Champlain Falls Prevention Strategy

Senior Friendly Forum
March 26, 2015

Presenter: Jane Adams
Champlain Falls Prevention Strategy
Regional Geriatric Program of Eastern Ontario
Champlain Local Integration Network
Why are falls important?

And why is Falls Prevention important?

What are we doing as a region?
Mrs J: Before a Regional Falls Prevention Strategy

- 81 yr-old widow
- Few medical issues;
- Seen in Emergency Department for fractured wrist after fall.
- Feels fearful and is becoming more isolated
- Worries about being a burden; contemplating retirement home – but worries about the cost.
Why are falls important?

National Falls Statistics

1) 1 in 3 seniors fall annually
   • *Half of seniors who fall, do so repeatedly*

2) 1 in 4 falls result in injuries
   • *Lacerations, sprains, head injuries, death.*
     • Every 10 minutes in Ontario, at least one older adult visits an ED due to a fall
     • Every 30 minutes in Ontario, at least one older adult is admitted to hospital due to a fall

Prevalence of falls

- Falls cause more than 90 per cent of all hip fractures in the elderly and 20 per cent of seniors who suffer a hip fracture die within a year.
- A single hip fracture costs $24,600 to $28,000 in direct health costs to the system. Almost half of people who sustain a hip fracture never recover fully.

40% of Long-term Care admissions are due to Falls
Why we took a systems approach.

The Good News!

- Programs and strategies targeted towards seniors have demonstrated a reduction of falls amongst seniors by 20% and more (SMARTRISK, 2006).

- 20% reduction in falls among seniors aged 55 years and over could result in 1,000 fewer permanent disabilities and 4,000 fewer hospital stays. The direct health care costs avoided would amount to almost $121 million annually (SMARTRISK, 2006).

- With a mean length of stay for a falls-related injury being approximately 15 days, 4,000 hospital admissions can equate to a significant number of hospitals days avoided (Scott, Wagar & Elliott, 2010).

  \[15 \times 4000 = 60,000\] days
Reducing Risk:

• Matching interventions against risk factors can reduce the patient's risk of falling. This occurs when the "root cause" of the risk factor's presence is eliminated. (Hendrich et al., 2004).

• Coordinated, community-wide, multi-strategy initiatives to prevent falls have been shown to significantly reduce falls-related injuries in seniors by between 6% and 33% (McClure et al., 2005).
Strategic Approach to Falls Prevention in Champlain

Provincial Strategy 2011 → The Tool Kit

Champlain Phase 1: Foundations
(Dec 2012-March 2013)

- Collaboration with Primary Care, Champlain LHIN, 4 PH Units & RGPEO and community stakeholders
- Governance structure
- Survey of community agencies to determine appropriate interventions
- Performance measurement
Phase 2 – Taking Action
June 2013-March 2014

Specific deliverables as part of funding approval for 2013-2014:

• **Develop and test a Falls Prevention Algorithm and complementary tools** (Develop and refine tools that are useful for Primary and Community Care (based on survey results))

• **Develop a Strategic Framework**
  Strategic Framework to support the reduction of falls across the region: 6 foundational pillars
Deliverable 1: Develop and Test Falls Algorithm and Tools

Primary Objective: To support the appropriate assessment, intervention and referral of older adults at risk of falls, within primary care

Steps

1) Standardize and link tools to support primary care:
   - Falls Prevention Algorithm for primary care (from AGS/BGS)
     Modifications and additions made to original AGS/BGS to flesh out assessment component and add use of standardized community assessment tool (GAOT)
     Prioritized: Most modifiable first
     Make it practical/useful for office/primary care use
   - Staying Independent Checklist/ <Préserver votre autonomie>
     (for use in the community)
   - Web links developed with ChamplainHealthline, PHUs and RGPEO websites for more in-depth clinical information and resources for referral and health promotion

2) Evaluate and report
Tested and evaluated in Primary Care

Piloted in 4 Primary care sites (Nov-Mar 2013-4):
- CHC X2 (Eastern Counties and Ottawa)
- FHT, (French, urban)
- Rural sole practitioner
and an information and feedback session held in Renfrew

Evaluation based on:
- Relevance and usefulness
- Knowledge increase
- Change in practice
What we learned:

• 108 patients screened and 32% identified as needing further assessment

Highlights:
- Majority agreed that *algorithm* was easy to follow, to understand and that they plan to use it with their patients
- Majority of participants agreed that the *checklist* was easy to read and that they plan to use it with patients.

• ½ of the participants had viewed the [www.rgpeo.com](http://www.rgpeo.com) or [champlainhealthline.ca](http://champlainhealthline.ca) websites and on average 83% plan to use them in the future.

• **All participants agreed that the skills required to complete falls assessments are skills that are appropriate to primary care – but they may not yet have the efficiencies to put them into practice**

• **Barriers identified were largely on the need for integration into an EMR and into office procedures.**

Recommendations:

• **Review and refine the algorithm and support package, expand into the community sector, integrate and link with work being done in Primary care, explore development of EMR.**
Deliverable #2: Develop Strategic Framework

Champlain Falls Prevention Strategy for Seniors

Pillar 1: Public Awareness
Pillar 2: Detection, Diagnosis, Intervention
Pillar 3: Best Practices for Health Care Providers
Pillar 4: System Navigation
Pillar 5: Performance Management
Pillar 6: Advocacy

Falls Prevention Services along the Continuum of Care

Well Seniors
Seniors at Moderate to High Risk of Falls

Available across sectors

Community & Public Health → Primary Care → CCAC → Hospital → Tertiary Care → Long-Term Care Homes
Consistent approach and messaging across Primary Care, all four Public Health Units and community services

- Four Public Health Units developed the Regional Falls Prevention messaging – part of the algorithm and incorporated into a PSW training module

- Coordinate dissemination of Staying Independent Checklist.
Evidence-based Algorithm for detection, diagnosis, and intervention refined and implemented in a variety of primary care and community settings in the region.

Algorithm ready to be incorporated into electronic medical record and other adaptations.

- **Processes and supports established for primary care and community support service settings**
- **Larger scale rollout of the algorithm across community, primary care and other health care settings**
Identified education and lesson plans for health care providers

Ensured all initiatives are evidence-based and standardized across sectors and region

- **Determined need for Falls Prevention training modules in different modalities**

- **Education module for Personal Support Workers across Champlain to support Falls Prevention in daily practice, including use of Staying Independent Checklist**

- **Develop on-line accredited Continuing Medical Education module for physicians and health care professionals**
Developed a referral framework for referring to regional Falls Prevention services

- More seniors will find, have access to and attend Falls Prevention, exercise classes and services.
Developed tools, processes and structures to monitor project performance

- Governance structures in place, including multi-sectoral committee
- Developed provincial and local Falls Prevention metrics and data collection processes.
Present case to key stakeholders to advocate for standardized falls prevention curricula and appropriate funding mechanisms

- Increased awareness and knowledge of need for standardized curricula
- Increased awareness and knowledge of need for appropriate funding mechanisms.
Phase 3 – Implementation and Integration

2014-2015 Initiatives

- **Algorithm and checklist revised and refined**
  - Presented to the Primary Care Network;
  - EMR development underway

- **Best Practices and Education**
  - Education plan for Comm Support Agencies: Module developed for PSWs
  - Primary Care/Community Initiative (Barry’s Bay)
  - Education and protocol in selected (5) retirement homes and EMS programs
  - Development of CME online, accredited falls prevention module

- **RGP Assessor in primary care** (Ottawa) providing clinical assessments in primary care in conjunction with memory clinics where fall risk is identified

- **Primary Care Outreach** in collaboration with Community Health Centers

- **Roll out by LHIN/Public Health**:
  - 1) primary care - Feb 2015
  - 2) community agencies - April
  - 3) seniors and the community at large - June

- **Navigation** tool being developed by CCAC, Public Health and CHCs
Why community and primary care?

Dr. Laurence Rubenstein (the author of the Staying Independent Checklist) wrote: “because older adults often do not complain to physicians about these problems, they may go undetected and untreated until after preventable injury and disabilities have occurred.” Detection and Management of Falls and Instability in Vulnerable Elders by Community Physicians; JAGS 2004, 52: 1527-1531

and

“clinicians should inquire regularly about falls and instability and use careful and thorough diagnostic approaches to identify the most likely causes, contributing factors, and associated comorbidities many of which will respond to intervention.”

All adults 65+ should be screened for falls on an annual basis in community programs or with a Primary Care Practitioner. Consider use of “Staying Independent Checklist”.

Screen for fall(s) or near falls:
- Two or more falls or near falls in past 6 months
- Fall with injury
- Difficulty with walking or balance
- Score of 4 or more on Staying Independent Checklist

If yes to any one of the screening questions?
- Obtain fall history
- Evaluate gait and use of aids if difficulty or change in walking

Is recurrence of fall likely?

If no:
- Single fall in past 6 months or several near falls?
- Evaluate Gait: Abnormalities noted? Yes/No

Primary Care Assessment/Intervention/Referral
1. Obtain relevant medical history, history of falls, physical examination, including cognitive and functional assessment to identify root cause.
2. Determine multifactorial fall risk by assessing: (see assessment checklist on reverse)
   a. Postural hypotension
   b. Medications: minimize meds contributing to falls and consider pharmacy consult; optimize pain management
   c. Gait, balance and mobility and muscle strength (ie TUG or other tests). Evaluate pain-related mobility: consider referral for appropriate mobility aids
   d. Visual acuity
   e. Other neurological impairments and refer appropriately
   f. Heart rate and rhythm
   g. Bone health; assess calcium intake and fracture risk; nutritional review. Supplement vitamin D and consider calcium; if ongoing fall risk - consider bone density and treat if OP or history of fragility fractures then treat
   h. Feet and footwear;
   i. Environmental hazards: consider home hazard checklist at stopfalls.ca
   j. Depression and Behavioural Risk Factors ie ETOH.

Health Promotion Key Messages:
- Encourage regular periodic health visit; annual medication, alcohol review and eye exam
- Complete a home safety checklist annually
- 150 minutes of physical activity per week – consider Champlain Exercise Programs: Champlainhealthline.ca
- Muscle and bone strengthening exercises to improve balance
- Eat 3 or more servings of calcium rich foods daily
- Take a daily vitamin D supplement

If appropriate refer to specialized programs and services (see referral and resource list - includes referral forms) stopfalls.ca
### Primary Care Multifactorial Risk Assessment for Falls

**CHECK ALL THAT APPLY**

**History of Falls:**
- Complete history of frequency and circumstances of the fall(s)
- Acute or fluctuating medical conditions (e.g. syncope, seizures, hypo/hyperglycemia, symptomatic postural hypotension, etc)
- Chronic medical (e.g. osteoporosis, urinary incontinence, cardiovascular disease, etc)
- If memory or cognition issues observed - consider MMSE results: MoCA results:

**Medications**
- Prescription, over the counter, illicit, Polypharmacy (6+)
- Psychoactive medications (including sedative hypnotics, anxiolytics, antidepressants)

**Postural Hypotension:**
- Obtain blood pressure readings: Pulse, Standing, Lying, Symptomatic
- Dizziness without postural hypotension

**Gait, Balance, and Mobility Problems**
- TUG results: > 14 sec (valid if no cognitive impairment)
- Unable to retrieve an item off the floor
- Reduced muscle strength/deconditioned
- Decreased lower extremity strength
- Unable to rise independently from a chair without the use of arm rests or assistance

**Impaired Vision**
- As reported by client and medical history
- Cataracts requiring surgery
- Bifocals or progressives
- Exam > 1 year ago

**Other Neurological Impairments**
- Based on info gained from medical history, cognitive and physical evaluation
- Romberg Sign

**Heart Rate and Rhythm Problems**
- Pulse taken during Blood Pressure reading

**At higher risk for low BMD, future fractures and falls based on:**
- Prior fractures
- Parental hip fractures
- Arthritis
- Current smoking
- Glucocorticoid use
- High alcohol intake
- Prednisone and steroid puffer

**Foot**
- Foot wear problems: examine feet and foot wear to determine need for interventions

**Environmental hazards:**
- Review home situation and determine need for in home assessment

**Assess for Depression and/or behaviour risks:**
- Mood
- Sleep changes
- Decreased interest
- Psychomotor changes
- Psychosomatic complaints
- Suicidal thoughts
- Appetite or weight loss

**Client's perceived functional ability / Fear related to falling:**
- Contributing to deconditioning or curtailment of physical activities

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**Evaluation of Gait, Balance and Strength**

**Recommended:** TIMED UP and GO (TUG):
- Time the individual as he rises from a firm chair (can push off from arm rests) walks 3 metres at normal pace (with walking aid if normally used), turns around and returns to chair.
- >14 seconds correlates with high risk for falls
- >30 seconds correlates with more independence in ADLs, query need for assistive devices
- <20 secs correlates with independence with ADLs

**Chair Stand Test:**
- Graphics and descriptions of both tests are available at stopfalls.ca

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*Jan 2014: Developed by Geriatric Outreach Assessment Team, Regional Geriatric Program of Eastern Ontario: Based on 2010 AGS/BGS Clinical Practice Guideline: Prevention of Falls In Older Persons*
Standardized self-assessment tool – in French and English

Check Your Risk for Falling

Please circle “Yes” or “No” for each statement below.

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<th>Why it matters</th>
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<td>If you scored 4 points or more, you may be at risk for falling.</td>
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<td>Discuss this brochure with your doctor or health care practitioner.</td>
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This checklist was developed by the Greater Los Angeles VA Geriatric Research Education Clinical Center and affiliates and is a validated fall risk self-assessment tool (Rubenstein et al. J Safety Res; vol. 42, n°6, 2011, p. 493-499). Adapted with permission of the authors.

NOTES

Falls Prevention

The Champlain Falls Prevention Strategy aims to reduce the frequency, severity and impact of preventable falls among older adults living in the region. The strategy was developed by the Regional Falls Steering Committee, in collaboration with hospitals, primary care and community support services.

The following resources are intended to help physicians assess the risk of falls, while providing an updated list of physiotherapy, exercise and community programs related to falls prevention.

Specialized Geriatric Services
Geriatric services provide health care specifically related to aging, in particular the frail elderly who have multiple health problems or who have difficulty managing on their own.

- When to Refer to Geriatrics
- View list of specialized geriatric services
- Link to RGPEO website Falls Prevention page (for geriatric resources)

Falls Prevention Programs
These are evidence-based programs with a falls prevention focus, including assessments and/or interventions that may be accompanied by physiotherapy services and educational classes on falls prevention.
Falls Prevention Program

The Regional Geriatric Program of Eastern Ontario, in partnership with the Champlain Local Health Integration Network and a broad group of community partners have lead the development of a Champlain Falls Prevention Strategy. This strategy builds on the extensive work developed by the Ministry of Health and Long Term Care which places a strong emphasis on the prevention of falls in the Ontario Integrated Falls Prevention Strategy and whose objective is to: "improve the quality of life for Ontario seniors aged 65 years and over and lessen the burden of falls on the health care system by reducing the number and impact of falls."

The Champlain Falls Prevention Strategy includes the development of assessment and intervention tools and resources to support primary care practitioners in identifying the root causes of falls amongst seniors and to put into place the appropriate interventions to reduce the number of falls and the injuries related to falls. The following pages provide a framework, tools, and resources to support a transfer of knowledge into everyday clinical practice and the key factors involved in falls prevention.

1. Fall Risk Assessment and Intervention resources
2. Community Resources
3. Other Resources
Fall Risk Assessment and Intervention

1. Obtain relevant medical history, history of falls, physical examination, including cognitive and functional assessment to identify root cause.

2. Determine multifactorial falls risk by assessing.
   a. Medications
   b. Postural hypotension
   c. Gait, balance and mobility and muscle strength (ie TUG or Chair Stand Test). Evaluate pain-related mobility
   d. Visual acuity
   e. Other neurological impairments
   f. Heart rate and rhythm
   g. Bone health: assess calcium intake and fracture risk; nutritional assessment
   h. Feet and footwear
   i. Environmental hazards
   j. Depression
How to do the Chair Stand Test

Purpose: To assess leg strength and endurance.

Equipment:
- A chair with a straight back without arm rests (seat 17" high)
- A stopwatch

Instructions to the patient:
1. Sit in the middle of the chair.
2. Place your hands on the opposite shoulder crossed at the wrists.
3. Keep your feet flat on the floor.
4. Keep your back straight.
5. On "Go", rise to a full standing position and then sit back down again.
6. Repeat this for 30 seconds.

On "Go", begin timing.

Count the number of times the patient comes to a full standing position in 30 seconds.

If the patient is over halfway to a standing position when 30 seconds have elapsed, count it as a stand.

Record the number of times the patient stands in 30 seconds.

Number: __________ Rating (See chart): __________

A below average rating indicates a high risk for falls.

Notes:
Benefits of a Regional Strategy

- Long-term planning & strategic approach
- Existing structures used to affect system changes
- Enhanced referrals & smoother navigation for client
- Improved communication & understanding across sectors
- Excellent multi-sectorial working & relationship building, with in-kind investment
- Increased knowledge & capacity for home care workers
Anticipated Outcomes of a Regional Strategy

- 10% decrease in rate of falls-related Emergency Department visits
- Decrease in rate of repeat falls-related Emergency Department visits
- Decrease in rate of falls-related admissions to hospital
- Decrease in rate of falls-related admissions for hip fractures
Challenges and Opportunities

- **Growing number of seniors:**
  - In 2015 there will be 203,703 seniors over 65 in Champlain
  - By 2020 there will be 243,939
  - In 2025 there will be 292,798

- **With awareness comes demand**

- **Seniors with complex needs require timely access to resources**

- **Integration with other senior strategies.**
Mrs Smith: In an integrated, prevention-oriented world

• 81 yr-old widow
• Few medical issues
• Occasionally uses a cane; has some lightheadedness, but not discussed with her family physician. Thought she was well “for her age.”
• Attended Flu Clinic and completed Staying Independent Checklist
• Checklist reviewed by team at doctor’s office as per the algorithm.

Outcome:
• Ongoing review, evaluation and intervention of Falls Risk
• Improved strength and balance leading to improved confidence and independence
• Improved social contact and well-being
Over the next five years we plan to:

• Increase Falls Prevention awareness and engagement to seniors and front line workers

• Work across the sectors to identify and improve the best practice falls prevention programming capacity, - need to ensure services including specialist services, to meet the needs of seniors

• Continue to ensure that health care providers across all sectors are using current evidence informed practices in Falls Prevention service delivery

• Gain commitment across all regional agencies to align themselves with the strategy and identify processes to ensure smooth transitions for seniors and caregivers across the continuum.

• Ensure our governance and evaluation structures are current, relevant and valid

• Ensure synergy with other regional senior strategies

• Link and partner with community agencies and programs such as Alzheimer’s Society, Osteoporosis;

• Link and partner with Long Term Care
THANK YOU!
Follow Up

Jane Adams and Chris Bidmead (Project leads)

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Or Phone
613 798 5555 ext 18564