multifactorial versus exercise-alone interventions in reducing recurrent falls among community-dwelling older people. Authors found that among community-dwelling older people with a history of falls, exercise-alone interventions were significantly more effective (5 times more) in reducing recurrent falls compared to multifactorial interventions. Also, shorter

interventions lasting 6 weeks to 9 months, with smaller group sizes with younger ages (age 70 versus 80 years) related to better outcomes.

<http://jah.sagepub.com/cgi/rapidpdf/0898264309338298v1>

Utilization of the Seniors Falls Investigation Methodology to Identify System-Wide Causes of Falls in Community-Dwelling Seniors.

Zecevic AA, Salmoni AW, Lewko JH, Vandervoort AA, Speechley M. *Gerontologist* 2009; Jun 12. Falls investigations of 15 seniors were done using a Seniors Falls Investigation Methodology (SFIM) which is an adapted version of a method used to examine transportation accidents. Using a systems approach expands the focus from individual risk factors to identifying the causes of falls and the circumstances surrounding them. This study provided compelling evidence that causes of falling are systemic and develop over time. It demonstrated that the systems approach is needed to expand the focus from the individual to multilayered organizational and supervisory causes. The SFIM demonstrated capability to identify causes of falls that will allow better prevention and management programs, hence advancing seniors' safety. SFIM shows great potential for implementation in organized settings, such as hospitals and long-term care homes.

Prevention – Acute Care and Residential Care

Low stiffness floors can attenuate fall-related femoral impact forces by up to 50% without substantially impairing balance in older women.

Laing AC, Robinovitch SN. *Accid Anal Prev* 2009; 41(3): 642-50.

This study measured the force–deflection properties of four different types of energy-absorbing floors (SmartCell, SofTile, Firm Foam, and Soft Foam). Also, female study participants aged 65 to 90 years of age (n = 15) underwent comprehensive balance assessments on each floor type and provided subjective feedback. Results showed that SmartCell and SofTile floors reduced femoral neck impact force by up to 47%, while causing only minimal effects on postural stability. Floors with the least stiffness (Firm Foam and Soft Foam) had greater femoral neck impact force reduction; however, they caused substantial negative effects on postural sway, balance recovery ability, and balance confidence, and were rated as impractical. Authors indicated that clinical trials are now needed to test the flooring in high risk settings including hospitals, rehabilitation centres, and residential housing settings. Authors also indicated the need for biomechanical test standards to guide market approval of this technology.

Prevention – Home Care

An interprofessional team approach to fall prevention for older home care clients 'at risk' of falling: health care providers share their experiences

Baxter P, Markle-Reid M. *International Journal of Integrated Care*, 28 May 2009

This qualitative study describes the experiences of five different health care professionals as they participated in an interprofessional team approach to care for the frail older adult living at home and at risk of falling. Authors found that interprofessional collaboration can be a positive experience for health care providers caring for those with chronic conditions when a positive attitude, a common goal, mutual respect, clarity of roles, clear communication and effective collaboration are combined. Authors also found collaboration required support at the individual, team and organizational level in order to be successful.

<http://infoltc.blogspot.com/2009/06/fall-prevention-for-older-home-care.html>

Risk Assessment Tools

Comparison of a fall risk assessment tool with nurses' judgement alone: a cluster-randomised controlled trial.

Meyer G, Köpke S, Haastert B, Muhlhauser I. *Age Ageing* 2009; ePub(ePub): ePub.

Nursing homes (n = 58) were recruited to compare the number of fallers, falls, fall-related injuries, medical attention, and newly administered fall preventive measures between an intervention group which used a standard fall risk assessment tool (Downton Index) with nurses' clinical judgement to a control group which used nurses' clinical judgement alone. Both groups were provided with a 60-90 minute presentation which covered frequency of falls and fall-related injuries in older people, proven fall risk factors, fall-related morbidity and best evidence strategies to prevent falls and fractures. The intervention group was trained to use the assessment tool. The monthly administration of the fall risk assessment tool in the intervention group did not result in a reduction of fallers and fall-related consequences. Authors conclude that "the use of a fall risk assessment tool by nurses should be avoided since it has no clinical consequences other than a waste of scarce nursing resources."

Medication

Medication interventions for fall prevention in the older adult.

Cooper JW, Burfield AH. J Am Pharm Assoc (2003) 2009; 49(3): e70-84.

Using recently published articles from Medline and resources from the Agency for Healthcare Research and Quality website, this article reviews the effects of medications on falls and offers suggestions to minimize fall risk by assessing all medications to reduce fall risk. The article features a basic patient assessment method and tool for pharmacists along with case studies and multiple choice questions to test and apply knowledge presented in the article.

<http://japha.metapress.com/media/64tkvqxyup08meuhugdh/contributions/f/4/u/6/f4u60r3613550737.pdf>

Risk Factors

Urinary incontinence is associated with an increase in falls: a systematic review. Chiarelli PE, Mackenzie LA, Osmotherly PG. Aust J Physiother 2009; 55(2): 89-95.

Authors conducted a systematic review and meta-analysis of observational studies investigating falls and urinary incontinence among community-dwelling older people. The results showed that falls are significantly associated with the symptoms of overactive bladder such as urgency and nocturia, but not with stress incontinence. Authors stress that screening and effective interventions for management of symptoms related to an overactive bladder should be included in falls prevention programs.

Fear of moving outdoors and development of outdoor walking difficulty in older people.

Rantakokko M, Mänty M, Iwarsson S, Tormakangas T, Leinonen R, Heikkinen E, Rantanen T. J Am Geriatr Soc 2009; 57(4): 634-40.

Community-living seniors aged 75 to 81 (n = 727) were interviewed at baseline to measure their fear of moving outdoors and identify individual and environmental correlates. Some participants (n = 314) took part in a 3.5-year follow-up to assess perceived difficulties in walking 0.5 km and 2 km. At baseline, 65% of the women and 29% of the men reported fear of moving outdoors. Poor socioeconomic status; musculoskeletal diseases; slow walking speed; and the presence of poor street conditions, hills in the nearby environment, and noisy traffic correlated with fear of moving outdoors. With the follow-up participants, there was an increase in self-reported difficulties in walking 0.5 km and 2 km. Authors conclude that knowledge about individual and environmental factors underlying fear of moving outdoors and finding ways to alleviate fear of moving outdoors are important for community planning and prevention of disability.

The influence of fear of falling on gait and balance in older people.

Reelick MF, van Iersel MB, Kessels RP, Rikkert MG. Age Ageing 2009; ePub(ePub): ePub.

This study examined the association between fear of falling (FoF) and gait and balance in older people during walking with and without dual-tasking (arithmetic task and verbal fluency) in 100

participants aged ≥ 75 years using the Activities-specific Balance Confidence scale, an electronic walkway (Gaitrite(R)) and a trunk accelerometer (SwayStar(R)). Older people with FoF showed a slower gait velocity than those without; however, FoF did not influence other gait or balance parameters, nor the ability to perform dual tasks. Authors conclude that older people with low levels of FoF use an adaptation mechanism optimizing balance, rather than showing decreased balance control.

Socio-demographic, health-related and psychosocial correlates of fear of falling and avoidance of activity in community-living older persons who avoid activity due to fear of falling.

Kempen GI, van Haastregt JC, McKee KJ, Delbaere K, Zijlstra GA. BMC Public Health 2009; 9(1): 170.

Community-living persons aged 70 years or older (n = 540) reporting at least low levels of fear of falling (FoF) and of avoidance of activity due to FoF were included in this cross-sectional study to identify factors that differentiate between mild and severe levels of FoF and of avoidance behavior. Study results showed that female sex, limitations in activity of daily living and one or more falls in the previous six months correlate independently with severe FoF. Higher age and limitations in activity of daily living correlate independently with severe avoidance of activity. Psychosocial variables (low general self-efficacy, low mastery, loneliness, feelings of anxiety and symptoms of depression) did not contribute independently to the difference between mild and severe FoF and to the difference between mild and severe avoidance of activity due. Authors conclude that these findings may help identify older persons at risk and also inform the development of interventions and programs to reduce FoF and avoidance of activity in old age.
<http://www.biomedcentral.com/1471-2458/9/170>

Miscellaneous

The provision of walking aids to the overtly aggressive older adult who is a high risk of falls: a careful balancing act.

Stubbs B. Int Psychogeriatr 2009; ePub(ePub): ePub.

The author of this letter discusses the challenge of reducing the risk of falls in high-risk, older adult psychiatric inpatients with respect to the prescription of walking aids. Having aggressive older adult patients use walking aids may pose a risk to health care workers and other patients as they may use the device as a weapon of attack. The author recommends that the physiotherapist work with the clinical team to come up with the safest option.

ProFaNE (Prevention of Falls Network Europe) Community Online

June, 2009 Newsletter

This month's newsletter features the UK's Department of Health's Falls and Fractures Commissioning Toolkit, the Norwegian Internet Home Exercise Programme to Reduce Falls, and the World Congress on Active Aging.

http://www.profane.eu.org/newsletters/pdf/ProFaNE_NL_Volume02_Issue03.pdf