

## INBRIEF

Summarizing the Evidence

# Clinical Effectiveness of Opioid Substitution Treatment

## Key Messages

- There is some evidence to suggest that heroin-assisted treatment with injectable hydromorphone or diacetylmorphine may be more clinically effective than methadone in patients with opioid use disorder (OUD).
- Most of the evidence identified suggests there may be no significant difference in clinical effectiveness for sustained-release oral morphine compared with methadone for patients with OUD.
- No evidence was identified describing the clinical effectiveness of oral hydromorphone, fentanyl patches, and fentanyl buccal tablets for the treatment of OUD.
- Most of the evidence identified for safe supply treatments was of low quality, and many of the included reviews included the same studies.

## Context

The opioid crisis has contributed to tens of thousands of deaths in North America in recent years. This crisis affects individuals, communities, and society as a whole, through loss of employment, homelessness, and harmful health effects for the individual, as well as crime-related activity and associated societal impacts. OUD can be treated with medication and/or psychotherapy. Conventional treatment of OUD typically includes opioid agonist therapy with methadone or buprenorphine. Both have been shown to be effective for treating OUD, but they can also have side effects. There is an increasing need for access to effective treatments for OUD as the opioid crisis continues to worsen.

## Technology

Safe supply, also called opioid substitution therapy, has been put forward as a way to address the opioid crisis. This approach provides prescription opioid medication as a safer alternative to

opioid drugs that have been obtained illegally. Some safe supply programs have been established in Canada and have shown to provide health and social benefits to people with OUD. In 2019, Health Canada approved the use of injectable hydromorphone and diacetylmorphine for the treatment of OUD. Research on other medications for the treatment of OUD is also ongoing, including slow-release morphine, oral hydromorphone, and fentanyl patches or tablets.

## Issue

There is some debate and controversy around the concept of safe supply. Concerns have been raised about treating OUD with the same substance that caused the condition. Some barriers to broader implementation of safe supply include safety concerns, such as the potential for overdose or redistribution, and societal stigma.

Safe supply is 1 of several interventions being investigated in Canada as a way to address the opioid crisis. The data describing safe supply treatments — including sustained-release morphine, hydromorphone, diacetylmorphine, fentanyl patches or tablets, among others — is not as plentiful as the data for more conventional treatments for OUD such as methadone. The aim of this review is to identify and summarize the evidence describing the clinical effectiveness of various types of safe supply therapies for the treatment of OUD.

## Methods

A limited literature search was conducted of key resources, and the titles and abstracts of the retrieved publications were reviewed. Full-text publications were evaluated for final article selection according to predetermined selection criteria (population, intervention, comparator, outcomes, and study designs).

## Results

The literature search identified 419 citations, 47 of which were deemed potentially relevant. Of these publications, 10 met the inclusion criteria for review — 7 reports included various types of systematic reviews and 3 reports described data from randomized controlled trials.

Read more about CADTH and this topic at:

[cadth.ca/clinical-effectiveness-opioid-substitution-treatment](https://cadth.ca/clinical-effectiveness-opioid-substitution-treatment)



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