



Newsletter - Ontario Osteoporosis Strategy

Stepping Stones along the journey

The statistics have been reported; one in three women and one in five men over 50 will suffer an osteoporotic fracture in their lifetime. The risk of another fracture is increased with each fracture. The results of fractures in the elderly can be devastating and can even lead to death. Hip fractures and osteoporotic fractures pose a significant risk to both men and women which can be higher than the risk of heart attack, diabetes and stroke combined. These statistics are ever more important in our new elderly dynamic population. The increase of life expectancy and the tremendous shift to an the aging population in Ontario represents a new challenge for healthcare professionals. The financial and human costs brings undue burden to the healthcare system and caregivers.

Working together to implement an appropriate response to the reduce the risk of fractures in Ontario's population is a step towards a future free of hip fractures.

The Ontario Osteoporosis Strategy (OOS) is an initiative aimed at reducing the morbidity, mortality and costs from osteoporotic fractures using a patient-centred, multi-disciplinary approach that is integrated across healthcare sectors. Find out more at: <https://www.osteostategy.on.ca/>



OSTEOPOROSIS
CANADA

St. Michael's
Inspired Care. Inspiring Science.



In this issue:

Bone Fit™
International

CLEAR
Medical
Imaging

NSM LHIN
Initiatives

St. Michael's
Evaluation
Team

Southlake Regional Health Centre:

Osteoporosis Interprofessional Education (OP IPE) Module

Southlake Regional Health Centre, along with its Family Practice Teaching Unit, the Canadian Memorial Chiropractic College, The Arthritis Program (TAP) and the Ontario Osteoporosis Strategy, were pleased to present the 2019 Osteoporosis Interprofessional Education (IPE) Module for learners in health care. A patient with lived experience was also included as part of the teaching faculty.

The session aimed to provide learners with an awareness and appreciation for the interprofessional approach in osteoporosis assessment and management. The learners were from a variety of professions including family practice, nursing, pharmacy, diagnostic imaging, chiropractors and social work.

The session focused on the importance of maximizing bone health, identifying risk factors and using appropriate tools to identify, evaluate and treat primary and secondary osteoporosis, exploring pharmacological and non-pharmacological strategies in care and the importance of primary and secondary prevention in osteoporosis care. It provides learners with an awareness of Osteoporosis for them to use as they graduate and begin to practice.



The presenting team from Southlake Regional Health Centre and Eduardo Meneses, Fracture Prevention Coordinator, Ontario Osteoporosis Strategy (R)

Fracture Screening and Prevention Program

and CLEAR Medical Imaging Partnership

In partnership with Windsor Regional Hospital (WRH) the Ontario Osteoporosis Strategy employs a full-time Fracture Prevention Coordinator (FPC), Katelynn Goodchild, as part of the Fracture Screening and Prevention Program (FSPP). Katelynn works within the fracture clinic at the Ouellette Campus. She screens patients 50 years of age or older who have sustained a low trauma fracture and facilitates the referral of these patients for further assessment and treatment (as appropriate). Patients who have vertebral fracture(s) are seen in the Neuro Surgical (clinic next to the fracture clinic) at the Ouellette Campus.

Through the guidance of the Neuro Surgical clinic, discussions began with Dr. John Speirs and the CLEAR Medical Imaging management team, which led to a partnership to address the care gap for patients with low trauma vertebral fractures.

Dr. Speirs is an Interventional Radiologist. He describes Interventional Radiology as a subspecialty of Diagnostic Imaging focusing on diagnosis and minimally invasive treatment such as angiography, pain management for oncology. Over time, this has morphed into image-guided, minimally invasive treatments including treatment for compression (vertebral fracture) fractures.

Each year, hundreds of thousands of Canadians needlessly fracture because their osteoporosis goes undiagnosed and untreated. Compression fractures have an impact on a person's quality of life and Dr. Speirs treats them to prevent future fractures. He says some vertebral fractures are old, some are new and almost all of these patients have osteoporosis, which, if left undiagnosed and/or untreated, could lead to future fractures.

Katelynn receives notification from CLEAR of patients with vertebral fractures caused by minimal trauma and who are 50 + years of age. These patients will go on to receive treatment from Dr. Speirs at the Ouellette Campus and are screened as part of the FSPP.

As these patients are at high risk of subsequent fractures, Katelynn facilitates a referral to a specialist to manage their bone health. A letter is also sent to the person's primary care provider, which is a protocol for the FSPP. "The partnership between CLEAR and the FSPP is a perfect relationship", says Dr. Speirs. FSPP patients who are eligible for a Bone Mineral Density test can choose to have the test at the WRH Metropolitan Campus or either of the CLEAR locations in Windsor, giving patients a choice of the most accessible location for them.

Fracture Screening and Prevention Program

and CLEAR Medical Imaging Partnership

More information on CLEAR Medical Imaging:

CLEAR Medical Imaging ("CLEAR"), provides a full range of diagnostic imaging services across a network of 9 independent health facilities located across Southwest Ontario (Windsor-Essex and Chatham-Kent counties). Clear Medical Imaging provides

- A team that consists of more than 140 medical and administrative team members
- A network of Clinics that offer extended evening and weekend hours, free parking, and clean, comforting environments
- A team of Radiologists with local hospital affiliations and strong qualifications to provide clear, accurate and timely reporting
- More than 1,200 referring healthcare provider relationships
- A streamlined process to share patient images and reports with referring providers.



Michelle Maeckeler, Manager
Clinic Support at CLEAR
Medical Imaging Windsor and
Katelynn Goodchild, FPC at
Windsor Regional Hospital.

Bone Mineral Density Testing (RUR)

and Reporting work in the North Simcoe Muskoka LHIN

In spring 2018, Georgian Radiology Consultants in Simcoe County implemented the new BMD requisition developed by Women's College Hospital for the Ontario Osteoporosis Strategy (OOS). The requisition is being used by over 125 health care practitioners and specialists in the Barrie area.

The Required Use Requisition (RUR) was developed initially by a team of researchers at Women's College Hospital. It has been validated by the Ontario BMD Working Group (a multidisciplinary team of family physicians, radiologists, internists, and scientists) and in relation to the current clinical guidelines for BMD testing, the OHIP Fee Schedule, and recommendations from Choosing Wisely Canada. In recognition of the importance of this initiative, Choosing Wisely Canada partnered with the development team.

The RUR can impact the following in Ontario:

- Increase BMD testing in those at high risk of a future fracture
- Decrease BMD testing in those at low risk of a future fracture
- Increase the accuracy of BMD reports by ensuring that clinical risk factors are incorporated into the fracture risk assessment at the time of BMD reporting

These impacts will improve the overall quality of fracture care in Ontario. Information gained from a BMD test can guide clinicians and patients in understanding the risk of having an osteoporosis-related fracture and inform decisions aimed at mitigating these risks. BMD testing plays an important role in the reduction of morbidity and mortality related to fractures, and it is therefore important that the appropriate people are being tested.

The RUR – BMD requisition form is posted at the OOS web site and available for download.

You can find it at:

<https://www.osteostategy.on.ca/toolbox/resources-for-health-professionals/hpeotools/recommended-use-requisition-rur-for-bmd-testing/>

This summer, the Diagnostic Imaging Department at Collingwood General & Marine Hospital (CGMH) and the OOS are working together to improve the overall quality of osteoporosis and fracture care in that community by implementing the BMD requisition form. Feedback on the implementation of the requisition BMD form: Recommended Use Requisition will be shared at the CGMH Research Day in June 2020. A NSM LHIN wide adoption of the BMD form is the aim.

Capturing Vertebral Fracture Patients

at Royal Victoria Regional Health Centre in Barrie

In April 2019, the Ontario Osteoporosis Strategy's Fracture Screening and Prevention Program started to screen patients in Simcoe County and Muskoka who have had vertebral fractures. This work is in collaboration with Georgian Radiology Consultants and Royal Victoria Regional Health Centre. The program was modelled after the program at CLEAR Medical Imaging Clinic at the Windsor Hospital.

The Fracture Prevention Coordinator in Simcoe County and Muskoka are able to screen many of the non-vertebral fracture patients by working with the orthopaedic surgeons in the fracture clinics in the region but were missing vertebral fracture patients as they don't typically present to the fracture clinics. Vertebral fractures are the most common osteoporotic fractures and are associated with an 8-fold increase in mortality rates. Vertebral fractures are powerful predictors of future spine and hip fractures. Dr. Chris Guest, an Interventional Radiologist and Dr. Gordon Crawford an Orthopaedic Surgeon, met to develop a plan to ensure vertebral fracture patients receive appropriate intervention to reduce their risk of future fractures. Vertebral fracture patients in the region have the opportunity to meet with a Fracture Prevention Coordinator at RVH to discuss the importance further assessment and connecting with their family doctor about their bone health and fragility fracture. As vertebral fracture are considered high risk, increasing the risk of another fracture, these patients are also referred to an osteoporosis specialist within the Simcoe Muskoka Bone Health Program.

The Region's next step is to develop a pathway to ensure vertebral fracture patients, who present in the Emergency Department, are screened and offered further assessment.



Dr. Christopher Guest, GRC/RVH, Rebecca Hyde, FPC at RVH and Sara Gareri, GRC

Subsequent fractures of the patients screened

in the Fracture Screening and Prevention Program (FSPP)

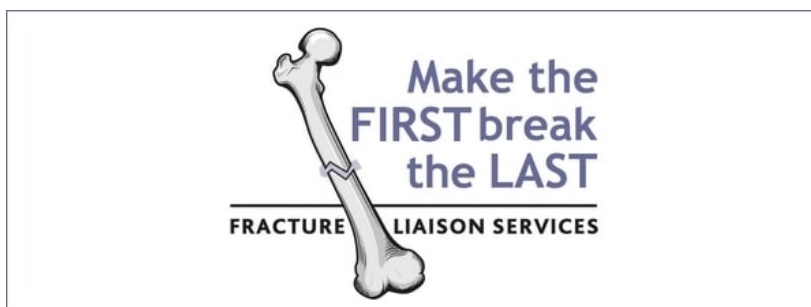
The evaluation team at St. Michael's hospital engages in knowledge translation and the promotion of findings from the Fracture Screening and Prevention Program (FSPP) through publications in peer-reviewed scientific journals and presentations at international conferences.

As part of the program evaluation using administrative data at ICES (formerly known as the Institute of Clinical Evaluative Sciences), the team at St. Michael's examined subsequent fractures (refractures) of the patients screened in the FSPP. We were particularly interested in knowing whether certain index fracture types were associated with a higher risk of refractures, as previous research on this topic was unclear. Refracture was defined as a new hip, pelvis, spine, distal radius or proximal humerus fracture. There were 6,543 patients in the cohort screened in the FSPP between 2007 and 2010, all of whom were confirmed to have sustained a fragility fracture. Majority were female (82.1%), mean age of 68 years with the most common index fracture being the distal radius fracture. Thirty-two percent of patients reported a history of fragility fractures after the age of 40 (i.e., a fracture prior to the index fracture). Thirty-four percent of patients reported a previous diagnosis of osteoporosis and 28.7% reported a history of falls in the year prior to screening.

One in ten of these patients refractured within 5 years after program screening. Even after controlling for the impact of age and sex, presenting with multiple simultaneous fractures (of different sites) at screening was an indicator of higher refracture risk.

While presenting with multiple fractures was an indicator of a higher refracture risk, presenting with an ankle fracture was associated with a lower refracture risk. Based on these findings, a more targeted approach for patients at a higher refracture risk is suggested.

Reference: Sujic R et al. (2019) Five-year refracture rates of a province-wide fracture liaison service. *Osteoporos Int.* doi: 10.1007/s00198-019-05017-3. [Epub ahead of print]



Evidence of patient beliefs, values and preferences

is not provided in osteoporosis clinical practice guidelines

The team at St. Michael's conducted a document analysis of English-language international osteoporosis guidelines based on the International Osteoporosis Foundation website in order to determine: a.) the extent to which osteoporosis guidelines reflected patients' beliefs, values and preferences (BVPs); b.) how BVPs were conceptualized; and c.) the methods used to elicit BVPs in the references cited by the guidelines. Each guideline was examined and all instances of statements pertaining to BVPs were extracted.

Twenty-seven of 70 (39%) guidelines included 95 statements about patient BVPs. Of the 95 statements, 32 statements (14 guidelines) were classified under BVP related to the choice of pharmacotherapy or general treatment, 10 (7 guidelines) under BVP related to adherence to pharmacotherapy or treatment in general, 5 (5 guidelines) under BVP related to financial costs and benefits, 43 (19 guidelines) under other BVP mentioned but not supported by a reference to a primary study or systematic review, and 5 (3 guidelines) under other BVP mentioned and supported by at least one reference to a primary study or systematic review. Twenty-nine references were cited to reflect the BVPs mentioned, including an editorial and quantitative studies.

In conclusion, BVPs were most often (14 guidelines) conceptualized as preference for one medication over another. Evidence of patient beliefs, values and preferences is not provided in osteoporosis clinical practice guidelines.

Too Fit to Fall or Fracture

Strength Training At least 2 days/week

- Exercises for legs, arms, chest, shoulders, back
- Use body weight against gravity, bands, or weights*
- 8 - 12 repetitions per exercise



Try these to get started:

- Classes at YMCA/community centre
- Consult a physical therapist/kinesiologist
- Contact Osteoporosis Canada



Balance Exercises Every day

- Tai Chi, dancing, walking on your toes or heels
- Have a sturdy chair, counter, or wall nearby, and try (from easier to harder): shift weight from heels to toes while standing; stand heel to toe; stand on one foot; walk on a pretend line



Posture Awareness Every day

- Gently tuck your chin in and draw your chest up slightly
- Imagine your collarbones are wings - spread your wings slightly without pulling your shoulders back



Aerobic Physical Activity At least 150 mins/week

- Bouts of 10 mins or more, moderate to vigorous intensity*
- You should feel like your heart is beating faster and you are breathing harder
- You might be able to talk while doing it, but not sing

Examples:

- Brisk walking
- Dancing
- Jogging
- Aerobics class

*If you have a spine fracture, consult a physical therapist/kinesiologist before using weights, and choose moderate, not vigorous aerobic physical activity.

Questions? Want a free physical activity booklet? Contact Osteoporosis Canada: English 1 800 463 6842 /

French 1 800 977 1778 or www.osteoporosis.ca

Locate a Bone Fit™ trained instructor: English 1 800 463 6842 / French 1 800 977 1778 or www.bonefit.ca



TOO FIT TO FALL OR FRACTURE: ONE PAGE GUIDE

This one page guide is packed with useful information to get you started thinking about ways you can safely and effectively exercise.

See what the experts recommend along with real life examples of what you can do and what you should avoid.

DOWNLOAD THE ONE PAGE GUIDE

Ontario Osteoporosis Strategy Primary Care

Initiative in North Simcoe Muskoka LHIN

The Ontario Osteoporosis Strategy's Primary Care Initiative is designed to engage primary care practitioners, particularly those in CHCs, FHTs, and Nurse Practitioner-Led Clinics, to adopt clinical pathways to support guideline-based care for osteoporosis and fracture patients. In January 2015, the NSM LHIN funded a Fracture Prevention Coordinator to support a regional Fracture Screening and Prevention Program and to work with Primary Care in the LHIN. For the past 4 years, Lori Woelfel, Fracture Prevention Coordinator, has been supporting primary care when not at the Orillia Soldiers Memorial Hospital and Collingwood General and Marine Hospital Fracture Clinics implementing the Fracture Screening and Prevention Program.

Canadian guidelines for osteoporosis recommend that individuals over 65 years of age should receive a baseline BMD test. In the April 2017 Provincial Performance Data for Osteoporosis Management Technical Report it showed a low rate of BMD testing in this population across LHINs (in 2014/15 only 13% of men and 28% of women aged 68-70 had been tested in the past 5 years). It was decided that this was a good place to start our work with Primary Care in this LHIN.

The Primary Care team identifies women over the age of 65 and men over the age of 70 who never had a Bone Mineral Density test completed. Lori, the Fracture Prevention Coordinator, calls the patients on behalf of the doctors from the Primary Care Team, discusses risk factors for fracture and osteoporosis with the patients and arranges for BMD test to be completed. Once Lori receives the completed BMD report, those patients who are deemed low risk for a future fracture are contacted by Lori for health teaching regarding the importance of calcium, vitamin D, and physical activity for good bone health. For the patients deemed moderate or high risk for a future fracture as per the BMD report, Lori will contact the family physician for next steps. All patients identified are encouraged to take part in the osteoporosis education programs within the CHCs and FHTs in the region.

The 2017 trial called The Screening for Osteoporosis in Older Women for the Prevention of Fracture (SCOOP) *in England* demonstrated that using a two-step screening program targeting older women in the community significantly reduces the risk of hip fracture and that primary fracture prevention in the community could catch 25% of hip fractures before they happen. This is a very similar approach to our work in the NSM LHIN. Since 2015, primary care practices in Orillia, Severn, Clearview, Wasaga Beach, Barrie, and Oro-Medonte have completed the BMD pathway and fracture risk assessment. These sites have implemented clinical pathways for people with osteoporosis and people who are at risk of osteoporotic fractures, utilizing tools that are now available to them. These tools include the Osteoporosis custom form for Telus PS Suites (which can help improve care by integrating assessment based on the osteoporosis guidelines), the standardized Recommended Use Requisition for Bone Mineral Density Testing (that provides health care professionals with information they need for a fracture risk assessment, as well as for monitoring purposes).

If you are from the NSM LHIN and interested in having support with the osteoporosis clinical pathways, please contact Monica Menecola, Regional Integration Lead for the Simcoe County and Muskoka area at mmenecola@osteoporosis.ca



Lori Woelfel, Fracture Prevention Coordinator in the NSM LHIN.



Bone Fit™ at the University of Toronto

In collaboration with the University of Toronto, our first hybrid training opportunity for Bone Fit™ was a great success. Using an Aging and Activity elective class in the Kinesiology program at University of Toronto as a platform for offering the important principles and considerations of exercise in Osteoporosis, Bone Fit™ was introduced to 69 students, with 39 of them opting to pursue further training in order to complete the full Bone Fit workshop. Workshop topics were offered for 6 weeks, in one-hour practicum blocks along with an introductory lecture. Those students who wished to complete the full training attended a consolidation mini-workshop for 2 hours following the course completion, received the workbook materials and were offered the option of writing the BF exam to be considered Bone Fit student-trained.

Students were engaged in learning the various concepts related to posture, balance, ambulation, exercise progression and spine sparing and strengthening and found the application to the real world a fun adjunct to 'book learning'. While challenging to teach in this manner (compared to a synchronous workshop), the content flowed well and has both the Bone Fit™ trainer and course instructor eager to revise and offer again next year.

Bone Fit™ Partnership with the National Osteoporosis Foundation

The National Osteoporosis Foundation (NOF), the leading health organization dedicated to osteoporosis and bone health in the United States, formalized a partnership with Osteoporosis Canada earlier this year that allows them to run Bone Fit™ workshops in the USA. The NOF hosted its first Bone Fit™ USA workshop in conjunction with its annual clinical conference, the Interdisciplinary Symposium on Osteoporosis (ISO) this past May. A diverse group of 26 clinicians and fitness professionals attended this training and found it to be incredibly informative and actionable. All of the participants expressed excitement to bring the Bone Fit™ principles back to their practices and to help spread the work about the program. Several of the clinicians are interested in becoming future trainers for the program as well.

Bone Fit™ has been running in Canada since 2010, training health and fitness professionals who work with clients with osteoporosis. Over 1600 people have completed the training, including many physiotherapists, kinesiologists, and fitness instructors. This new partnership will enable health and fitness professionals in the USA to increase their confidence and knowledge in prescribing safe exercises for people with osteoporosis. As well, the NOF and Osteoporosis Canada will be able to share their learnings with each other, further strengthening the program. NOF will be hosting a second training in September in Albuquerque, New Mexico.





An evidence-informed exercise training workshop, designed for healthcare professionals and exercise specialists to provide training on the most appropriate, safe and effective methods to prescribe and progress exercise for people with osteoporosis.



Interactive Practical Learning



Learn the most recent recommendations on reducing fracture risk



Emphasize safety in your exercise program

BASICS CLINICAL

Aimed at exercise and fitness professionals working in the community with uncomplicated osteoporosis clients | \$200

Developed for rehabilitation professionals working in a clinical environment with simple or complex osteoporosis clients | \$400

All registrations include a light breakfast, lunch, free t-shirt (Basics) or foam roller (Clinical).

To register, visit www.bonefit.ca

Guelph

YMCA-YWCA Guelph

Basics - Oct 5
Clinical - Oct 5-6

Sault Ste-Marie

YMCA of Sault Ste. Marie

Basics - Oct 19
Clinical - Oct 19-20

Ottawa

Carleton University

Basics - Oct 26
Clinical - Oct 26-27

Chatham

St. Clair College Healthplex

Basics - Mar 7
Clinical - Mar 7-8

Kingston

YMCA

Basics - Mar 28
Clinical - Mar 28-29

For all workshops - Day 1: 7:30AM to 5:00PM | Day 2: 8:00AM to 4:00PM

Contact
bonefit@osteoporosis.ca

416-696-2663 x2290

OSTEOPOROSIS

osteoporosis.ca



osteostategy.on.ca



The Ontario Osteoporosis Strategy is committed to educating health professionals across Ontario about osteoporosis and related fractures. Beyond The Break is an inter-professional and continuing education series working to improve knowledge on: emerging best practices, screening, diagnosis, treatment and management of osteoporosis. A wide range of topics have been covered from nutrition, physiotherapy, long-term care, primary care, and osteoporosis and cancer care. All Beyond the Break webinars are hosted on the Ontario Telemedicine Network (OTN) and registration is not required to watch a webinar. Every webinar is archived for 2 years and can be found at <http://osteostategy.on.ca/btb-main>.

The series is currently on summer break and will return in the Fall.

Next webinar:

Maximisation des DME envers ostéoporose et la prévention des chutes, **Dr. Therese Hodgson, Sept. 12, 2019, 12PM**



2019 WEBINAR SCHEDULE

12:00PM-1:00PM EST

SEPTEMBER



12 Maximisation des DME envers ostéoporose et la prévention des chutes

Presented by Dr. Dr. Thérèse Hodgson
Watch it on OTN #109159922



24 TBD

Presented by Dr. Upender Mehan
Watch it on OTN #12671584



26 Reducing the Risk for Falls in Later Life

Presented by Dr. Maureen Ashe & Kristi Gerevas,
UBC, Centre for Hip Health & Mobility
Watch it on OTN #83387747



OCTOBER



31 Sarcopenia & Frailty

Presented by Dr. Ahmed Negm, GERAS Centre
Watch it on OTN #109163284

NOVEMBER



5 Nutrition and Bone Health Throughout the Lifespan

Presented by Dr. Hassan Vatanparast, University of Saskatchewan
Watch it on OTN #116280099



7 Dance, Mobility and Falls

Presented by Dr. Patricia Hewston, GERAS Centre
Watch it on OTN #109164870

Community Connections



CONNECT WITH US ON TWITTER @FRACTURELINK

Contact your Regional Integration Lead (RIL)

RILs cultivate partnerships in communities across Ontario to foster and integrate fracture reduction pathways and establish bone health educational collaborations. They develop and disseminate tools and resources for healthcare professionals, patients and caregivers.

www.osteostategy.on.ca

Look for the next issue of Fracture Link in Nov 2019.

If you would like to be featured in the upcoming issue of Fracture Link please contact Marq Nelson
mnelson@osteoporosis.ca
 1 800 463-6842 ext 2318

Elizabeth Stanton	estanton@osteoporosis.ca	Toronto West, Peel, Northern Ontario
Jennifer Weldon	jweldon@osteoporosis.ca	Toronto Central, York Region
Judy Porteous	jporteous@osteoporosis.ca	Bruce, Grey, Huron, Perth, Lambton, Dufferin
Julian Rawlins	jrawlins@osteoporosis.ca	Toronto East, Durham & Peterborough
Kate Harvey	kharvey@osteoporosis.ca	Waterloo, Wellington, Brantford, London, Windsor
Lisa Campbell	lcampbell@osteoporosis.ca	Hamilton, Niagara, Halton, London
Marq Nelson	mnelson@osteoporosis.ca	Ottawa, Pembroke, Kingston, Eastern Ontario
Monica Menecola	mmenecola@osteoporosis.ca	Simcoe County & Muskoka