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The big picture: Spring into action

"Nothing happens until something moves." - Albert Einstein

Evolution is a word that can very easily describe the path of the Ontario Osteoporosis Strategy (OOS) since 2005. What began by looking at the vast service gaps in osteoporosis care has evolved into a focused approach to reducing hip fractures by 20% by the year 2020. This expected 20% reduction will help reduce the current care gaps in osteoporosis care.

This issue of Fracture Link will highlight the efforts of the growing number of osteoporosis and fracture risk reduction champions and will provide updates from OOS stakeholders.

[Visit us online at www.osteostategy.on.ca](http://www.osteostategy.on.ca)



Osteoporosis Canada

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ST. MICHAEL'S HOSPITAL
A teaching hospital affiliated with the University of Toronto



Women's
College
Hospital



Upcoming Events & Highlights

Beyond the Break

Targeted towards health professionals working with people living with osteoporosis, this modular series is designed to provide updates on the latest advances in recognition, diagnosis, treatment and education on osteoporosis. It's free and interactive and you can access the modules using your computer!



BoneFit

The most recent BoneFit workshops were held in Barrie and Kitchener and a total of 59 participants attended. BoneFit workshops were also highlighted at the Ontario Society for Health and Fitness Professionals conference as well as the UHN Cardiovascular Prevention and Rehabilitation Program held in Toronto.



Bonefit.ca upcoming courses

July 12-13, 2014

University of Calgary –
Calgary, AB

September 13-14, 2014

Sault College – Sault St.
Marie, ON

October 25-26, 2014

St Joseph's Health Care –
London, ON

November 15-16, 2014

Peterborough Sports &
Wellness Centre –
Peterborough, ON

New Exercise Recommendations

Part 1: Overview of Too Fit to Fracture Exercise Recommendations
Presented by Dr. Lora Giangregorio, PhD, University of Waterloo
Friday, June 27, 2014
(12-1pm ET)

For more information:
www.osteoporosis.ca/health-care-professionals/beyond-the-break/



Poster Presentation in Berlin (at FFN) and Ottawa (at CDPAC)

Benefits of a Peer-to-Peer Learning Initiative with Osteoporosis Screening Coordinators

Background: A peer-to-peer learning initiative was identified as a way of integrating and enhancing the information and concepts from the Choices and Changes workshop (developed by the Institute for Healthcare Communication) while providing interactive support to the OSCs, who work in fracture clinics across the province.

Objective: To examine the perceived benefits of peer-to-peer learning and the feasibility of implementing future peer-to-peer learning opportunities within the Fracture Clinic Screening Program.

Outcome: The peer-to-peer learning initiative will be rolled out to all OSCs throughout fiscal year 2013-2014.



The full poster on Peer to Peer learning presented at the Fragility Fracture Network (FFN) in Berlin, September 2013 and at the Chronic Disease Prevention Alliance of Canada (CDPAC) will be available online at osteostategy.on.ca

Ontario Osteoporosis Strategy for Long-Term Care (OOSLTC)

The Ontario Osteoporosis Strategy for Long-Term Care (OOSLTC) believes that all residents in Long Term-Care homes should be provided care and services that are meaningful and allow them to participate and live actively each day. We have promoted many outreach activities for better fracture prevention practices by health care providers caring for residents.

In the fall of 2013, the Directors of the Ontario Association of Residents' Councils Board (all of whom are residents in LTC homes) were given a questionnaire to complete after reviewing some Strategy educational materials. The experience was designed to tap into residents' lived experience related to osteoporosis care in their respective homes, balanced with their right to live with the risk of falling and prevention of fractures. Recently, Carly Skidmore, a member of the OOS LTC team, attended the spring Residents' Councils board meeting to address the findings, provide a review of osteoporosis and fracture prevention strategies for long-term care, answer questions and plan for next steps. Just like the Ontario Association of Residents' Councils, the OOSLTC team wants to better understand and meet residents' needs. When it comes to osteoporosis and fracture prevention, the strategy wants to know:

- What information is important to you?
- What would you like to learn more about?

With the release of the new Fracture Prevention Guidelines and new user friendly tools, the strategy is keen to provide these resident-focused tools to Residents' Councils across the province so that information could be used for resident welcome packages and resource information within homes.

Additionally, the OOSLTC team is working hard to empower residents with the latest research and knowledge about fracture prevention best practices. This information will be available in short user friendly formats through email, and will be published periodically in OARC's Seasons newsletter. It's about everyone working together to help prevent those unnecessary fractures, severe pain, and loss of abilities that residents can suffer with for a long time.

Interested in Learning More?

Visit us at www.osteoporosislongtermcare.ca

Dr. Alexandra Papaioannou

Professor of Medicine with
McMaster University in
Hamilton Ontario

Lead for the Ontario
Osteoporosis Strategy for
Long-Term Care

Hamilton Health Sciences –
St. Peter's Hospital –
Juravinski Research Center



National Falls Conference - May
27-28th

Highlights will be presented in our
next issue of Fracture Link

Research activities for the Fracture Clinic Screening Program:

Focus on the qualitative work

Qualitative research is an inquiry that focuses on meaning and interpretation. As opposed to quantitative research, qualitative research seeks to examine the meaning of a phenomenon through description, rather than analyzing it quantitatively, in terms of trends and frequencies. Both qualitative and quantitative research methods are used in the evaluation of the Fracture Clinic Screening Program as they inform and complement one another.

A qualitative study led by Dr. Dorcas Beaton examined patient perceptions of the path to osteoporosis care following a fragility fracture. This study, published in *Qualitative Health Research* journal, used focus groups to understand the process by which patients decided to proceed to osteoporosis testing or care, within a post-fracture, coordinator-based osteoporosis screening program. The results of the study indicated that, to initiate osteoporosis testing and care, patients had to both comprehend the link between their fragility fracture and osteoporosis, and make an action-oriented appraisal of what action to take. In addition, the study has identified modifiable barriers, such as confusion surrounding bone mineral density test result interpretation, perceptions of physicians' disinterest in osteoporosis and some inaccurate health beliefs. These could be addressed to potentially improve the number of patients tested and treated for osteoporosis after a fragility fracture, perhaps through the application of health-behavior-change models that seem to fit with the perceptions of the participants in this study.

In order to inform the efforts aimed at improving patients' understanding of their fracture risk, we have also used qualitative research and examined the messages around re-fracture risk that patients perceive from health care providers. A study led by Dr. Joanna Sale recruited 25 patients from the intensive Osteoporosis Exemplary Care Program at St. Michael's hospital where patients were educated about fracture risk. We found that patients took away certain parts of the message about fracture risk (e.g. that they were "high" risk) but not others (e.g. that they had a 20% chance of re-fracturing). While most participants recalled they were categorized as "high risk", they were unable to recall the other elements of the message about fracture risk. Patients were also unable to recall what they were at risk for. Many thought they were at risk for osteoporosis, for low bone density, for falling or for fracturing if they fell. These findings suggests that health care providers' messages around fracture risk are confusing to patients and that they need to be modified to better suit patients' needs. Alternative ways of communicating fracture risk should be considered and evaluated before implementation. Visit osteostategy.on.ca for a link to SMH research unit.

Dr. Dorcas E. Beaton

Director, Research Scientist and Professor

B.Sc. (occupational therapy),
University of Toronto;

M.Sc. (clinical epidemiology),
University of Toronto;

PhD (clinical epidemiology),
University of Toronto

Research Interests

Outcomes research, health and quality of life measurement, measurement theory, perceptions of recovery, work productivity and prognosis, facilitating best practices, musculoskeletal, osteoporosis, fracture care, arthritis, upper limb reconstruction, hand therapy

Women's College Hospital

Evidence for unnecessary BMD testing

In Ontario, in the absence of major restrictions to bone mineral density (BMD) testing, a sharp increase in BMD testing rates in much younger women, aged 40–44 years, for whom fracture risk is low, has been reported.¹ In fiscal year 2007, BMD testing in women aged 40–59 years accounted for almost half (approximately 200,000) of all BMD tests performed.² While this high rate of testing may indicate concern about osteoporosis as this age group approaches menopause, it also suggests unnecessary testing. Evidence validates this suggestion; research by our group at Women's College Hospital demonstrated that among healthy women age 40–60 years referred to a multidisciplinary osteoporosis clinic in Ontario for a baseline DXA test between 2005 and 2009, more than 90% had normal bone density.³ This study also showed that if a decision rule based on weight or menopausal status and fracture history was applied, then 33% of those who received the baseline BMD test would not have been recommended for testing.³ At the same time, clinical guidelines indicate women over 65 should be tested.⁴ Other research from our group has similarly demonstrated that reimbursement changes in 2008 in Ontario were associated with reduced testing rates among high risk individuals, notably those with recent fragility fractures.⁵ In 2010, about 12% of older men and 44% of older women (22% overall) who became eligible for DXA testing at age 65 years, were tested by age 70.⁶ Together, this evidence suggests that guidelines for BMD testing are not being followed. Previous research from our team demonstrated that, in a sample of BMD reports for fracture patients in Ontario, more than 50% of the time, reported fracture risks were misclassified by being underestimated (Allin 2013). Over 30% of reports containing a “low” fracture risk assessment should have been reported as “moderate” and over 20% of reports containing a “moderate” fracture risk should have been reported as “high” given the true fracture history.⁷ This has implications in terms of fracture risk categorization that can negatively affect subsequent follow-up care and treatment as current guidelines recommend that patients with high fracture risk be treated with bone-sparing agents.⁸ **We have developed a standardized requisition for BMD referral or a Required Use Requisition (RUR) that aims to fill these care gaps by promoting appropriate referral and ensuring that the clinical risk factors that impact fracture risk assessment are available to the reading specialist at the time reporting.**

Two 10-year fracture risk assessment tools are now available for Canadians:

CAROC

In 2005, Osteoporosis Canada, in association with the Canadian Association of Radiologists, launched the 10-year absolute fracture risk assessment – CAROC.

In addition to BMD (lowest T-score of hip and lumbar spine), age, gender, fracture history and steroid use are taken into consideration to determine an individual's 10-year risk of fracture.

The presence of both a fragility fracture and steroid use puts the patient at high fracture risk regardless of BMD result.

Version 2, now available for Canadian physicians, uses only femoral neck (hip) BMD rather than the lowest of hip and lumbar spine.

FRAX

In 2008, the World Health Organization (WHO) launched the FRAX tool (Fracture Risk Assessment). In 2010 Canadian data were added to this tool. In addition to femoral neck (hip) BMD, age, gender, fracture history and steroid use, FRAX also takes into account other clinical risk factors to calculate the absolute 10-year risk of a hip fracture or other major osteoporotic fracture (spine, forearm, upper arm)

Women's College Hospital

BMD testing - cont'd

The initial design of the RUR was created by the Ontario BMD Working Group, a committee composed of family physicians, radiologists, a BMD technician, and specialists with expertise in osteoporosis with representation from the Canadian Association of Radiologists, the Ministry of Health and Long-term Care, Osteoporosis Canada, and the Ontario College of Family Physicians and chaired by Drs. Jaglal and Hawker. The first version sought principally to communicate the best evidence surrounding baseline referral of low risk women.³ Subsequent interviews with family physicians revealed the need to communicate guidelines more broadly; guidelines for repeat testing and the relationship of guidelines to insurance policies were found to be particularly unclear.⁹ The RUR has been further refined based on consultation with developers of standardized forms currently in use in Manitoba, British Columbia, and Nova Scotia. Interviews with these stakeholders in addition to reading specialists have illustrated the potential for forms to communicate clinical details more accurately than patient self-reports, which are prone to error. Several major diagnostic imaging centres that perform BMD testing in the Greater Toronto Area have reviewed and verified that the RUR is acceptable to them. Before widespread implementation of the RUR can occur, our team would like to evaluate the effectiveness of the RUR. To do this, in September 2013, we submitted a grant proposal to the Canadian Institutes of Health Research to conduct a cluster randomized controlled trial. There is also ongoing pilot testing of the RUR at Women's College Hospital and clinics affiliated with the Scarborough Hospital as part of a post-graduate family medicine residents' research project. At these locations, a hard copy of the RUR is being

used by approximately 30 Ontario family physicians to further elucidate barriers to implementation and data collection for the trial.

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A champion partnership!

Dr. Gord Crawford and NSM LHIN

Have created a regional integrated Orthopaedic Plan which includes secondary fracture prevention as a way to deal with hip fractures. Details in next issue of Fracture Link.

Community Partnership Award: YMCA Cambridge

The YMCAs of Cambridge and Kitchener-Waterloo are dedicated to building strong and healthy communities, working and supporting areas of community need. To support their mission, the YMCAs of Cambridge and Kitchener-Waterloo offer a number of customized exercise and education programs for adults with low fitness levels and/or chronic conditions. The first major program initiatives commenced in 2011 with a focus on supporting individuals with cardiac conditions, those at risk of type 2 diabetes and those with type 2 diabetes. Programs grown over the past 3 years and now accommodate a broader group, including supporting individuals with osteoporosis.

Each major program initiative has been done in collaboration with other community organizations. Four YMCA program advisory groups were formed and include local experts and community stakeholders that volunteer in a group that advises program development and evaluation. Kate Harvey (Ontario Osteoporosis Strategy/Osteoporosis Canada) is a member of the Live Smart program advisory group. Live Smart is a program that is designed to support individuals with bone and joint issues like osteoporosis and arthritis as well as those with heart conditions or COPD. It is a 12 week program with two sessions per week that include supervised, safe and effective exercise customized for each participant. Healthy living tips are discussed weekly. Participants build confidence to exercise safely and effectively, as well as gain support through exercising with individuals who have similar conditions. Approximately 20 YMCA staff and volunteers leading Live Smart programs have participated in Osteoporosis Canada's BoneFit training program. The BoneFit training program provides foundational training to exercise and fitness professionals providing exercise programming to individuals with low bone mass and osteoporosis.

Comment for Live Smart graduate: "I was so happy to find out about the Live Smart program at the YMCA. The staff and volunteers have given me the confidence to exercise without fear. I look forward to maintaining a healthy lifestyle."

In November 2013 the YMCA's of Cambridge, Kitchener and Waterloo were presented with Osteoporosis Canada's Community Partnership award "in recognition of their contributions and ongoing support of the Ontario Osteoporosis Strategy".



<http://www.arkfamilyy.ca>

"I love all the personal attention I get here....I keep focused here and it's a good family feel. I would recommend it to anyone. It's got a good flavor. I miss it when I'm not here."

We have recently updated the translated versions of Your Guide to Strong Bones to reflect the new exercise recommendations, and we've added some new translations. YGTSB is now available in 11 languages in addition to English and you can find them all posted at the web site as downloadable PDFs at

www.osteoporosis.ca/programs-and-resources/publications/multilingual-resources/

Contact your Regional Integration Lead

to find out about event partnerships and resources available to you.



50,000!

Its a big number and we are approaching 50000 patients screened through the Fracture Clinic Screening Program (FCSP) at hospitals throughout Ontario. If your hospital would like to include an article in your hospital newsletter contact your local RIL



Look for the next issue of Fracture Link in Nov 2014.

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

To learn more about resources in your area contact your local Regional Integration Lead

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