SAFER-OPIOIDS: A structured approach to identifying key information and drug therapy problems in chronic noncancer pain patients using opioid therapy

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Introduction

Chronic noncancer pain (CNCP) affects a considerable and increasing number of Canadians.¹ Opioids have been demonstrated to reduce pain intensity in CNCP conditions; however, their use also presents risks and potential adverse effects.¹ The *Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain* recognizes that pharmacists need to take responsibility for assessing risks of opioid therapy and minimizing harm.¹ Recent attention in the media about these risks reinforces the need for pharmacists to be proactive in assessing and monitoring opioid therapy.² The removal of OxyContin from the market has also prompted a call to action for pharmacists and physicians to work collaboratively around dose changes and to reduce prescription fraud.^{1,3}

Use of a structured approach for pharmacists to assess all patients on opioid therapy is important to ensure comprehensiveness and to avoid specific patients feeling targeted. Patients on opioid therapy may feel stigmatized because of recent increased media coverage about its harms, including the risk of addiction. Patients should play an active role in facilitating the safest possible use of opioids, and pharmacists can reinforce patient education with accurate information.¹

Clinical pharmacists from the University Health Network (UHN) and the Centre for Addiction

and Mental Health (CAMH) work collaboratively in an ambulatory program to provide detailed medication assessments focused on opioid therapy. They found that, when contacted for information, pharmacists in the community often reported that they were concerned about their patients' opioid therapy; however, they felt that they did not have enough information about the indication or treatment plan to complete an assessment. These subjective reports are consistent with survey results from 2011 about Ontario pharmacists' experiences dispensing opioids; of 642 respondents, most (86%) reported that they were concerned about the prescription opioid use of several or many of their patients.⁴ Respondents from this survey felt that physicians often failed to recognize that pharmacists can help with opioid management; 56% reported that physicians were unwilling to communicate their therapeutic plans to the pharmacists; and 61% reported that physicians sometimes or frequently did not respond to their concerns.⁴

Based on the structure of standardized assessments performed in the ambulatory clinic, a mnemonic to trigger identification of key information and a thorough and efficient assessment of patients' opioid therapy was created to help pharmacists take responsibility for opioid management in their practice. Components of the tool were based on the pharmaceutical care

BOX 1 SAFER-OPIOIDS mnemonic tool**Side effects****Aberrant behaviours****Function****Effect on pain****Collaborative Relationship with physician****Over the watchful dose of 200 mg morphine equivalents****Pill count****Interactions****Opioid treatment agreement****Indication****Psychiatric Diagnosis****Substance use**

process but, to facilitate a simple mnemonic phrase (SAFER-OPIOIDS; Box 1), they are not in the recommended order for consideration of indication, efficacy, safety and convenience.⁵

Description of SAFER-OPIOIDS*S is for side effects*

Common adverse effects of opioids include constipation, nausea, vomiting, drowsiness, dizziness, pruritis and sedation.¹ Less common, but clinically significant, adverse effects also include dry mouth, sweating, loss of appetite, urinary retention and heartburn.¹ Patients on opioid therapy should also be monitored for medical complications, including sexual dysfunction, aggravation of central and obstructive sleep apnea, opioid-induced hyperalgesia and opioid-related mood disorder.¹ Asking patients about symptoms related to these complications is key, as they may not often associate these changes with their opioid therapy.

A is for aberrant behaviours

Observation of and inquiries about aberrant behaviours should be part of opioid monitoring by pharmacists. Aberrant behaviours can be classified into 2 groups: 1) tampering or altering the route of delivery (e.g., biting or crushing controlled-release tablets, snorting or injecting oral tablets, sucking or smoking transdermal patches) and 2) engaging in illegal activities

(e.g., multiple doctoring; fraud; buying, borrowing, selling or stealing drugs).¹ Escalating the dose (e.g., requesting higher doses, running out early) may be indicative of aberrant behaviour but may also indicate ineffective pain management. Framing questions to patients as standard screening in a nonpunitive manner is essential. The Current Opioid Misuse Measure (COMM) is a 17-item self-report questionnaire that may be used as a screening tool to identify the risk of misuse in the previous 30 days.¹ Identified aberrant behaviours should be carefully documented and communicated to the physician.

F is for function

Functional change is an important consideration in measuring opioid effectiveness. Initially, setting goals with the patient will facilitate monitoring over time; patients can be prompted to discuss work, household activity, mood, walking ability, sleep and social activities.¹ A structured assessment tool, such as the Brief Pain Inventory (Short Form), may be used.¹

E is for effect on pain

The effectiveness of opioid therapy for pain reduction must also be considered. Establishing realistic expectations with the patient before starting opioids is recommended, since the achievable goal of opioid therapy for CNCP is rarely the elimination of pain but rather a reduction in pain intensity by at least 30%.¹ The change in pain intensity can be monitored by the pharmacist in a structured way, using an 11-point (0 to 10) numeric rating scale.¹ Asking patients to rate their baseline pain and then their pain with use of their medication aims to determine this 30% reduction in pain intensity, considered a clinically significant improvement.⁶

R is for collaborative relationship

Pharmacist-physician collaboration is recommended to enhance patient safety and to reduce aberrant prescription-related activities (e.g., prescription fraud). Obtaining all prescriptions at a single pharmacy of the patient's choice should be encouraged by the physician to facilitate monitoring. Pharmacists, through their multiple interactions with the patient, have a responsibility to observe for adverse effects or aberrant behaviours and engage in routine communication with the physician to determine a patient-centred plan.

O is for over the “watchful dose” of 200 mg morphine equivalents

CNCP can be managed effectively in most patients with dosages at or below 200 mg/day of morphine or equivalent (ME).¹ Doses above 200 mg ME have been associated with a 3-fold increased risk of opioid-related mortality.⁷ Furthermore, complications such as opioid-induced hyperalgesia, cognitive impairment and sexual dysfunction occur more frequently with higher doses.¹ Some patients may require higher doses of opioids (e.g., patients who were receiving a 30% reduction in pain relief without intolerable side effects but who have developed tolerance); however, the risks must be carefully balanced against the benefits. Pharmacists are well positioned to identify doses over 200 mg ME, to review the risks and benefits with the patient and to initiate a discussion with the physician about changes to the treatment plan.

P is for pill count

Monitoring patients with a higher risk of opioid misuse (e.g., patients with a personal/family history of alcohol or substance abuse, uncertain security in the home, past aberrant drug-related behaviours) may involve extra precautions, such as asking the patient to bring his or her medication for pill counts.¹ Structured opioid prescribing, including shortened fill intervals (e.g., daily or weekly), may be indicated and should be recommended to prescribing physicians if regular pill counts identify discrepancies. Regular reviews of fill dates are appropriate for all patients on opioid therapy, to detect potential aberrant behaviours.

I is for interactions

A thorough review of a patient's current prescription and nonprescription medications and substance use is required to avoid potentially serious drug interactions.¹ In particular, the combination of opioids and benzodiazepines increases the risk of sedation and overdose.¹ A trial of benzodiazepine tapering should be considered prior to the initiation of opioid therapy.¹ If a trial of benzodiazepine tapering is not indicated or is unsuccessful, opioids should be titrated cautiously and high doses should be avoided. Other medications, alcohol and other nonprescribed drugs or substances with the potential for central nervous system (CNS) depression should also be assessed.⁸

Patients require education about these potential interactions to avoid over-the-counter products containing opioids and other products with CNS-depressant effects (e.g., sedating antihistamines) while using prescribed opioids.

O is for opioid treatment agreement

A written opioid treatment agreement between the patient and prescribing physician should be outlined at the start of opioid therapy.¹ Inclusion of the pharmacist in the written agreement, or creation of a separate agreement between the pharmacist and patient, should also be considered. The agreement usually outlines the responsibilities and boundaries of the patient and the health care practitioners.¹ The agreement should typically include compliance with scheduled visits, consultations and obtaining opioids from a single prescriber and pharmacy; storage of medication in an appropriate place; urine drug screening; and an action plan when refills are requested ahead of schedule.¹ The agreement should be regularly reviewed with the patient.

I is for indication

Prior to the initiation of opioid therapy, evidence related to the effectiveness for CNCP should be considered.¹ Opioids have shown only small to moderate benefits in relieving nociceptive and neuropathic pain and improving function.⁹ For neuropathic pain, they are considered second-line to alternative therapies, including antidepressants and anticonvulsants, in available guidelines.¹⁰ Opioids are not indicated for migraine or tension headaches or for patients with irritable bowel syndrome.¹¹ Only one opioid, tramadol, has shown benefit in fibromyalgia and the effects were small; other pain-relief options should be tried.¹ Pharmacists need to gather information about the indication for opioid therapy for assessment and monitoring. The indication for opioid therapy can be discussed with the patient. Clarification of the indication with the physician is also an opportunity to initiate a collaborative approach prior to a patient starting a trial of opioid therapy.

D is for psychiatric diagnosis

Patients with a psychiatric diagnosis are at greater risk of adverse effects from opioids.¹ These increased risks include depression; substance abuse; and sedation, falls or overdose secondary to combination with psychotropic medications or benzodiazepines.¹ Titration of doses should be

slower in CNCP patients with comorbid psychiatric disorders and the patient's mood and functioning should be closely monitored.¹

S is for substance use

Routine inquiry about patients' substance use should occur in a nonjudgmental manner at the start of opioid therapy and changes in substance use should be monitored over time. Questions about specific substances, including tobacco, alcohol, marijuana, cocaine, amphetamines, opioids, benzodiazepines/sedatives, hallucinogens and solvents, will inform a thorough history. History of substance use may indicate that patients are at higher risk of opioid misuse and, in some situations, that opioid therapy may not be appropriate. CNCP patients may use alcohol or other substances to self-medicate,¹² resulting in potentially life-threatening interactions with opioid therapy.⁸

Discussion

The SAFER-OPIOIDS mnemonic provides a structured tool for pharmacists to assess and monitor opioid therapy in CNCP patients. It

could also be useful as a teaching tool for pharmacy students and new pharmacists to easily recall key information from the *Canadian Guideline for Safe and Effective Use of Opioids for Chronic Non-Cancer Pain*.¹ The Opioid Manager is an existing point-of-care tool for providers prescribing opioids to facilitate use of the guideline and has already been widely downloaded by physicians and pharmacists for use in practice.¹³ This proposed SAFER-OPIOIDS mnemonic, with the specific purpose of aiding pharmacists in their identification of drug therapy problems relating to opioid therapy, is consistent with the philosophy behind the Opioid Manager. Though the mnemonic was designed for pharmacists, it may be useful for other health care professionals as well. Similar mnemonic tools have been developed for use in other clinical settings, such as the FASTHUG¹⁴ and the modified FASTHUG-MAIDENS¹⁵ for use by pharmacists in the intensive care setting. Research should be conducted to assess the impact of the SAFER-OPIOIDS approach on patient outcomes in the community. ■

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