

CADTH Reference List

Strategies for the Reduction or Discontinuation of Opioids: A 2021 Update

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Key Messages

- Seven evidence-based guidelines regarding tapering strategies for the reduction or discontinuation of opioids were identified.
- Five evidence-based guidelines regarding switching or crossover strategies for the reduction or discontinuation of opioids were identified.

Research Questions

1. What are the evidence-based guidelines regarding tapering strategies for the reduction or discontinuation of opioids?
2. What are the evidence-based guidelines regarding switching or crossover strategies for the reduction or discontinuation of opioids?

Methods

Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including MEDLINE, the Cochrane Database of Systematic Reviews, the international HTA database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were opioids and drug tapering. Search filters were applied to limit retrieval to guidelines. Where possible, retrieval was limited to the human population. The search was also limited to English-language documents published between January 1, 2016 and April 20, 2021. Internet links were provided, where available.

Selection Criteria and Summary Methods

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed. The Overall Summary of Findings was based on information available in the abstracts of selected publications. Open-access, full-text versions of evidence-based guidelines were reviewed when abstracts were not available and relevant recommendations were summarized.

Results

Eight evidence-based guidelines were identified for this report.¹⁻⁸ Seven evidence-based guidelines were identified regarding tapering, switching, or crossover strategies for the reduction or discontinuation of opioids.¹⁻⁷ Five evidence-based guidelines were identified regarding switching or crossover strategies for the reduction or discontinuation of opioids.^{1-4,8}

Table 1: Selection Criteria

Criteria	Description
Population	Patients with chronic, non-cancer pain
Intervention	Methods or strategies to taper, rotate, switch, or crossover opioids
Comparator	Not applicable
Outcomes	Recommendations regarding the discontinuation of opioid use, tapering of opioid use, crossover or switching of opioids, rotation of opioids, and cessation of opioid use
Study designs	Evidence-based guidelines

Additional references of potential interest that did not meet the inclusion criteria are provided in Appendix 1.

Overall Summary of Findings

Four guidelines¹⁻⁴ discuss both tapering and switching/rotating opioids, while 3 guidelines discuss only tapering⁵⁻⁷ and 1 guideline discusses only switching.⁸ Three guidelines^{1,2,5} focus on treating opioid use disorder (OUD). Four guidelines are from Canadian groups,^{1-3,5} while the remainder are from the US.^{4,6-8}

Seven guidelines¹⁻⁷ discuss tapering strategies. Two Canadian guidelines – the *Canadian Guidelines on Opioids Use Disorder Among Older Adults*¹ and the *CRISM National Guideline for the Clinical Management of Opioid Use Disorder*² – recommend slow tapering over rapid tapering,^{1,2} except under specific circumstances.¹ The Patients, Experience, Evidence and Research (PEER) group⁵ from Canada recommends that tapering, with the intention of stopping opioid agonist treatment, should be slow and individualized to the patient. American guidelines from ISCI (the Institute for Clinical Systems Improvement),⁴ the US Department of Veteran Affairs and Department of Defense (VA/DoD),⁶ and the American Society of Interventional Pain Physicians (ASIPP)⁷ recommend that tapering schedules should be based on each patient’s needs and characteristics. In addition, the VA/DoD guideline⁴ recommends avoiding abrupt discontinuation, except for safety reasons. The Canadian guideline for opioid therapy and chronic non-cancer pain³ recommends tapering opioids to the lowest effective dose for patients, using 90 mg or more morphine equivalents of opioids, instead of not changing the opioid therapy dosing at all.

Five guidelines^{1-4,8} discuss switching opioids. The *Canadian Guidelines on Opioids Use Disorder Among Older Adults*¹ recommends that if older adults cannot be treated with buprenorphine or methadone maintenance and their renal function is adequate, initiation onto oral morphine may be considered with caution. The CRISM guidelines² recommend considering switching to buprenorphine-naloxone for patients with OUD being treated by methadone who are interested in treatment simplification. The Canadian guideline for opioid therapy and chronic non-cancer pain³ recommends rotating to other opioids if patients are having persistent problematic pain and/or other adverse effects. The ISCI guideline⁴ recommends that, when switching, doses of the new opioid should be reduced and then titrated to achieve analgesia, and that switching to methadone should be reserved only for experienced clinicians. A guideline focused on using buprenorphine⁸ for chronic pain recommends that clinicians

consider switching patients from a full μ -opioid receptor agonist treatment to buprenorphine under specific circumstances such as lack of efficacy.

A detailed summary of the identified guidelines can be found in Table 2.

Table 2: Summary of Guidelines

Guideline	Country	Recommendation and Strength of Recommendation (If Applicable)
Tapering and switching/crossover strategies		
<p><i>Canadian Guidelines on Opioid Use Disorder Among Older Adults (2020)</i>¹</p>	<p>Canada</p>	<p>For older adults with, or at risk of, an OUD such as those with polypharmacy or comorbidities that increase the risk of an opioid overdose:</p> <ul style="list-style-type: none"> • Tapering the opioid should be considered (GRADE quality: Moderate; strength: Strong). • Once the decision is made to taper, a slow outpatient tapering schedule (e.g., 5% drop every 2 to 8 weeks with rest periods) is preferred over rapid tapering. Faster tapering schedules may be attempted under special circumstances if the patient is in a treatment setting with medical supervision. (GRADE quality: Low; strength: Weak) <p>For treating older adults with OUD:</p> <ul style="list-style-type: none"> • If buprenorphine and methadone maintenance were ineffective or could not be tolerated, and if renal function is adequate, daily witnessed ingestion of oral morphine may be considered with caution. Careful supervision of initiation onto short-acting morphine first is recommended before transitioning to maintenance with the long-acting, 24-hour formulation. (GRADE quality: Low; strength: Weak) • Induction onto an opioid agonist is recommended over non-opioid treatment (i.e., withdrawal management). If a tapering trial is attempted, there should be an option to initiate longer-term opioid agonist therapy or opioid antagonist therapy. (GRADE Quality: Moderate; strength: Weak) <p>For older adults on medication for OUD and requiring management of CNCP:</p> <ul style="list-style-type: none"> • Non-medication and non-opioid strategies are recommended. (GRADE quality: Moderate; strength: Weak)

Guideline	Country	Recommendation and Strength of Recommendation (If Applicable)
<i>CRISM National Guideline for the Clinical Management of Opioid Use Disorder (2018)</i> ²	Canada	<p>Switching:</p> <ul style="list-style-type: none"> For patients who have a successful and sustained response to methadone and express a desire for treatment simplification, consider transitioning to buprenorphine/naloxone. (GRADE quality: Moderate; Strength: Strong) In patients for whom first- and second-line treatment options were ineffective or contraindicated, opioid agonist treatment with slow-release oral morphine (ideally prescribed as once daily witnessed doses) may be considered. These should only be prescribed by physicians with a Section 56 exemption to prescribe methadone or after consulting with an experienced addiction practitioner. (GRADE quality: Moderate; strength: Strong) <p>Tapering:</p> <ul style="list-style-type: none"> For withdrawal management without opioid agonist treatment, supervised slow (> 1 month) opioid agonist tapering in an outpatient or residential treatment setting is recommended rather than a rapid (< 1 week) taper. Patients should also be transitioned to long-term addiction treatment, as withdrawal management without this transition is associated with increased risk of relapse, morbidity, and mortality. (GRADE quality: Moderate; Strength: strong) For patients who have a successful and sustained response to opioid agonist treatment and wish for medication cessation, consider slow tapering over months to years, depending on the patient. (GRADE quality: Moderate; strength: Strong)
Guideline for Opioid Therapy and Chronic Non-cancer Pain (2017) ³	Canada	<p>Switching:</p> <ul style="list-style-type: none"> For patients with CNCP currently using opioids and have persistent problematic pain and/or problematic adverse effects, rotation to other opioids is recommended over keeping the opioid therapy the same. (Weak recommendation) <p>Tapering:</p> <ul style="list-style-type: none"> For CNCP patients currently using 90 mg morphine equivalents of opioids or more, tapering opioids to the lowest effective dose is recommended, potentially including discontinuation instead of making no change to opioid therapy. (Weak recommendation) <ul style="list-style-type: none"> For patients who have a substantial increase in pain or decrease in function that persists for more than 1 month after a small dose reduction, tapering may be paused or potentially abandoned.
<i>ISCI – Pain: Assessment, Non-Opioid Treatment Approaches and Opioid Management Care for Adults (2017)</i> ⁴	US	<p>Switching:</p> <ul style="list-style-type: none"> Opioid conversion tables should be used only as guidance when switching. Doses of the new opioid should be reduced by 50% of the previous daily MME dose and titrated to achieve analgesia. Switching an opioid-tolerant patient to methadone for chronic pain should be reserved for experienced clinicians familiar with its use. <p>Tapering:</p> <ul style="list-style-type: none"> Opioid tapering should be discussed and offered at intervals of 6 months for all patients on chronic opioids. Once the patient and clinician agree to taper, it should be individualized to the patient's circumstances and a referral source should be available. During tapering, patients should be offered additional treatment options and frequent follow-up.

Guideline	Country	Recommendation and Strength of Recommendation (If Applicable)
Tapering strategies		
PEER group – <i>Managing Opioid Use Disorder in Primary Care</i> (2018) ⁵	Canada	<ul style="list-style-type: none"> • Opioid agonist treatment should not be initiated if the intention is to discontinue (by tapering) in the short term. Opioid agonist treatment is intended as long-term management, as optimal duration is unknown and may be indefinite. (Strong recommendation, low-quality evidence) • If considering tapering to stop opioid agonist treatment, tapering should be slow and individualized to the patient.
<i>VA/DoD Clinical Practice Guideline for Opioid Therapy for Chronic Pain</i> (2017) ⁶	US	<ul style="list-style-type: none"> • The guideline recommends tapering the dose or discontinuing long-term opioid therapy when risks of long-term opioid therapy outweigh benefits. Abrupt discontinuation should be avoided unless required for immediate safety concerns. (Strength: Strong) • Recommend individualizing opioid tapering based on risk assessment and each individual patient’s needs and characteristics. There is insufficient evidence to recommend specific tapering schedules and strategies. (Strength: Strong)
ASIPP Guidelines – Responsible, Safe, and Effective Prescription of Opioids for Chronic Non-cancer Pain (2017) ⁷	US	<ul style="list-style-type: none"> • Taper and discontinue opioid therapy if there is a lack of response, adverse consequences, and/or abuse with retaliation. (GRADE quality: Fair; strength: Moderate) <ul style="list-style-type: none"> ◦ For a patient who has not been taking the medication on a long-term basis, tapering is not necessary and discontinuation may be carried out. ◦ Tapering may be carried out slowly (decrease of 10% of original dose per week). Some patients can be tapered more rapidly without major problems over a 6- to 8-week period.
Switching or crossover strategies		
Webster et al. – <i>Understanding Buprenorphine for Use in Chronic Pain: Expert Opinion</i> (2020) ⁸	US	<ul style="list-style-type: none"> • Consider switching from full μ-opioid receptor agonist treatment to buprenorphine if any of the following circumstances are applicable: <ul style="list-style-type: none"> ◦ lack of efficacy (e.g., tolerance, hyperalgesia) ◦ concern from health care providers regarding prescribing a Schedule II opioid (e.g., risk of addiction, misuse, and/or overdose death) ◦ patient has limited ability to utilize oral formulations due to altered gastrointestinal motility/function (e.g., after bariatric surgery) ◦ patient is receiving immediate-release treatment and would benefit from a longer-acting analgesic with a relatively favourable safety profile and Schedule III classification. • It is not recommended to switch to buprenorphine for chronic pain if a patient with OUD is not a candidate for opioids. • Clinical best judgment should be used to individualize conversion when switching to buprenorphine.

ASIPP = American Society of Interventional Pain Physicians; CNCP = chronic non-cancer pain; CRISM = Canadian Research Initiative on Substance Misuse; GRADE = Grades of Recommendation Assessment, Development and Evaluation; ISCI = Institute for Clinical Systems Improvement; MME = morphine milligram equivalents; OUD = opioid use disorder; PEER = Patients, Experience, Evidence and Research; VA/DoD = Veterans Affairs/Department of Defense.

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Tapering and Switching Strategies

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Switching or Crossover Strategies

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