Prevention (General)

Effectiveness of Intervention Programs in Preventing Falls: A Systematic Review of Recent 10 Years and Meta-Analysis.
Authors examined the reported effectiveness of fall-prevention programs for older adults by reviewing randomized controlled trials from 2000 to 2009 that had at least 5 months follow-up (n = 17). Primary outcome measures were number of falls and fall rate. Based on meta-sensitivity analyses using 13 studies, authors conclude that interventions to prevent falls in older adults were modestly effective in multifactorial interventions with a 10% reduction in fall rates, 9% in community settings, and 12% on Model I intervention types (initial intervention with subsequent follow up verses ongoing intervention throughout a study).

Preventing falls among seniors: the way forward.
There is a growing body of research about the etiology and prevention of falls. However, the persistently high incidence of falls among seniors calls for renewed efforts to develop, test, implement, and scale-up fall prevention strategies for older adults. This paper considers advances in the field and describes three priority areas for generating research and translating knowledge on fall prevention. Clinical practice guidelines, systems change approaches and environmental risk factors are discussed. Recommendations include transcending our health sector view of the fall prevention problem, supporting comparative research on system-oriented approaches to fall prevention, and examining ways to sustain and scale-up fall prevention efforts.
http://www.sciencedirect.com/science/journal/00224375/42/6

Knowledge translation for falls prevention: The view from Canada.
Because most falls are multifactorial, falls prevention interventions can involve several approaches delivered by numerous health care disciplines in multiple settings for older adults at various risk levels. These complexities may make knowledge translation (KT) more challenging than with simpler interventions for specific diseases. Contradictory research can hamper KT. For example, systematic reviews evaluating multifactorial programs have reported varying degrees of effect. Upon further analysis, an explanation of contradictory findings may be that programs consisting of risk factor assessment and referral are associated with a smaller effect than programs consisting of risk factor assessment coupled with active intervention. The U.S. Connecticut Collaboration for Fall Prevention and the Moving for Better Balance projects both showed that it is possible to roll out evidence-based falls prevention in clinicians over a large geographic area. In Canada, while there are numerous widely available falls prevention resources on the internet, there is an uneven presence of Clinical Practice Guidelines (CPGs) on the websites of the key health provider communities, and few published evaluations of care gaps in falls prevention and management. Those that have been conducted reveal very low uptake of CPGs, and many missed opportunities for secondary prevention in those at highest risk, even in teaching hospital emergency departments. There are very few formal
evaluations of falls prevention KT projects in the worldwide peer-reviewed literature, and none could be identified as having been conducted in Canadian health care settings.

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Evaluation of an evidence-based education program for health professionals: The Canadian Falls Prevention Curriculum© (CFPC)
Introduction: A staged, mixed methods approach was applied to the development and evaluation of an evidence-based education program for health care professionals and community leaders on how to design, implement and evaluate a fall prevention program. Stages included pre-development, development, pilot testing and impact on practice. The goal of the evaluation was to determine if the CFPC met the needs of the target audience and had an impact on learning and practice. Methods: Methods included a needs assessment, systematic reviews, pre/post-tests of learning, follow-up surveys and interviews, and descriptive reports of stakeholder involvement. The needs assessment and systematic review of existing programs indicated that there was a demand for a comprehensive, evidence-based curriculum on fall prevention and that no similar curricula existed. Pre/post-test findings showed significant increases in learning and follow-up surveys showed a positive impact on practice. Impact on industry: Evidence shows that the most effective fall prevention efforts are those that address the multifactorial nature of fall risk, with proven interventions provided by trained clinicians. The Canadian Falls Prevention Curriculum provides evidence-based training for clinicians and community leaders using a public health approach to fall prevention that includes instruction on how to define the problem, assess the risk, examine best practices, implement the program, and conduct evaluation of the program’s effectiveness.

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Do exercise interventions designed to prevent falls affect participation in life roles?
A systematic review and meta-analysis.
The World Health Organization describes individuals' functioning at a societal level as 'participation'. Participation restriction includes problems experienced in social interaction, employment, using transportation and community, social and civic life. Participation restriction has been identified in older adults particularly in those at risk of falling, with a history of falls, or a fear of falling. Authors included randomised controlled trials of exercise interventions that aimed to reduce falls in older people (60+) in community, aged care facilities or hospital settings and that measured participation at two time-points (n = 15). The pooled estimate of the effect of interventions indicated a small improvement in participation. Meta-regression showed multifactorial interventions with an exercise component had a larger effect than exercise intervention alone, but the difference was not statistically significant. Authors conclude that interventions including exercise may improve participation in life roles in older people. The International Classification of Functioning, Disability and Health may be a useful framework for understanding the broader impact of falls prevention interventions.
Older Adult Fall Prevention: Perceptions, Beliefs, and Behaviors.
Authors state that fall prevention needs to be a key public health priority for older adults due to the magnitude of the problem and because there are a number of effective interventions available, including risk factor assessment and management, exercise programs, and environmental modification. Fall interventions need to be presented to older adults as life enhancing and as a way to remain independent. The goal should be to select programs that are effective and acceptable to facilitate long-term adherence.
http://ajl.sagepub.com/cgi/content/refs/4/1/16

Older people's experience of falls: understanding, interpretation and autonomy -
A convenience sample of 27 older people (mean age 84 years; range 65-98) participated in semi-structured taped interviews, then follow-up interviews were undertaken to detect changes over time. People who reflected on their fall and sought to understand why and how it occurred developed strategies to prevent future falls, face their fear, maintain control and choice and continue with activities of daily living. Those who did not reflect on their fall and did not know why it occurred restricted their activities and environments and remained in fear of falling. Authors conclude that assisting people to reflect on their falls and to understand why they happened could help with preventing future falls, allay fear, boost confidence, and aid rehabilitation relating to their activities of daily living.

In this editorial, Tinetti says “the recent spate of negative trials has cast a pall on the multifactorial fall-prevention approach” referring to recent meta-analyses of multifactorial interventions to prevent falls and injuries in older people in community and emergency care settings. Analysis shows that direct intervention seems to work much better than referral to usual care due to limited client follow-through and questionable referral expertise. Research results points to two options. The first is to return to the traditional single-intervention approach which may make it easier to show short-term effects on a single outcome. However, it is unlikely to advance the ability to maximize health and functioning in persons with multiple risk factors and competing outcomes. The second is to actively disseminate successful strategies, identifying and reducing barriers to incorporating these strategies into practice. Providers and community program staff should be trained and shown how to implement fall risk assessment and management so that when older adults are referred, providers are ready, willing, and able to act.