

Managing Osteoporosis

A Nova Scotia Approach



Highlights

**Report
of the
Provincial
Osteoporosis
Committee**

June 2002


NOVA SCOTIA
Department of Health

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Provincial Osteoporosis Committee

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Emily Somers, Manager, Drug Programs, DOH
Barb Harvie, Maureen Aucoin, Performance Measurement & Health Informatics, DOH
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Mike Pothier, Director of Clinical Support, Southwest Nova District Health Authority
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Carl Ferguson, Manager, Diagnostic Imaging, Cumberland Health Authority
Dr. Bruce Jones, Internist, Pictou County District Health Authority
Liz Millet Isenor, VP Patient Care, Guysborough Antigonish Strait Health Authority
Mary Lou O'Neill, Director, Population Health & Research, Cape Breton District Health Authority
Dr. Andrew Ross, Radiologist, Capital District Health Authority (CHA)
Dr. Diane Theriault, Rheumatologist, Dartmouth General Hospital, CHA
Dr. Elizabeth Cummings, Paediatric Endocrinologist, IWK Health Centre
Lygia Figueiredo, Home Care Nova Scotia
Heather Christian, Coordinator, Public Health Enhancement
Jean Murdock, Osteoporosis Society of Canada, Nova Scotia Chapter
Dr. David Rippey, Senior Medical Advisor/ED Integrated Primary & Population Health Branch, DOH
Kim Kelly, Drug Evaluation Pharmacist

*"I have become quite depressed since I broke my arm and pelvis.
I am 82 years old yet I feel like a dependent child again.
I wish that I had known more about what it really means
to have osteoporosis before my fall happened."*

— Mrs. D., Patient with Osteoporosis

About Osteoporosis

Osteoporosis is a common metabolic bone disease. Someone with osteoporosis has lost bone mass and their bone tissue has deteriorated. Their bones become weaker and break easier. They break during falls, but even the simple act of rising and standing can break bones in severe cases. Osteoporosis is somewhat preventable, manageable, and treatable, but often people don't even know they have it. It's a silent disease. Someone can have osteoporosis without having any symptoms.

Osteoporosis affects 30 per cent of women over the age of 50 and about 12 per cent of men. The risk and effects of osteoporosis increase as people age. It is a major cause of fractures, especially hip, wrist, and spinal fractures.

Hip fractures are a devastating injury, particularly for the elderly. They live with pain and loss of mobility. Their sudden loss of independence is often the most difficult consequence to deal with. Many are admitted to hospital or to nursing homes after a hip fracture, and almost 20 per cent of hip fracture victims die within one year.

In Nova Scotia, in 2000, about 1,797 fractures were related to osteoporosis. About 64 per cent of these were hip fractures. That resulted in 23,000 inpatient hospital days. Osteoporosis is both a health and an economic issue for Nova Scotians.

We need to identify and treat osteoporosis to reduce the risk of fractures. The most effective and accurate tool for identifying and monitoring the disease is the bone densitometry unit, which measures bone density. Currently there are three of these units in the province. With the release of this report, the province is approving two new bone densitometry units.

The Purpose of this Report

The recommendations outlined here are the first steps in managing osteoporosis, which includes preventing, diagnosing, and treating the disease. Our recommendations need to be implemented and evaluated over the next two years to ensure that the overall goal is met—to reduce fractures and associated effects on individuals and families who have, or are at risk of, osteoporosis.

Our Committee

This report is the work of a committee of health professionals from throughout the province. It builds on the work of earlier committees. Using the expertise of its members and literature on the subject, practices in other jurisdictions, and the recommendation of various national and international bodies, it makes the following 12 recommendations.

Our Recommendations

Prevention

Together, we need to prevent osteoporosis. We also need to prevent the worst consequences of osteoporosis—fractures.

1. To prevent osteoporosis, children and adolescents need to develop their peak bone mass and to maintain that peak bone mass throughout their lives. **These are the crucial years for building healthy bones. For girls the most critical years are 10 to 14; for boys, 13 to 17.** To build healthy bones, they need healthy food and plenty of exercise. We recommend a coordinated education program to get this message across to children, parents, and health care providers.
2. Many factors contribute to the number of falls that the elderly have. That makes it a major challenge to deal with. But, working together in the community, we believe the number of falls can be reduced. We recommend that community-based initiatives to reduce the incidence of falls in our elderly population be endorsed and strengthened.
3. About 10 per cent of fractures from falls happen in hospitals, nursing homes, and other facilities. We believe that the risk of fractures in this population can be reduced by giving people with osteoporosis vitamin D and calcium supplements and, where appropriate, by using hip protectors. We recommend that the Long Term Care sector establish a program to assess and implement the use of nutritional supplements. We also recommend that this sector work with District Health Authorities to establish a fall assessment program that would consider the appropriate use of hip protectors to reduce the risk of fractures.

4. Falls are both predictable and preventable. The more risk factors a person has, the more likely a fall. Health care providers can often help patients to identify and avoid these risks. We recommend that a standardized risk and fall assessment protocol be added to both the Home Care assessment process and the hospital discharge process.

Standards and Guidelines for Diagnosis and Treatment

The province needs standards and guidelines for diagnosis and treatment.

5. Bone mineral densitometry is the most effective tool for diagnosing osteoporosis. We believe that bone densitometry should only be used when a test would help to either counsel the patient or choose the best therapy. We recommend that the province accept and implement the Committee's criteria for bone density testing for men, women, and children.
6. We believe that minor changes are needed to the current medications covered by the Nova Scotia Senior's Pharmacare Program to best treat osteoporosis. We recommend that the Provincial Formulary Management Committee revise the criteria for coverage.
7. Effective treatment of osteoporosis includes lifestyle changes and taking medications. Those who should be taking medications often don't. We know, though, that patients who understand how their medications help them are better at taking them. We recommend that District Health Authorities include primary prevention services into their care planning. This would include counselling patients about nutrition and medications, helping them get active, and following up to see that patients are sticking to their programs.

Quality Standards, Performance Monitoring, and Reporting

The province needs quality standards, performance monitoring, and reporting of data.

8. Measuring bone density is used both to diagnose risk and to monitor effectiveness of treatment. To be most useful, health care providers have to be able to compare the results from test to test, even though tests may be taken at different times, by different technologists, on different machines, and interpreted by different physicians. To do this, we need standards. We recommend that guidelines and recommendations for the standardization and quality monitoring of bone densitometry units be implemented.
9. The Department of Health collects data on the type and place of falls and the number of fractures that occur each year in each district. We believe that the department and districts need to collect even more information. We recommend that more indicators

that help us to manage osteoporosis be developed and used in the province. To do this, we recommend that a process be put in place to help us choose the best information to collect.

Resources/Access

Nova Scotians need fair access to resources throughout the province.

10. Our Committee found that people in Cape Breton and Southwest Nova Scotia do not have easy access to bone density units. We also found that Truro's unit did not operate at full capacity. We believe that a centralized booking system for the province should be explored as part of the department's new information system, so that bone density units can be used effectively. We recommend that one of the two new units be placed in industrial Cape Breton and the other in the southwest area of the province.

Education and Communication

The Department of Health and the District Health Authorities need an education and communication plan.

11. We believe that a planned educational approach is needed to successfully implement these recommendations and to achieve a coordinated approach to managing osteoporosis. We also believe that the Osteoporosis Society of Canada, Nova Scotia Chapter, be included in the communication plan. We recommend that such a plan be developed and implemented both to educate the public and to support clinical care.

Leadership

Our recommendations will require leadership from the Department of Health and the District Health Authorities.

12. Our recommended provincial approach to managing osteoporosis as outlined in these recommendations needs to be coordinated. We recommend that the roles and responsibilities of the Department of Health and the District Health Authorities be identified as the recommendations are implemented.

A complete copy of the report can be found on the Department of Health website: www.gov.ns.ca/health/

Action Plan

Listed below are the actions required to support the recommendations. Each action outlines the accountabilities and associated timelines.

1. Approval of Committee Report

Accountability: Department of Health

Implementation Timeline: June 2002

2. Communication Plan developed to announce the Department of Health's Response

Accountability:

- Communication staff at the Department of Health
- Communication staff at Cape Breton DHA
- Communication staff at Southwest Nova DHA

Implementation Timeline: June 2002

3. Person and/or division within the Department of Health identified as Implementation Coordinator

Accountability: Department of Health

Implementation Timeline: June 2002

4. Implementation team with lead people and strategies identified

Accountability:

- Department of Health
- South Shore DHA
- South West Nova DHA
- Colchester East Hants DHA
- Cape Breton DHA
- Capital Health DHA

Implementation Timeline: June 2002

5. First implementation team meeting

Accountability:

- Department of Health
- District Health Authorities

Implementation Timeline: June 2002