

INBRIEF Summarizing the Evidence

Cost-Effectiveness and Guidelines for Opioid Substitution Treatment

Key Messages

- For the treatment of opioid use disorder (OUD), evidence suggests that injectable hydromorphone or injectable methadone may provide more benefit at less cost compared with injectable diacetylmorphine over a 6-month time horizon.
- Evidence suggests that in the treatment of OUD, both injectable hydromorphone and injectable diacetylmorphine are likely to provide more benefit at less cost than methadone maintenance treatment.
- There is some uncertainty in the cost-effectiveness evidence because the observed data were collected during shortterm follow-up and the long-term outcomes were based on extrapolations beyond the actual study data.
- One guideline suggests that slow-release oral morphine can be considered with caution when treating OUD in older adults with adequate renal function, in whom buprenorphine and methadone maintenance therapies have been ineffective or could not be tolerated. This was a weak recommendation supported by low-quality evidence.
- One guideline recommends using injectable hydromorphone or injectable diacetylmorphine for individuals with severe, treatment-refractory OUD who continue to inject illicit opioids. The recommendation was rated as conditional because some patients would find the attendance requirements for injectable opioid agonist treatment onerous or they would not have their needs met by injectable opioid agonist treatment. The recommendation was supported by moderate-quality evidence.
- No relevant cost-effectiveness evidence was identified for the use of sustained-release oral morphine, oral hydromorphone, fentanyl patches, or fentanyl buccal tablets for OUD treatment.
- No guidelines with recommendations were identified for the use of oral hydromorphone, fentanyl patches, or fentanyl buccal tablets for OUD treatment.

Context

Opioid dependence has an enormous burden on individuals and society. OUD is associated with deterioration in overall health, social functioning, and quality of life; criminal activity; incarcerations; and overdose-related deaths. First-line treatment for OUD includes pharmacotherapy with an opioid agonist or antagonist and adjunct psychosocial treatment. Methadone maintenance treatment and buprenorphine are pharmacotherapies that have shown to be effective for numerous outcomes; however, a subpopulation of individuals with severe OUD fail to benefit from these therapies.

Technology

There is emerging evidence that suggests that individuals who do not respond to or relapse while on first-line drug treatments may benefit from supervised injectable opioids, such as prescription diacetylmorphine, hydromorphone, or other oral alternatives.

Issue

While expanding OUD treatment options may lead to better outcomes, it comes with challenges such as the risk of adverse effects, restricted access, and increased resource pressure on health services with an associated cost. The aim of the Rapid Response report is to summarize the cost-effectiveness and the evidence-based guideline recommendations for various opioid agonist interventions used to treat OUD.

Methods

A limited literature search was conducted of key resources, and 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 300 citations, 13 of which were deemed potentially relevant. Of these publications, 5 met the inclusion criteria for review - 3 economic evaluations and 2 evidence-based guidelines.

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Read more about CADTH and this topic at: cadth.info/cost-effectiveness-opioidsubstitution-treatment

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