

# MCMASTER PAIN ASSISTANT: THE WHY, WHAT AND HOW OF A NEW EMR TOOL THAT TEACHES

<sup>1</sup>Guenter D, <sup>1</sup>Schabort I, <sup>2</sup>Taenzer P, <sup>3</sup>Moulin DE, <sup>1</sup>Wilson J, <sup>1</sup>Nair K, <sup>1</sup>Tasch C, <sup>1</sup>Malaekheh R, <sup>1</sup>Bauer M, <sup>4</sup>Radhakrishnan A, <sup>1</sup>Buckley DN, <sup>1</sup>Dolovich, L.  
<sup>1</sup>McMaster University, <sup>2</sup>University of Calgary, <sup>3</sup>University of Western Ontario, <sup>4</sup>University of Toronto

Acknowledgements: Lawson Health Research Institute, Pfizer Canada Inc., Canadian Institutes of Health Research

## Introduction

18.9% of adults over age 18 have chronic pain (Schopflocher et al, 2011); it is challenging to manage in primary care

**Our goal:** Design a computerized decision support system (CDSS) for OSCAR EMR that will:

- translate guidelines and tools into the moment of care for primary care clinicians *without being intrusive*
- Improve workflow for clinicians and provide systematic approach and tools for patients
- Improve health outcomes for people with pain
- Focus initially on neuropathic and low back pain, more later
- Include tools for general chronic pain management, optional-access teaching tips
- CDSS to interact with MyOscar Personal Health Record

## The Development Process

Needs assessment was conducted, including:

- Clinician focus groups
- Patient focus groups
- Observation of workflow with current EMR during chronic pain clinical encounter

Clinical and IT expert panel advised on content and function  
Development team worked closely with software developer to review the guidelines for neuropathic and back pain

## Usability Testing

Two rounds of usability testing were conducted

- Round one:
  - 7 clinicians participated at two sites (3 Family Physicians, 3 Nurse Practitioners, 1 Resident)
- Round two:
  - 6 clinicians participated at two sites (3 Family Physicians, 2 Nurse Practitioners, 1 Resident)

Clinicians worked through 3 scenarios using real patient data and used Think Aloud technique to indicate their reaction to the CDSS as they worked with it; completed System Usability Scale

Revisions made to CDSS based on clinician reaction to using it

## Main Features of CDSS

- Embedded in the new “Health Tracker” landing page for all chronic diseases, making all CDM tools easy to access
- Brings relevant patient management data to one view
- “Encounter Guides” offer fields for patient information in format that fits a typical visit
- Digitized tools for measuring and monitoring pain, function, risk of chronicity, sleep, mood, goals
- Embedded teaching tips and links to education for both clinicians and patients
- Self-populating fields draw from other parts of the EMR for relevant clinical information
- Prescribing directly from this page, along with prescribing info
- WSIB reports, consult notes populated direct from encounter
- Completed clinical materials can be sent to patient through the MyOscar Personal Health Record
- Back pain content based on: Toward Optimized Practice initiative in Alberta; Interdisciplinary Spine Assessment and Education Clinics in Ontario
- Neuropathic pain content based on the Consensus Guidelines of Canadian Pain Society (Moulin et al)

## Next Steps

- Currently piloting usability at McMaster Family Practice with real clinical care, final modifications will follow
- The CDSS will be part of OSCAR 14 version update
- **Impact evaluation starts January 2014, we are looking for any OSCAR clinics to enrol in our evaluation study**

## Contact Information

If your clinic uses OSCAR EMR, and you are interested in having the McMaster Pain Assistant made available to you, please contact either:

Dale Guenter  
guentd@mcmaster.ca

Christie Tasch  
taschcg@mcmaster.ca