Update on Health Canada project: Family Physicians & Opioid Prescribing

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For the Safer Prescribing of Opioids (SPO) Team

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FACULTY/PRESENTER DISCLOSURE

• Faculty: Pamela Leece

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• Safer Prescribing of Opioids (SPO) Team
  – Dr. Daniel Z. Buchman – Bioethicist, UHN
  – Dr. Andrea Furlan – Physician Scientist, UHN
  – Dr. Michael Hamilton – Consultant and Medication Safety Specialist, ISMP Canada
  – Dr. Meldon Kahan – Medical Director, Substance Use Service, WCH
  – Dr. Pamela Leece – Women’s College Hospital & Public Health Ontario
  – Dr. Nav Persaud – Family Physician, St. Michael's Hospital, Toronto
  – Dr. Sheryl Spithoff – Family Physician, Women’s College Hospital
  – Dr. Beth Sproule – Clinician Scientist and Advanced Practice Pharmacist, CAMH
  – Dr. Anita Srivastava – Family Physician, St. Joseph’s Health Centre

  – Project management: Yalnee Shantharam
  – Project administration: Gina Marinakos
  – KT Consultant Team: Dr. Sharon Straus, Dr. Julia Moore, Nadia Bashir
Learning Objectives

• List specific areas for improvement in medication safety practices and guideline adherence related to opioid prescribing in primary care

• Describe how a program of knowledge and practice self-assessment could improve opioid safety in primary care practice

• Identify facilitators and barriers to the application of the Canadian opioid guideline in their own practice
Agenda

- Background
- Project overview
- Project tools
- Evaluation
- Early results
- Discussion
Background
Background

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6043a4.htm
Background

Opioid Prescribing
- Quantity
- Variation
- Safety
- Adherence to guidelines

Adverse outcomes
- Death
- ER visits
- Addiction

This project is funded by Health Canada
Background
### Direct links: Prescribing and Harms

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>89%</td>
<td>Prescription in the year before death (Dhalla 2009)</td>
<td></td>
</tr>
<tr>
<td>91%</td>
<td>Prescribed opioids after non-fatal overdose (Larochelle 2016)</td>
<td></td>
</tr>
<tr>
<td>59%</td>
<td>First exposed by prescribing – among those with heroin/ nonmedical rx opioid use (Butler 2016)</td>
<td></td>
</tr>
<tr>
<td>Up to 1/3</td>
<td>Develop addiction in chronic opioid therapy (Juurlink 2012)</td>
<td></td>
</tr>
<tr>
<td>3x</td>
<td>Risk of opioid-related mortality on 200mg/d vs. &lt;20mg/d (Gomes 2011)</td>
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</tbody>
</table>
Rationale

- Undergraduate and post-graduate medical training do not extensively cover pain or opioid prescribing education.
- Evidence-based and theory-driven approaches to education and behaviour change could be effective for supporting adherence to opioid guidelines.

This project is funded by Health Canada.
Project Overview
• Project title:
  – Improving Canadian Family Physician Knowledge and Performance in Safe Prescribing of Opioids for Chronic Non-Cancer Pain

• Funding: Health Canada

• Dates: April 1, 2015 – March 31, 2017

• Design: mixed method evaluation (quantitative and qualitative) of processes and outcomes; pretest- double posttest

• Participants: 9 Family Physicians in Ontario

• Intervention: Opioid Self-Assessment Package
Our Team

This project is funded by Health Canada.
Goal

• To improve Canadian family physicians’ knowledge and performance in safe prescribing of opioids using the Canadian Guideline for Safe and Effective Use of Opioids for Non-Cancer Pain
Objectives

• Develop and pilot an Online Opioid Self-Assessment Program (SAP) *(physician knowledge)*

• Design and evaluate indicators to measure knowledge, processes, and clinical practice relative to the opioid guideline *(quality improvement)*

• Identify the key *facilitators and barriers* for physicians to adhere to the opioid guideline *(qualitative)*
Safer prescribing of opioids

Practice Change

- Increase provider adherence to Canadian guideline for safe and effective use of opioids for chronic non-cancer pain

Implementation Strategies

- Online SAP module
- Chart review checklist
- Practice self-assessment

Developed with support from the SMH KT Program

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Project Design

- Development and evaluation: **Opioid Self-Assessment Package**

**First Phase**
Complete the design and development of the Opioid Self-Assessment Package

**Second Phase**
Pilot and evaluate the package with family physicians in Ontario

**Third Phase**
Revise these products and prepare for scale-up across Canada

This project is funded by Health Canada
Implications/ Long-term goals

• Increased knowledge of opioid guidelines & increased adherence to opioid guidelines
• Establish indicators for clinical and system-wide opioid prescribing quality monitoring and improvement
• Increased patient safety & decreased opioid adverse events
Project Tools
Project Tools

Opioid Self-Assessment Package & Evaluation

<table>
<thead>
<tr>
<th>Knowledge Self-Assessment Program</th>
<th>Chart Review Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice Self-Assessment</td>
<td>Interview Guide</td>
</tr>
</tbody>
</table>

This project is funded by Health Canada
Welcome to the Opioid Self Assessment Package!

Thank you for your participation in our study entitled: Improving Canadian Family Physician knowledge and performance in safe prescribing of opioids for chronic non-cancer Pain

Please log in to our participant portal to access background information on our study & our project components.

Username *

Password *

LOG IN

This project is funded by Health Canada
Welcome to your Opioid Self Assessment Package.

General

Activities will be available after completion of the first qualitative interview and will be available for 2 week period. A due date will appear beside the activity indicating when it will be due.

- Physician and Practice Profile G
- Practice Self-Assessment
- Self Assessment Program
- Chart review checklist

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Paula takes 40mg of OxyNEO® twice daily. For breakthrough pain, she takes Tylenol #3® (about 7 per day), and she also uses a TDS Fentanyl patch 25mcg/hour.

6. What is her approximate morphine equivalent per day (MEQ)?
Core Characteristic #1 – A systematic and formal assessment of the risk and benefits to a patient of instituting opioid therapy is conducted prior to beginning therapy.

When assessing a patient for treatment for chronic non-malignant pain:

1. Initial patient assessment
   A structured process is in place to collect and document:
   i. pain causation
   ii. pain type (neuropathic, nociceptive or mixture)
   iii. pain duration
   iv. initial pain pattern
   v. initial pain intensity
   vi. limitations in function or quality of life caused by pain

☐ A = No activity to implement
☐ B = Formally considered, but not implemented
☐ C = Partially implemented in some areas
☐ D = Fully implemented in some areas
☐ E = Full implemented throughout
### Core Characteristics in Opioid Safety

<table>
<thead>
<tr>
<th>Core Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment</strong></td>
<td>systematic and formal; risk and benefits</td>
</tr>
<tr>
<td><strong>Plan</strong></td>
<td>systematic and thorough implementation</td>
</tr>
<tr>
<td><strong>Monitoring</strong></td>
<td>appropriate intervals, structured manner</td>
</tr>
<tr>
<td><strong>Safeguards</strong></td>
<td>use guidelines and protocols, technological safeguards</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>drug orders are standardized to minimize errors</td>
</tr>
<tr>
<td><strong>Competency</strong></td>
<td>maintenance of competency and continuing education</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>patients educated about opioid drugs, medication errors</td>
</tr>
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This project is funded by Health Canada.
Chart Review Checklist

Date of Review: _________________
Prescriber Name: _________________
Chart Review ID Number: __________
Patient year of birth: ________________
Diagnosis(-es) of chronic non-cancer pain condition: ________________________________
Approximate date of initiating daily opioid therapy: ________________________________
Type(s) of opioid currently being prescribed, dose and frequency [most recent prescription]:

<table>
<thead>
<tr>
<th>Opioid</th>
<th>Dose</th>
<th>Frequency</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Meets</th>
<th>Partially meets</th>
<th>Does not meet</th>
<th>N/A</th>
<th>Notes</th>
<th>Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Initial Patient Assessment (or included in Cumulative Patient Profile) - first documented discussion of opioid trial</td>
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</tbody>
</table>

1. The physician documents a clear initial assessment of the pain condition: cause, type, duration and pattern and intensity

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Qualitative Interviews

• 45 minutes each
  – **Interview 1: Before Self-Assessment Package**
    • Previous experience with opioid prescribing, opioid guideline, quality improvement
    • Barriers and facilitators to guideline adherence
  – **Interview 2: After Self-Assessment Package**
    • Experience with Opioid Self-Assessment Package
  – **Interview 3: 6 months**
    • Experience with opioid prescribing, opioid guideline, and quality improvement since using the self-assessment package
    • Barriers and facilitators to guideline adherence

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Safer Prescribing of Opioids (SPO)

Status:

- Recruitment began Feb 2016
- Data collection began Mar 2016
- Expect to close data collection period Jan 2017

More Information:
- http://sap.opioidmanager.com/opioidstudy

This project is funded by Health Canada
Evaluation

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Simplified Logic Model

**Target Group:** Family physicians in general practice in Canada, treating patients with long-term opioid therapy for chronic pain.

**Inputs**
- Funding/In-Kind
- Hired staff
- Consultants

**Activities**
- Intervention Development
- Evaluation
- Collaboration
- Integrated Knowledge translation

**Outputs**
- Opioid Self-Assessment Package
- Evaluation results
- Stakeholder & Advisory Groups
- Knowledge exchange mechanisms

**Outcomes**

<table>
<thead>
<tr>
<th>Short</th>
<th>Medium</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased prescriber capacity</td>
<td>Increased adherence to opioid guidelines</td>
<td>Increased patient safety</td>
</tr>
<tr>
<td>Ongoing collaborations</td>
<td>Scale-up of quality improvement for opioid prescribing</td>
<td></td>
</tr>
<tr>
<td>Opioid Self-Assessment Package use</td>
<td>Increased prescriber supports and satisfaction</td>
<td></td>
</tr>
<tr>
<td>Increased understanding of barriers and facilitators to guideline adherence</td>
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**Funding/In-Kind**
- This project is funded by Health Canada
# Evaluation Design

**Phase 1**  
(Baseline, 7 hours)

- Qualitative Interview #1  
- Opioid Chart Review Checklist (5 charts)  
- Baseline Questionnaire  
- Opioid Knowledge Pre-Test  
- Opioid Practice Self-Assessment Tool  
- Online Opioid Self-Assessment Program (SAP), including the Opioid Knowledge Test  
- Chart review feedback discussion  
- Qualitative Interview #2 (within 2 weeks)

**Phase 2**  
(5-7 months, 6.25 hours)

- Qualitative Interview #3  
- Opioid Chart Review Checklist (5 charts)  
- Opioid Knowledge Pre-Test  
- Opioid Practice Self-Assessment Tool  
- Online Opioid Self-Assessment Program (SAP), including the Opioid Knowledge Test  
- Chart review feedback discussion

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Qualitative Methods

• Semi-structured interviews, in-person or phone

• Transcribed verbatim

• Qualitative-descriptive approach
  – open coding to identify themes

• Themes were coded using NVivo11

Early results
Qualitative Interview 1

Barriers and facilitators to following the opioid guideline:

‘The patient in front of you is never as simple as the guideline’
Qualitative Interview 1

Participants N=9

<table>
<thead>
<tr>
<th>Gender</th>
<th>Practice location</th>
<th>Practice type</th>
<th>Practice size</th>
<th># patients on opioids</th>
<th>% patients on opioids</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 men</td>
<td>2 rural</td>
<td>3 academic</td>
<td>Range: 100-2000</td>
<td>Range: 5-47</td>
<td>Range: 0.45-3.75</td>
</tr>
<tr>
<td>4 women</td>
<td>3 urban</td>
<td>4 community</td>
<td>Mean: 1037</td>
<td>Mean: 25</td>
<td>Mean: 2.44</td>
</tr>
<tr>
<td></td>
<td>4 suburban</td>
<td>1 both</td>
<td>Median: 950</td>
<td>Median: 30</td>
<td>Median: 2.61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1 missing)</td>
<td>(1 missing)</td>
<td>(2 missing)</td>
<td>(2 missing)</td>
</tr>
</tbody>
</table>
Qualitative Interview 1

• Experience managing chronic pain? Opioid prescribing?

‘[Chronic pain] is one of the biggest stressors on family practice…’

‘legal cloud on our heads’

‘addicts are creative. I was burned a few times... til you learned their stories are not true.’
Qualitative Interview 1

• Experience managing chronic pain? Opioid prescribing?

‘want a pill all the time to fix things’

‘they take a lot of time’

‘I know they should be off this, I don't know what to do …’
Qualitative Interview 1

What are the facilitators and barriers to using non-pharmacologic treatment for chronic pain?

**Facilitators**
- Insurance coverage
- Patient interest

**Barriers**
- Lack of public funding
- Patient compliance
- “Harder-working”

‘If you have insurance,’ …
‘the world is your oyster.’
Facilitators

• For using guidelines in general
  • integrated with EMR
  • flow sheets, algorithms, charts, handouts
  • billing incentives
  • good examples: diabetes, hypertension

• For using Opioid Guideline
  • ‘it’s what doctors do anyway’:
  • in line with current ‘spirit and practice’
  • as a ‘safety net’
  • pragmatic, practical

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Barriers

• To using guidelines in general
  • time (‘there are a hundred issues’ to discuss in an appointment)
  • effort (becoming familiar with guideline contents)

• To using Opioid Guideline
  • density and complexity: ‘Have you seen it?’ .... ‘It’s horrendous…’
    ‘They want the world ...in one chart…’
  • ambivalence: disagreement with some tenets
  • requires challenging conversations with patients; issues of trust
  • infrequently needed to refer to the guidelines
Qualitative Interview 1

- What are facilitators and barriers to continuing medical education?

  - Facilitators:
    - Online
    - Small group learning
    - Interactive methods
    - Facilitated conversation
  
  - Barriers:
    - Ineffective formats, “dinner with strangers”
    - Content that is too basic
    - Time constraints
    - Distrust of pharma-sponsored events
    - Cost

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Qualitative Interview 1

- What are facilitators and barriers to using implementation and assessment tools?

- Facilitators:
  - Integration with EMR
    - “like the diabetes flow sheet”

- Barriers:
  - Time
  - “Complexities”
  - “Too many checklists”

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Implications for Practice
Implications for Practice

The project tools fill current gaps in education and practice supports

Opportunity to review knowledge, reflect on practice

Most family physicians will run into an “opioid problem” (patient with an adverse event) in their career

Tools can assist with preventing, identifying, or addressing common problems encountered with opioid prescribing

Highlight important concepts in opioid safety, introduce new safeguards into practice

Increase confidence, reduce stress

This project is funded by Health Canada
Future directions

Updated Canadian Opioid Guideline 2017

Supports relevant to opioid prescription monitoring and quality assurance
Questions?

• Pamela Leece pamela.leece@mail.utoronto.ca
Discussion