Team Based Approaches to Chronic Pain Management: Opioid Stewardship

Jennifer Wyman, MD, Academic Lead, Opioids Clinical Primer

Assistant Professor, Dept. of Family & Community Medicine, University of Toronto
Objectives

1. Recognize where the Opioids Clinical Primer fits in the suite of supports known as Ontario Pain Management Resources (OPMR)
2. Describe key strategies for reducing the risks of opioids in the management of chronic non-cancer pain
3. Identify the benefits of a team based approach to opioid stewardship
Learn without boundaries

Free CME courses, patient resources and community forums for you and your peers. All at your fingertips.

SEE PROGRAMS

Featured Programs

machealth Blog
“The Tiered CPD Model will include minimum training requirement for all opioid prescribers and dispensers, with additional training and supports based on provider and community needs.”
Ontario Pain Management Resources
A Partnership to Help Clinicians Support their Patients

Helping patients manage pain is complex. To help navigate this challenging landscape and support health care providers across the health system, Health Quality Ontario and organizations across the province offer a coordinated program of supports to help family doctors, nurse practitioners and other primary care clinicians manage their patients' pain, including the appropriate use of opioids.

The following provides a one-stop summary of available pain management supports.
Six Courses

1. Opioid Use Disorder in Primary Care: Principles of Assessment and Management
2. Managing Patients with Opioid Use Disorder in Primary Care with Buprenorphine
3. Safer Opioid Prescribing Strategies
4. Mental Health, Chronic Pain, and Substance Use: Addressing the Connections
5. Strategies for Managing Chronic Pain: Moving Beyond Opioids
6. Treating Opioid Use Disorder: Initiating Buprenorphine in Primary Care, ED and Inpatient Settings

*coming soon
Assess Your Knowledge
1. You have been prescribing oxycocet 2 tablets QID to a 50 year old male for back pain for about 8 years. You have recently become concerned that he may be misusing his medication. He has asked for a couple of early refills, and his last urine sample showed codeine as well as oxycodone, but you haven’t had a chance to see him since the result came in.

You receive a call from his pharmacy: they have received your renewal as well as a prescription for acetaminophen with codeine from another physician.

What is the most appropriate option at this point in time?

a. Change his dose to long-acting oxycodone so his dose will last longer
b. Rotate to another opioid because his pain is not being managed
c. Cancel the prescription and discharge him from your practice
d. Have his medications dispensed twice weekly until you can see him again to determine next steps
2. Which of the following factors increases the risk of opioid related death?

a. Doses above 50 mg
b. Concurrent prescriptions for pregabalin
c. Alcohol use
d. All of the above
3. True or False? Naloxone is an opioid antagonist (blocker) that can temporarily reverse the effects of an opioid overdose. A prescription is required to obtain naloxone from a pharmacy.

a. True.
b. False.
4. A patient new to you has chronic neuropathic pain related to a complex ankle fracture. She has not had relief with acetaminophen and OTC NSAIDs. She has no active substance use or mental health issues. Are opioids appropriate based on the information provided?

   a. Yes  
   b. No
5. According to the 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain all patients on doses of opioids greater than 90MME/D (mg morphine equivalents/day) should have their doses tapered and potentially discontinued.

a. True
b. False
Why Are We in an Opioid Crisis?

Multiple complex factors, including:

• High prevalence of chronic pain in the general population
• Prescribing practices
• Changes in the illicit drug supply
• Psychological, social and biological risk factors that increase the risk of addictions
• Inadequate access to treatment for substance use and mental health disorders, couple with stigma
Prescribing Practices

- 20% of the population has chronic pain
- Risk of opioids was historically underestimated
  - 5.5% of patients with no pre-existing substance use or psychiatric disorder develop addiction to opioids prescribed for chronic pain
  - 9% of patients with active substance use issues develop addiction to opioids in the context of prescriptions for chronic pain
- Risks of de-prescribing
Withdrawal and the Illicit Drug Supply

• Abrupt cessation of opioids leads to withdrawal symptoms
• Withdrawal symptoms can cause patients to seek opioids from non-medical sources
• The risk of harm from non-medical sources is high because:
  • Opioid tolerance is lost within days
  • Street opioids often contain fentanyl powder
  • Ultra-high potency of fentanyl puts both naïve and experienced users at risk of overdose

*In 2017 over 60% of street drug samples tested positive for fentanyl*
Overdose crisis

Context

- 2017 Canadian guideline for opioids for chronic non-cancer pain
- Illicit fentanyl supply
- Rapid tapering/discontinuation
Ontario Prescription Opioid Tool
Rates of Opioid Use and Related Adverse Events in Ontario by County

Rate of Opioid Users in 2015

Click the arrow to the left and choose the PAN function for optimal viewing

Per 10,000 Public Drug Beneficiaries
1,600
2,800

Slide to see rate differences
Count of Opioids for Pain (Individuals) in Ontario

Over Time by Age Group: All

Age Groups by Year: 2017

Notes:
1) LHIN/PHU is based on the individual’s location of residence.
2) In accordance with ICES’ commitments in data sharing agreements, a number of approaches have been taken to ensure no reporting of small cells. These are summarized in the technical appendix.
Type of opioid present at death, Ontario, 2003 - 2017

- Codeine
- Fentanyl
- Heroin
- Hydrocodone
- Hydromorphone
- Methadone
- Morphine
- Morphine
- Oxycodone

Year: 2003 to 2017
Number of deaths: 0 to 900

The graph illustrates the number of deaths by type of opioid from 2003 to 2017 in Ontario. The highest number of deaths occurred in 2017.
### Direct links: Prescribing and Harms

| 89%  | Prescription in the year before death (Dhalla 2009)  
|      | 56% in month before death  
| 91%  | Prescribed opioids after non-fatal overdose (Larochelle 2016)  
| 59%  | First exposed by prescribing – among those with heroin or nonmedical prescription opioid use (Butler 2016)  
| 37%  | Prescription source before addiction treatment (Sproule 2009)  
| Up to 1/3 | Develop addiction in chronic opioid therapy (Juurlink 2012)  
| 3x   | Risk of opioid-related mortality on 200mg/d vs. <20mg/d (Gomes 2011)  
| 48%  | Sedative prescription 30d before opioid death (Fulton-Kehoe 2015)  

---

Opioid Related Harms

• Sleep apnea
• Depression/dysphoria
• Severe constipation
• Hypogonadism
• Fractures
• Hyperalgesia
• Withdrawal-mediated pain
The 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain

Main editor
Jason Busse

Associate Professor, Department of Anesthesia
Associate Professor, Department of Health Research Methods, Evidence, and Impact
McMaster University, MDCL-2109
1280 Main St West, Hamilton, Ontario, Canada, L8S 4K1
bussejw@mcmaster.ca
**Recommendation 1:** When considering therapy for patients with chronic non-cancer pain

*Strong Recommendation*

We recommend optimization of non-opioid pharmacotherapy and non-pharmacological therapy, rather than a trial of opioids.

---

**Recommendation 2:** For patients with chronic noncancer pain, without current or past substance use disorder and without other active psychiatric disorders, who have persistent problematic pain despite optimized nonopioid therapy

*Weak Recommendation*

We suggest adding a trial of opioids rather than continued therapy without opioids.
Recommendations 6 and 7: For patients with chronic noncancer pain who are beginning long term opioid therapy

Strong Recommendation

Recommendation 6: We recommend restricting the prescribed dose to less 90mg morphine equivalents daily rather than no upper limit or a higher limit on dosing.

Some patients may gain important benefit at a dose of more than 90mg morphine equivalents daily. Referral to a colleague for a second opinion regarding the possibility of increasing the dose to more than 90mg morphine equivalents daily may therefore be warranted in some individuals.
Recommendation 8: For patients with chronic noncancer pain who are currently using opioids, and have persistent problematic pain and/or problematic adverse effects

We suggest rotation to other opioids rather than keeping the opioid the same

Rotation in such patients may be done in parallel with, and as a way of facilitating, dose reduction
Recommendation 9: For patients with chronic noncancer pain who are currently using 90mg morphine equivalents of opioids per day or more

Weak Recommendation

We suggest tapering opioids to the lowest effective dose, potentially including discontinuation, rather than making no change in opioid therapy.

Some patients are likely to experience significant increase in pain or decrease in function that persists for more than one month after a small dose reduction; tapering may be paused and potentially abandoned in such patients.
Clinical Dilemmas

- Should all patients on opioids be tapered?
- Should all patients on doses >90 MME/D be tapered?
- What should I do with a patient who seems to be doing well on their current regimen?
- Should I avoid starting any patients on opioids for chronic pain?
- How can I manage chronic pain more effectively?
Case 1: Betty

- 80yo with severe osteoarthritis of the shoulders and hands
- Diverticulitis, anxiety
- Lives alone
- Drives
- Medications:
  - Acetaminophen with codeine 30mg; 2 TID
  - Ramipril
  - Lorazepam 1mg BID prn
  - Zopiclone 7.5mg qhs for sleep
Case 2: Dave

- 50 year old former police officer on disability for chronic back pain following a work-related motor vehicle crash
- Lives with his partner and their combined 4 kids, ages 10-22
- Medication:
  - OxyNeo 30mg BID + oxycocet 2 TID prn
  - Duloxetine 60mg OD
  - Pregabalin 300mg BID
  - Ramipril
  - Atorvastatin
  - Pantoprazole
Case 3: Tamara

- 36yo heavy equipment operator with migraines, endometriosis and severe dysmenorrhea.
- Medications:
  - Progesterone only BCP
  - Cyklokapron
  - Sertraline
Strategies for Opioid Stewardship

- Patient Education
- Opioid Agreements
- Managing prescriptions safely
- Calculating dose in MME/D
- Assessing benefit vs risks of opioids
- Planning a taper
Team Roles

- MD
- RN/NP
- Pharmacist
- Physiotherapist
- Social Worker
- Dietician
- Support Staff
- QI team
Patient Education

• Side effects, evidence for harms vs benefits, tolerance
• Risks of sedation
• Caution about driving while doses are being initiated or titrated
• Caution re risks with BZDs, gabapentinoids and “z-drugs”
• Advise against combining alcohol and opioids
• Explain phenomenon of loss of tolerance
Opioid Agreements

- Helps to clarify expectations
- Structures a process of informed consent
- Outlines responsibilities and boundaries for both patients and prescribers
- Is NOT a contract, is NOT required by the CPSO
- Written- signed by clinician and patient, copy for patient and chart
- Verbal – should be documented in patient’s chart
Opioid Agreement – Typical Inclusions

- Patients will receive opioid prescriptions from one prescriber
- Patients will inform their other providers of their medication
- Patients will not give their medication to anyone else nor receive someone else’s medication
- Medication will be stored safely
- Opioid prescriptions will not be replaced if they are lost or stolen
- Prescription renewals will require an in-person assessment
- Urine drug screens may be requested as a means of monitoring treatment
Safe Storage

• Out of sight and out of reach
• Locking device (e.g. locked toolbox, key kept separately)
• Return unused medications to the pharmacy
• All patch formulations should be managed with a patch return policy
Appropriate Quantities and Dispensing Intervals

• No more than 14 days at a time when medications are being titrated
• Maximum 28-30 days of medication at a time for patients
  • On stable doses
  • With no concerning behaviours
  • With reassessments every 3 months
• More frequent dispensing for patients with concerning behaviour patterns, e.g. q1-2 weeks (or even q1-2 days)
• Consider blister packs
Writing Prescriptions Safely

- Start date
- End date?
- Dose in mg and tablets
- Dispensing intervals
- Faxed to pharmacy
- Reminder to advise the patient to book a follow-up appointment rather than fax renewal request
- Advise MD if patient appears sedated
Managing Requests for Prescription Repeats

- *In general,* a prescription should last until the next booked appointment
- Patients should be aware of office policy
- Are staff consistent with office policy?
- What are additional considerations?
  - Previous requests for renewals?
  - Risk of destabilization if medication is not renewed?
Strategies for Managing Prescription Requests

- *Ideally*, appointment for assessment before renewal/refusal
- *Alternatives:*
  - Set an appointment date and extend just until that date
  - Dispense in smaller quantities
  - Remind the patient of office policy; explain that if an exception is being made, they should not expect that in future
  - Communicate with the pharmacy; request that they advise patients to book an appointment rather than faxing a request
  - Have a strategy in place for when the prescriber is out of the office
  - Will others in the office renew the prescription to bridge the gap?
  - Will they require an office visit?
Communicating with Other Health Professionals

• Pharmacists
  • Assistance checking the Narcotics Monitoring System/Digital Health Drug Repository
  • HQO suggests that prescription history be checked at the initiation of opioid therapy and every 3-6 months for people on long-term stable doses, more often if there are concerns about problematic substance use or multiple prescribers
  • Assistance with checking interactions/additive risks

• Other Prescribers
  • Communicate if an opioid prescription has been prescribed
  • Who will be responsible for monitoring/renewing that medication?
  • Are there risks of interactions with other medications?
Communicating with Other Health Professionals

- Pharmacist
- Other prescribers

Note: The Digital Health Drug Repository (DHDR) is a new way for providers to view information about their patients’ dispensed opioid and controlled medications. DHDR can be accessed via the Connecting Ontario or Clinical Connect viewers or the OneAccess Portal.
Information Available to Health Care Providers

- Publicly funded drugs
- Monitored drugs
- Viewable Drug Information
- Publicly funded pharmacy services
- Viewable Pharmacy Service Information

Over 5 years of information about all monitored drugs (narcotics and controlled substances), regardless of payor, when the approved identification used was a valid Ontario Health Number.

Available information in the DHDR
# Calculating Morphine Equivalencies

<table>
<thead>
<tr>
<th>Opioids*</th>
<th>To convert to oral morphine equivalent, multiply by:</th>
<th>To convert from oral morphine, multiply by:</th>
<th>50 MED equivalent dose</th>
<th>90 MED equivalent dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral preparations (mg/d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Codeine</td>
<td>0.15 (0.1-0.2)</td>
<td>6.67</td>
<td>334 mg/d</td>
<td>600 mg/d</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>5.0</td>
<td>0.2</td>
<td>10 mg/d</td>
<td>18 mg/d</td>
</tr>
<tr>
<td>Morphine</td>
<td>1.0</td>
<td>1</td>
<td>50 mg/d</td>
<td>90 mg/d</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>1.5</td>
<td>0.667</td>
<td>33 mg/d</td>
<td>60 mg/d</td>
</tr>
<tr>
<td>Tapentadol</td>
<td>0.3-0.4</td>
<td>2.5-3.33</td>
<td>160</td>
<td>300</td>
</tr>
<tr>
<td>Tramadol</td>
<td>0.1-0.2</td>
<td>6</td>
<td>300</td>
<td>540**</td>
</tr>
<tr>
<td>Transdermal fentany</td>
<td>60 - 134 mg morphine = 25 mcg/h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>135 - 179 mg = 37 mcg/h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>180 - 224 mg = 50 mcg/h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>225 - 269 mg = 62 mcg/h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>270 - 314 mg = 75 mcg/h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>315 - 359 mg = 87 mcg/h</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>360 - 404 mg = 100 mcg/h</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assess benefit for function, not just pain (e.g. BPI or history, not just pain scale)

• Review other medications that may increase risks (e.g. benzodiazepines, higher dose gabapentinoids, “z-drugs”)

• Assess side effects (constipation, sweats, fatigue, depression, weight gain, low libido, sleep apnea, hyperalgesia)

• Assess for problematic use/opioid use disorder

• Screen for other problematic substance use

• Screen for mood and anxiety disorders
Planning a Taper

Tapering works best when it’s voluntary; engaging the patient is important. A successful taper typically involves:

- motivational interviewing
- goal setting
- frequent visits
- communication with pharmacist,
- optimizing non-opioid and non-pharmacologic interventions
Case 1: Betty

• 80yo with severe osteoarthritis of the shoulders and hands
• Diverticulitis, anxiety
• Lives alone
• Drives

Medications:
• Acetaminophen with codeine 30mg; 2 TID
• Ramipril
• Lorazepam 1mg BID prn
• Zopiclone 7.5mg qhs for sleep
Considerations for Betty

• Dose: 180mg codeine = approximately 30mg morphine
• Risks/Adverse Effects:
  • Constipation
  • 2 sedating medications
• Benefits
  • Has been taking codeine for so long she can’t tell.
  • Manages her ADL independently
• Problematic use?
  • No early refills, never sees other physicians
Considerations for Betty

• Strategies
  
  • Could try to decrease codeine gradually e.g. tablets with 20mg instead of 30?
  • *Consider “deprescribing” for her BZD/zopiclone; explore alternative medication and non-medication approaches
  • May benefit from assessment by social work, physiotherapist, dietician
  • Review risks re driving, alcohol, prescription renewals, storage and self-management
Case 2: Dave

• 50 year old former police officer on disability for chronic back pain following a work-related motor vehicle crash
• Lives with his partner and their combined 4 kids, ages 10-22
• Medication:
  • OxyNeo 30mg BID + oxycocet 2 TID prn
  • Duloxetine 60mg OD
  • Pregabalin 300mg BID
  • Ramipril
  • Atorvastatin
  • Pantoprazole
Considerations for Dave

- **Dose:** 80mg oxycodone = 135mg morphine /day
- **Risks/Adverse Effects:**
  - dose>90mg in association with high-dose pregabalin
  - Drinks 2-4 drinks daily
  - Low libido, low energy, weight gain
- **Benefits**
  - Rates his pain 5/10 but not doing very much. Mood low.
- **Problematic Use?**
  - Requests for early refills once for travel only; no reports of aberrant use
  - Check of DHDR shows that he hasn’t filled prescriptions from any other doctors
Considerations for Dave

• Strategies
  • Appropriate for a taper based on risks vs benefits
  • Use CEP/Rx Files tools to map goals, dose reductions and reassessments
  • Locked box
  • Will need regular appointments – benefit of team
  • “Prescribe” naloxone
Case 3: Tamara

• 36yo heavy equipment operator with migraines, endometriosis and severe dysmenorrhea.

• Medications:
  • Progesterone only BCP
  • Cyklokapron
  • Sertraline
Considerations for Tamara

Would you start her on an opioid?

- Optimize non-opioid medications
- Screen for current and past problematic substance use
- Screen for mood and anxiety disorders
- Consider whether her condition is one that is helped by opioids
- What would goals of therapy be?
- If you did start her, at what doses?
Team Roles

- MD
- RN/NP
- Pharmacist
- Physiotherapist
- Social Worker
- Dietician
- Support Staff
- QI team
Tools/Strategies to Improve Opioid Stewardship

- EMR queries, e.g.:
  - MME/d>50,>90,>200 MME/D
  - opioids with BZDs/sedative hypnotics and pregabalin/gabapentin
- Practice tools e.g.:
  - Centre for Effective Practice Opioids for Chronic Non-Cancer Pain Tool
  - morphine equivalence calculator
- Screening tools, e.g.
  - Substance use screeners
  - GAD-7, PHQ-9
  - Brief Pain Inventory
- Patient handouts
Team Practices to Improve Chronic Management & Opioid Stewardship

- Clear process for handling prescription renewals
- Ensure all prescriptions are done in the EMR
- Physio assessment of all patients with chronic pain
- Pharmacist assessment of all patients on long-term opioids, or opioids with sedating
- Ensure appointments and prescriptions are synced
- Check-lists to ensure patients have been linked to self-management programs
- Maintain list of patient oriented resources
- Team leader for coordination
Team Goals?

• Reduce rates of co-prescribing of opioids and sedating medications ✓
• Reduce rates of faxed prescription renewal requests ✓
• Target individuals at higher risk of opioid related adverse effects ✓
• Increase number of patients with an opioid agreement on file ✓
• Use Brief Pain Inventory (BPI) scores as a measure of effective pain management rather than pain scores ✓
• Discuss naloxone with all patients on opioids ✓
• For patients with opioid use disorder, offer/arrange treatment with opioid agonist therapy ✓
• Reduce overall MME/D dosages ❌
Key Messages

- There is no “safe” dose of opioids
- Stopping opioids rapidly puts patients at risk
- Caution re overlapping opioids and sedating medications is essential
- Safer prescribing and dispensing strategies should be used for all patients – universal precautions
- Naloxone can be recommended for all patients on opioids
- Team based approaches can reduce the risks of opioid prescribing and improve outcomes for patients with chronic pain
Naloxone Kits

Should be offered to:

• Every patient on higher dose opioids
• Every patient who uses street opioids
• Patients who may have an opioid use disorder
• Patients who use opioids and alcohol and/or benzodiazepines
• Family members/friends of those with problematic opioid use
1. You have been prescribing oxycocet 2 tablets QID to a 50 year old male for back pain for about 8 years. You have recently become concerned that he may be misusing his medication. He has asked for a couple of early refills, and his last urine sample showed codeine as well as oxycodone, but you haven’t had a chance to see him since the result came in.

You receive a call from his pharmacy: they have received your renewal as well as a prescription for acetaminophen with codeine from another physician.

What is the most appropriate option at this point in time?

a. Change his dose to long-acting oxycodone so his dose will last longer.
b. Rotate to another opioid because his pain is not being managed.
c. Cancel the prescription and discharge him from your practice.
d. Have his medications dispensed twice weekly until you can see him again to determine next steps.
2. Which of the following factors increases the risk of opioid related death?

   a. Doses above 50 mg
   b. Concurrent prescriptions for pregabalin
   c. Alcohol use
   d. All of the above
3. True or False? Naloxone is an opioid antagonist (blocker) that can temporarily reverse the effects of an opioid overdose. A prescription is required to obtain naloxone from a pharmacy.

a. True
b. False
4. A patient new to you has chronic neuropathic pain related to a complex ankle fracture. She has not had relief with acetaminophen and OTC NSAIDs. She has no active substance use or mental health issues. Are opioids appropriate based on the information provided?

a. Yes
b. No
5. According to the 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain all patients on doses of opioids greater than 90MME/D (mg morphine equivalents/day) should have their doses tapered and potentially discontinued.

a. True
b. False

Weak recommendation: suggest tapering to the lowest effective dose rather than making no change in opioid therapy
Safer Opioid Prescribing Strategies

Understand your role in minimizing opioid-related harms through patient education and safe prescribing and dispensing practices. Learn how to assess patients on opioids for adverse effects, and when and how to taper and switch opioids. Select patients who are likely to benefit from opioids and are at a lower risk of harm.

Modules  Additional References  Reviews

Opioid Conversion Table.pdf

Resources and References Safer Prescribing Practices.pdf
Questions?