



Opioid Indications

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Objectives

- Efficacy of Opioids
- Opioid Prescribing Guidelines



- Prevalence of chronic pain in the adult population is about 11% in the United States¹
- Opioid prescriptions in the United States doubled from 2000 to 2010²
 - 89.2 million opioid prescriptions in 2010 alone
 - Opioid Prescriptions have been currently downtrending since 2012
- Unsatisfactorily high rate of prescription opioid overdoses/deaths remain

^{1.} Nahin RL. Estimates of pain prevalence and severity in adults: United States, 2012. J Pain. 2015;16(8):769-780

^{2.} Sites BD, Beach ML, Davis MA. Increases in the Use of Prescription Opioid Analgesics and the Lack of Improvement in Disability Metrics Among Users; *Regional Anesthesia & Pain Medicine* 2014;**39**:6-12

Figure 2. National Drug-Involved Overdose Deaths*, Number Among All Ages, 1999-2019



*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database, released 12/2020.





Efficacy of Opioids

- There is evidence of short-term efficacy of opioids to treat acute pain <6 months
- As length of time on opioids increases, efficacy decrease
- Short term opioid Rx is a risk factor for long term opioid use
- No improvement in pain or function with dose escalation

Opioid treatment for Chronic Pain

Efficacy of Opioids for Chronic Pain: A Review of the Evidence

Ballantyne Jane C. MD FRCA; Shin, Naomi S. BA

The Clinical Journal of PainThe Clinical Journal of Pain. 24:p 469-478, July 2008.

doi: 10.1097/AJP.0b013e31816b2f26

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The Journal of Pain Volume 20, Issue 6, June 2019, Pages 706-715



Effectiveness of Opioids for Chronic Noncancer Pain: A Two-Year Multicenter, Prospective Cohort Study With Propensity Score Matching

Dalila R. Veiga *^{, †, ‡} ∧ ⊠, Matilde Monteiro-Soares ^{‡, §}, Liliane Mendonça ^{¶, ∥}, Rute Sampaio ^{∥, *, *, ††}, José M. Castro-Lopes ^{∥, *, *, ††, ‡†}, Luís F. Azevedo ^{‡, §, ∥, ‡‡}

 Analgesic efficacy, while initially good, is not always sustained during continuous and long term opioid therapy (months to years)

 Opioid users reported no improvement regarding pain symptoms, physical function, emotional function, and social/familiar disability at the 2 year mark

Research

JAMA | Original Investigation

Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain The SPACE Randomized Clinical Trial

Erin E. Krebs, MD, MPH; Amy Gravely, MA; Sean Nugent, BA; Agnes C. Jensen, MPH; Beth DeRonne, PharmD; Elizabeth S. Goldsmith, MD, MS; Kurt Kroenke, MD; Matthew J. Bair; Siamak Noorbaloochi, PhD

- 240 patients
- Opioid vs non-opioid group
- No difference in functionality between groups, decreased pain scores in the non-opioid group and increased side effects in the opioid group







Clinical Guidelines for the Use of Chronic Opioid Therapy in Chronic Noncancer Pain

Roger Chou, MD, Gilbert J. Fanciullo, MD, MS, [...], and the American Pain Society-American Academy of Pain Medicine Opioids Guidelines Panel

Additional article information





Opioids should be initiated for treatment of chronic non-cancer pain when:

- Alternative therapies have not provided sufficient pain relief or cannot be used
- Pain is having an adverse impact on function or quality of life
- Potential benefits of opioid therapy outweigh potential harms



Special Communication

CDC Guideline for Prescribing Opioids for Chronic Pain– United States, 2016

Deborah Dowell, MD, MPH; Tamara M. Haegerich, PhD; Roger Chou, MD

JAMA Network[™]

2016 CDC Recommendations

Among the 12 recommendations in the Guideline, there are three principles that are especially important to improving patient care and safety:



Nonopioid therapy is preferred for chronic pain outside of active cancer, palliative, and end-of-life care.



When opioids are used, the lowest possible effective dosage should be prescribed to reduce risks of opioid use disorder and overdose.



Clinicians should always exercise caution when prescribing opioids and monitor all patients closely.

Determining When to Initiate or Continue Opioids for Chronic Pain

- Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain. Clinicians should consider opioid therapy only if expected benefits for both pain and function are anticipated to outweigh risks to the patient. If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy, as appropriate.
- Establish treatment goals with all patients, including realistic goals for pain and function, and consider how opioid therapy will be discontinued if benefits do not outweigh risks. Continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety.
- Discuss with patients known risks and realistic benefits of opioid therapy and patient and clinician responsibilities for managing therapy.

Opioid Selection, Dosage, Duration, Follow-up, and Discontinuation

- Prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids
- Prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when considering increasing dosage to 50 morphine milligram equivalents (MME) or more per day, and should avoid increasing dosage to 90 MME or more per day or carefully justify a decision to titrate dosage to 90 MME or more per day.
- Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than 7 days will rarely be needed.
- evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation. Clinicians should evaluate benefits and harms of continued therapy with patients every 3 months or more frequently. If benefits do not outweigh harms of continued opioid therapy, clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue opioids.

Assessing Risk and Addressing Harms of Opioid Use

- Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms. Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (≥50 MME/d), or concurrent benzodiazepine use, are present.
- Review the patient's history of controlled substance prescriptions using state PDMP data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him or her at high risk for overdose.
- Urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.
- Avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible
- Clinicians should offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder





Summary

- Opioid overdoses continue to be at an unacceptably high rate
- While opioids have proven to be effective for acute pain management, long term efficacy continues to be poor
- When prescribing opioids:
 - Start at the lowest dose possible
 - Prescribe only what is needed (ie short course)
 - Monitor patients for any signs of abuse