



Champlain Falls Prevention Strategy

Senior Friendly Forum
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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

Ontario Injury Prevention Statistics, 2007-2008; Smartrisk, 2009 Public Health Canada 2014



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).

$$15 \times 4000 = 60,000 \text{ days}$$




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 or 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.**



Pillar 1
**Public
Awareness**

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.*



Pillar 2
**Detection,
Diagnosis,
Intervention**

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*



Pillar 3
Best
Practices
for Health
Care
Providers

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*



**Pillar 4
System
Navigation**

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.*



Pillar 5
Performance
Management

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.*



Pillar 6 Advocacy

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 and 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

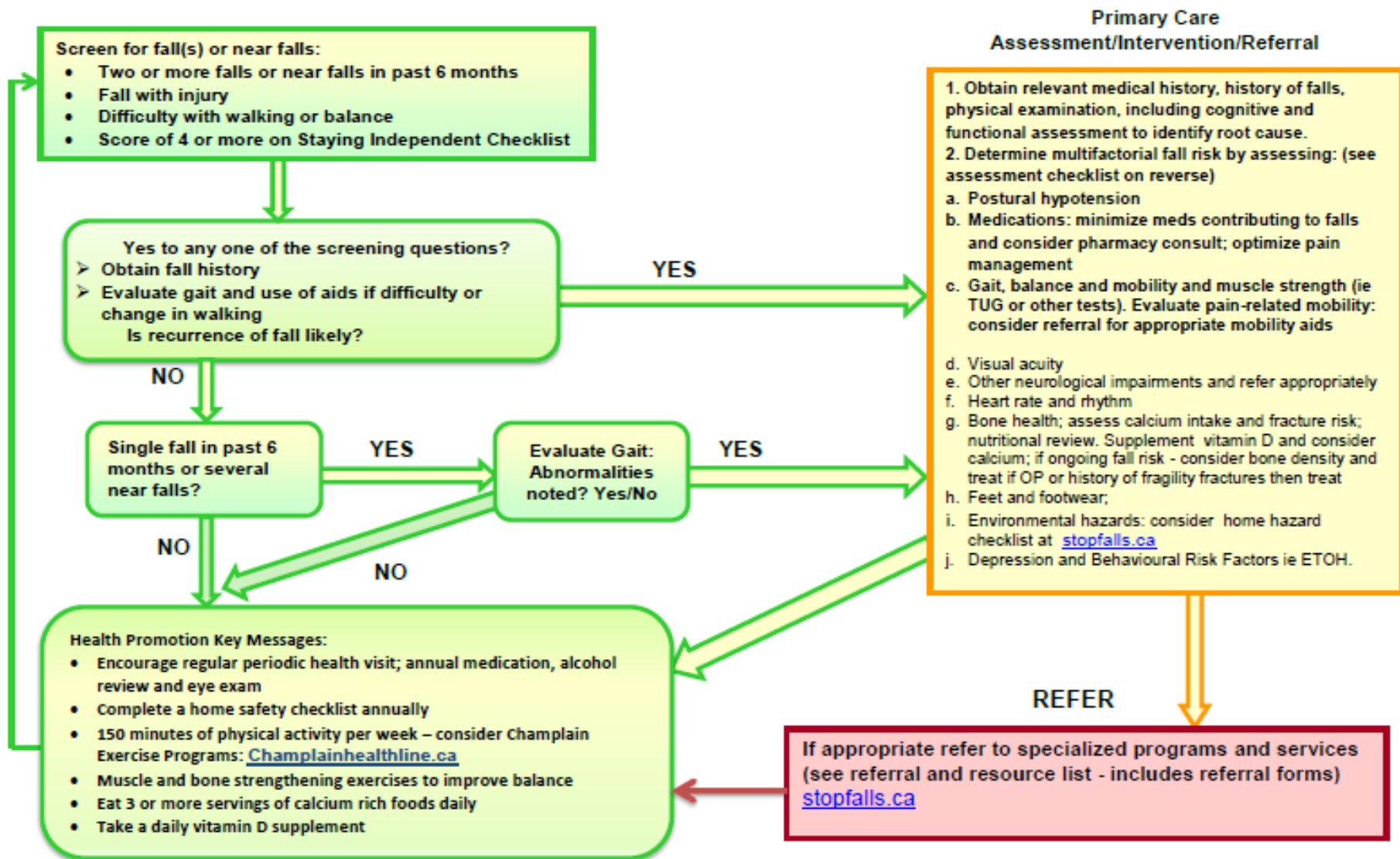
and

“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.”

American Geriatrics Society, British Society and American Academy of Orthopedic Surgeons panel on falls prevention. Guideline for the prevention of falls in older persons. J Am Geriatr Soc 2001, 49: 664-772

- = Community Health Agencies
- = Primary Care Providers
- = Specialized or Tertiary Care Providers

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" *





Primary Care Multifactorial Risk Assessment for Falls

For Comprehensive Medical Assessment
See RGPEO Website: stopfalls.ca

CHECK ALL THAT APPLY

<p>1. History of Falls: <input type="checkbox"/> Complete history of frequency and circumstances of the fall(s)</p>	<p>Evaluation of Gait, Balance and Strength</p>
<p><input type="checkbox"/> Acute or fluctuating medical conditions (e.g. syncope, seizures, hypo/hyperglycemia, symptomatic postural hypotension, etc)</p>	<p>Recommended: TIMED UP and GO (TUG):</p>
<p><input type="checkbox"/> Chronic medical (e.g. osteoporosis, urinary incontinence, cardiovascular disease, etc)</p>	<p>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.</p>
<p><input type="checkbox"/> If memory or cognition issues observed - consider MMSE – results: _____ MoCA results: _____</p>	
<p>2.A. Medications <input type="checkbox"/> Prescription, over the counter, illicit, <input type="checkbox"/> Polypharmacy (6+) <input type="checkbox"/> Alcohol intake <input type="checkbox"/> Psychoactive medications (including sedative hypnotics, anxiolytics, antidepressants)</p>	<p>>14 seconds correlates with high risk for falls >30 seconds correlates with more dependence in ADLs, query need for assistive devices <20 secs correlates with independence with ADLs</p>
<p>B. Postural Hypotension: obtain blood pressure readings: Pulse _____ Lying _____ Standing _____ Sitting _____ <input type="checkbox"/> Symptomatic <input type="checkbox"/> Dizziness without postural hypotension</p>	
<p>C. Gait, Balance, and Mobility Problems <input type="checkbox"/> TUG results: > 14 secs (valid if no cognitive impairment) <input type="checkbox"/> Unable to retrieve an item off the floor <input type="checkbox"/> Reduced muscle strength/deconditioned <input type="checkbox"/> Decreased lower extremity strength <input type="checkbox"/> Decreased upper body strength <input type="checkbox"/> Unable to rise independently from a chair without the use of arm rests or assistance</p>	<p>Chair Stand Test:</p>
<p>D. Impaired Vision: as reported by client and medical history Risk factors: <input type="checkbox"/> Cataracts requiring surgery <input type="checkbox"/> Bifocals or progressives <input type="checkbox"/> Exam > 1 year ago</p>	<p>Graphics and descriptions of both tests are available at: stopfalls.ca</p>
<p>E. <input type="checkbox"/> Other Neurological Impairments: based on info gained from medical history, cognitive and physical evaluation <input type="checkbox"/> Romberg Sign:</p>	
<p>F. <input type="checkbox"/> Heart Rate and Rhythm Problems: pulse taken during Blood Pressure reading</p>	
<p>G. <input type="checkbox"/> At higher risk for low BMD, future fractures and falls based on: <input type="checkbox"/> Prior fractures <input type="checkbox"/> Parental hip fractures <input type="checkbox"/> Arthritis <input type="checkbox"/> Current smoking <input type="checkbox"/> Glucocorticoid use <input type="checkbox"/> High alcohol intake (Prednisone and steroid puffer)</p>	
<p>H. <input type="checkbox"/> Foot <input type="checkbox"/> Foot wear problems: examine feet and foot wear to determine need for interventions</p>	
<p>I. <input type="checkbox"/> Environmental hazards: review home situation and determine need for in home assessment</p>	
<p>J. <input type="checkbox"/> Assess for Depression and/or behaviour risks: <input type="checkbox"/> Mood <input type="checkbox"/> Sleep changes <input type="checkbox"/> Decreased interest <input type="checkbox"/> Psychomotor changes <input type="checkbox"/> Psychosomatic complaints <input type="checkbox"/> Suicidal thoughts <input type="checkbox"/> Appetite or weight loss</p>	
<p>Client's perceived functional ability / Fear related to falling: contributing to deconditioning or curtailment of physical activities</p>	



Standardized self-assessment tool – in French and English

STAYING INDEPENDENT

Falls are the main reason why older people lose their independence.



Are you at risk?

For more information on exercise and falls prevention programs contact Champlain CCAC at 613 310-2222 or www.champlainhealthline.ca

This initiative is sponsored by the Champlain Local Health Integration Network and the 4 regional health units.



BSEO
Bureau de santé
de l'est de l'Ontario



Renfrew County
and District Health Unit

Check Your Risk for Falling

Please circle "Yes" or "No" for each statement below.

Why it matters

Please circle "Yes" or "No" for each statement below.		Why it matters
Yes (2)	No (0)	I have fallen in the last 6 months. People who have fallen once are likely to fall again.
Yes (2)	No (0)	I use or have been advised to use a cane or walker to get around safely. People who have been advised to use a cane or walker may already be more likely to fall.
Yes (1)	No (0)	Sometimes I feel unsteady when I am walking. Unsteadiness or needing support while walking are signs of poor balance.
Yes (1)	No (0)	I steady myself by holding onto furniture when walking at home. This is also a sign of poor balance.
Yes (1)	No (0)	I am worried about falling. People who are worried about falling are more likely to fall.
Yes (1)	No (0)	I need to push with my hands to stand up from a chair. This is a sign of weak leg muscles, a major reason for falling.
Yes (1)	No (0)	I have some trouble stepping up onto a curb. This is also a sign of weak leg muscles.
Yes (1)	No (0)	I often have to rush to the toilet. Rushing to the bathroom, especially at night, increases your chance of falling.
Yes (1)	No (0)	I have lost some feeling in my feet. Numbness in your feet can cause stumbles and lead to falls.
Yes (1)	No (0)	I take medicine that sometimes makes me feel light-headed or more tired than usual. Side effects from medicine can sometimes increase your chance of falling.
Yes (1)	No (0)	I take medicine to help me sleep or improve my mood. These medicines can sometimes increase your chance of falling.
Yes (1)	No (0)	I often feel sad or depressed. Symptoms of depression, such as not feeling well or feeling slowed down, are linked to falls.
TOTAL _____		Add up the number of points for each "yes" answer. If you scored 4 points or more, you may be at risk for falling. Discuss this brochure with your doctor or health care practitioner.

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

Primary Care Providers: For more information about the Champlain Falls Prevention Strategy, the Staying Independent Checklist, and the clinical algorithm go to: <http://www.rgpeo.com/en/health-care-practitioners/falls-prevention-program.aspx>

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



Exercise Classes
for Seniors

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.



Regional Geriatric Program of Eastern Ontario Programme gériatrique régional de l'Est de l'Ontario

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Falls Prevention Program

Fall Risk Assessment and Intervention

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](#)



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Years of
Aging Successfully



Regional Geriatric Program of Eastern Ontario

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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](#)

Chair Stand Test



Primary Care Fall Prevention

Chair Stand Test

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.

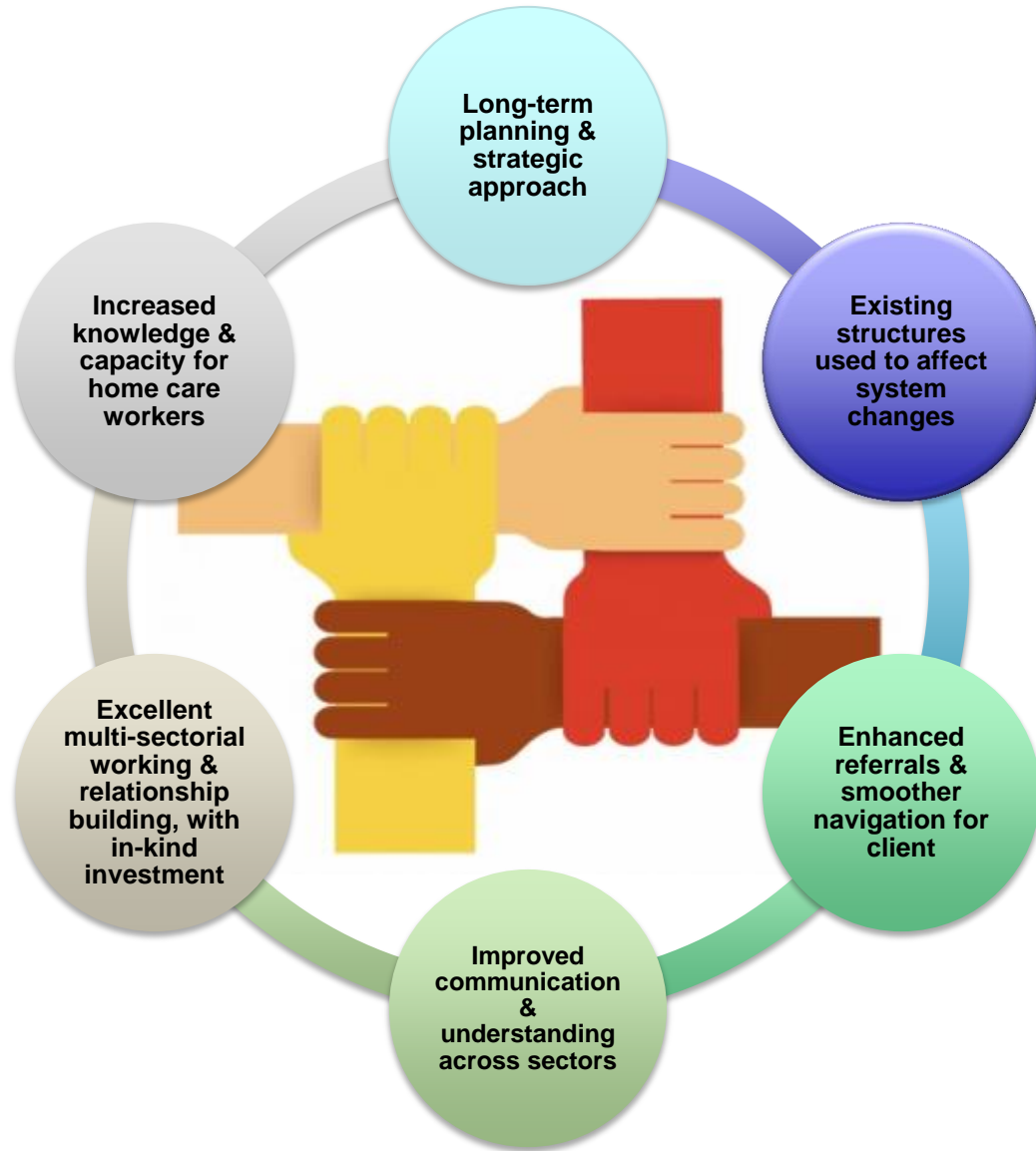
Record the number of times the patient stands in 30 seconds.

Number: _____ **Rating (See chart):** _____

A below average rating indicates a high risk for falls.

Notes:

Benefits of a Regional Strategy





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

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