

# Primary Care Physicians and Musculoskeletal Disorders — The Challenges Increase



Characteristics of the Canadian healthcare system have created unique and often untapped opportunities for health research. Virtually all residents of Canada are eligible for coverage under one of 10 provincial and 3 territorial insurance plans that pay for medically required physician services. Over 95% of Canadian physicians bill the health plans for their services. Bills for services are not accepted without a diagnostic code in ICD-9 (International Classification of Diseases, Revision 9) format and the unique identification numbers for both the physician and the patient. As a result, the billing database has a wealth of health information.

Power, *et al*, whose article appears in this issue of *The Journal*<sup>1</sup>, are to be commended for recognizing and utilizing this opportunity to increase our understanding of the burden of musculoskeletal disorders (MSD) in Canada. Never before has billing data been aggregated from these independently administered health insurance plans to give a picture representative of the residents of Canada.

Unfortunately, there are significant limitations inherent in harvesting data from the billing records of insurance plans. Primary care physicians will often manage more than one problem on each visit, but typically they enter only one diagnostic code when submitting their bill to the plan. This has the potential to underestimate the number of visits where MSD were managed. This study will also underreport disease in people living in longterm care facilities, those who attend nonphysicians for care of their MSD, and others who choose to self-manage their problem rather than visiting a physician for care. Correcting for these examples of underreporting would strengthen the authors' primary conclusion about the prevalence of MSD in the adult Canadian population.

Diagnostic codes used for billing are not required for patient care, so physicians tend to pay less attention to accuracy when selecting a diagnosis for billing purposes. Physicians may select a well known but nonspecific code to avoid searching for a more accurate diagnostic code.

Provincial differences between the 7 provinces that are reported in this article need to be interpreted cautiously. For example, the authors noted a strikingly low use of codes for nonspecific MSD by physicians practicing in the Francophone province of Quebec compared to other parts of Canada. This does not necessarily mean nonspecific MSD are rare in Quebec. This observation could be partially due to language and cultural differences in that province, resulting in physicians choosing different diagnostic codes. Signals such as this will need further study to determine their true etiology.

The authors have wisely avoided the temptation to dissect the data trying to get more information. They have based their principal conclusions on aggregate data from large numbers of physicians' billings, and this should increase our confidence in the authors' conclusions. Their results are compatible with predictions based on previous reports from Canada and other developed countries<sup>2,3</sup>.

The authors conclude that MSD are responsible for more cost than any other health conditions except cardiovascular disease. Moreover, although MSD are the second commonest reason for visiting a primary care physician, only 8% of primary care services are dedicated to their management. The authors found nearly one-quarter of adult Canadians attended a physician for MSD each year. Eighty-eight percent of these individuals made at least one visit to a primary care physician, and 73% of these patients continued to visit their primary care physician without referral to a specialist. These results should send a strong message to health-policy decision-makers in Canada and in other developed countries. MSD are a huge health problem that will strain our resources, particularly in primary care. Careful planning will be needed to support the services of primary care physicians so they can continue to carry the increasing burden of managing these problems as our population ages. The public will need to be confident that they can access

---

*See Ambulatory physician care for musculoskeletal disorders in Canada, page 133*

---

appropriate diagnostic and treatment services at the primary care level.

A portion of these patients will also need timely referrals to specialists for surgery and for conditions such as rheumatoid arthritis. We will need to explore and test alternative methods to manage the interface between primary and secondary care. Multidisciplinary assessment teams are an attractive option for streamlining the referral process and allowing timely access to surgical, pharmacological, and nonpharmacological therapies. Successful projects will need to be deployed quickly because as our population ages, the average age of Canadian family physicians is also increasing and is getting closer to retirement age<sup>4</sup>. This will further increase the pressure on primary care physicians for these limited services.

As primary care physicians we will need to pay careful attention to emerging information about the treatments for MSD. The advantage of selective cyclooxygenase-2 (COX-2) inhibitors for gastrointestinal risks has now been overshadowed by adverse cardiovascular outcomes<sup>5,6</sup>. This change and the return to widespread use of nonselective nonsteroidal antiinflammatory drugs (NSAID) will cause us to have complex discussions with our patients about selecting optimal treatments. Will the potential cardiovascular risks outweigh the improved gastrointestinal risk profile of a selective COX-2 inhibitor? Is there an increased cardiovascular risk associated with the nonselective NSAID they have chosen? Will the antiinflammatory medication have a negative influence on renal function? Should the patient be tested for *Helicobacter pylori* before embarking on a course of treatment with an NSAID? Should a proton pump inhibitor or misoprostol be prescribed with their NSAID to reduce the gastrointestinal risks<sup>6-12</sup>? These are difficult questions for a busy primary care physician to answer while trying to provide careful informed consent with a patient before choosing a pharmacological treatment. Electronic information systems can be integrated into practices to support many aspects of this challenging task, but this feature will require a commitment from many stakeholders.

A worrisome finding in Power, *et al*'s article was the trend to fewer women accessing surgical specialists and to a decline in the number of surgeries they have for MSD after age 55 years despite MSD increasing with age. Moreover, men are more likely to visit the surgeon, and their decline in the number of surgical procedures begins later in life. Does this mean there are barriers preventing access for women to surgical care? This disturbing finding needs to be studied further, particularly since the authors report higher rates of MSD among women than men.

This article highlights the importance of MSD in the adult Canadian population. It has demonstrated the critical importance of primary care physicians in the management of MSD and identified challenges for health professionals and health policy decision-makers in Canada and other

developed countries. The problem is likely to worsen with the aging of our population. Primary care physicians will need support for their assessment and management of these patients. Multidisciplinary teams could assist with our care and facilitate our referrals so that we can provide optimal management for our patients. We must listen to the message in this article and take appropriate action.

**NIGEL W. FLOOK**, MD, CCFP, FCFP,  
Associate Clinical Professor,  
Department of Family Medicine,  
University of Alberta, SCC/WCM,  
1A1 WMC-8440 112 Street NW,  
Edmonton, Alberta, Canada T6G 2B7

Address reprint requests to Dr. Flook. E-mail: nflook@shaw.ca

## REFERENCES

1. Power JD, Perruccio AV, DesMeules M, Lagacé C, Badley EM. Ambulatory physician care for musculoskeletal disorders in Canada. *J Rheumatol* 2006;33:133-9.
2. Health Canada. Arthritis in Canada [Report on the Internet. 2003. Accessed November 1, 2005. 124 pages.] Available from: <http://www.phac-aspc.gc.ca/publicat/ac/index.html>
3. Akesson K, Dreinhofer KE, Woolf AD. Improved education in musculoskeletal conditions is necessary for all doctors. *Bull World Health Organ* 2003;81:677-83.
4. National Physician Survey, 2004 Results. College of Family Physicians of Canada. [Internet Survey. Accessed November 1, 2005.] Available from: <http://www.cfpc.ca/English/cfpc/research/janus%20project/nps/results/default.asp?s=1>
5. Davis P, Juby A, Robertson S, Richard N. Is there anything else we could possibly need to know about COX-2 selective inhibitor drugs? [editorial]. *J Rheumatol* 2004;31:847-8.
6. US Food and Drug Administration. FDA Joint Meeting of the Arthritis Advisory Committee and Drug Safety Committee, February 16-18, 2005. [Meeting records on the Internet. Accessed November 1, 2005.] Available from: <http://www.fda.gov/ohrms/dockets/ac/cder05.html>
7. Silverstein FE, Graham DY, Senior JR, et al. Misoprostol reduces serious gastrointestinal complications in patients with rheumatoid arthritis receiving nonsteroidal anti-inflammatory drugs. A randomized, double-blind, placebo-controlled trial. *Ann Intern Med* 1995;123:241-9.
8. Tramer MR, Moore RA, Reynolds DJ, McQuay HJ. Quantitative estimation of rare adverse events which follow a biological progression: a new model applied to chronic NSAID use. *Pain* 2000;85:169-82.
9. Huang JQ, Sridhar S, Hunt RH. Role of *Helicobacter pylori* infection and non-steroidal anti-inflammatory drugs in peptic-ulcer disease: a meta-analysis. *Lancet* 2002;359:14-22.
10. Kelly JP, Kaufman DW, Jurgelson JM, Sheehan J, Koff RS, Shapiro S. Risk of aspirin-associated major upper-gastrointestinal bleeding with enteric-coated or buffered product. *Lancet* 1996;348:1413-6.
11. Chan FK, Chung SC, Suen BY, et al. Preventing recurrent upper gastrointestinal bleeding in patients with *Helicobacter pylori* infection who are taking low-dose aspirin or naproxen. *N Engl J Med* 2001;344:967-73.
12. Stack WA, Atherton JC, Hawkey GM, Logan RF, Hawkey CJ. Interactions between *Helicobacter pylori* and other risk factors for peptic ulcer bleeding. *Aliment Pharmacol Ther* 2002;16:497-506.