Guidance on opioid tapering in the context of chronic pain: Evidence, practical advice and frequently asked questions

Laura Murphy, BScPhm, ACPR, PharmD; Roshina Babaei-Rad, BScPhm, PharmD; Donna Buna, BScPhm, PharmD; Pearl Isaac, RPh, BScPhm; Andrea Murphy, BScPhm, ACPR, PharmD; Karen Ng, BScPhm, ACPR, PharmD; Loren Regier, BSP, BA; Naomi Steenhof, BScPhm, ACPR; Maria Zhang, BScPhm, PharmD, MSc; Beth Sproule, BScPhm, PharmD

Background
There has been growing evidence of increased harms from long-term and high-dose use of opioids, including sleep apnea, hypogonadism, opioid hyperalgesia, immunosuppression, fractures, bowel obstruction, overdose, opioid use disorder and death.1-5

The updated 2017 Canadian Guideline for Opioids for Chronic Non-Cancer Pain (hereafter referred to as the Guideline) suggests that adults with chronic noncancer pain (CNCP) on \( \geq 90 \) mg morphine equivalent dose daily be tapered to the lowest effective dose or discontinued if possible.2 This was labeled a weak recommendation because of low-quality evidence; the recommendation was included because of potential opioid-related harms. The Guideline recognizes that different choices around this recommendation will be appropriate for individual patients, who should be supported by clinicians to make decisions consistent with their values and preferences.2

To support the implementation of this recommendation, the Guideline provides reasons to consider tapering, including lack of improvement in pain and/or function, nonadherence to the treatment plan, signs of problematic opioid use, serious opioid-related adverse effects or patient request. Long-term opioid therapy should be evaluated routinely with respect to benefits and risks for each patient. Benefits of tapering for some patients may include relief of interdose withdrawal symptoms (e.g., pain, sweating or anxiety close to the end of the dosing interval), reduction in opioid adverse effects and improvements in overall function and quality of life.6 The Guideline suggests actively engaging patients in discussions about tapering and preparing them by optimizing nonopioid therapy as appropriate for their pain and comorbidities (e.g., acetaminophen, nonsteroidal anti-inflammatory drugs [NSAIDs], tricyclic antidepressants, serotonin norepinephrine reuptake inhibitors, gabapentinoids, cannabinoids). They also suggest optimizing nonpharmacological therapy and psychosocial support, setting realistic functional goals, creating a schedule of dose reductions and frequent follow-up and having a plan to manage withdrawal symptoms. Expert opinion on strategies for opioid tapering is provided in the Guideline2 and outlined in Box 1. Consideration of a multidisciplinary and/or team-based approach is associated with success in opioid tapering.6 Linked to the Guidelines is an information sheet for patients, available through the National Pain Centre.7

Although other guidelines also discuss tapering for the reduction or discontinuation of opioids, there is no evidence to guide specifics of tapering regimens for chronic pain patients.8

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Gaps in the literature remain regarding the tapering rate, medication choice and the use of alpha-2 adrenergic agonists to manage withdrawal symptoms. Experienced pharmacists, including those working in pain clinics with high rates of referrals for tapering and rotation of chronic opioid therapy, have identified common, practical questions from clinicians to inform the individualization of tapers. These frequently asked questions overlap with identified gaps in the literature, relying on expert opinion, anecdotal evidence and a return to first principles.

Frequently asked questions

1. How can I approach the subject of a taper in patients with chronic noncancer pain who feel as though their opioid is the only thing that has helped them?

A motivational approach may be helpful. Generally, people are not motivated by extrinsic factors (i.e., concerns about the “opioid crisis” in Canada). Instead, a motivational approach elicits the patient’s own reasons for change or intrinsic motivation and is likely to be much more effective. Tips on how to use a motivational approach for discussions about opioid tapering are provided in Box 2, with some suggested phrasing. Pharmacists can incorporate this type of approach into discussions about a patient’s opioid therapy, especially when ambivalence (a state of mixed or contradictory feelings) is identified. Additional resources are available to learn more about a motivational approach and include techniques for speaking with patients to identify their level of commitment and to mobilize change talk.

2. My patient is currently using multiple short- and long-acting opioids for chronic pain, for example, hydromorphone controlled-release, hydromorphone immediate-release and oxycodone/acetaminophen combination products. How should I initiate the taper?

There are several options to consider:

A. Consolidate and switch all opioids to one, new, extended-release oral opioid. The patient is able to take advantage of incomplete cross-tolerance as the equianalgesic dose should be reduced by 50% during the switch, resulting in immediate decreased opioid burden. A good option might be a morphine extended-release product, which simplifies dosing times to once or twice daily and minimizes pill burden and time spent focused on opioid medications. Switching short-acting to long-acting opioids on a fixed dose schedule is in line with recommendations from the Guideline. Evidence for this practice is lacking, however, and opinions vary.

B. Some patients may be more receptive to start tapering one opioid medication or formulation at a time. Include patients’ experiences and preferences and determine which opioids provide the least benefit. These may be tapered easily to build confidence in a patient anxious or resistant to change. Be watchful for increasing use of immediate-release opioids while they remain as part of the regimen.
3. If I am starting the taper by switching opioids, what is the best medication to choose?

Any oral extended-release products that the patient is not currently taking or has not taken in the past would be appropriate; however, once-daily formulations (e.g., Kadian or Jurnista) can minimize pill burden and increase adherence while maintaining adequate opioid blood concentrations throughout the 24-hour period.\(^{13,14}\) Once-daily dosing may help reduce the psychological focus on opioids. In addition, calculations to switch to morphine only require one step (conversion to morphine equivalent dose), compared with a second step to then calculate the equianalgesic dose of a new drug. Patients’ comorbidities and concurrent medications must be considered in the selection of a new opioid for impact to specific opioid absorption or metabolism (e.g., morphine should be avoided in renal impairment). Patients’ medication history must also be considered to determine if there have been failed trials in the past, potentially narrowing options.

4. What is the role for short-acting opioids in a tapering protocol?

For chronic pain, avoiding the use of immediate-release opioids in combination with extended-release opioids is preferable.\(^{15}\) The Guideline does not discuss any role for short-acting opioids in tapering protocols. Patients may be very resistant to discontinuing their short-acting medications, as the quick onset may act as a source of control over pain for them and they provide earlier and more intense peak effects (which affect “liking” or hedonic effect). Continued fluctuations in short-acting opioids delay the taper process and may increase interdose withdrawal symptoms. As a taper progresses, patients are at risk of loss of tolerance and subsequent inadvertent overdose if they continue to consume fluctuating quantities of short-acting opioids. Pharmacists must educate patients, monitor use of short-acting opioids, recommend daily limits and suggest nonopioid and nonpharmacological (e.g., distraction, stretching, meditation) alternatives for withdrawal symptoms.

In contrast, there may be a role for short-acting medications at the end of tapers, when extended-release medications are at the lowest strength but patients are not able to discontinue. An example of this would be a patient on morphine extended-release 10 mg once daily who experiences withdrawal symptoms if this is stopped. Extended-release products cannot be

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**BOX 2** A motivational approach to opioid tapering

Ask about the upsides and downsides from the patient’s perspective.
- “Tell me about how your opioids help you now, compared to when you started them.”

Reflect any responses and emotions.
- “So your opioids just take the edge off your pain.”
- “So you are worried about what these are doing to your body.”
- “It sounds like you don’t want to be on fentanyl but you are scared about the pain if you come off.”
- “You think nothing else will work.”

Listen carefully, then link together pros and cons (if any).
- “So on the one hand, you still are not able to do all the things you want to do inside and outside of the house and you are worried about all the risks related to opioids, but you are scared about withdrawal and not having anything to manage your pain.”

Ask “permission” to provide information.
- “I have some information that I would like to share with you about opioids. Would today be a good day to discuss this?”

Individualize benefits and risks to review with patients (sleep apnea, hormonal changes, mood, risk of death, hyperalgesia, interdose withdrawal).

Recommend specific tapering strategies.

Discuss withdrawal management.
- Talk about what other patients have said or how they have described their experience.
cut or further manipulated; therefore, to continue to decrease by smaller amounts, an option is to switch to a short-acting morphine product, for example, 2 mg 4 times daily and continuing to decrease by 2 mg increments.

5. My patient is on a high-dose fentanyl patch. Should I taper him using the patch or switch him to another opioid?

There is often concern that if a patient is using fentanyl transdermal (TD) patches, especially at high doses, that conversion to an oral extended-release opioid is risky because of imprecise conversion ranges. The ranges available in the monograph are intended only to be used unidirectionally for conversion from an oral opioid to fentanyl TD. In addition, there are concerns about potentially poor TD absorption and subsequent risk of overdose when switching to the oral route due to more complete absorption in a particular individual. There may be more comfort in decreasing the fentanyl dose using available patch strengths, especially at high doses of fentanyl TD. The lowest fentanyl TD patch strength available is 12 mcg/h. Coverage by provincial formularies varies, limiting the availability of this lower strength. Once the lowest tolerable patch strength is reached, one could then consider switching to another opioid to continue the taper with frequent monitoring and follow-up.

6. If the tapering plan is to switch from a fentanyl patch to another oral opioid, what directions should I provide to them about when to start the oral opioid after removing the patch?

When switching between opioids, consideration must be given to the pharmacokinetics of individual formulations (e.g., onset, time to peak, time to reach steady state). When patients are switching from fentanyl transdermal to morphine extended-release every 12 hours, they should remove their fentanyl patch and, 12 hours later, take 50% or less of the new calculated morphine dose. Twenty-four hours after patch removal, 100% of the new calculated morphine dose may be given. Remember, the new calculated morphine dose should discount the equipotential dose by 50% before these new calculations are applied. To help with this transition period of 24 to 48 hours, a very limited quantity of short-acting opioids may be considered as needed at fixed intervals to minimize withdrawal and then discontinued. A double check of calculations prior to switching opioids is critical to avoid potential errors. Box 3 outlines an example of calculations for switching from a fentanyl TD patch to an alternative oral ER opioid. Calculations of a morphine-equivalent dose should be performed considering the amount the patients report they are using if lower than what was prescribed to avoid overdosing with the new opioid. Asking the patients about any diversion in this context may also be important—they may be more likely to disclose if they understand the risks.

7. How quickly should opioids be tapered for patients with CNCP?

The Guideline recommends a rate of 5% to 10% every 2 to 4 weeks. More frequent decreases (e.g., weekly) have been described in other guidelines. Rapid tapers (immediate or over a few days/weeks) should only be carried out in a medically supervised withdrawal centre, where severe withdrawal symptoms can be managed. Patients who have been on opioids for a very long time or are highly anxious may benefit from a much more gradual taper. Any decrease in the opioid dose reduces potential harms; the focus should remain on successes to continue to motivate the patient.

8. My patients are experiencing a lot of pain after the first dose decrease. Their usual pain is worse and they are experiencing body aches.

During a taper, some patients experience temporary increases in pain and withdrawal symptoms. Patients can be reassured that this will generally subside within 1 to 2 weeks. Helping patients to manage their expectations about pain is important. Potential triggers that may be contributing to worsened pain could also be anticipated (i.e., weather, activity level) and avoided if possible. Sleep disturbances or mood changes as a result of withdrawal during a taper may also affect pain levels. Acetaminophen or an NSAID may be recommended for increased withdrawal pain and body aches. Nonopioid and nonpharmacological therapy for pain, sleep and mood should be optimized. When combination products containing opioids and acetaminophen are discontinued or switched to a long-acting opioid, the indication for acetaminophen should
be assessed and prescribed separately to avoid loss of analgesic effect from that component. A patient-centred approach to tapering may help minimize the impact on their quality of life. For example, strategically schedule the day of dose change with the patients so it has less negative impact if they do not feel as well the day or two afterwards. In the event that the patient cannot tolerate the decrease, the taper should be held until the patient is ready to resume and then restarted at a slower rate.

9. My patient was tapered off his chronic opioid therapy very rapidly over 1 week by his family doctor before he retired. He is now experiencing very significant withdrawal and cannot find a new prescriber. How can I help him?

It is important to reassure the patients that even though opioid withdrawal is very uncomfortable, it is temporary and not life-threatening in most circumstances. Exceptions include pregnancy, where severe withdrawal can result in premature labor and spontaneous abortion and unstable medical and psychiatric conditions, which may be worsened by anxiety.3 Reassurance that withdrawal symptoms continue to improve with time is critical. Early, late and prolonged symptoms of withdrawal have been described, and management includes over-the-counter medications and nonpharmacological methods.18 Health care professionals should offer frequent follow-up or availability for patients to contact them as needed. Be familiar with additional resources for patients who are unable to cope, for example, telehealth or crisis lines. This is a risky time for patients as some may resort to using street opioids to alleviate their pain. Pharmacists can dispense and provide education on use of a naloxone kit at this time to prevent overdose after a loss of tolerance.

10. How do I send my recommendations for a taper in a clear way to prescribers, when gradual tapers have so many steps?

A schedule for tapering is suggested, including planned dates, doses, frequency, total dose/day and quantities that will be required for the prescription. As the plan may need to be adapted along the way, create a schedule for the first 1 to 2 months with planned follow-up with the pharmacist and prescriber at that time to review progress. A documentation template is available from RxFiles: www.rxfiles.ca/rxfiles/uploads/documents/Opioid-Taper-Template.pdf. A documentation worksheet for Switching Opioids is also available online through the Opioid Manager: http://nationalpaincentre.mcmaster.ca/opioid-manager/documents/opioid_manager_switching_opioids.pdf.

11. If my patient taking prescription opioids for pain has a diagnosis of opioid use disorder, can she be tapered in the same way?

For patients with an active substance use disorder and CNCP, the Guideline has strong recommendations against the use of opioids.2 For patients with a history of a substance use disorder and persistent problematic noncancer pain, they also suggest continuing nonopioid therapy rather than trialing opioids.2 The Guideline estimates that 10% of people with CNCP on opioids will develop an opioid use disorder.2 For these patients, the risk considerations and treatment goals are different. However, it can be a challenge to diagnose opioid use disorder in patients using opioids for chronic pain. It is important to

### BOX 3 Calculations for switching from fentanyl transdermal patch to an alternative oral extended-release opioid

**Example: Switching from fentanyl 100 mcg/h transdermal patch to morphine extended-release.**

Fentanyl 100 mcg/h patch is approximately equivalent to 400 mg morphine equivalent dose.

New total daily dose of morphine = 200 mg daily.

New opioid dose = morphine extended-release 100 mg by mouth twice daily.

Twelve hours after patch removal, the patient should take morphine extended-release 50 mg (one dose).

Twenty-four hours after patch removal, patient starts morphine extended-release 100 mg Q12H, to continue until the first decrease in the oral taper.
understand that an opioid use disorder is a problematic pattern of opioid use leading to clinically significant impairment or distress.\(^\text{19}\) As with all substance use disorders, the associated behaviours, cravings and relapses are the result of brain changes that last beyond stopping opioid use.\(^\text{19}\) In the context of patients taking opioids solely under appropriate medical supervision, the development of physical dependence (i.e., tolerance, withdrawal symptoms) is not considered in the diagnosis since this is expected with chronic opioid exposure. In this case, the other features that form the basis for an opioid use disorder diagnosis must be assessed, which include indications of impaired control over opioid use, social impairment due to opioid use and risky opioid use. In patients with pain who have aberrant or drug-seeking behaviours (such as early refill requests) or significant difficulties with tapering, the underlying reasons must distinguish between seeking better pain management and the development of opioid use disorder.\(^\text{19}\)

While making this determination, shortened intervals, limited quantities and urine drug screening may be helpful. A referral for further assessment and diagnosis may be needed. Best practice for the management of patients with opioid use disorder is opioid agonist maintenance treatment with buprenorphine/naloxone or methadone.

12. My patient has a diagnosis of a personality disorder and I am finding it very difficult to work with him towards an opioid taper. What are some strategies so we can work together effectively?

It is important to recognize that some patients may be particularly challenging to support during opioid tapering. The diagnosis of chronic pain may be associated with other psychopathology, particularly borderline personality disorder (BPD).\(^\text{20}\) BPD is characterized by emotional lability and by difficulties with interpersonal relationships and self-destructive behaviour. These patients report higher levels of pain, and for them, pain symptoms may function as an interpersonal means of eliciting caring responses from others.\(^\text{20}\) Because of their difficulty with self-regulation or impulsivity, patients with BPD are at high risk of drug misuse.\(^\text{20}\) They also have a negative self-image, fears of abandonment and transient mood shifts in response to interpersonal stress.\(^\text{21}\) Patients with BPD may have unrealistic expectations, be very resistant to change in treatment and have difficulty establishing relationships, including trusting health care providers.\(^\text{21}\) In light of the challenges identified around working with patients with BPD to manage chronic pain and opioid tapering, the need for clear boundaries and agreements for communication and follow-up are reinforced. Clear, realistic expectations should be emphasized.\(^\text{20}\) Although recommended in general for all patients, the need for structured opioid prescribing in patients with BPD is emphasized, including short intervals, limited quantities, urine drug screening and a single prescriber. Even with stabilized patients, prescribers should consider weekly or biweekly dispensing intervals on weekdays to eliminate problems from weekend or statutory holiday pharmacy closures.

**Discussion**

For patients with CNCP using opioids and experiencing serious challenges in tapering, the Guideline recommends a formal multidisciplinary program.\(^\text{2}\) This may also apply for those on extremely high doses of opioids where alternative methods such as switching to buprenorphine/naloxone for tapering may be preferred. Remarks in the Guideline recognize the cost of formal multidisciplinary opioid reduction programs and their limited availability/capacity. Alternatives proposed include a variety of health professionals who can collaborate in the care of the patient (e.g., primary care physician, nurse, pharmacist, physical therapist, others).

A naloxone kit is recommended for anyone on opioid therapy. The Guideline suggests considering naloxone especially while switching opioids.\(^\text{2}\) As patients taper and discontinue opioids, they are at risk of inadvertent or unintentional overdose due to loss of tolerance. This is an important contribution that pharmacists can make to opioid safety by advocating for wide distribution of naloxone kits.

Finally, health care providers should offer frequent follow-up or contact information for patients if they have questions, especially during initial phases of tapering. The importance of the frequent and nonjudgmental interactions patients have with their pharmacist and the rapport that is developed should not be underestimated in contributing to positive outcomes for a successful taper.
Conclusion
Implementation of the Guideline will likely result in more patients with CNCP tapering their chronic opioid therapy; there is continued and increasing need for practical, patient-centred and evidence-based guidance on tapering strategies.

From Toronto Rehab (L. Murphy, Steenhof), University Health Network, Toronto; the Centre for Addiction and Mental Health (Babaei-Rad, Isaac, Zhang, Sproule), Toronto, Ontario; the Regional Pain Program (Buna), Victoria, British Columbia; College of Pharmacy (A. Murphy), Dalhousie University, Halifax, Nova Scotia; the Toronto Academic Pain Medicine Institute (Ng), Women’s College Hospital, Toronto, Ontario; RxFiles Academic Detailing (Regier), Saskatoon Health Region, Saskatoon, Saskatchewan; and the Leslie Dan Faculty of Pharmacy (Steenhof, Zhang, Sproule), University of Toronto, Toronto, Ontario. Contact laura.murphy@uhn.ca.

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ORCID iD: L. Murphy http://orcid.org/0000-0002-4787-8879

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