Opioids and Chronic Pain

A GUIDE FOR PRIMARY CARE PROVIDERS









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Prescribing opioids for chronic pain





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Managing chronic non-cancer pain

Integrative therapies Manual medicine

- Chiropractic, acupuncture
- Herbs, supplements, anti-inflammatory eating
- Yoga, Tai Chi, mindful movement
- Mind-body therapies

Behavioral therapies

- Depression/anxiety group
- Health/pain group
- Social engagement plan
- Cognitive Behavioral Therapy (CBT)
- Acceptance and Commitment Therapy (ACT)

Movementbased therapies

- Physical/occupational therapy
- Supervised/graded physical activity

Medication

- NSAIDs/Acetaminophen
- Anticonvulsants
- Antidepressants
- Topical (lidocaine, capsaicin)
- Immune modulators
- Muscle relaxants
- Cannabinoids
- Lowest effective opioid dose

Procedures

- Ice/heat
- Injections (joint, trigger point, epidural)
- Transcutaneous electrical nerve stimulation (TENS)
- Referrals (orthopedics, neurosurgery, procedural pain clinic)

If an opioid medication is part of the treatment plan, take the following steps:

- >> ASSESSMENT OF RISK, ADHERENCE, FUNCTION AND PAIN: at least annually
- **INFORMED CONSENT OR CONTROLLED SUBSTANCE AGREEMENT:** at least annually
- **CONTROLLED SUBSTANCE MONITORING PROGRAM:** check CURES every 4 months
- PRESCRIBE NALOXONE: at least every two years

If managing opioid use disorder, options include:

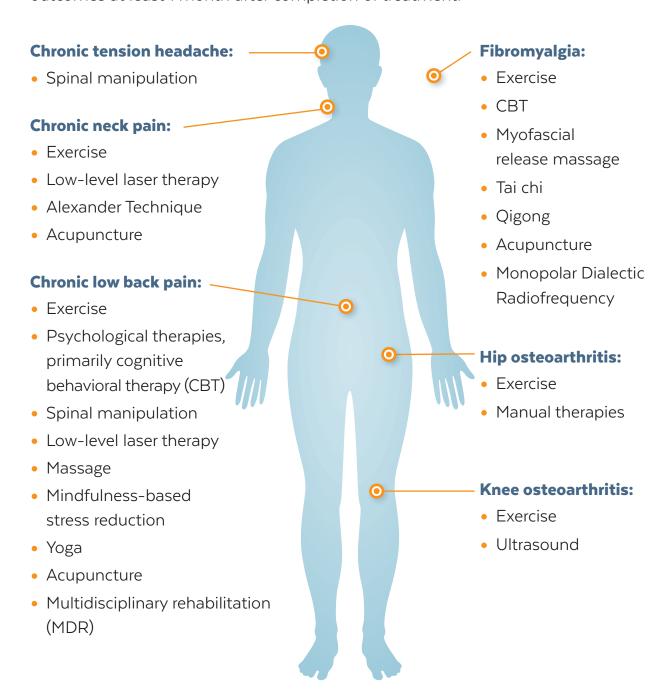
- Start buprenorphine, methadone maintenance, or extended-release naltrexone
- Arrange for outpatient or residential treatment
- Consider behavioral health and other referrals

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Non-pharmacologic treatment of chronic pain

The Agency for Healthcare Research and Quality conducted a systematic review of noninvasive non-pharmacological treatment for chronic pain and found the following interventions led to significant improvement in function and pain outcomes at least 1 month after completion of treatment:¹





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Non-opioid pharmacologic treatment of chronic pain

Use a systematic approach to initiating pharmacologic therapy for pain:

- 1. Record history and physical, pain description, function/social assessment.
- 2. Determine mechanism of pain.
- **3.** Consider non-pharmacologic options.
- 4. Consider pharmacologic options that may help.
- 5. Reassess response at regular intervals and modify treatment accordingly.

	Condition	Treatment
×	Acute, inflammatory pain (e.g., lumbar radiculopathy, bursitis, tendonitis, gout)	CorticosteroidsNSAIDs
	Headaches (e.g., tension-type, migrane)	 Acetaminophen NSAIDs Antidepressants (e.g., tricyclics) Anticonvulsants (e.g., topiramate)
A TOUR	Fibromyalgia	Anticonvulsants (e.g., pregabalin)
MX KA	Muscle spasm or spasticity	Muscle relaxants (e.g., baclofen)
W. Carlotte	Neuropathic pain (e.g., peripheral neuropathy)	 Anticonvulsants (e.g., gabapentin, topiramate) Antidepressants Topical local anesthetics (e.g., lidocaine)
***************************************	Osteoarthritis or rheumatoid arthritis	NSAIDs
₩\	Chronic musculoskeletal pain (e.g., bone pain)	Antidepressants (e.g., duloxetine)NSAIDs

Treatments listed for each condition are examples of options for the condition type, but are not applicable for all of the examples listed under the condition (e.g., tension-type headaches are not treated by anticonvulsants).

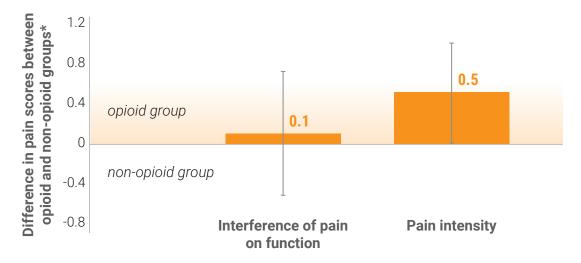


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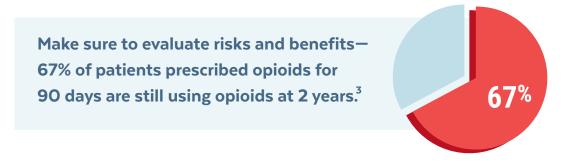
Considering opioids for pain management

Avoid opioids as first-line therapy for chronic, non-cancer pain.

Patients randomized to opioids had similar pain-related function and greater pain intensity compared to those randomized to non-opioid medications.²



^{*}Pain scores measured by Brief Pain Inventory (BPI) Interference and Severity Scales. Patients had no contraindications to acetaminophen or NSAIDs.



When should a provider consider opioids for chronic conditions?

- When other therapies are contraindicated
- When other therapy trials were implemented and unsuccessful
- After a full assessment and discussion of risks and benefits.

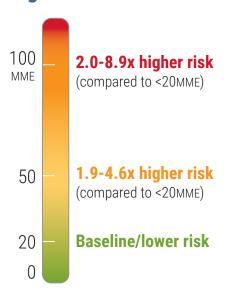


Opioid dose considerations

CALCULATING MORPHINE MILLIGRAM EQUIVALENTS (MME)

Opioid (doses in mg/day except where noted)	Conversion factor
Codeine	0.15
Morphine	1
Hydrocodone	1
Oxycodone	1.5
Fentanyl transdermal (in mcg/hr)	2.4
Oxymorphone	3
Hydromorphone	5
Methadone	
1-20 mg/day	4
21-40 mg/day	8
41-60 mg/day	10
≥61 mg/day	12

Higher opioid dose = higher risk of overdose⁴



These dose conversions are estimated and cannot account for all individual differences in genetics and pharmacokinetics. Some opioids, including methadone and fentanyl, have complex conversion factors and require expertise to manage.



recommends

If opioids *are* appropriate, consider using episodic, short-acting opioids and keep at the lowest effective dose—*low and slow*.



Starting opioids:

Starting dose for opioidnaive patients is generally 5-30 MME/day



Exercise caution:

- Doses ≥ 50 MME
- Concurrent use of a benzodiazepine, alcohol, or methadone for pain



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Managing patients on opioids

INHERITING PATIENTS ALREADY ON OPIOID THERAPY CAN BE COMPLEX

- Review case with former provider if possible.

 Develop a treatment plan that slowly adjusts to your style of management to avoid a radical divergence from the prior plan of care.
- 2 Consider bridging the patient until a plan of care is determined.

Abruptly tapering or stopping opioids can be dangerous:

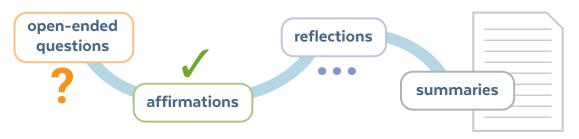
- a. Opioids may be crucial to the patient's condition (e.g. sickle cell disease)
- b. Patient may be at risk of other harms (see next page)
- 3 Develop a patient-centered care plan.
- Screen for opioid use disorder; start discussing medication options right away.

 The patient may struggle with an opioid use disorder diagnosis—give them time.
- Document opioid stewardship and rationale for treatment plan.

 Investigations into opioid prescribing often focus on insufficient documentation.

PATIENT ENGAGEMENT

- Recognize external factors that can make any patient-provider conversation challenging, especially patient stressors (e.g. psychological stressors) and provider stressors (e.g. time pressure, clinic/health system policies).
- Use motivational interviewing techniques.



For more information, go to: motivationalinterviewing.org



Risks of reducing opioid dose

INCREASED ILLICIT SUBSTANCE USE:

Stopping prescribed opioids increased the chance of more frequent heroin and illicit opioid pain reliever use.⁵



OPIOID-RELATED ADVERSE EVENTS:

Approximately half of Medicaid patients in Vermont had an opioid-related ED visit or hospitalization following discontinuation of high-dose opioids.

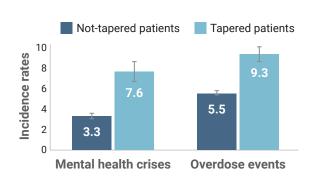
Speed of taper and substance use disorder diagnosis were the strongest predictors.⁶



Each additional day of taper was associated with a 1% reduction in the likelihood of an opioid-related event.

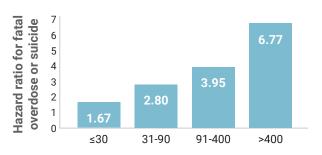
INCREASED MENTAL HEALTH CRISES AND OVERDOSE EVENTS:

Among 113,618 patients on high-dose stable opioid therapy, tapering was associated with significant increases in mental health crises and overdose.⁷



MORTALITY:

Among 1,394,102 VA patients, risk for fatal overdose or suicide rose after stopping opioid therapy, with increasing risk the longer patients had been treated before stopping.⁸ Other studies have shown similar findings.⁹



Days of opioid treatment prior to discontinuation



Shared decision-making for opioid therapy

Avoid making a decision without an individualized conversation with the patient.

Ask the patient to describe perceived risks and benefits.

Patients may identify scenarios with limited benefit or increasing risk such as:

- On opioids after pain condition addressed
- No evidence of pain/function improvement
- Very high dose of opioids
- Other risky medications (e.g. benzodiazepines)
 Active opioid use disorder
- Adverse effects (constipation, overdose, etc.)
- Worsening comorbidities

Develop a plan with the patient.

SHARED DECISION-MAKING PROCESS

Taper opioids

Patient perspective "I'm afraid my pain will get worse."







Provider perspective "I want to keep this patient safe."

Continue opioids

Transition to meds for OUD

Communication techniques:

- Validate patient's pain and experience
- Recognize power dynamics
- Empower patient to participate in treatment planning

- Don't judge
- Be flexible
- Prepare for emotion

Before implementing change, review and develop a plan for:

- Social issues (e.g. housing, finances, intimate partner violence)
- Alternative pain management strategy (other medication and non-medication strategies)
- Mental health services
- Social support
- Withdrawal medications
- Changes in tolerance and overdose risk



Mechanics of a taper

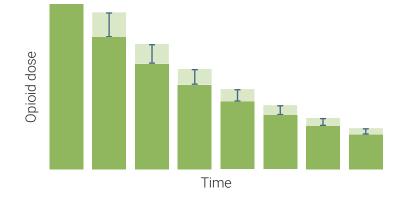
BUILD THE CASE

- 1. Get to know the patient's stressors, needs, and pain:
 - don't rush to start a taper immediately: patient buy-in is important
 - individualize the taper plan (see "Example tapers for opioids")
- 2. Discuss the risks of tapering.
- **3.** Involve patient in the selection of a taper speed and frequency of dose reduction (see "Example tapers for opioids").
- **4.** Tapering should **not** result in withdrawal. However, in some circumstances, you may prescribe adjunctive medications to treat withdrawal symptoms.

Symptom	Medication
Cold sweats, chills, feeling "jittery"	Clonidine: 0.1 mg tablet
Anxiety, problems sleeping	Hydroxyzine: 50 mg tablet
Nausea or vomiting	Ondansetron: 4 mg tablet
Diarrhea	Loperamide: 2 mg tablet
Body aches or muscle pain	NSAIDS or Acetaminophen

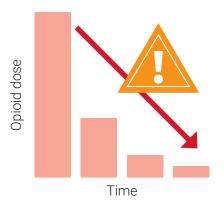
TAPER GOALS

Most commonly, opioid tapers will involve **dose reduction of 5-20%** of original dose every 4 weeks



Abrupt tapers (>20% of

original dose) **should be avoided whenever possible**



TIP

If a taper is needed, empower the patient successful tapers may take years, but can be associated with less or similar pain.¹⁰ Any reduction is a success.



Example tapers for opioids¹¹

Slowest taper (over years)					
Reduce by 2% to 10% every 4 to 8 weeks with	Ex: morphine SR 90 mg q8h = 270 MED* Month 1: 90 mg SR qAM, 75 mg noon, 90 mg qPM [5% reduction] ^a				
pauses in taper as needed. Consider for patients taking high doses of long-acting	Month 2: 75 mg SR qAM, 75 mg noon, 90 mg qPM Month 3: 75 mg SR (60 mg+15 mg) q8h Month 4: 75 mg SR qAM, 60 mg noon, 75 mg qPM				
opioids for many years.	Month 5: 60 mg SR qAM, 60 mg noon, 75 mg qPM Month 6: 60 mg SR q8h				
	Month 7: 60 mg SR qAM, 45 mg noon, 60 mg qPM Month 8: 45 mg SR qAM, 45 mg noon, 60 mg qPM Month 9: 45 mg SR q8h ^b				



Standard taper (over months or years) — MOST COMMON

Reduce by 5% to 20%
every 4 weeks with pauses
in taper as needed.

Ex: morphine SR 90 mg q8h = 270 MED

Month 1: 75 mg (60 mg+15 mg) SR q8h [16% reduction] **Month 2**: 60 mg SR q8h; **Month 3**: 45 mg SR q8h

Month 4: 30 mg SR q8h; Month 5: 15 mg SR q8h

Month 6: 15 mg SR q12h; Month 7: 15mg SR qhs, then stop

Faster taper (over weeks)

Reduce by 10% to 20%
every week.

Ex: morphine SR 90 mg q8h = 270 MED

Week 1: 75 mg SR q8h [16% reduction]

Week 2: 60 mg SR (15 mg x 4) q8h; **Week 3**: 45 mg SR (15 mg x 3) q8h

Week 4: 30 mg SR (15 mg x 2) q8h; **Week 5**: 15 mg SR q8h

Week 6: 15 mg SR q12h; Week 7: 15 mg SR qhs x 7 days, then stop

Rapid taper (over days) — RARELY INDICATED

Reduce by 20% to 50% of first dose if needed, then reduce by 10% to 20% every day.

Ex: morphine SR 90 mg q8h = 270 MED

Day 1: 60 mg SR (15 mg x 4) q8h [33% reduction]

Day 2: 45 mg SR (15 mg x 3) q8h; Day 3: 30 mg SR (15 mg x 2) q8h

Day 4: 15 mg SR q8h; Days 5-7: 15 mg SR q12h

Days 8-11: 15 mg SR qhs, then stop

^aContinue the taper based on patient response.

^bContinue following this rate of taper until off the morphine or the desired dose of opioid is reached.

^{*}MED = morphine equivalent dose



Benzodiazepines with opioids

Benzodiazepines are overprescribed for anxiety and sleep. Risks of use include falls, sedation, and cognitive/functional impairment.

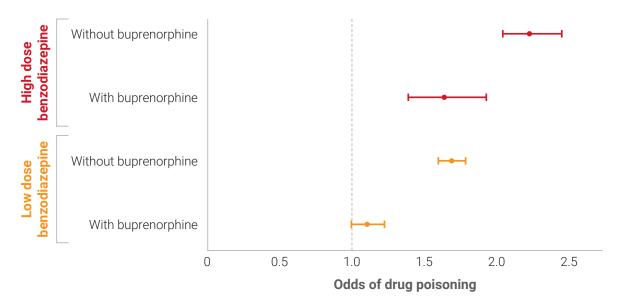


In 2017, approximately 1/5 of U.S. patients on an opioid prescription had at least 1 day of **overlapping** benzodiazepine prescription.¹²



32.5% of opioid-related overdose deaths involved a benzodiazepine during the first half of 2018.¹³

BUPRENORPHINE IMPROVES SAFETY FOR PATIENTS WITH OUD PRESCRIBED BENZODIAZEPINES¹⁴



The odds of drug poisoning is lower if buprenorphine is added to benzodiazepines.

FDA and SAMHSA state not to withhold buprenorphine for patients using benzodiazepines.



Benzodiazepines with opioids (continued)

OVERDOSE RISK FROM OPIOID-BENZODIAZEPINE OVERLAP¹⁵

One prescriber: Lower risk

Multiple prescribers: 1.8-fold higher risk







MANAGEMENT

- 1 Coordinate prescribing.
- Ensure underlying psychiatric or medical conditions are effectively managed.
- 3 Consider changing full agonist opioid to buprenorphine for safety.
- 1 If needed, taper opioid or benzo slowly in collaboration with patient.

Benzodiazepine taper example:

- Reduce dose by 10-25% every 2 weeks.
- Consider switching to lorazepam for ease of dose reductions and CBT for taper success.
- Treat withdrawal symptoms.



Abrupt tapers/stopping can be life-threatening (e.g., seizures).

5 Treat any return to use with compassion.

Approaches to benzodiazepines should be patient-centered, minimize risk, maximize benefit, and involve shared decision-making.

Opioid stewardship





Pain and function assessments

Assessments should focus on both pain and function.

- Assessments are essential when initiating opioid treatment or seeing a new patient already on long-term opioid therapy.
- Reassessments should take place at regular intervals to ensure benefit and evaluate adverse events.



Assessments should take place within three months of starting treatment and at least annually thereafter.

PAIN, ENJOYMENT, GENERAL ACTIVITY (PEG) SCALE FOR ASSESSING PAIN INTENSITY AND INTERFERENCE: A SIMPLE, 3-QUESTION TOOL

0	1	2	3	4	5	6	7	8	9	10
No	pain		7,5							Pain as bad as you can imagi
		nber b njoyme			s how,	durin	g the p	ast we	ek, pa	in has interfered
0	1	2	3	4	5	6	7	8	9	10
	s not									Completely interferes
inte	ileie									
3. Wh	at nun	eneral	activit							in has interfere
s. Wh	at nun				s how, 5	durin g	g the p	east we	e k, p a	nin has interfere

CAUTION

Among racial and ethnic minority groups, women, and patients who are elderly or have cognitive impairment, pain can be underrecognized and inadequately treated. 16,17

The PEG is as valid and reliable as the longer Brief Pain Inventory scale and is sensitive to changes in pain.¹⁸

Risk factor assessment

Once you have determined that opioids are indicated for a patient, assessing for risk of opioid use disorder may help guide how closely you monitor.

A systematic review found that **the following may be associated with increased risk of use disorder due to prescribed opioids**:

Consider closer monitoring when initiating opioids for patients with these characteristics¹⁹

History of Opioid Use Disorder (OUD)

Certain mental health diagnoses, such as personality disorders Concomitant prescription of some psychiatric medications

History of Substance Use Disorder (SUD)

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Screening tools (e.g. Opioid Risk Tool) are often used in protocols, but do not accurately predict outcomes.



In the presence of risk factors, consider increasing the frequency of:

- Pain/function assessments
- Urine drug screening
- Checking controlled substance monitoring program (CSMP)
- Screening for opioid use disorder

Urine drug screening (UDS)

Goal of UDS: Support patient care

UDS does:	UDS does not:
Support patient care	Prevent opioid-related problems among patients with chronic pain ²⁰
Detect whether a substance has been used in a particular window of time	Diagnose addiction, dependence or diversion of controlled substances
Guide optimal care, like hemoglobin A1c	Singlehandedly provide justification to stop prescribing opioids for patients

HOW FREQUENTLY SHOULD I ORDER UDS FOR MY PATIENTS?

- CDC recommends considering the risks and benefits of UDS before a patient starts opioids and periodically (e.g., annually) thereafter.
- Most clinics adopt a uniform testing policy to prevent unintentional bias.
- Some facilities establish UDS frequency and timing independently of clinicians.



EXAMPLE

Use risk assessment to guide urine drug screening frequency.

- Low risk: every 12 mo
- Higher risk or opioid dose > 120 MME/day:
 consider more frequent screening





Interpreting UDS

Most UDS is in the form of immunoassays:

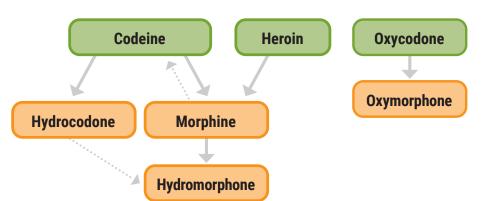
- Point-of-care
- Oualitative
- Show both metabolites and parent drug

Know your lab's standard testing panel/options.

LIMITATIONS:

- Do not test for all substances
- Methadone, buprenorphine, and fentanyl often require a separate test
- Many false positives/negatives

OPIOID METABOLIC PATHWAYS



EXAMPLE:

Prescription: Morphine

UDS results: hydromorphone

+ morphine

Interpretation: a) Patient most likely taking morphine only; b) Patient could be taking morphine + hydromorphone

If UDS results are hard to explain:

- Talk with the patient
- Contact the lab
- Consider mass spectrometry (GC/MS or LC-MS):
 - Lab-based
 - Quantitative
 - Fewer false positives/negatives
 - More expensive

If UDS results are negative, consider:

- Is the patient taking the medication?
- Is the patient taking a lower dose of the medication, or more infrequently?
- Are negative results due to duration of use, body mass, hydration, etc.?
- *If long-term suspicion for diversion or SUD, engage with patient to create a plan (e.g. OUD treatment, tapering, referrals).

Always discuss results with patient before drawing conclusions; avoid changing therapy based on one unexpected result.

Informed consent and treatment agreements

- **Informed consent** is a joint, documented discussion between provider and patient to address risks associated with opioids and clarify expectations.
- Controlled substance agreements are written documents, similar to and possibly replacing informed consent, which include expectations of both the patient and provider. They are generally signed by the patient and renewed annually.



Review informed consent or controlled substance agreements at least annually.

	ATIENT-PROVIDER AGREEMENT only one part of treatment for chronic pair
The goals for using this medicine	e are:
To improve my ability to work or fur	nction at home.
To help my problem as much as pos	sible.
Provider's Responsibilities	Patient Responsibilities
Refills	Privacy
Prescriptions from Other Provid	ers
Stopping the Medication	
have been told about the possi nedicine.	ible risks and benefits of this
atient's name and signature	Date

At a minimum, providers should offer written information to patients about the benefits and risks of opioid therapy and document patients' understanding and agreement.

Controlled substance agreement templates are available online: bit.ly/PA_form

Additional considerations

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- Remind patients to keep opioids in a locked and safe place.
- Encourage safe disposal of drugs, like take-back programs.





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OPIOIDS AND CHRONIC PAIN



Controlled substance monitoring

California's controlled substance monitoring program (CURES) is an online system used by prescribers to review prescriptions for controlled substances.

All California licensed prescribers and pharmacists who are authorized to prescribe, order, administer, or dispense scheduled drugs must register for CURES, check it when starting controlled substances and re-check it every 4 months.

CURES CONTACT INFO:

Email: CURES@doj.ca.gov Phone: (916) 210-3187

To register: oag.ca.gov/cures

FEATURES OF CURES

- Save search list: Save patient searches so they are easily available next time you log in.
- **Peer-to-peer communication**: Send communications securely to providers about mutual patients.
- **Alerts/messaging**: Receive daily alerts with information on patients who reach prescribing thresholds.



CURES alerts prescribers to patients

with multiple prescribers, high-dose opioid prescriptions, concomitant opioids and benzodiazepines, and daily opioids over 90 days.



Overdose prevention

Prior opioid overdose is a major risk for future overdose.

A patient who has previously overdosed is greater than **seven times more likely** to overdose in the subsequent year.²¹

OTHER FACTORS THAT INCREASE RISK OF OVERDOSE

Reduced tolerance: after a period of abstinence, dose change, or release from incarceration

Genetic predisposition

Concomitant use of substances: benzodiazepines, alcohol



Some patients have overdosed and don't realize it.

In one study, out of 60 patients on opioid therapy for pain, 37% had stopped breathing or required help to be woken up due to opioids.²²

of those patients denied overdosing, calling it a bad reaction.

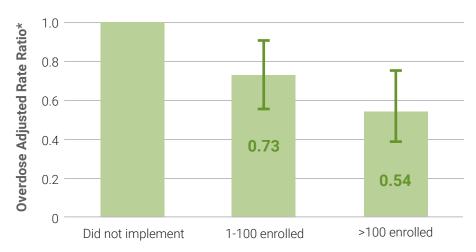
The word "overdose" may have negative connotations and people who use prescription opioids may not relate to it. Instead of using the word "overdose", consider language like "accidental overdose" or "bad reaction", or talk about "opioid safety".



Naloxone is effective as overdose prevention

GIVING NALOXONE TO PEOPLE WHO USE DRUGS IS ASSOCIATED WITH REDUCED OVERDOSE MORTALITY

FATAL OPIOID OVERDOSE RATES BY NALOXONE IMPLEMENTATION IN MASSACHUSETTS²³



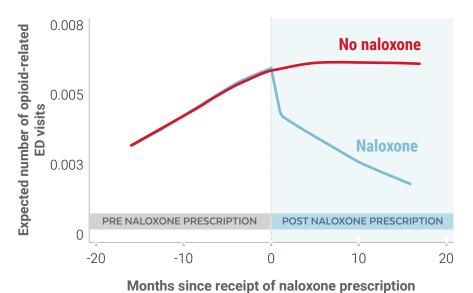
Overdose education and nasal naloxone distribution programs trained 2912 potential bystanders who reported 327 rescues.

Compared to communities that did not implement these programs, both groups had significantly reduced adjusted rate ratios (p < 0.01). The adjusted odds ratio measured the incidence of overdoses, controlling for confounding variables.

Training enrollments per 100,000 population

NALOXONE MAY REDUCE OPIOID-RELATED ADVERSE EVENTS

OPIOID-RELATED EMERGENCY DEPARTMENT VISITS BY RECIPIENT OF NALOXONE PRESCRIPTION AMONG PRIMARY CARE PATIENTS ON OPIOID THERAPY FOR CHRONIC PAIN 24**



Prescribing naloxone to 29 patients averted 1 opioid-related emergency department visit in the following year.

^{*}Ratios with 95% confidence intervals, adjusted for population age <18, male, race/ethnicity, below poverty level, medically supervised inpatient withdrawal, methadone and buprenorphine treatment, prescriptions to doctor shoppers, year.

^{**}In a population with a rate of opioid-related emergency department visits of 7/1000 person years.



Indications for naloxone prescribing



- Prescribe naloxone for patients taking opioids with:
 - Opioid use ≥50 MMEs/day
 - Benzodiazepine use
 - History of substance use disorder
 - History of opioid overdose
 - Comorbidities or medications that increase overdose risk
 - Loss of tolerance (e.g., after tapering or incarceration)



Also offer naloxone to patients:

- With any illicit substance use
- At risk of witnessing an opioid overdose

Naloxone is NOT a controlled substance. **Any licensed healthcare prescriber can prescribe naloxone.** California law provides additional protections to encourage naloxone prescribing and distribution.

NALOXONE CO-PRESCRIBING (AB2760)

• Prescribers in California are required to offer a prescription for naloxone to a patient who is receiving 90 MME or higher per day, receiving concurrent benzodiazepine, or at risk of overdose.

PHARMACIST PROVISION OF NALOXONE (CA AB1535)

• Pharmacists are allowed to directly prescribe and dispense naloxone to patients at risk of experiencing or witnessing an opioid overdose.

Naloxone formulations

Naloxone mechanism of action

- Highly specific, high-affinity opioid antagonist used to reverse the effects of opioids
- Lasts 30-90 minutes
- Virtually no side effects

INTRANASAL

 Naloxone 4mg #1 two pack. Use PRN for suspected opioid overdose and call 911. Repeat every 2-3 minutes if symptoms persist.



If intranasal naloxone is not optimal or accessible, an injectable naloxone prescription may be written. Provide direct education to patients for vial and syringe administration of naloxone.

INJECTABLE

 Naloxone 0.4mg IM #2, use PRN for suspected overdose, IM syringe (3ml 25g 1" syringe) #2



SBIRT CODES

To bill time for naloxone training (per 15 min intervals)

MediCare:	MediCal:	Commercial:
G0396	H0050	CPT99408

SBIRT: Screening, Brief Intervention, and Referral to Treatment

Opioid use disorder management





Recognizing opioid use disorder (OUD)

Ask non-judgmental, open-ended questions about patterns of drug use and how use affects the patient's life.

DSM-5 CRITERIA FOR OPIOID USE DISORDER (OUD)*



USE PATTERNS:

- More/longer use than intended
- Unable to stop or cut down
- Excessive time dealing with opioids
- Craving



CONTINUED USE EVEN WHEN:

- Responsibilities not fulfilled
- Social and interpersonal problems
- Activities reduced
- Physical hazards from use
- Health problems patient knows are caused by opioids



DRUG EFFECTS (ONLY IF NOT PRESCRIBED):

- Tolerance: requiring more to achieve effect
- Withdrawal symptoms if opioids are stopped

SCORING

Give 1 point for each domain endorsed by the patient or observed by the clinician.

Mild SUD = 2-3

Moderate SUD = 4-5

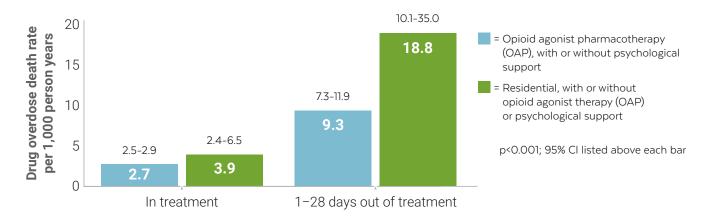
Severe SUD = 6 or more

^{*}Used to diagnose OUD as well as other substance use disorders.

Managing OUD

- If your patient has OUD, it is essential to arrange for treatment.
- Treatment with medications has the best evidence for managing OUD and should be considered for all patients.
- When therapy for OUD is stopped, the risk of death increases.

DRUG OVERDOSE DEATH RATE PER 1,000 PERSON YEARS AMONG 151,983 PEOPLE WITH OUD SEEKING TREATMENT IN THE UNITED KINGDOM²⁵



FDA-APPROVED MEDICATION TREATMENT OPTIONS

- Buprenorphine (with or without naloxone)
- Methadone
- Extended-release naltrexone



Like treatment for other chronic diseases such as diabetes, these medications should be considered long-term therapy.

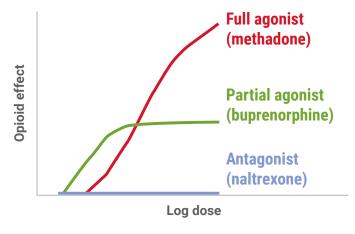
BEHAVIORAL/PSYCHOLOGICAL INTERVENTIONS

- Outpatient or inpatient rehabilitation and counseling
- Support groups such as Narcotics Anonymous

If not personally providing OUD treatment, a warm hand-off to other providers is critical.



Buprenorphine overview and safety profile



BUPRENORPHINE

- A partial opioid agonist
- Time to peak: 30 min to 3 days depending on formulation
- Has very high affinity, blocking effects of heroin or other opioids

SAFETY PROFILE

- Due to the "ceiling effect" of a partial agonist, buprenorphine has:
 - Low potential for misuse and diversion
 - Low risk of respiratory depression or overdose
 - Ability to reduce craving and withdrawal without the euphoria of full agonist
- Maintenance is critical: OUD requires long-term care.
- Buprenorphine treatment is safe and effective during pregnancy.²⁶
- Most buprenorphine for OUD treatment is co-formulated with naloxone to discourage diversion or injection of the product.

STUDIES ALSO SUPPORT USE OF BUPRENORPHINE FOR CHRONIC PAIN²⁷

In a study of 35 patients on 200-1,370 morphine equivalent milligrams of opioids for chronic pain, after two months of sublingual buprenorphine:





Quality of life scores increased from 6.1 to 7.1 (p=0.005)

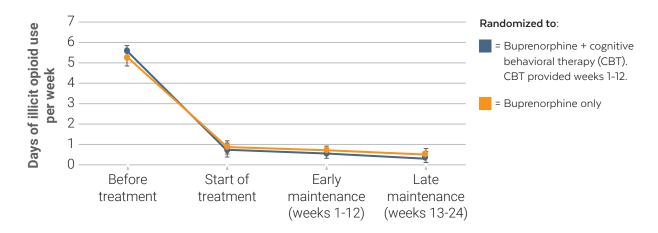
Range of pain scores = 0-10



Buprenorphine is an effective medication to treat OUD in primary care

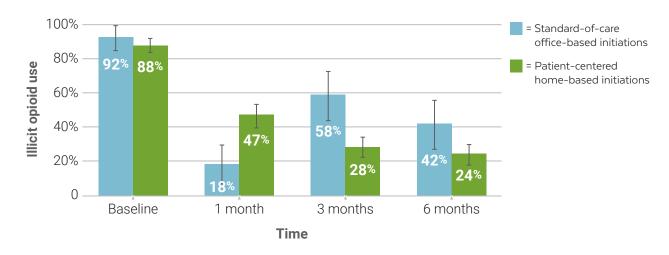
ROUTINE MEDICATION MANAGEMENT CAN BE AS EFFECTIVE AS COMBINING BUPRENORPHINE WITH COUNSELING

While counseling should be sought if available, lack of access should not be a barrier to treatment.²⁸



PATIENTS CAN BE STARTED ON BUPRENORPHINE IN THE OFFICE OR AT HOME

Reductions in opioid use are similar when patients start therapy themselves at home compared to office-based settings.²⁹





Planning for buprenorphine

Formulations

- Keep buprenorphine tablet or film under tongue until dissolved (5-15 min). DO NOT SWALLOW.
- OK to cut film in half or quarter pieces.
- Therapy usually involves buprenorphine with naloxone, although the monoformulated product can also be used.

BUPRENORPHINE/NALOXONE (CO-FORMULATED)











Sublingual film

MONOFORMULATED BUPRENORPHINE







Subcutaneous injection



Transdermal patch

Patient education and considerations

- Manage withdrawal symptoms when starting
- Side effects: fatigue, agitation, headache (from naloxone), nausea
 - Precipitated withdrawal: too large a dose started too soon after last opioid agonist (patient should call provider or go to the emergency department if severe symptoms present).
- Treatment is as long as needed; longer is usually better, and lifelong is normal

Not contraindications:

- Pregnancy
- Benzodiazepines
- Stimulants/other illicit drugs

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Alcohol



Starting buprenorphine

Have patient sign a consent form for treatment Make sure patient is in withdrawal 12-48 hours after last opioid dose, COWS score > 8, and at least one objective sign **Decide on initiation location and timing** Home, clinic or hospital **HOME OR CLINIC HOSPITAL** DAY 1 DAY 1 Usual first dose: Usual first dose, either: 4mg 4mg or 8mg If still in withdrawal, Assess every hour. If still in repeat dose every withdrawal but symptoms 1-2 hours until stable. improving, repeat dose until stable. Max dose Day 1 = 12mg Max dose day 1 = 16mg DAY 2 DAY 2 Start total Day 1 dose Start total Day 1 dose (or less if sedated). (or less if sedated). Max dose Day 2 = 16mg Max dose Day 2 = 32mg

✓ CHECK COWS:

Higher score = less risk of precipitated withdrawal

Clinical Opioid Withdrawal Scale (COWS): mdcalc.com/ cows-score-opiate-withdrawal COWS has 11 items and up to 48 points.

Look for subjective symptoms AND at least one objective sign.

- Subjective: insomnia, vomiting, diarrhea, restlessness, anxiety, abdominal cramps, diaphoresis, myalgias/arthralgias, hot flashes, dizziness, tearing, goosebumps, shaking, yawning, twitching, sweating
- Objective: restlessness, shivering, rhinorrhea, dilated pupils, tachycardia, yawning, piloerection, tremor, sweating, hypertension

Subsequent days

Follow similar protocol. Usual final dose = 8-32mg



Continuing buprenorphine

- Document OUD in chart.
- Optimal dose varies by patient.
 ≥16mg/day may aid in retention, block other opioids, and reduce relapse, pain, and dysphoria.
- Follow-up visits: tailor frequency to patient stability. Weekly visits at start of treatment or when unstable; monthly or longer when stable.

Review:

- Buprenorphine adherence, illicit opioid use, UDS, CSMP
- Mental health and comorbid substance use disorders
- Healthcare maintenance
- If unsuccessful, consider other OUD medications such as methadone or extended-release naltrexone.

Remember that buprenorphine:

- Gives patients control over opioid use.
- Lowers overdose risk, even
 if still using illicit opioids,
 by binding very tightly to
 µ receptors.
- Does not treat other substance use disorders.



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FOR PAIN

- Any formulation can be used, including the transdermal patch.
- Prior authorization may be required.
- Medication is generally administered 2-3 times daily.
- Acute pain: May require a temporary dose increase.
- Peri-operative pain: A multidisciplinary expert panel now agrees that buprenorphine should not routinely be discontinued during the perioperative period.³⁰



Buprenorphine overlap initiation

Extremely high tolerance to opioids increases the risk of **precipitated withdrawal**. **An alternative is buprenorphine overlap initiation** which avoids this risk.

CONSIDER WHEN PATIENT:

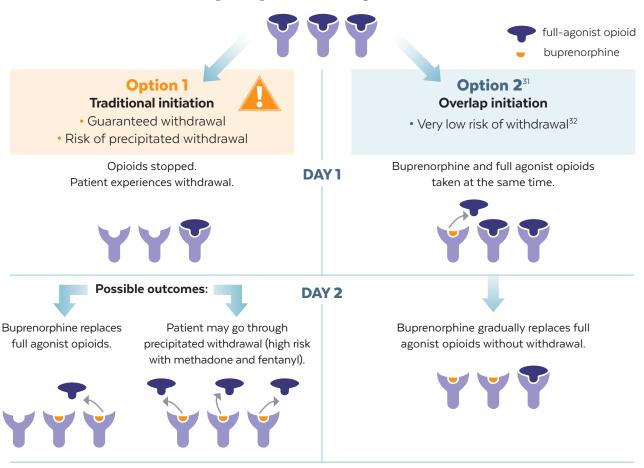
- Doesn't want to experience withdrawal
- Had prior difficulty starting buprenorphine
- Uses fentanyl
- Wants to switch from methadone

AVOID WHEN PATIENT:

- Prefers a rapid start or is already in significant withdrawal
- X Is unable to take buprenorphine multiple times a day

TRADITIONAL VS. OVERLAP INITIATION OF BUPRENORPHINE:

Patient taking full-agonist opioids (e.g., methadone, fentanyl)



DAY 3+:Buprenorphine dose increased and patient stabilized.

For overlap initiation protocols, go to: https://cabridge.org/resource/starting-buprenorphine-with-microdosing



Substance use disorder (SUD) therapies

- Screening for substance use and SUD: Ask about type, frequency, amount, route, complications and withdrawal symptoms.
- Diagnosing SUD: Use DSM-5 criteria—the criteria apply across substances.
 The use disorder is considered mild, moderate or severe based on the number of criteria a patient meets.
- Assess the patient's readiness to change.

	Screening tools ^a	Medications	Behavioral interventions ^{33,34}
Nicotine	AAR • Ask • Assist • Refer	Nicotine replacementVareniclineBupropion	 CBT^c Smoking cessation
Alcohol	CAGE(-AID), AUDIT	 Naltrexone IR or ER Acamprosate Disulfiram Gabapentin^b Topiramate^b 	 CBT^c AA Mindfulness^c MI^c
Opioids	TAPS, DAST-10	BuprenorphineMethadoneER Naltrexone	 CBT^c NA Mindfulness-oriented recovery enhancement
Stimulants	NM ASSIST, TAPS, DAST-10	For methamphetamine: • Mirtazapine ^b • Bupropion ^b	 CBT^c Contingency management

^a SBIRT can be used to screen for all substances: bit.lySBIRT_screen; ^boff-label use; ^cCBT, Mindfulness and MI target both use disorder and depression symptoms

Urine drug screening can help assess whether or not a substance has been used but do not diagnose substance use disorders.



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Additional medical care for patients who use drugs

Due to increased risk for various complications, patients who use drugs should also be considered for:



Screening for infections such as HIV, hepatitis B, hepatitis C, sexually-transmitted infections and tuberculosis (at least annually for most patients)



Vaccinations such as hepatitis A, hepatitis B, human papillomavirus, tetanus-diphtheria-pertussis, influenza and pneumococcus



Management of cardiac risk factors, particularly for people who use stimulants or tobacco, including blood pressure and lipid control, as well as smoking cessation



Treatment of other comorbid substance use disorders, including tobacco and alcohol use disorders



Treatment of comorbid psychiatric disorders



Education about safe injection practices and provision of clean injection equipment



Naloxone to reverse the effects of an opioid overdose



Pre- and post-exposure prophylaxis (PrEP and PEP) for HIV prevention

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