

STUDY PROTOCOL

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Imaging use for low back pain by Ontario primary care clinicians: protocol for a mixed methods study – the Back ON study

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Abstract

Background: At any one time, one in every five Canadians has low back pain (LBP), and LBP is one of the most common health problems in primary care. Guidelines recommend that imaging not be routinely performed in patients presenting with LBP without signs or symptoms indicating a potential pathological cause. Yet imaging rates remain high for many patients who present without such indications. Inappropriate imaging can lead to inappropriate treatments, results in worse health outcomes and causes harm from unnecessary radiation. There is a need to understand the extent of, and factors contributing to, inappropriate imaging for LBP, and to develop effective strategies that target modifiable barriers and facilitators. The primary study objectives are to determine: 1) The rate of, and factors associated with, inappropriate lumbar spine imaging (x-ray, CT scan and MR) for people with non-specific LBP presenting to primary care clinicians in Ontario; 2) The barriers and facilitators to reduce inappropriate imaging for LBP in primary care settings.

Methods: The project will comprise an inception cohort study and a concurrent qualitative study. For the cohort study, we will recruit 175 primary care clinicians (50 each from physiotherapy and chiropractic; 75 from family medicine), and 3750 patients with a new episode of LBP who present to these clinicians. Clinicians will collect data in the clinic, and each participant will be tracked for 12 months using Ontario health administrative and self-reported data to measure diagnostic imaging use and other health outcomes. We will assess characteristics of the clinicians, patients and encounters to identify variables associated with inappropriate imaging. In the qualitative study we will conduct in-depth interviews with primary care clinicians and patients.

Discussion: This will be the first Canadian study to accurately document the extent of the overuse of imaging for LBP, and the first worldwide to include data from the main healthcare professions offering primary care for people with LBP. This study will provide robust information about rates of inappropriate imaging for LBP, along with factors associated with, and an understanding of, potential reasons for inappropriate imaging.

Keywords: Primary care, Low back pain, Diagnostic imaging, Cohort study, Administrative data analysis, Qualitative study

Background

Low back pain is the world's leading cause of disability due to non-fatal health outcomes from diseases and injuries, and presents a major societal and individual burden [1, 2]. Low back pain is one of the biggest public health problems in Canada: at any one time, one in every five

Canadians has low back pain [3], and it is the second most common symptom, after a cough, seen in family practice [4–6]. Each year in Canada, direct treatment costs for low back pain exceed CAD\$8 billion [7], with significant additional societal costs associated with losses in worker productivity and associated disability payments.

For people with low back pain who seek care, the most common providers of choice are family practitioners, chiropractors and physiotherapists [8]. However, management of low back pain in these settings is not always

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Pain Management For Primary Care Clinicians

Dawn A. Marcus



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Practical Pain Management C. David Tollison, John R. Satterthwaite, Joseph W. Tollison, 2002 Thoroughly revised to reflect contemporary diagnostics and treatment this Third Edition is a comprehensive and practical reference on the assessment and management of acute and chronic pain This edition features 14 new chapters and is filled with new information on invasive procedures pharmacologic interventions neuraxial pharmacotherapy physical and occupational therapies diagnostic techniques pain in terminally ill patients cancer pain visceral pain rheumatologic disorders managed care and medicolegal issues Reorganized with two new sections focusing on diagnostics and cancer pain A Brandon Hill recommended title

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Clinical Pain Management : Cancer Pain Nigel Sykes, Michael Bennet, Chun-su Yuan, 2008-09-26 Now divided into four parts the second edition of Cancer Pain delivers broad coverage of the issues that arise in the management of malignancy related pain from basic science through end of life care and associated ethical issues to therapies both medical and complementary Part One reviews basic considerations in cancer pain management includ

The Oxford Handbook of Clinical Psychology David H. Barlow, 2011 The exponential growth of clinical psychology since the late 1960s can be measured in part by the extensive perhaps exhaustive literature on the subject This proliferation of writing has continued into the new century and the field has come to be defined as much by its many topics as its many voices The Oxford Handbook of Clinical Psychology synthesizes these decades of literature in one extraordinary volume Comprising chapters from the foremost scholars in clinical psychology the handbook provides even and authoritative coverage of the research practice and policy factors that combine to form today's clinical psychology landscape In addition to core sections on topics such as training assessment diagnosis and intervention the handbook includes valuable chapters devoted to new and emerging issues in the clinical field including health care reforms cultural factors and technological innovations and challenges Each chapter offers a review of the most pertinent literature outlining current issues and identifying possibilities for future research Featuring two chapters by Editor David H Barlow one on changes during his own 40 year odyssey in the field the other projecting ten themes for the future of clinical psychology The Oxford Handbook of Clinical Psychology is a landmark publication that is sure to serve as the field's benchmark reference publication for years to come It is an essential resource for students clinicians and researchers across the ever growing

clinical psychology community **Chronic Pain** Dawn A. Marcus, 2005 Annotation The author simplifies the complex care of patients with chronic pain by providing practical strategies for targeting important symptoms establishing realistic treatment goals and managing patients with instructional sheets that can be copied directly from the book and used for both education and the monitoring of therapeutic compliance and response **Pharmacology for the Primary Care Provider** Marilyn W. Edmunds, Maren Stewart Mayhew, 2004 The only pharmacology resource specifically written by and for nurse practitioners this new edition provides a greater emphasis on prototype drugs while retaining its comprehensive approach to the pharmacology content needed by the primary care provider New features include prototype drug lists in the coverage of drug classes that receive expanded coverage detailed patient teaching guidelines expanded content in both the geriatric and pediatric chapters a special icon identifying the Top 200 Drugs and highlighted Clinical Alerts Comprehensive coverage is provided of all drugs commonly prescribed and used in the primary care setting Prototype drugs are presented first in each drug class with expanded coverage of these agents Clear explanations describe how each drug in a class differs from its prototype Detailed information shows how to provide effective patient teaching as well as how to gain patient compliance Chapters focus on the practitioner's role in patient teaching drug action and drug therapy Online Resources are provided at the end of each chapter The Top 200 Drugs are described according to the number of U S prescriptions dispensed Five new units improve the organization of material Renal Genitourinary Agents Unit 8 Psychotropic Agents Unit 11 Endocrine Agents Unit 12 Female Reproductive Agents Unit 13 and Health Promotion Unit 15 New chapters examine over the counter medications compliance and the therapeutic experiment overview of the nervous system substance abuse treatment of common infections weight management and complementary and alternative treatments Reorganized and redesigned format and headings are more consistent and easy to follow Content has been expanded in the geriatric and pediatric special populations chapters Ch 6 and 7 More concise coverage of disease processes features clearer ties to the Mechanism of Action sections 25 new figures have been added to the pathophysiology and Mechanisms of Action sections A Table of Common Interactions is included on the inside of the back cover **Pain** Harald Breivik, Michael Shipley, 2007 Edited by Harald Breivik and Michael Shipley this text offers the most up to date advice on the assessment and treatment of pain

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