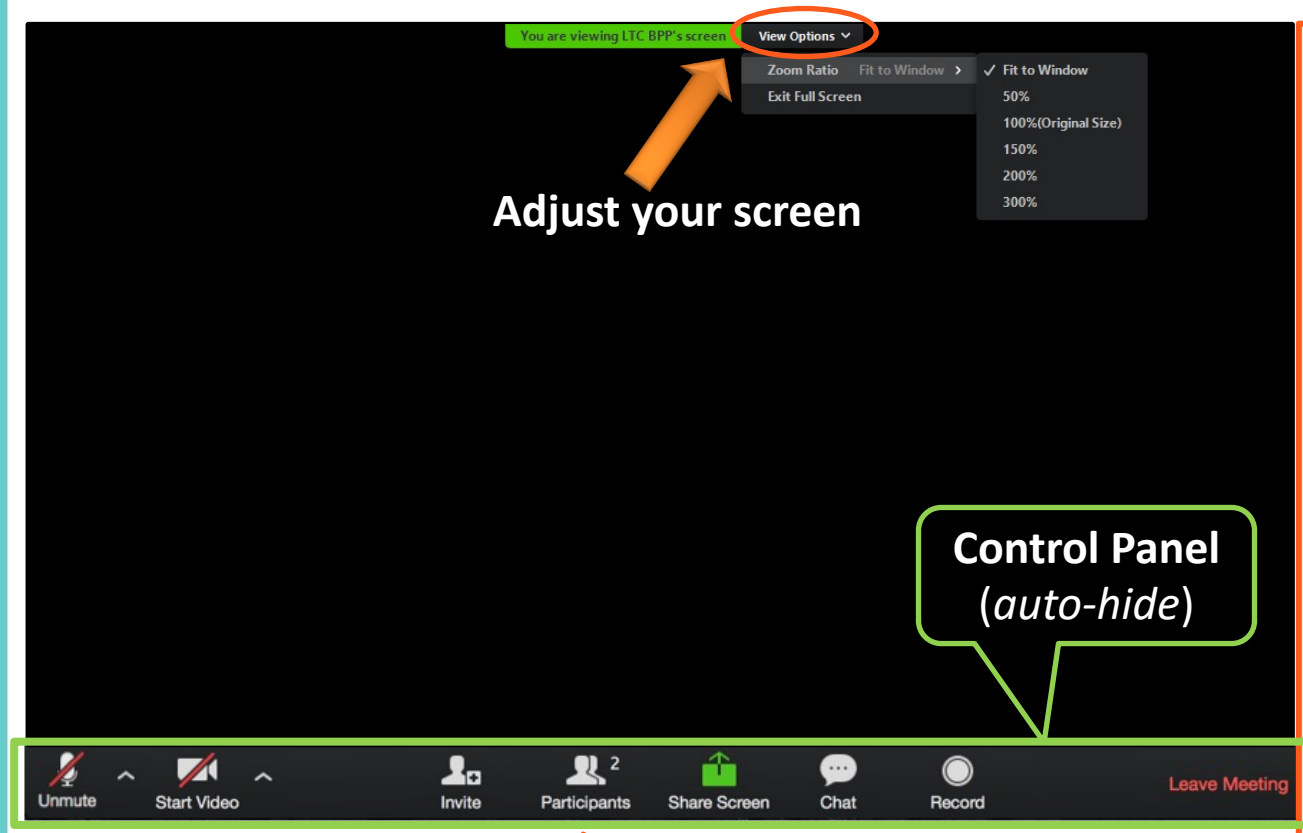
Welcome!

The webinar will begin at 1:30 pm EDT

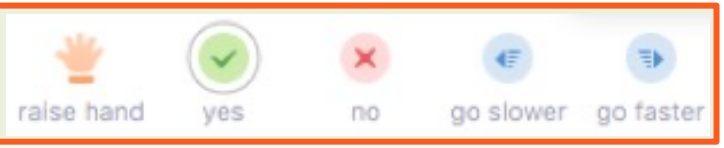


Housekeeping

- All lines will be **muted** to ensure sound quality
- This webinar will be **recorded**. Slides will be shared.
- Use the **Chat** box to ask questions along the way.
- Questions will be addressed at the end.

Please stay muted

Click to open the **Participants** box to give *nonverbal* feedback.



RNAO

RNAO.CA

Introduce yourself

Your name (and the names of any others that are with you today)

Name of your LTC home

Partners in Fall Injury Prevention: Fracture Risk Scale and RNAO Best Practice Guideline on Falls

RNAO LTC Best Practice Program and the Ontario Osteoporosis Strategy

April 21, 2021

1:30 - 2:30 PM

Introduction

Shaila Aranha RN, MScN PMP
RNAO LTC Best Practice
Co-ordinator
Waterloo Wellington and
HNHB

Kate Harvey
OOS
Regional Integration Lead
Waterloo, Wellington,
London and Windsor

Dr. Caitlin McArthur
Registered Physiotherapist,
PhD.

Overview

- RNAO Best Practice Guideline Program
- Ontario Osteoporosis Strategy
- Dr. Caitlin McArthur
- Linking interventions with the BPG related to falls.
- Fracture prevention resources
- Falls prevention resources

RNAO Best Practice Guidelines Program

Funded by the Government of Ontario since 1999 to:

Develop

Disseminate

Actively support the uptake

of evidence-based clinical and healthy work environment best practice guidelines and to evaluate their impact on patients and residents, as well as organizational and health system outcomes.

Program Goal

To improve resident care and resident outcomes,
in Ontario long-term care homes,
through systematic approaches to the
implementation and sustainability
of evidence-based practices.

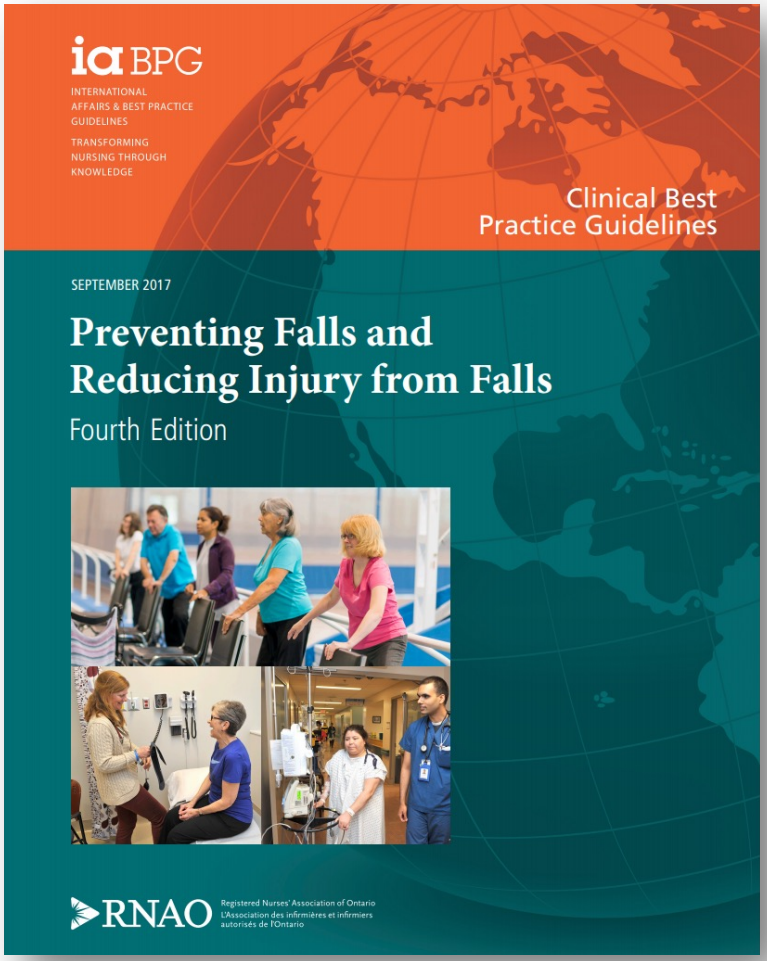
LONG-TERM CARE
BEST PRACTICES
PROGRAM

Funded by the Government of Ontario

RNAO Registered Nurses' Association of Ontario
L'Association des infirmières et infirmiers autorisés de l'Ontario

RNAO Long-Term Care Best Practices Program Team

RNAO Best Practice Guidelines



ONTARIO OSTEOPOROSIS STRATEGY

Kate Harvey

Regional Integration Lead,

Waterloo, Wellington, London and Windsor

Osteoporosis Canada,

The Ontario Osteoporosis Strategy

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Regional Integration Leads (RIL) for the Ontario Osteoporosis Strategy by region

Stronger bones. Better lives.

ONTARIO OSTEOPOROSIS STRATEGY

The Ontario Osteoporosis Strategy (OOS) is a population-based initiative to improve quality of care for people living with osteoporosis in Ontario.

The Ontario Osteoporosis Strategy

ONTARIO OSTEOPOROSIS STRATEGY

Working to reduce morbidity, mortality and cost of osteoporotic fractures using a patient-centered, multi-disciplinary approach that is integrated across healthcare sectors.

Three priorities:

- Fracture Prevention
- Health Professional Education and Outreach
- Patient Education and Self Management

with the **goal of reducing osteoporotic hip fractures**

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Osteoporosis Clinical Guidelines

ONTARIO OSTEOPOROSIS STRATEGY

Recommendations for Preventing Fractures in LTC

The goal of fracture prevention in LTC is to prevent loss of mobility, serious injury, pain, transfers to acute care and ultimately to maximize opportunities for quality living among long-term care residents.


GUIDELINE

commendations for preventing fracture in long-term c

Scope

Methods

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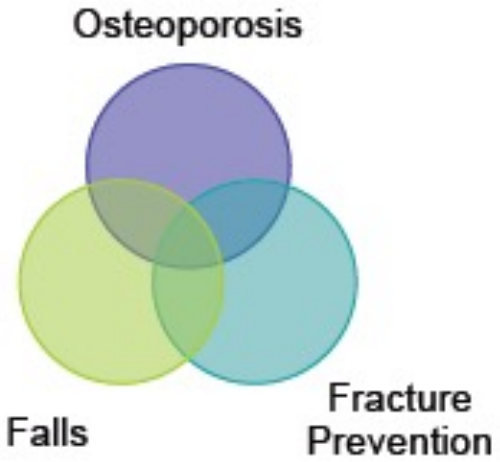
Fractures and Falls

ONTARIO OSTEOPOROSIS STRATEGY

It's important that osteoporosis, fracture prevention and falls are recognized as **a trio of interrelated health issues** and any intervention targeting one of these three health issues should acknowledge the other two.



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In the chat box tell us:

ONTARIO OSTEOPOROSIS STRATEGY

Is your home using the FRS?

(if yes, tell us how in the chat box)

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Dr. Caitlin McArthur

ONTARIO OSTEOPOROSIS STRATEGY

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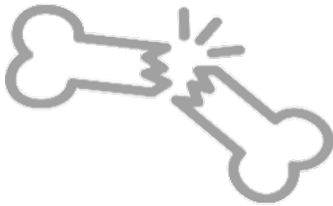

Assessing Fracture Risk in Long-term Care: The Fracture Risk Scale

Dr. Caitlin McArthur

Registered Physiotherapist, PhD

Assistant Professor | School of Physiotherapy | Dalhousie University

ONTARIO OSTEOPOROSIS STRATEGY

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osteostrategy.on.ca

OsteoStrategyON

ONTARIO OSTEOPOROSIS STRATEGY

Fracture Risk Scale

George Ioannidis, PhD
Michaela Jantzi,
Jenn Bucek
Jonathan Adachi, MD FRCPC
Lora Giangregorio, PhD
John Hirdes, PhD
Laura Pickard, MA
Alexandra Papaioannou, MD MSc FRCP(C) FACP

GERAS Centre – Osteoporosis Strategy Team

Alexandra Papaioannou, MD MSc FRCP(C) FACP
George Ioannidis, PhD
Caitlin McArthur, PhD
Loretta M. Hillier, MA
Mary Lou Van der Horst, RN, MBA
Erin Young, BA

LTC Fracture Prevention Recommendations

Alexandra Papaioannou, MD MSc FRCP(C) FACP
Nancy Santesso, PhD MLIS BASc RD
Suzanne Morin, MD MSc FRCP FACP
Sid Feldman, MD CCFP FCFP
Jonathan Adachi, MD FRCPC
Richard Crilly, MD MRCP(UK) FRCPC
Lora Giangregorio, PhD
Susan Jaglal, BSc MSc PhD
Robert Josse, MD BS BSc
Sharon Kaasalainen, BScN MSc PhD
Paul Katz, MD CMD
Andrea Moser, MD MSc CCFP FCFP
Laura Pickard, MA
Hope Weiler, RD PhD
Susan Whiting, PhD
Carly J. Skidmore, MSc
Angela M. Cheung, MD PhD
Scientific Advisory Committee of Osteoporosis Canada

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Osteoporosis

ONTARIO OSTEOPOROSIS STRATEGY

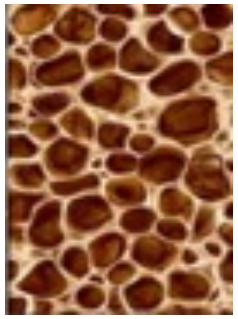
Normal Bone

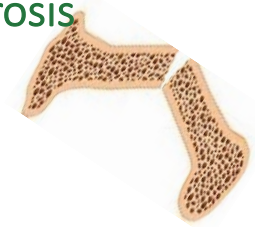
STRONG and COMPACT

- Structure inside the bone is DENSE and more solid HONEYCOMB
- Better able to withstand minor falls

It is a deterioration and loss of bone structure

Bone with osteoporosis





WEAK and BRITTLE

* Structure inside the bone is more OPEN like a

* Less likely to withstand minor falls

.

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2 Kinds of Fractures

ONTARIO OSTEOPOROSIS STRATEGY

Generally, there are **2 kinds of fractures** that residents may sustain.

1. **Caused by trauma** (usually the impact from a fall)
   Residents with osteoporosis are more likely to experience a broken bone or "**fragility fracture**" when they fall from

- Standing height
- Beds
- Chairs
- Wheelchairs
- Wheeled walkers
- Walkers

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2 Kinds of Fractures

ONTARIO OSTEOPOROSIS STRATEGY

2. Spontaneous

Residents with osteoporosis are more likely to experience a "**spontaneous fracture**" without any known cause and no known trauma. It happens "*out of the blue*".

Examples

- A resident may suddenly complain of severe back pain
- A resident may unexpectedly have increased responsive behaviours.

Most common fracture sites

ONTARIO OSTEOPOROSIS STRATEGY

- **Spine -** Compression fractures are a diagnosis that many residents with osteoporosis have when they move in to LTC/CC (residential care)
- **Wrist -** Wrists can break as a result of residents trying to stop their fall
- **Shoulder –** Residents tend to fall sideways from poor balance and weakened leg muscles; and may land on their shoulder
- **Hip -** Residents tend to fall sideways from poor balance and weakened leg muscles; and may land directly on their hip

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Fractures are a serious problem

ONTARIO OSTEOPOROSIS STRATEGY

- 2-6% of residents sustain a hip fracture each year
- Hip fracture is the most common fracture type in LTC (49%)
- >72% of older adults at high risk for fractures are not investigated or treated for osteoporosis

Ronald LA et al. *Can J Aging*. 2008;27:109-115.
Papaioannou A. et al. Osteoporos Int. 2016;27:887-97.
Jaglal, S. Ontario Osteoporosis Strategy– Provincial Performance Data for Osteoporosis Management Technical Report, 2017.

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Fractures can be devastating for LTC residents

ONTARIO OSTEOPOROSIS STRATEGY

Papaioannou A, et al. *Osteoporos Int* 2001; 12(10):870-874.
Ioannidis G, et al. *CMAJ* 2009; 181(5):265-271.
Papaioannou A, et al. *CMAJ*; 2015. 187 (15): 1135-44.
Tosteson AN, et al. *Osteoporos Int* 2007; 18(11):1463-1472.
Neuman MD, et al. *JAMA*, 2014; 174(8):1273-1280.

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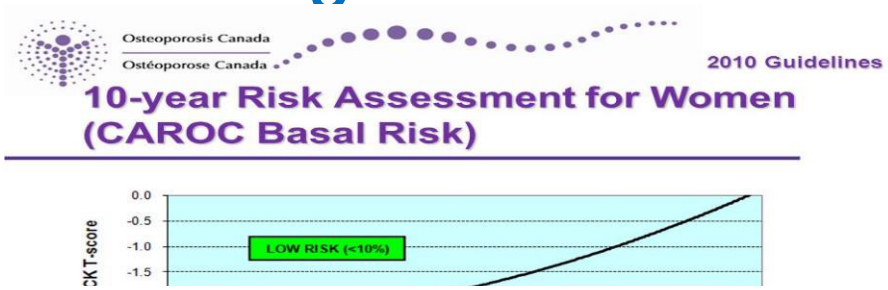
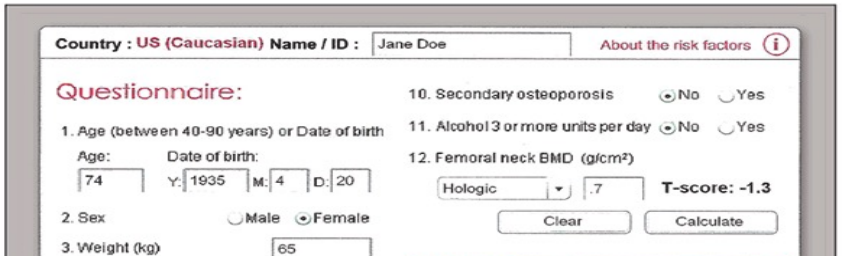
Current Fracture Risk Assessments

ONTARIO OSTEOPOROSIS STRATEGY

CAROC



FRAX



Not tailored for use in LTC

Greenspan S et al. JAGS, 2012:60(4): 689-90.

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ONTARIO OSTEOPOROSIS STRATEGY

Fracture Risk Scale (FRS)

Assessing fracture risk for LTC residents to put strategies into place to prevent fractures

Ioannidis G, et al. *BMJ Open*, 2017;7.

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Benefits of the FRS

ONTARIO OSTEOPOROSIS STRATEGY

- ✓Prevent fractures
- ✓ Improve quality of life for residents
- ✓ Improve care

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The FRS:

ONTARIO OSTEOPOROSIS STRATEGY

- ✓ Predicts hip fractures for LTC residents
- ✓ Requires no additional documentation or resources
- ✓ Does not require BMD testing
- ✓ Validated across Canada

Ioannidis G, et al. *BMJ Open*, 2017;7.
Negm A, et al. *BMC Geriatrics*, 2018; 18(320).

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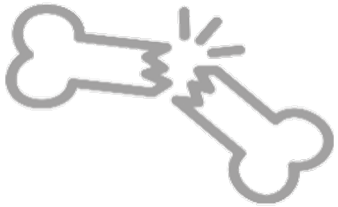
Open Access Research

BMJ Open

Development and validation of the Fracture Risk Scale (FRS) that predicts fracture over a 1-year time period in institutionalised frail older people living in Canada: an electronic record-linked longitudinal cohort study

George Ioannidis,[1,2] Micaela Jantzi,[3] Jenn Bucek,[3] Jonathan D Adachi,[1,2] Lora Giangregorio,[4] John Hirdes,[3] Laura Pickard,[1,2] Alexandra Papaioannou[1,2]



Negm et al. BMC Geriatrics (2018) 18:320
https://doi.org/10.1186/s12877-018-1010-1

BMC Geriatrics

RESEARCH ARTICLE Open Access

Validation of a one year fracture prediction tool for absolute hip fracture risk in long term care residents

Ahmed M. Negm[1,2*], George Ioannidis[1,3], Micaela Jantzi[4], Jenn Bucek[4], Lora Giangregorio[1,5], Laura Pickard[1,3], John P. Hirdes[4], Jonathan D. Adachi[3], Julie Richardson[2,6], Lehana Thabane[6] and Alexandra Papaioannou[1,3,7]

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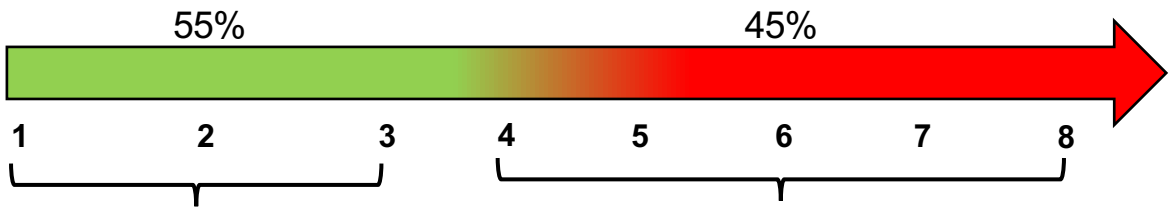
How to interpret FRS Scores:

ONTARIO OSTEOPOROSIS STRATEGY



Walk in corridor and
BMI > 30
or
Unable to walk in corridor
and no fall past 30 days

Walk in corridor and
BMI 18-30
& one of the following:

- Prior fall
- Prior fracture
- Cognitive impairment (CPS 3-6)
- Tendency to wander
- Age >85

or
Unable to walk in corridor
and had a fall past 30 days

or
Walk in corridor and
BMI <18 with or without a fall

- Walk in corridor – G1da
- BMI – height and weight
- Wandering – E4aa
- Fall – J4a, J4b
- Fracture – J4d
- Cognition – CPS Score

Ioannidis G, et al. *BMJ Open*, 2017;7.

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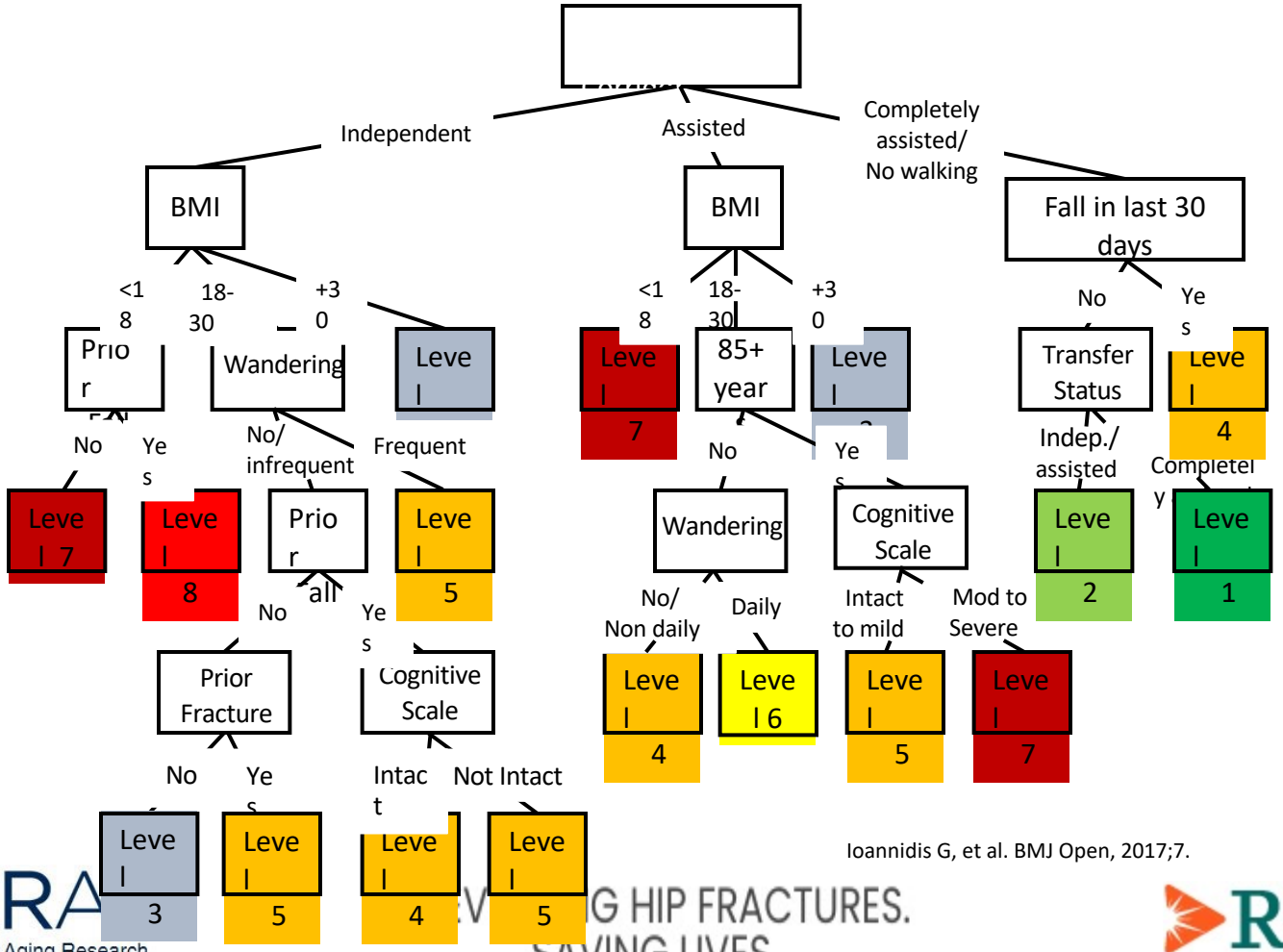
FRS Prediction Outcome Algorithm



Ioannidis G, et al. BMJ Open, 2017;7.

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...G HIP FRACTURES. SAVING LIVES.

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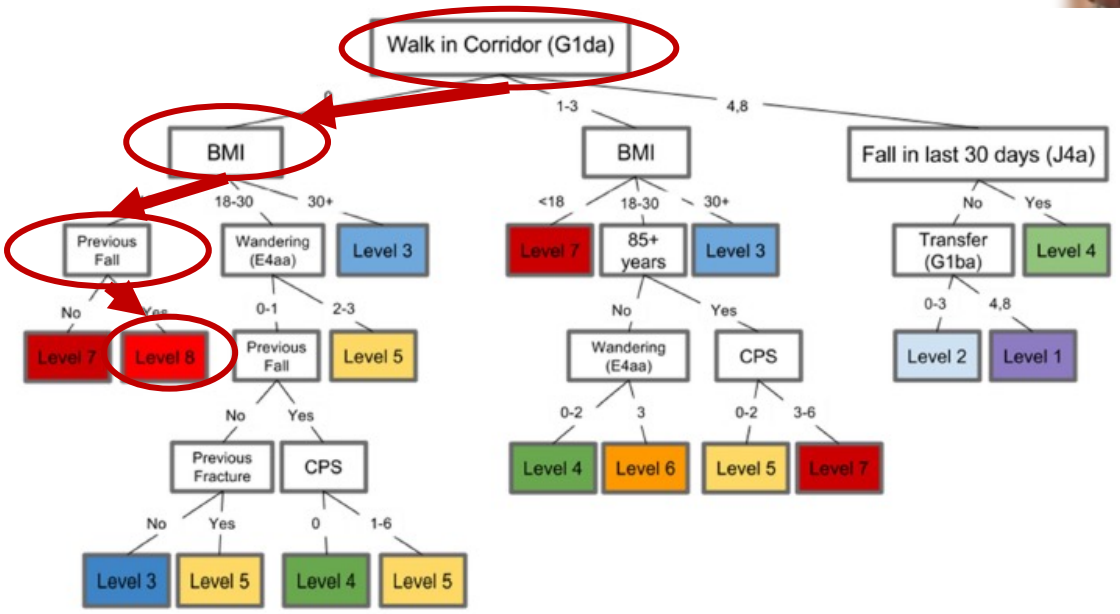
- walks independently in corridor
- BMI of <18
- had a fall in last 180 days



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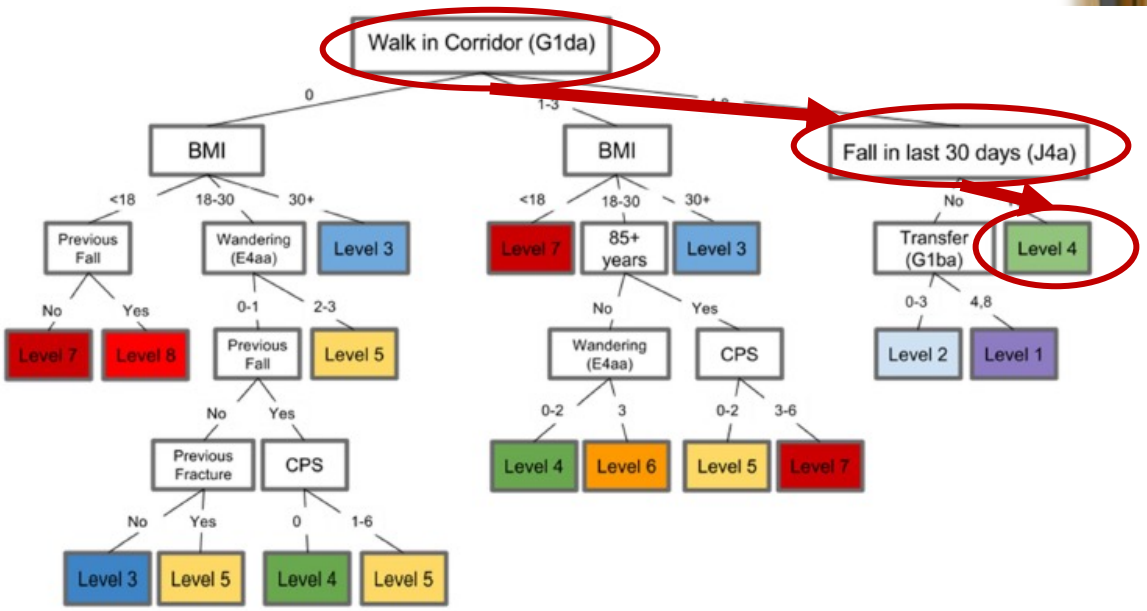
- Unable to walk
- Has fallen in the past 30 days



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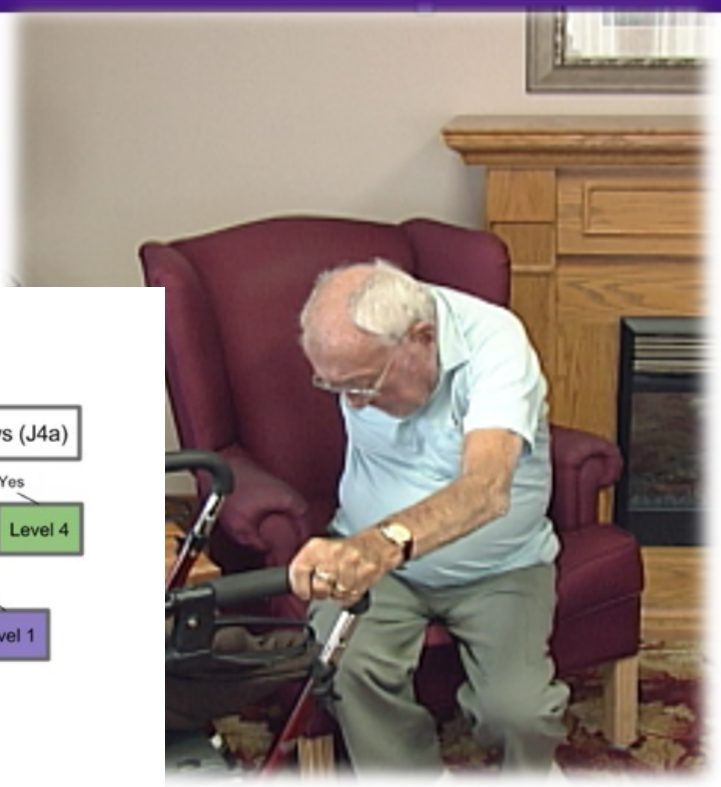
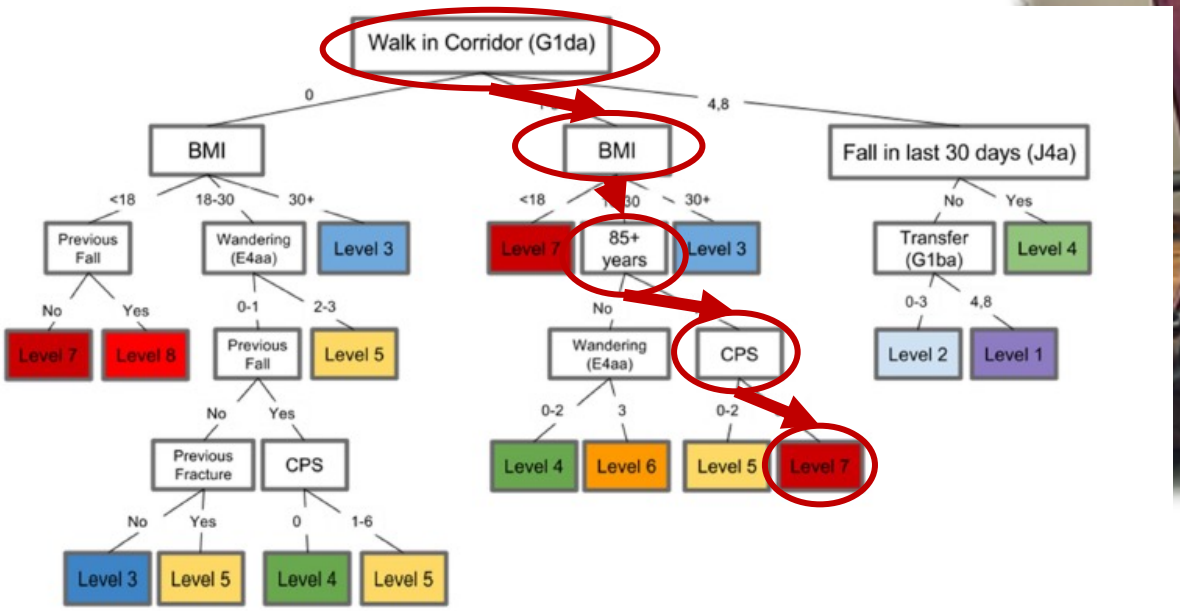
- walks in the corridor with assistance
- BMI between 18 and 30
- is > 85 years of age
- is cognitively impaired (CPS > 3)





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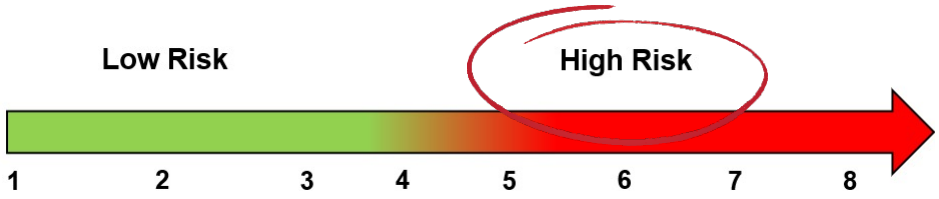
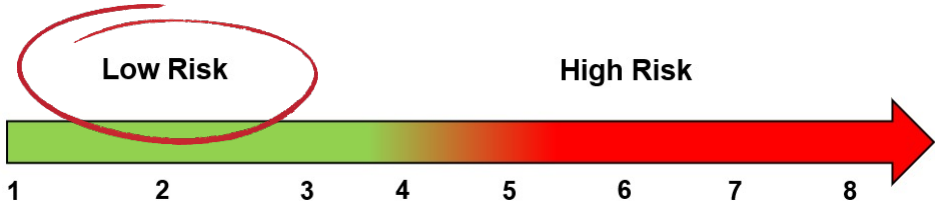
- walks independently in corridor
- BMI of <18
- had a fall in last 180 days



- Unable to walk
- Has not fallen in the past 30 days



- walks in the corridor with assistance
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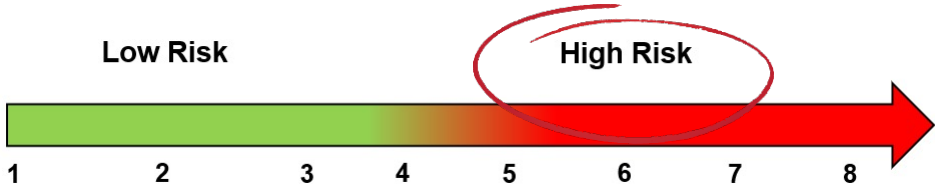

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Some Cautions

ONTARIO OSTEOPOROSIS STRATEGY

- FRS assesses risk for hip fracture but may underestimate the risk for vertebral fractures
- FRS calculates risk based on variables available in the RAI-MDS 2.0 – other risk factors may exist that are not included

Ioannidis G, et al. *BMJ Open*, 2017;7.

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Where do I find the FRS score for my resident?

ONTARIO OSTEOPOROSIS STRATEGY

PointClickCare®

RAI-MDS (MDS 2.0) / LTCF

Outcomes Summary Report

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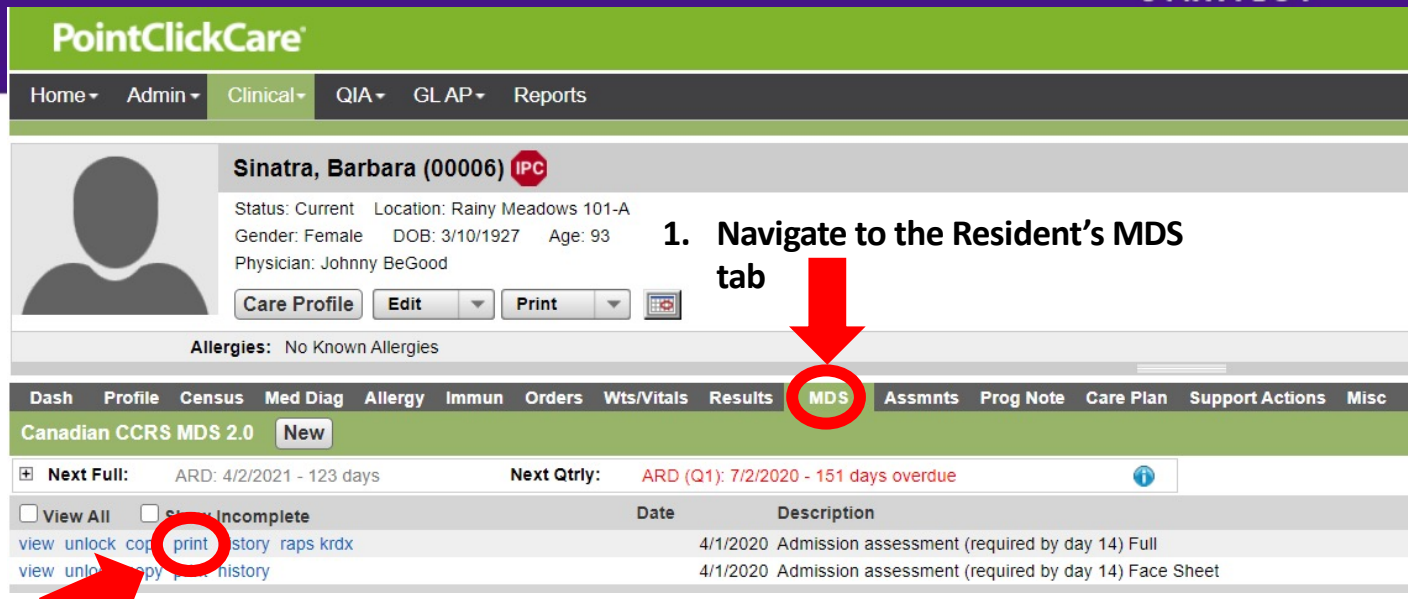
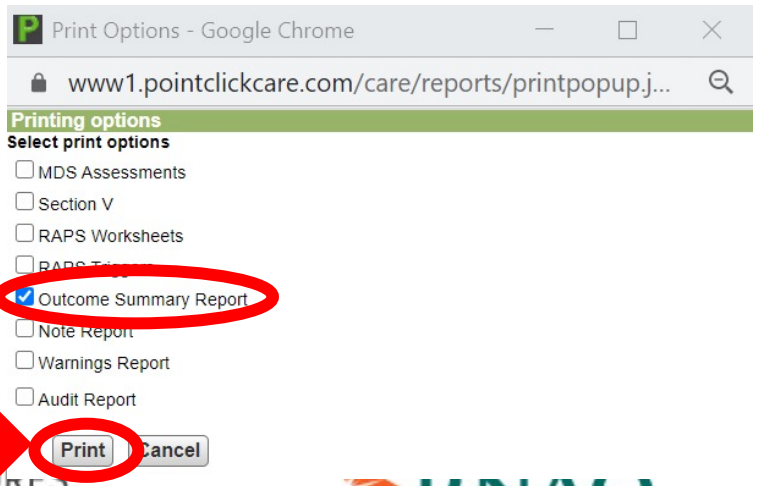
Viewing a Resident's FRS

ONTARIO OSTEOPOROSIS STRATEGY



1. **Navigate to the Resident's MDS tab**

2. **Click *Print***



3. **Check the *Outcome Summary Report* box**

4. **Click on *print***

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Viewing a Resident's FRS Score

ONTARIO OSTEOPOROSIS STRATEGY

Outcomes	
RUG	SSC
CMI	1.4
CPS	0
DRS	10
COMM	0
PAIN	1
ISE	5
ADL Short	16
ADL Long	28
ADL Self	6
CHESS	0
ABS	8
PSI	9
PURS	3
FRS	4

The Outcome Scores Report will be generated.

This will give the FRS Score for that MDS Assessment.

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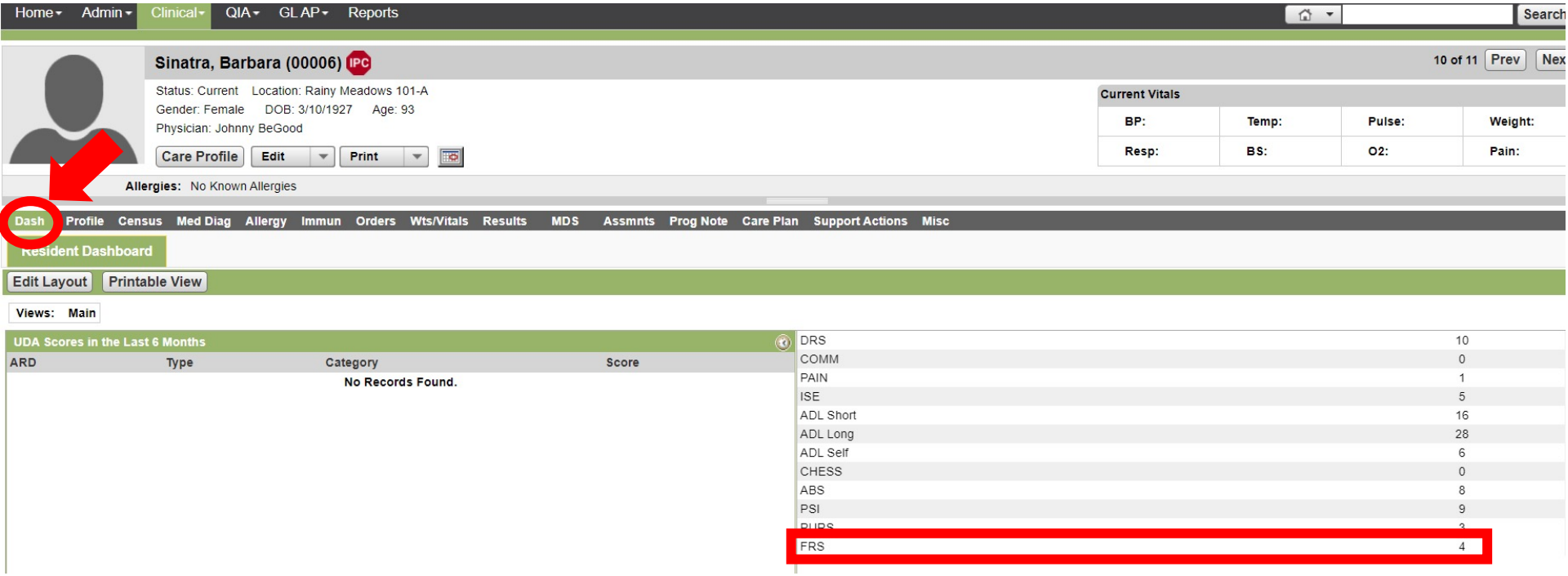
ONTARIO OSTEOPOROSIS STRATEGY



An individual FRS can also be viewed by navigating to the resident *Dash* and viewing the MDS Scores

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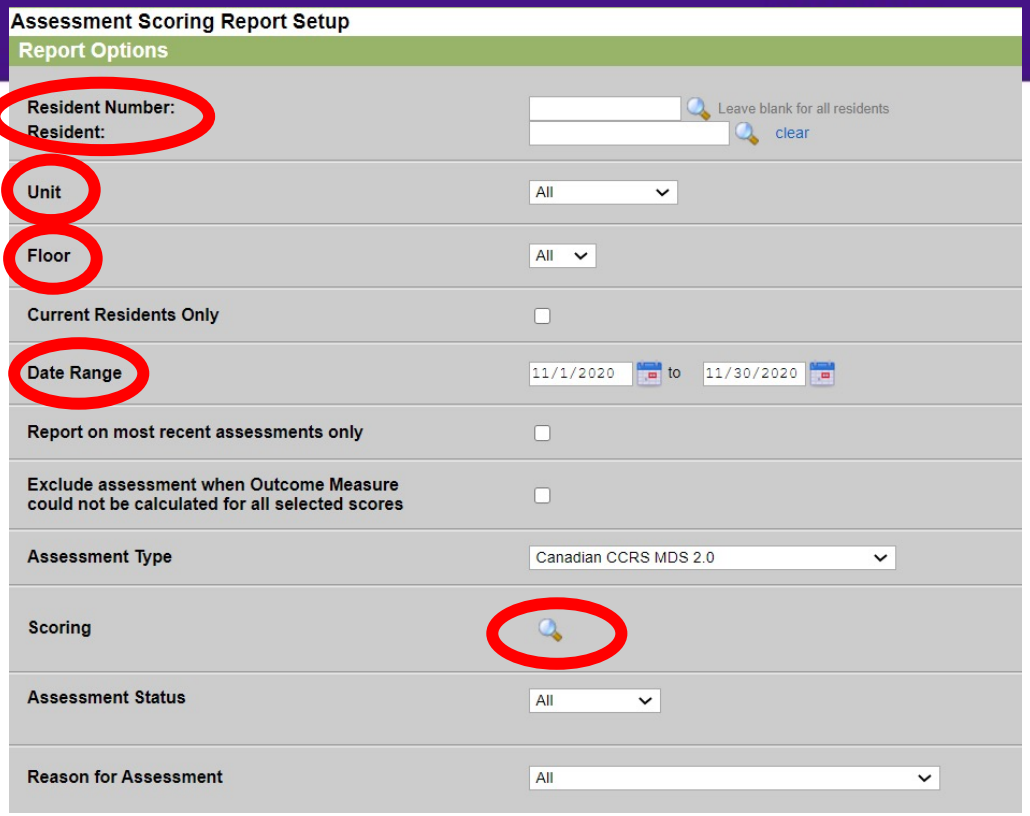
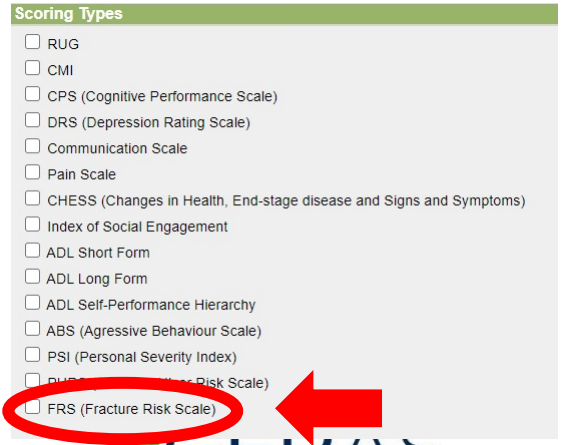
Assessment Scoring Report

ONTARIO OSTEOPOROSIS STRATEGY



2. Select date range
   - single residents over time
   - multiple residents at one time point

3. Use the magnifying glass to open the assessment score types



4. Select FRS

5. Click Update

6. Run Report

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Clinical Pearls

ONTARIO OSTEOPOROSIS STRATEGY

- ✓ **Regular risk assessment is important** – use FRS on admission, quarterly, or when the resident's status changes
- ✓ **Provide patient-centred care** – involve the resident and family in goals of care and treatment options

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ONTARIO
OSTEOPOROSIS
STRATEGY

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- Directed at interprofessional teams caring for frail older adults in LTC
- Integration of osteoporosis and falls assessment and management to reduce fractures

Early release, published at www.cmaj.ca on September 14, 2015. Subject to revision.

CMAJ GUIDELINES CME

Recommendations for preventing fracture in long-term care

Alexandra Papaioannou MD MSc, Nancy Santesso RD PhD, Suzanne N. Morin MD MSc, Sidney Feldman MD, Jonathan D. Adachi MD, Richard Crilly BSc MD, Lora M. Giangregorio PhD, Susan Jaglal PhD, Robert G. Josse MBBS, Sharon Kaasalainen PhD, Paul Katz MD, Andrea Moser MD MSc, Laura Pickard MA, Hope Weiler RD PhD, Susan Whiting PhD, Carly J. Skidmore MSc, Angela M. Cheung MD PhD; for the Scientific Advisory Council of Osteoporosis Canada

CMAJ Podcasts: author interview at https://soundcloud.com/cmajpodcasts/141331-guide

The 2010 clinical practice guideline for the diagnosis and management of osteoporosis in Canada[1] focused on the care of adults living in the community. However, the fracture rate for adults living in long-term care (residents) is two to four times that of adults of similar age living in the community, and one-third of older adults who experience hip fracture are residents in long-term care.[2] Hip fracture is one of the most serious consequences of osteoporosis and also one of the leading causes of admission to hospital.[3] When residents return to long-term care after a hospital stay, they need additional hours of specialized care.[4,5] In addition, fracture pain and delirium frequently associated with analgesia are distressing for residents and their families. Vertebral fractures are also a concern for residents, and the reported prevalence is up to 30% (for at least one moderate to severe fracture).[6] Multiple vertebral fractures can be a substantial cause of pain, anxiety, depression, reduced pulmonary function[7] and agitation.

Frail older adults at high risk of fracture in long-term care face other challenges. More than 40% have dementia,[8] a similar percentage experience swallowing difficulties,[9,10] and over 20% may have renal insufficiency.[9,11]

It may be difficult to identify residents at high risk of fracture, as the current fracture risk assessment tools (the Canadian Association of Radiologists and Osteoporosis Canada tool[12] [CAROC; www.osteoporosis.ca/multimedia/pdf/CAROC.pdf] and the Canadian WHO Fracture Risk Assessment Tool [FRAX; www.shef.ac.uk/FRAX/]) provide 10-year fracture risk and have not been validated in long-term care, where over 20% of residents may die within one year of admission.[14,15] Most research regarding risk assessment and pharmacologic therapies has not included those with multiple comorbidities.[16,17]

Scope

This document provides guidance regarding strategies for the prevention of fractures directed toward interprofessional teams caring for frail older adults in long-term care.

Methods

This guideline, which has been endorsed by Osteoporosis Canada, was developed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach[18,19] (www.gradeworkinggroup.org), in a process led by a GRADE methodologist (N.S.). The guideline panel comprised the authors, other multidisciplinary health care providers and researchers, and representatives from resident and family councils (see Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.141331/-/DC1). The panel was first surveyed to prioritize questions and impor-

Competing interests: See end of article.

This article has been peer reviewed.

Correspondence to: Alexandra Papaioannou, papaioannou@mhsc.ca

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KEY POINTS

- In older adults living in long-term care (residents), fractures cause pain, agitation, immobility and transfers to hospital.
- Residents identified as being at high risk of fracture include those with prior fracture of the hip or spine, those with more than one prior fracture and those with one prior fracture and recent use of glucocorticoids.
- Recommendations for preventing fracture in long-term care were developed using the GRADE (Grading of Recommendations Assessment, Development and Evaluation) approach, with consideration of the quality of the available evidence, the balance between benefits and harms, the preferences of residents and their care providers, and the resources required to implement the recommendations.
- Strategies to prevent fractures, including vitamin D and calcium supplementation, use of hip protectors, exercise, multifactorial interventions to prevent falls and pharmacologic therapies, should be tailored to each resident's level of fracture risk, mobility, life expectancy, renal function and ability to swallow.

Papaioannou A, et al. *CMAJ*; 2015. 187 (15): 1135-44.

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ONTARIO OSTEOPOROSIS STRATEGY

Recommend calcium 1200mg/d preferably dietary, or supplemental, and vitamin D 800-2000IU

Consider medications to treat osteoporosis and prevent fracture

Promote exercise for improving balance, strength and function

Implement fall prevention strategies
Consider hip protectors

Work as a team with residents and families combining interdisciplinary care strategies to meet their care needs

Papaioannou A, et al. *CMAJ*; 2015. 187 (15).

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Chat box feedback:

ONTARIO OSTEOPOROSIS STRATEGY

How your homes are using the FRS…

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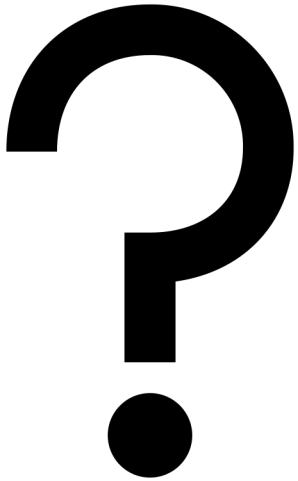
ONTARIO OSTEOPOROSIS STRATEGY

@McArthurCaitlin



caitlin.mcarthur@dal.ca

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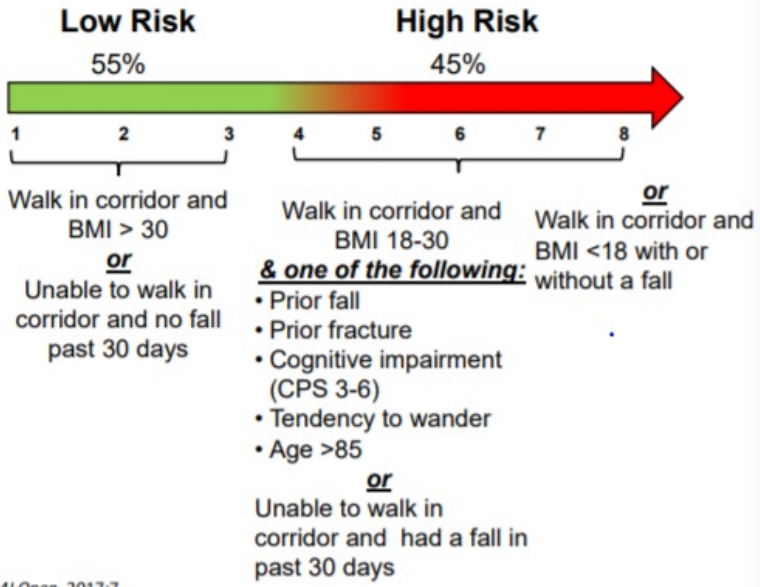
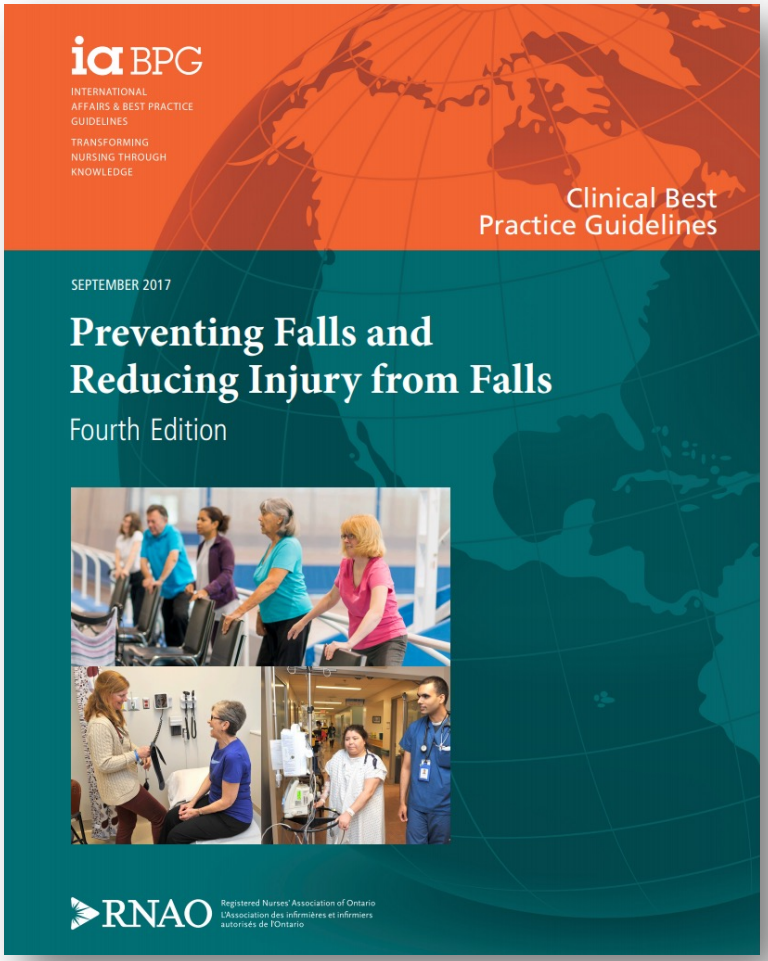
What's the Connection?

Fracture Risk Scale Scores – Hip Fracture Risk



Ioannidis G, et al. *BMJ Open*, 2017;7.



Screening

RECOMMENDATION 1.1:

Screen all adults to identify those at risk for falls. Conduct screening as part of admission processes, after any significant change in health status, or at least annually (Level of Evidence = V).

Screening should include the following approaches (Level of Evidence = Ia):

- identifying a history of previous falls;
- identifying gait, balance, and/or mobility difficulties; and
- using clinical judgment.

Level of Evidence: Ia & V
Quality of Evidence: Reviews = strong, moderate, and low; guidelines = strong; expert panel

Falls Risk Factors

- Behavioural
- Biological
- Environmental
- Socio-Economic
- Health Conditions

- Resources

Appendix E: Tables 10

Appendix E: Table 11

Table 11: Health Conditions Associated with Increased Risk for Falls

CONDITION	REFERENCES
Cancer	Callis, 2016
Dementia/cognitive impairment	Ambrose et al., 2015; Ambrose et al., 2013; Booth et al., 2015; Bunn et al., 2014; Burton et al., 2015; Chan et al., 2015; Guo et al., 2014; Hunter, Wagg, Kerridge, Chick, & Chambers, 2011; Jensen & Padilla, 2011; Meyer et al., 2015; Vieira et al., 2011; Winter, Watt, & Peel, 2013; Zhao & Kim, 2015
Haemophilia	Flaherty & Josephson, 2013
Multiple sclerosis	Gunn et al., 2015; Sosnoff & Sung, 2015
Osteoarthritis	Mat et al., 2015
Osteoporosis	Papaioannou et al., 2015
Overall frailty, older age	Ambrose et al., 2015; Ambrose et al., 2013; Bula, Monod, Hoskovec, & Rochat, 2011; Cadore et al., 2013; Guo et al., 2014; Vieira et al., 2011; Zhao & Kim, 2015; Zia et al., 2015
Parkinson's disease	Allen et al., 2011; Bloem et al., 2016; Mansfield et al., 2015; Monti, Bellini, Medri, & Pillastrini, 2011; Shen et al., 2016
Psychiatric illness (including depression)	Bunn et al., 2014; Callis, 2016; Changqing et al., 2015
Risks for non-ambulatory adults (those who utilize a wheelchair as their primary means of mobility) Device-related characteristics (e.g., wheelchair design), transfer activities, impaired seated balance, other environmental factors (e.g., carpeted flooring)	Rice et al., 2015
Stroke	Verheyden et al., 2013; Vieira et al., 2011; Walsh, Horgan, Walsh, & Galvin, 2016

Falls Injury Risk Factors

- Bleeding risk
- Fracture risk
- Skin Integrity risk

- Resources

Appendix E: Table 12

Table 12: Factors Associated with Increased Risk of Fall Injury

RISK CATEGORY	SPECIFIC RISK FACTORS
Bleeding risk	■ Haemophilia (Flaherty & Josephson, 2013) ■ Thrombocytopenia* ■ Anticoagulation therapy* ■ Antiplatelet therapy* ■ Liver or kidney disease (hemodialysis)*
Fracture risk	■ Renal bone disease (dialysis)* ■ Residents in long-term care (may also apply to other settings*) with: □ prior hip or spine fracture; □ history of more than one fracture (other than hands, feet, or ankles); □ recent use of systemic glucocorticoids and history of fracture; and □ osteoporosis, osteopenia (Papaioannou et al., 2015).
Skin integrity risk*	Skin tears due to fragile skin and shearing forces*

* Provided by the expert panel.

Comprehensive Assessment

RECOMMENDATION 1.2a:

For adults at risk for falls, conduct a comprehensive assessment to identify factors contributing to risk and determine appropriate interventions. Use an approach and/or validated tool appropriate to the person and the health-care setting.

Level of Evidence: III
Quality of Evidence: Reviews = strong and moderate; guidelines = strong

Resources

Appendix F: Approaches and Tools for Assessing Falls Risk

Fracture Risk Scale (FRS)

- Validated tool for assessing fracture risk for LTC residents
- First tool developed and validated to predict hip fracture for LTC residents over a 1-year time period
- Supports clinical decisions in care-planning by identifying who is at risk
- Available in PointClickCare (auto-generated from MDS 2.0 data

Combination of Interventions

RECOMMENDATION 2.4:

Implement a combination of interventions tailored to the person and the health-care setting to prevent falls or fall injuries.

Level of Evidence: Ia
Quality of Evidence: Reviews = strong, moderate, and low; guidelines = strong

RECOMMENDATION 2.5:

Recommend exercise interventions and physical training for adults at risk for falls to improve their strength and balance. Encourage an individualized, multicomponent program/activity that corresponds to the person's current abilities and functioning.

Level of Evidence: Ia
Quality of Evidence: Reviews= strong, moderate, and low; guidelines = strong

Resources

Appendix G: Interventions for Falls Prevention and Injury Reduction (Tables 14-17)

Appendix H: Exercise and Physical Training Interventions

Vitamin D Supplementation

RECOMMENDATION 2.7:

Refer adults at risk for falls or fall injuries to the appropriate health-care provider for advice about vitamin D supplementation.

Level of Evidence: V
Quality of Evidence: Reviews = strong and moderate; guidelines = strong and moderate

RECOMMENDATION 2.8:

Encourage dietary interventions and other strategies to optimize bone health in adults at risk for falls or fall injuries, particularly those at risk for fracture. Refer to the appropriate health-care provider for advice and individualized interventions.

Level of Evidence: V
Quality of Evidence: Guideline = strong and moderate; expert panel

Referral and Engagement

- Refer adults with recurrent falls, multiple risk factors or complex needs (1.2b)
- Engage resident and their family

✓ Explore their knowledge and perception of risk

✓ Discuss options for interventions (2.1)

Fracture Risk Scale (FRS)

A Communication Tool
An Education Resource

Gap Analysis

Date Completed: _____

Team Members participating in the Gap Analysis:

- _____
- _____
- _____
- _____
- _____
- _____

Completion of this gap analysis allows for the annual comparison of your current practice to evidence-based practices as regulated by the MOHLTC. See Appendix A for this and other regulations that apply to a falls program in your home.

RNAO Best Practice Guideline Recommendations	Met	Partially Met	Unmet	Notes (Examples of what to include: is this a priority to our home, information on current practice, possible overlap with other programs or partners)
Practice Recommendations: 1.0				
1.1 Screen all adults to identify those who are at risk for falls. Conduct screening as part of admission processes, after any significant change in health status, or at least annually. Screening should include the following approaches: • identifying a history of previous falls; • identifying gait, balance, or mobility difficulties; and • using clinical judgment. (Level of Evidence = Ia & V)				
1.2a For adults at risk for falls, conduct a comprehensive assessment to identify factors contributing to risk and determine appropriate interventions. Use an approach and/or validated tool appropriate for the person and health-care setting. (Level of Evidence = III)				
1.2b Refer adults with recurrent falls, multiple risk factors or complex needs to the appropriate clinician(s) or interprofessional team for further assessment and to identify appropriate interventions. (Level of Evidence = V)				
Practice Recommendations: 2.0				
2.1 Engage adults at risk for falls and fall injuries using the following actions: • explore their knowledge and perceptions of risk, and level of motivation to address risk; • communicate sensitively about risk and use positive messaging; • discuss options for interventions and support self-management; • develop an individualized plan of care in collaboration with the person; • engage family (as appropriate) and promote social support for interventions; and				

Community of Practice
Falls Prevention program

COMMUNITY OF PRACTICE SESSIONS Each session will be a combination of education and sharing	
SESSION 1 **Assessing Current Practices** 1. Become familiar with the *Prevention of Falls and Reducing Injury from Falls* BPG 2. Review your falls program using the gap analysis 3. Explore the importance for collecting baseline data **Thursday, April 22, 2021 – 1 pm to 2 pm (EDT)** **Friday April 23, 2021 – 1 pm to 2 pm (EDT)** **Monday April 26, 2021 – 1 pm to 2 pm (EDT)** **Contact SAranha@RNAO.ca for zoom link**	**SESSION 2** **Planning for Implementation** 1. Use data to support priorities 2. Develop a falls prevention action plan 3. Share evidence-based strategies to implement practice changes **Tuesday, April 27th, 2021 - 2:00-3:00 pm (EDT)**
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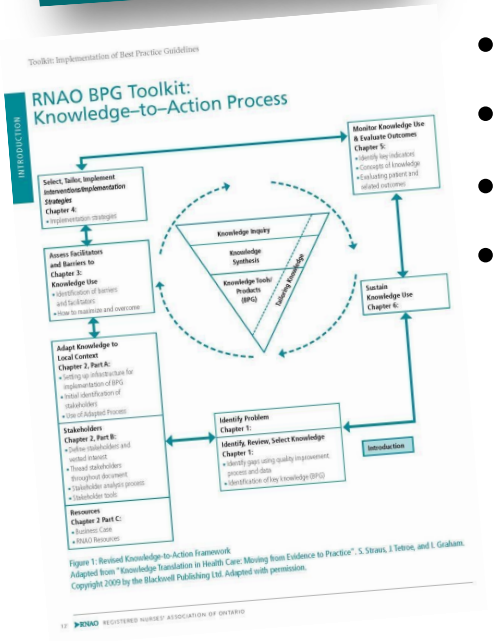
Working together 1:1 or CoP

- Identify an area for quality improvement eg: falls, restraint use, pain management etc.
- Talk to your DOC & contact your LTC Best Practice Coordinator
- Pull together a small inter-disciplinary group to participate and form a team: DOC, PSW, RPN, RN, PT…
- Complete gap analysis with LTC BPC
- Determine priority recommendations
- Review resources provided by LTC BPC
- Develop action plan getting team input
- Implement, monitor, evaluate and sustain practice changes
- Celebrate Successes
- Yearly gap analysis review and ongoing action planning

Step-by-Step
BPG Implementation Toolkit



The toolkit helps you:

- Plan, implement, monitor, evaluate, and sustain evidence based practice changes

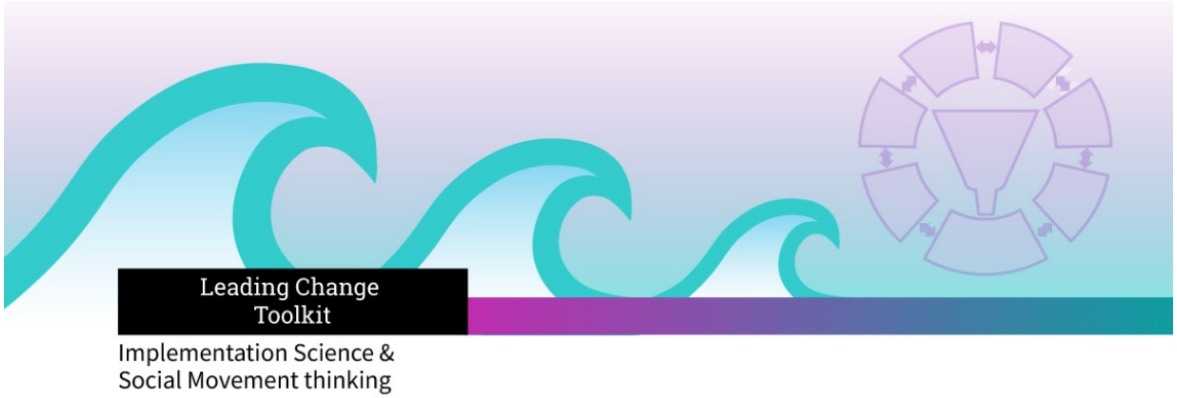
The toolkit is based on Knowledge to Action Framework which helps you to identify:

- Problems and gaps in practice
- Key stakeholders and resources needed
- Infrastructure and process changes needed
- Facilitators and barriers to success

Remember…

Making a plan without the right tools is like making a cake without a recipe. It can be done but you may not get your desired outcome.

Leading Change Toolkit Coming Soon



- Late spring 2021 roll out
- Replaces implementation toolkit
- Online resource
- Includes structured processes that are guided by the Knowledge to Action Framework and Social Movement approaches

ONTARIO OSTEOPOROSIS STRATEGY

More information about osteoporosis and the fracture prevention recommendations is available at:

- **https://www.gerascentre.ca/osteoporosis-strategy-for-long-term-care**
- **https://osteostrategy.on.ca/toolbox/ltc-toolbox/ltcresources**
- **https://osteoporosis.ca**

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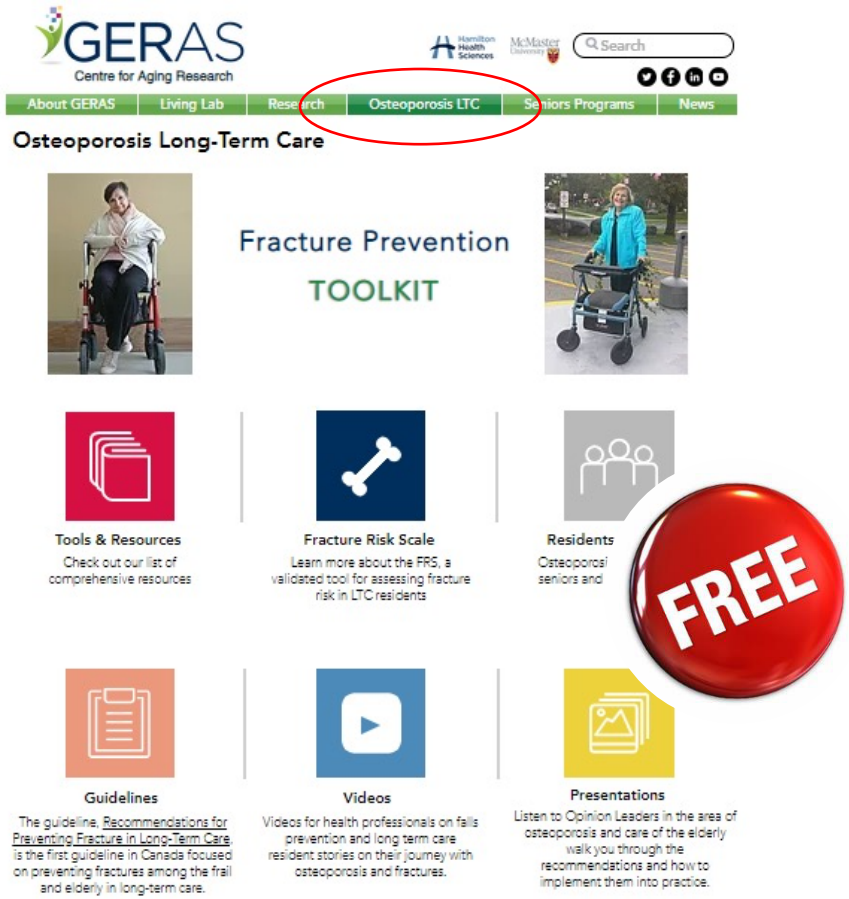
Go To:

ONTARIO OSTEOPOROSIS STRATEGY

Google

Fracture Prevention Toolkit

https://osteostrategy.on.ca/



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For healthcare providers

www.gerascentre.ca/osteoporosis-ltc-resources-for-health-professionals-2/

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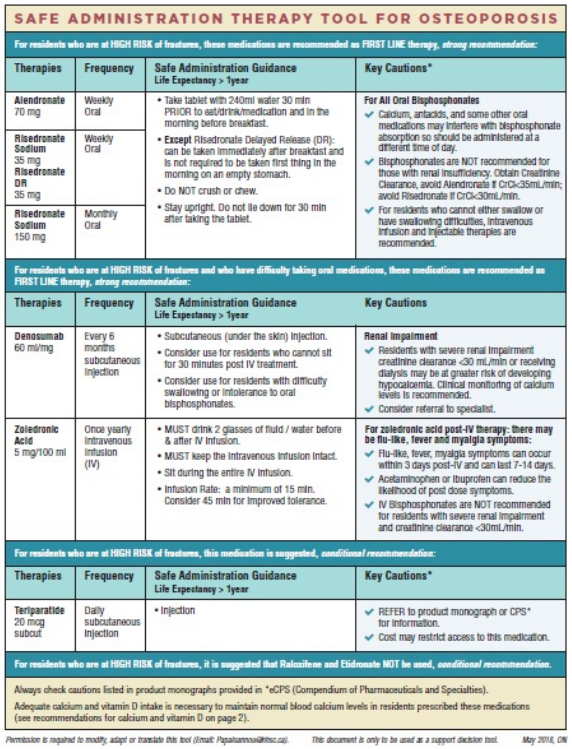


SAFE ADMINISTRATION THERAPY TOOL FOR OSTEOPOROSIS

For residents who are at HIGH RISK of fractures, these medications are recommended as FIRST LINE therapy, *strong recommendation*:

Therapies	Frequency	Safe Administration Guidance Life Expectancy > 1year	Key Cautions*
Alendronate 70 mg **Risedronate Sodium** 35 mg **Risedronate DR** 35 mg **Risedronate Sodium** 150 mg	Weekly Oral Weekly Oral Monthly Oral	• Take tablet with 240ml water 30 min PRIOR to eat/drink/medication and in the morning before breakfast. • **Except** Risedronate Delayed Release (DR): can be taken immediately after breakfast and is not required to be taken first thing in the morning on an empty stomach. • Do NOT crush or chew. • Stay upright. Do not lie down for 30 min after taking the tablet.	**For All Oral Bisphosphonates** ✓ Calcium, antacids, and some other oral medications may interfere with bisphosphonate absorption so should be administered at a different time of day. ✓ Bisphosphonates are NOT recommended for those with renal insufficiency. Obtain Creatinine Clearance, avoid Alendronate if CrCl<35mL/min; avoid Risedronate if CrCl<30mL/min. ✓ For residents who cannot either swallow or have swallowing difficulties, intravenous infusion and injectable therapies are recommended.

For residents who are at HIGH RISK of fractures and who have difficulty taking oral medications, these medications are recommended as FIRST LINE therapy, *strong recommendation*:

Therapies	Frequency	Safe Administration Guidance Life Expectancy > 1year	Key Cautions
Denosumab 60 ml/mg	Every 6 months subcutaneous injection	• Subcutaneous (under the skin) injection. • Consider use for residents who cannot sit for 30 minutes post IV treatment. • Consider use for residents with difficulty swallowing or intolerance to oral bisphosphonates.	**Renal Impairment** ✓ Residents with severe renal impairment creatinine clearance <30 mL/min or receiving dialysis may be at greater risk of developing hypocalcemia. Clinical monitoring of calcium levels is recommended. ✓ Consider referral to specialist.
Zoledronic Acid 5 mg/100 ml	Once yearly Intravenous Infusion (IV)	• MUST drink 2 glasses of fluid / water before & after IV infusion. • MUST keep the intravenous infusion intact. • Sit during the entire IV infusion. • Infusion Rate: a minimum of 15 min. Consider 45 min for improved tolerance.	**For zoledronic acid post-IV therapy: there may be flu-like, fever and myalgia symptoms:** ✓ Flu-like, fever, myalgia symptoms can occur within 3 days post-IV and can last 7-14 days. ✓ Acetaminophen or ibuprofen can reduce the likelihood of post dose symptoms. ✓ IV Bisphosphonates are NOT recommended for residents with severe renal impairment and creatinine clearance <30mL/min.

For residents who are at HIGH RISK of fractures, this medication is suggested, *conditional recommendation*:

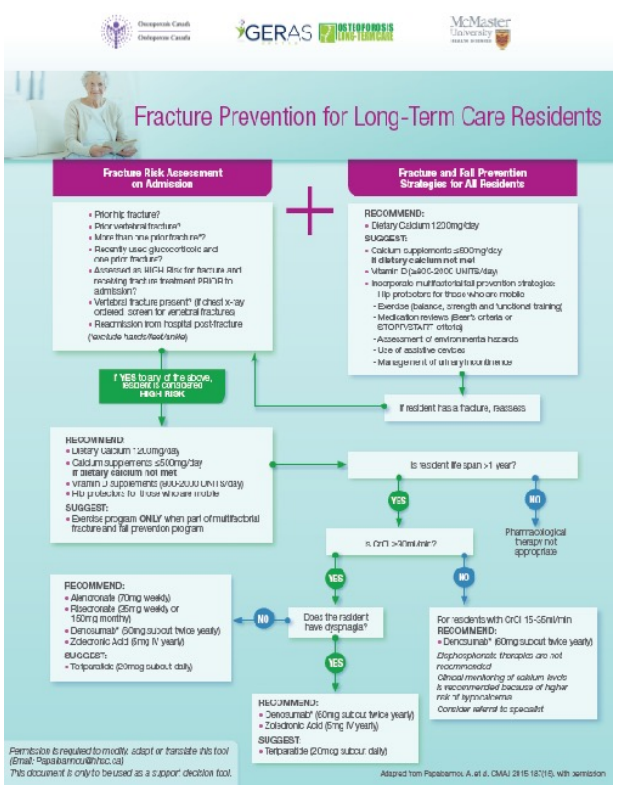
Therapies	Frequency	Safe Administration Guidance Life Expectancy > 1year	Key Cautions*
Teriparatide 20 mcg subcut	Daily subcutaneous injection	• Injection	✓ REFER to product monograph or CPS* for information. ✓ Cost may restrict access to this medication.

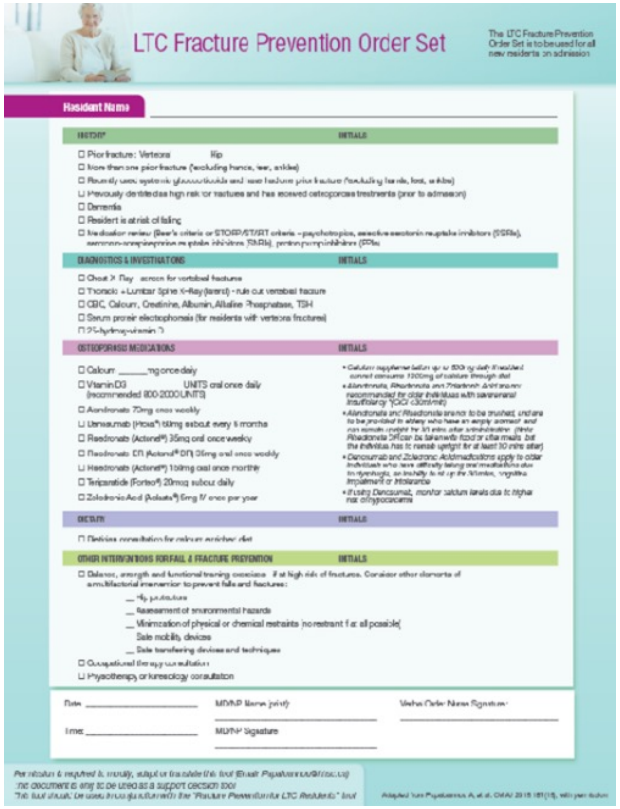
For residents who are at HIGH RISK of fractures, it is suggested that Raloxifene and Etidronate NOT be used, *conditional recommendation*.

Always check cautions listed in product monographs provided in *eCPS (Compendium of Pharmaceuticals and Specialties).

Adequate calcium and vitamin D intake is necessary to maintain normal blood calcium levels in residents prescribed these medications (see recommendations for calcium and vitamin D on page 2).

Permission is required to modify, adapt or translate this tool (Email: Papaioannou@lhsc.ca). This document is only to be used as a support decision tool. May 2018, ON





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Educational Videos

https://www.gerascentre.ca/osteoporosis-long-term-care-video-gallery/

ONTARIO OSTEOPOROSIS STRATEGY

Meeting the Challenges of Osteoporosis – English Version

Learn about the challenges of osteoporosis as well strategies to prevent falls and fractures in LTC.

Learn More

Combatting Fear with Knowledge About Osteoporosis

Mark shares his experience of caring for his mother who has osteoporosis.

Learn More

The Presence of Pain and Undiagnosed Osteoporosis

Devora shares her experience living with osteoporosis.

Learn More

Four topics:

- Personal Support Workers
- Physiotherapists & Physiotherapy Assistants
- Group Exercise Trainers & Exercise Professionals
- Restorative Care

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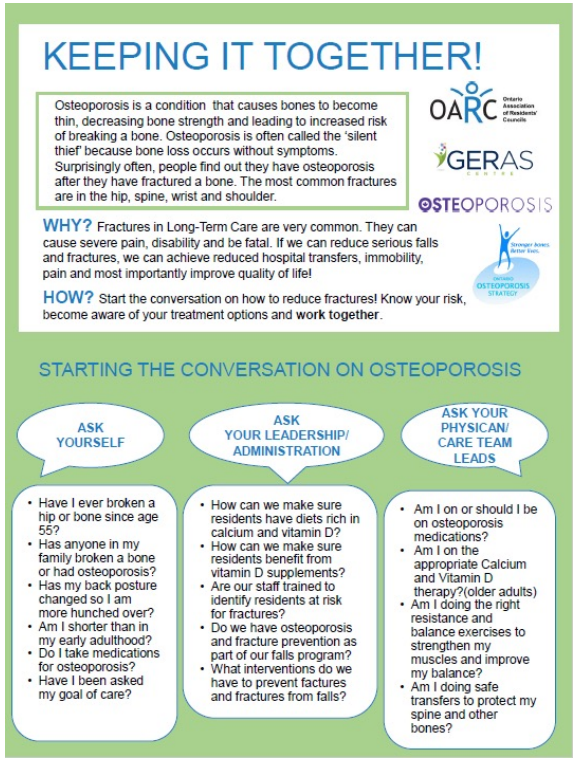
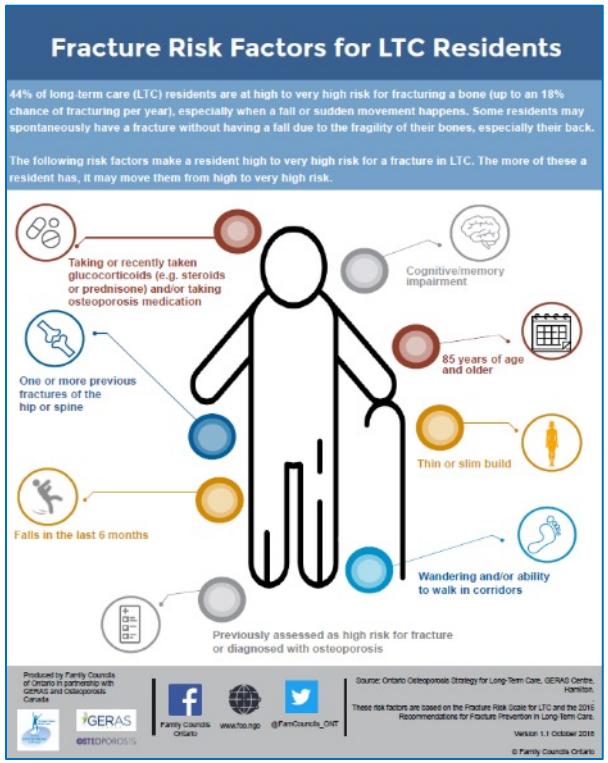
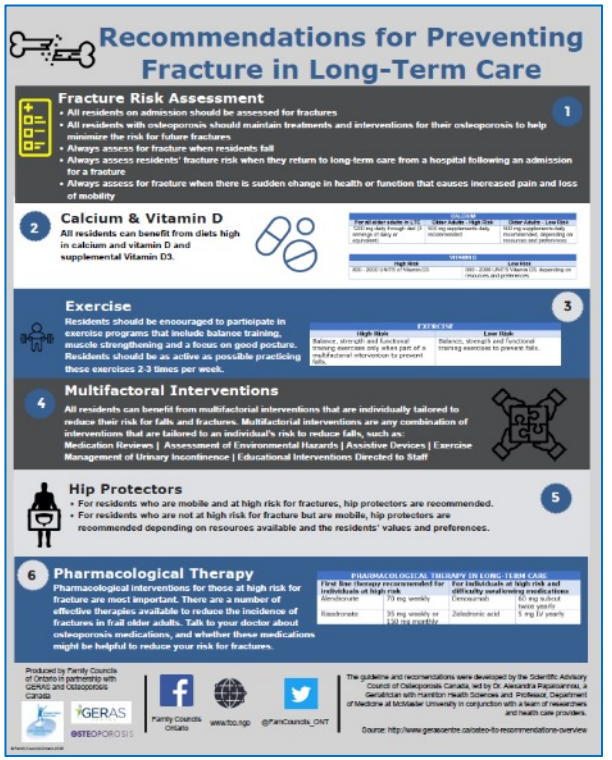
For residents and family members

ONTARIO OSTEOPOROSIS STRATEGY

https://www.gerascentre.ca/resources-for-residents-families/







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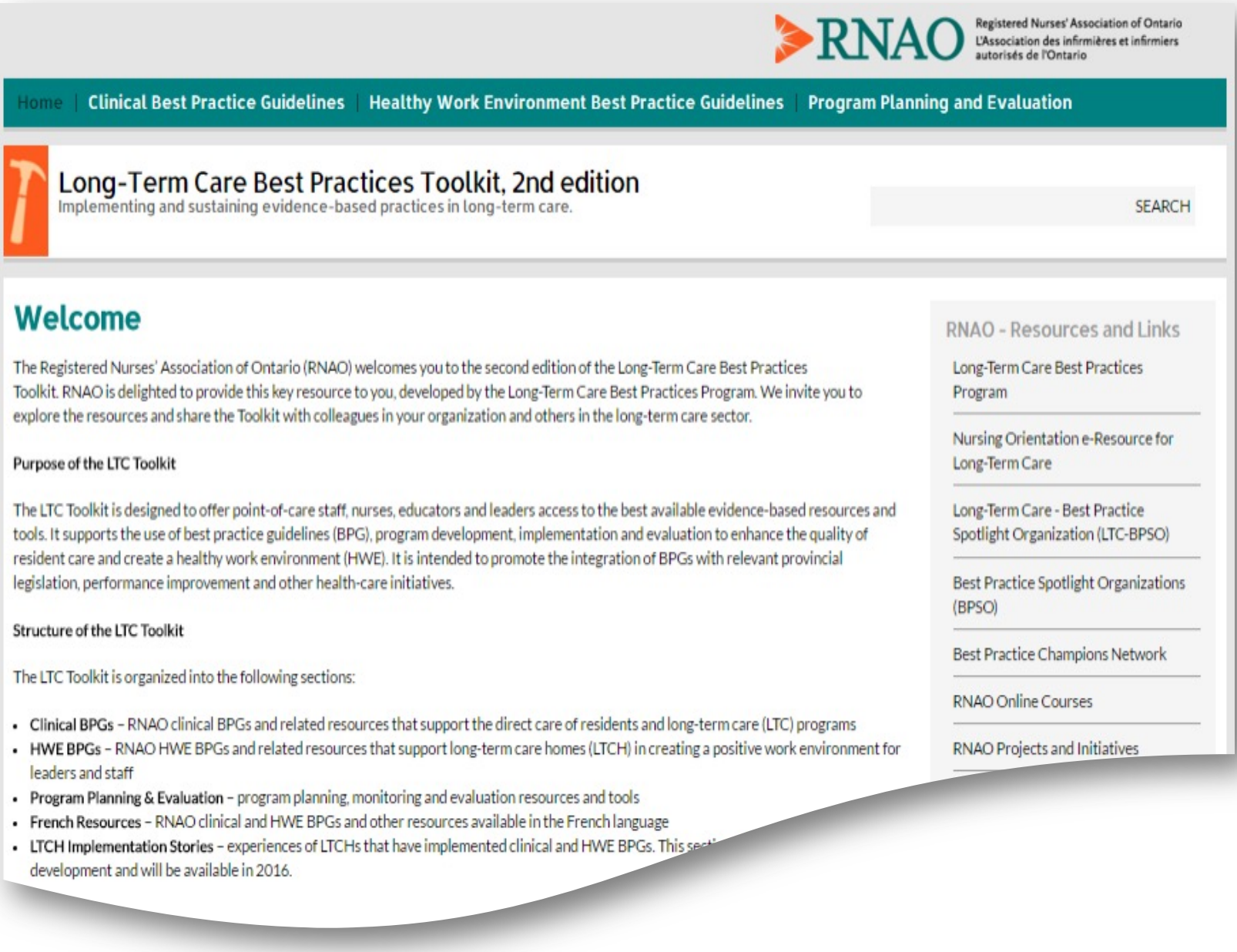

http://ltctoolkit.rnao.ca

Poll Question

Next Steps

- Review your current practices
- Connect with your RNAO LTC Best Practice Coordinator
- Complete a Gap Analysis for your Falls prevention program and review LTC Falls Toolkit Resources
- Review OOS Fracture Prevention Toolkit Resources and Plan FRS integration
- Trial and Evaluate FRS roll out

Let's work together to reduce falls and injuries from falls

Community of Practice
Falls Prevention program

COMMUNITY OF PRACTICE SESSIONS Each session will be a combination of education and sharing	
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Questions

Shaila Aranha
RNAO LTC Best Practice Coordinator (Waterloo Wellington and HNHB)
SAranha@RNAO.ca

Kate Harvey
OOS Regional Integration Lead (Waterloo, Wellington, London and Windsor)
kharvey@osteoporosis.ca

Thank You!


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PROGRAM


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