

Prescribing Opioids for Pain

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GUIDELINE TITLE CDC Clinical Practice Guideline for Prescribing Opioids for Pain—United States, 2022

DEVELOPER AND FUNDING SOURCE Centers for Disease Control and Prevention

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TARGET POPULATION Clinicians treating outpatients aged 18 years or older with acute, subacute, or chronic pain, excluding pain management for sickle cell disease, cancer-related pain, palliative care, and end-of-life care.

MAJOR RECOMMENDATIONS

- Nonopioid and nonpharmacologic treatments are at least as effective as opioids for many types of acute pain (category B; evidence type 3) and are preferred for subacute and chronic pain (category A; evidence type 2).
- Benefits and risks of opioid therapy should be assessed and discussed before starting opioids for acute pain due to severe injuries or moderate to severe postoperative pain (category B; evidence type 3) and subacute or chronic pain (category A; evidence type 2), using immediate-release preparations (category A; evidence type 4) at the lowest effective dose (category A; evidence type 3) and for no longer than the expected duration of severe pain (category A; evidence type 4).
- For patients already receiving long-term or higher-dose opioid therapy, do not reduce or stop opioids rapidly unless warning signs of impending overdose are present (category B; evidence type 4).
- Evidence-based medications for treatment of opioid use disorder (OUD) such as buprenorphine or methadone should be offered and arranged. Detoxification alone, without other medication for OUD, is not recommended because of increased risk of drug use, overdose, and overdose death (category A; evidence type 1).

Summary of the Clinical Problem

Within the context of the opioid crisis, improving care for patients experiencing pain, from acute to chronic, has been the focus of multiple stakeholders.¹ Chronic pain alone affects approximately 20% of US adults, and many people experiencing pain do not get optimal relief despite a wide variety of nonopioid, opioid, and nonpharmacologic treatments due to limited evidence, inadequate access, and health disparities.^{1,2} Although release of the 2016 Centers for Disease Control and Prevention (CDC) guideline for prescribing opioids for chronic pain was associated with fewer opioid prescrip-

tions, there was also an association with decreased access to opioids, abandonment, and abrupt discontinuation.^{3,4}

Characteristics of the Guideline Source

The CDC conducted a multistep review that engaged a federal advisory committee; formed work groups of patients, caregivers, and clinicians; conducted workshops with interested stakeholders and federal agencies; and reviewed public comments. Final peer reviewers had not participated in development of the guideline, but they represented diverse backgrounds with a variety of clinical interests (Table).

Evidence Base

The CDC commissioned 5 systematic comparative effectiveness reviews. The scope covered recommendations for all clinicians managing acute (<1 month), subacute (1-3 months), or chronic (>3 months) pain, with or without opioids, in outpatients aged 18 years or older. Management of sickle cell pain, cancer-related pain, and pain in patients receiving palliative or end-of-life care were excluded from the review and guidelines.

The Advisory Committee on Immunization Practices adaptation of the GRADE method was used to develop recommendations based on the quality of available evidence, treatment effects and harms, patient and clinician values and preferences, and health care costs.



Viewpoint [page 1738](#)



Related article [page 1745](#)

The strength of recommendations was categorized as A (applies to and should be followed by most persons) or B (necessitates shared decision-making based on patient values, preferences, and clinical circumstances). The quality of evidence was categorized as type 1 (highest quality, usually from randomized trials) through type 4 (lowest quality). Of the 12 final recommendations, 7 were category A and 2 were supported by evidence type 1 or 2.

For most common acute pain conditions including low back pain, neck pain, sprains, dental extractions, kidney stone pain, and headaches, nonopioids are at least as effective as opioids. For example, in the treatment of acute low back pain, 1 trial found no difference between codeine, 60 mg, and acetaminophen, 600 mg, vs ketorolac,

Table. Guideline Rating

Standard	Rating
Establishing transparency	Good
Management of conflict of interest in the guideline development group	Good
Guideline development group composition	Good
Clinical practice guideline-systematic review intersection	Good
Establishing evidence foundations and rating strength for each of the guideline recommendations	Good
Articulation of recommendations	Good
External review	Good
Updating	Fair
Implementation issues	Good

10 mg, both given orally every 4 to 6 hours as needed, for either pain within 4 or 6 hours of dosing or improved function at 4 days.⁵ The opioid was associated with adverse events such as nausea, vomiting, abdominal pain, dyspepsia, somnolence, dysphoria, dizziness, and visual disturbance (64% vs 34%; relative risk [RR], 1.90; 95% CI, 1.28-2.83) but also with increased serious adverse events that were incapacitating and disrupted normal activities (17% vs 3%; RR, 5.25; 95% CI, 1.20-22.98).⁵

A meta-analysis of 71 randomized trials with 19 616 patients who quantified their chronic pain on visual analog or numeric rating scales showed that opioids were associated with small mean improvements vs placebo (mean difference, -0.79 on a 0- to 10-point scale; 95% CI, -0.93 to -0.67).⁶ The clinical importance of small improvements varies between persons, and any benefits may be offset by increased risks of OUD and opioid overdose, as well as fall and fracture risk, which were found in a dose-dependent manner across multiple studies. One retrospective cohort study of Medicaid patients found an increased risk of all-cause mortality (adjusted hazard ratio, 1.64; 95% CI, 1.26-2.12; risk difference, 68.5 excess deaths per 10 000 person-years) in patients initiating long-acting opioids (sustained-release morphine, controlled-release oxycodone, transdermal fentanyl, or methadone) for chronic noncancer pain vs propensity score-matched patients taking anticonvulsants (gabapentin, carbamazepine, or pregabalin) or cyclic antidepressants.⁷

Several trials evaluating noninvasive, nonpharmacologic therapies such as physical therapy, cognitive behavior therapy, massage, acupuncture, and mind-body practices (yoga, tai chi) for treatment of many forms of subacute and chronic pain showed sustained improvements in pain and function that persisted after the therapies were delivered.²

Gradual tapering of long-term opioids is favored over rapid tapering. An observational study showed that an incremental increase in maximum monthly dose reduction velocity of 10% in adults receiving 50 morphine milligram equivalents or more per day was associated with an increased risk of overdose (adjusted incidence rate ratio, 1.05; 95% CI, 1.03-1.08) and mental health crisis (adjusted incidence rate ratio, 1.14; 95% CI, 1.11-1.17) compared with more gradual tapers.⁸

Benefits and Harms

Opioids may be indicated in some situations, including specifically for severe traumatic injuries (burns and crush injuries) as well as for moderate or severe postoperative pain, particularly where nonsteroidal anti-inflammatory agents are contraindicated. When initiating or continu-

ing opioids, strategies to reduce the risk of harms include prescribing the minimum necessary duration and dose, prescribing naloxone to patients at risk of overdose, monitoring prescription drug monitoring program data, obtaining urine toxicology testing, using particular caution when prescribing opioids in combination with benzodiazepines, and identifying and treating OUD. Common adverse effects of opioids include constipation, dry mouth, nausea, vomiting, drowsiness, confusion, tolerance, physical dependence, and withdrawal.

The guideline authors warned payers, health systems, and state regulators to avoid inflexible standards of opioid dosage thresholds that could result in rapid tapers or discontinuation of opioid therapy. Clinicians should not be penalized for accepting new patients already taking prescribed opioids for chronic pain.

Discussion

The 2022 guideline emphasized the need to support individualized person-centered care rather than a set of involuntary and inflexible rules. Pain treatment should be multimodal and multidisciplinary and should include nonopioid or nonpharmacologic treatment for many common types of pain.² Clinicians and patients should work together to identify functional treatment goals and continuously assess the benefits and risk of available treatment options.¹ When a decision is made to use an opioid, the guidelines suggest using a risk-benefit calculus for opioid-related decisions rather than strict dosage recommendations, and they offer more specific recommendations for opioid tapering.⁹

Evidence-based medications for treating patients with OUD should be offered. After passage of the Consolidated Appropriations Act of 2023, the Drug Enforcement Administration (DEA) and Substance Abuse and Mental Health Services Administration announced the elimination of the X-waiver for prescribing buprenorphine. All clinicians with a DEA registration that includes Schedule III can now prescribe buprenorphine, but additional training requirements will be required for DEA registration starting in June 2023.

Areas in Need of Future Study or Ongoing Research

More high-quality data on the benefits and harms of long-term opioid therapy for chronic pain, with comparisons with other pharmacologic and nonpharmacologic therapies, are needed. Particular attention to special populations, including racial and ethnic groups, older adults, and persons in rural communities, is necessary to ensure equitable access to high-quality pain management at both patient and systems levels.

ARTICLE INFORMATION

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