PACE Pharmaceutical Assistance Contract for the Elderly

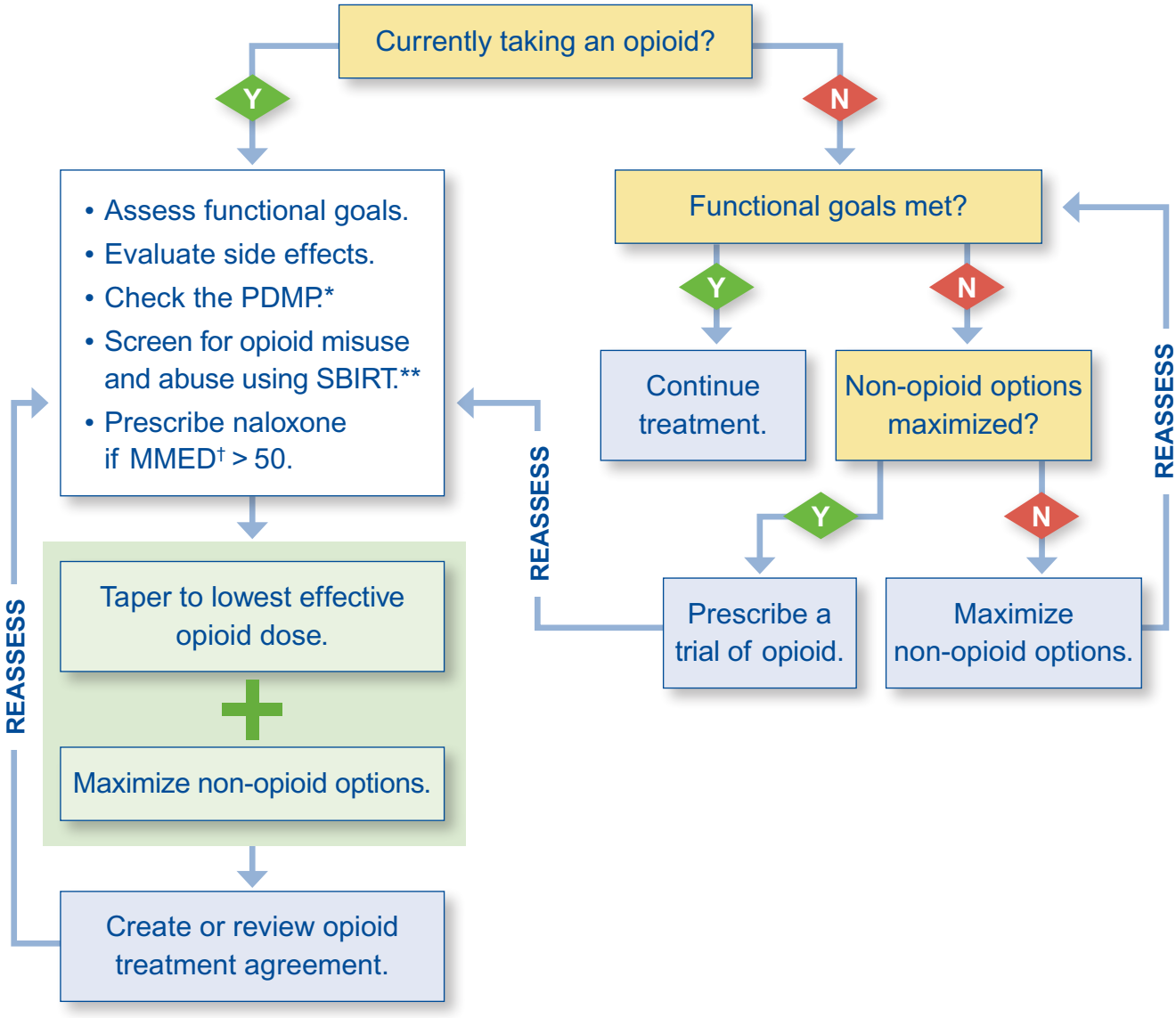
Alosa Health
Balanced information for better care

Managing chronic pain in the elderly

Managing patients with chronic pain effectively and safely

Establish clear functional goals and maximize use of non-opioid therapies.

FIGURE 1. An algorithm for managing chronic pain patients



* **PDMP:** prescription drug monitoring program

****SBIRT:** Screening, Brief Intervention, and Referral to Treatment

† **MMED:** morphine milligram equivalents per day

Evidence-based approaches to managing four chronic pain syndromes

TABLE 1. Strength of evidence for drug and non-drug options

	INTERVENTION	Osteoarthritis	Low back pain	Diabetic neuropathy	Fibromyalgia
NON-DRUG OPTIONS	**exercise**	●	●	○	●
	physical therapy	●	○	○	○
	tai chi	●	●	●	●
	weight loss	○	○	○	●
	yoga	●	○	○	○
	acupuncture	●	●	○	○
	massage	●	○	○	●
	TENS*	○	○	●	○
	cognitive behavioral therapy	○	●	○	●
	mindfulness meditation	○	●	○	○
	self-management	●	●	○	○
DRUG OPTIONS	**acetaminophen**	●	○	○	○
	NSAIDs—oral	●	●	○	○
	NSAIDs—topical	●	○	○	○
	duloxetine (Cymbalta, generics)	●	●	●	●
	tricyclic antidepressants (TCAs)	◉	◉	●	○
	pregabalin (Lyrica, Lyrica CR)	●	○	●	●
	gabapentin (Neurontin, generics)	○	○	○	●
	topical lidocaine (Lidoderm, generics)	○	○	●	○
	medical marijuana	○	○	●	○
	opioids	○	○	◉	◉
	tramadol	○	●	●	○

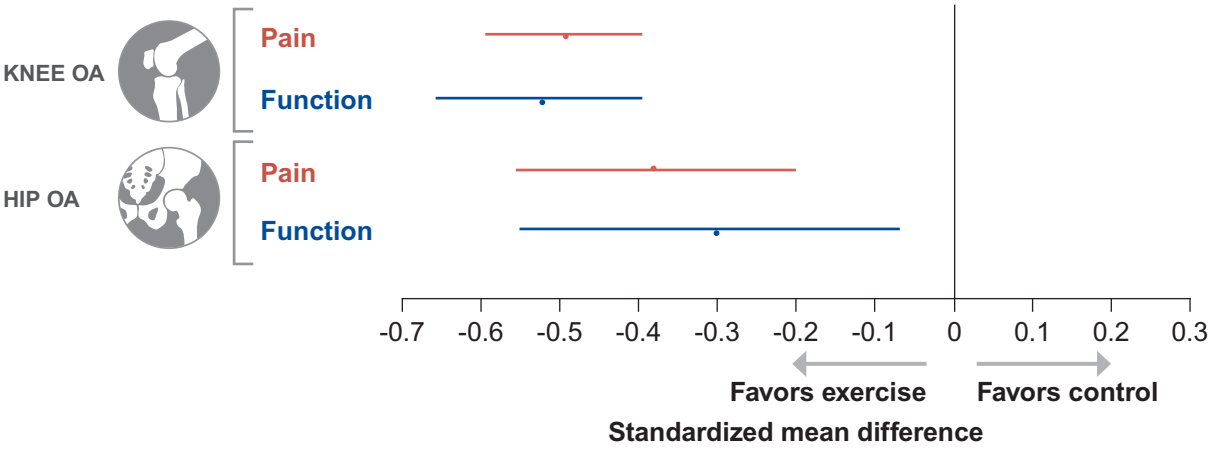
Risk/benefit profile: ● = favorable ● = potentially favorable ◉ = unfavorable ○ = unknown

* **TENS:** transcutaneous electrical nerve stimulation

Osteoarthritis

Exercise, one of the most effective options for managing osteoarthritis (OA)

FIGURE 2. Systematic reviews of trials for hip and knee OA showed that exercise reduces pain and improves function. Most trials lasted 8 weeks, some had 30 months follow up.[1,2]



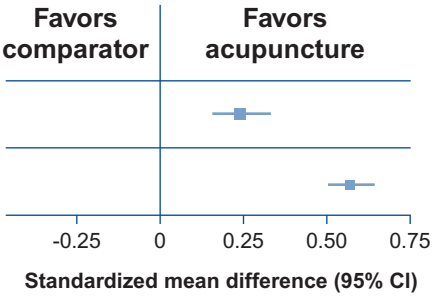
Many of the exercises studied can be done independently at home or as part of group programs. Examples include:

- walking
- cycling
- resistance bands
- free weights
- physical therapy
- and more

Acupuncture

FIGURE 3. Acupuncture reduced pain in patients with knee OA regardless of comparison group.[3]

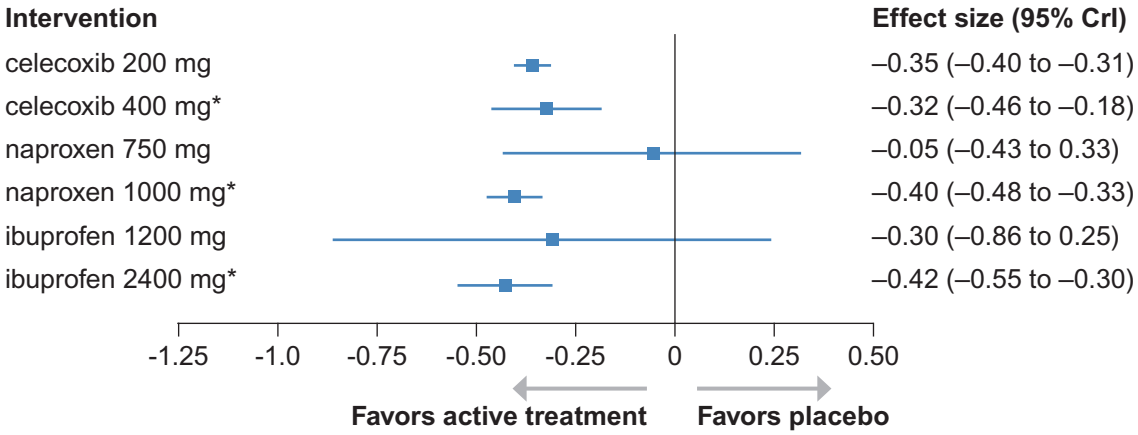
Comparison	Trials	Total number of participants	
		Acupuncture	Comparator
Acupuncture vs. sham	5	830	799
Acupuncture vs. no acupuncture	6	1164	1062



Massage, either from a licensed massage therapist or self-massage, moderately reduced pain OA in seven randomized controlled trials.[4]

NSAIDs are an effective treatment for osteoarthritis, which is increasingly seen as having an inflammatory component.

FIGURE 4. Selective and non-selective NSAIDs have similar efficacy, but response differs by dose.[5]

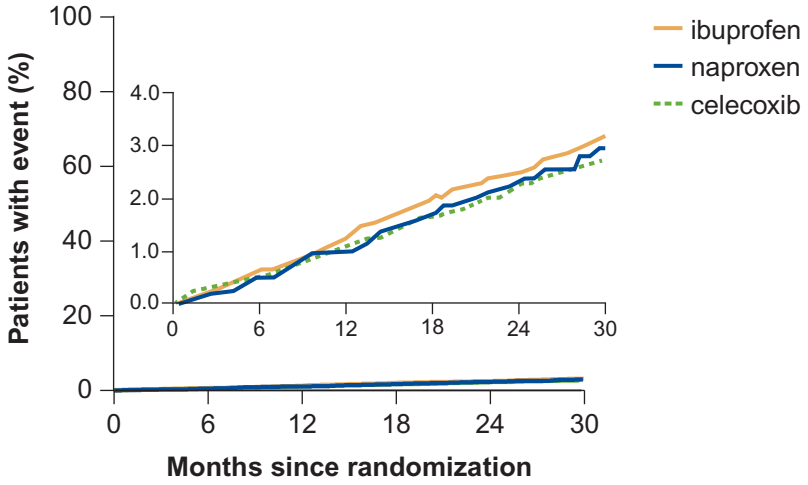


* Maximum approved daily dose

Topical NSAIDs are as effective for pain and function as oral NSAIDs after 1 year of treatment.[6]

NSAIDS can increase the risk of cardiovascular events and gastrointestinal bleeding. Still, they may be the best choice for many.

FIGURE 5. PRECISION, a recent, large, randomized controlled trial found no difference in cardiovascular outcomes between celecoxib, naproxen, and ibuprofen.[7]



Celecoxib appears at least as safe as the non-selective NSAIDs with a slightly lower risk of GI bleeding than either ibuprofen and naproxen and fewer renal adverse effects than ibuprofen.

Adding a proton pump inhibitor to an NSAID, including celecoxib, reduces the risk of GI bleed.

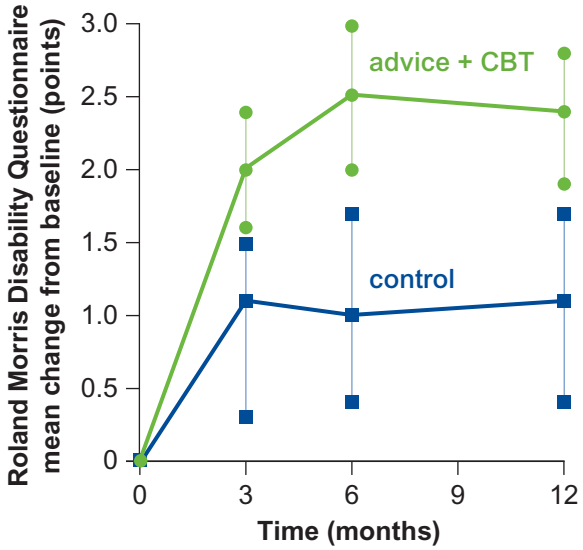
Chronic low back pain

The benefit of cognitive behavioral therapy (CBT) for pain reduction can extend beyond intervention itself.

FIGURE 6. CBT delivered over six group sessions improved back pain disability scores vs. control during the intervention and through 12-month follow up.[8]

CBT is a structured intervention focused on:

- how thoughts, beliefs, attitudes, and emotions influence pain
- highlighting the patient's role in controlling and adapting to pain
- goal setting, often with recommendations to increase activity to reduce the sense of helplessness



Tai chi: a mind-body exercise

TABLE 2. After 10 weeks of tai chi classes, a larger fraction of patients had at least a 30% reduction in pain scores or improved function than those in the wait-list control.[9]

	tai chi (n=80)	control (n=80)	p-value
Pain	46%	15%	<0.001
Function	50%	24%	

For every 4 people doing tai chi for 10 weeks, 1 person will benefit.

Chair tai chi is available for more frail older patients.

NSAIDs are the first-line pharmacologic option for managing chronic low back pain.

Second-line options include duloxetine and tramadol.[10]

FIGURE 7. A meta-analysis of duloxetine found a small reduction in pain and improvement in function compared to placebo. In one of these studies, duloxetine 60 mg once daily reduced pain scores <10% compared with placebo.[11]

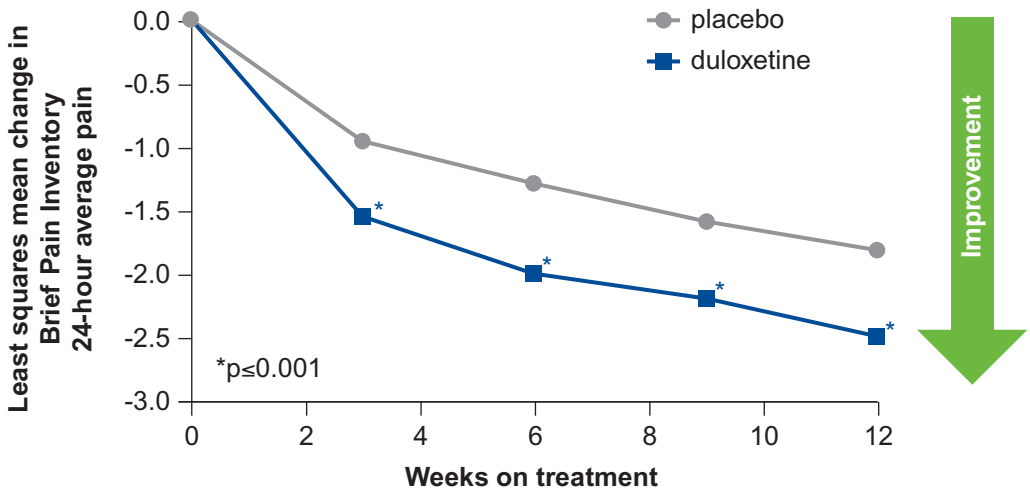
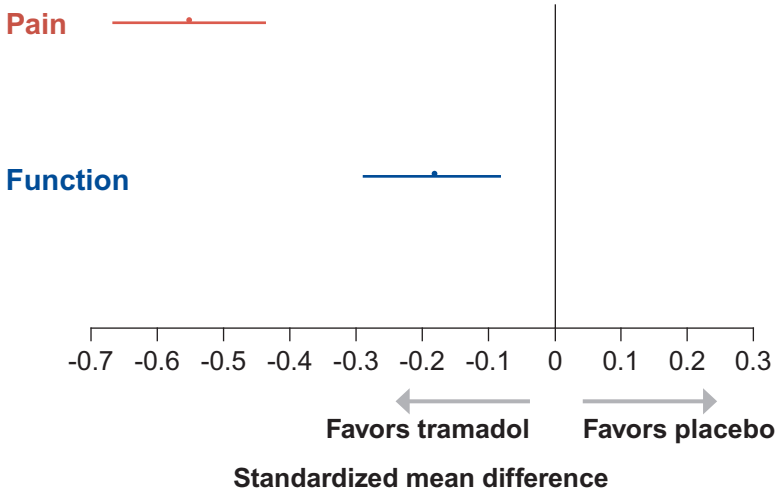


FIGURE 8. A meta-analysis of five randomized controlled trials found short-term pain relief and small functional improvement with tramadol compared to placebo.[12]



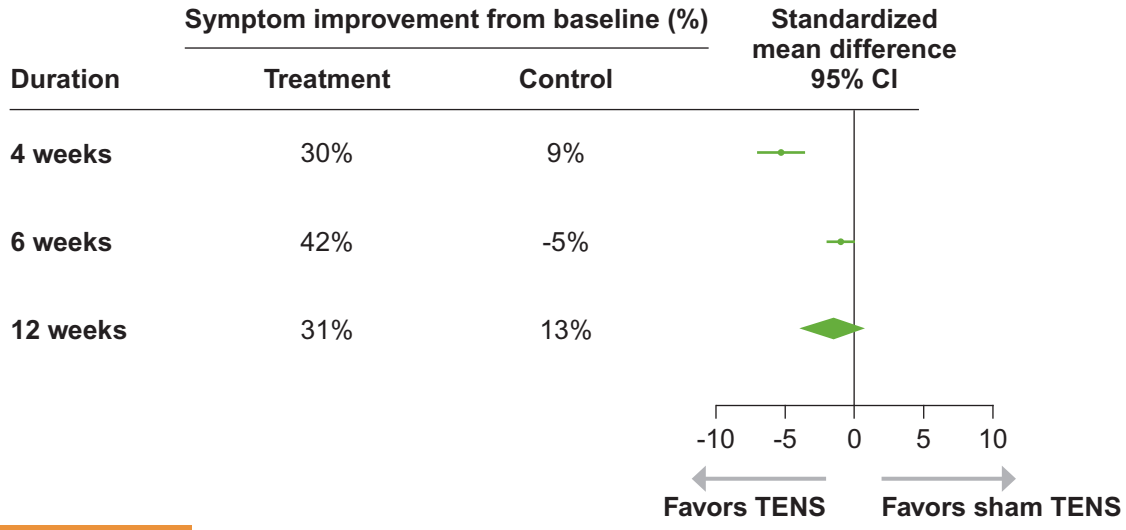
Tramadol has similar risks as typical opioids. Duloxetine has a more favorable side effect profile.

Diabetic neuropathy

NON-DRUG OPTIONS

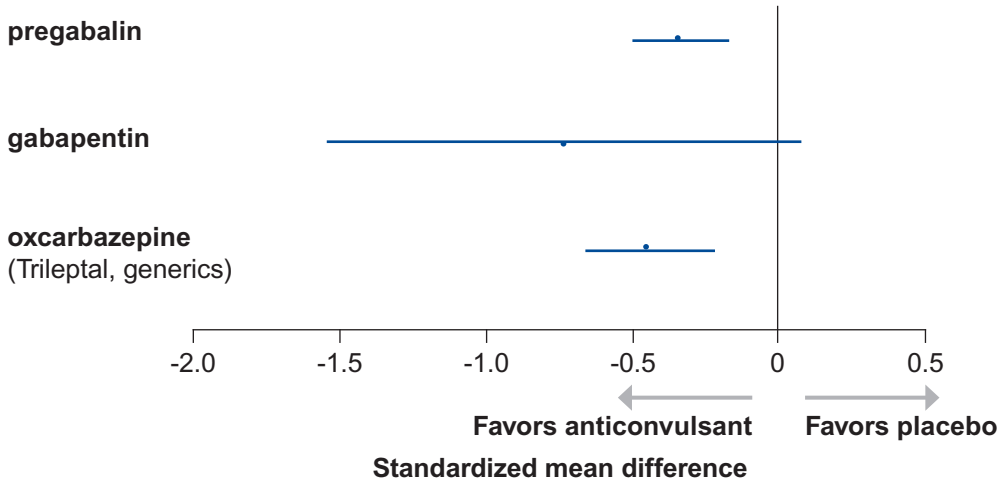
Transcutaneous electrical nerve stimulation (TENS) may provide short-term pain relief.

FIGURE 9. In a meta-analysis of three trials TENS provided limited short-term relief from pain, but benefits are not seen beyond 6 weeks.[13]



DRUG OPTIONS

FIGURE 10. Anticonvulsants effectively reduce neuropathic pain compared to placebo.[14]



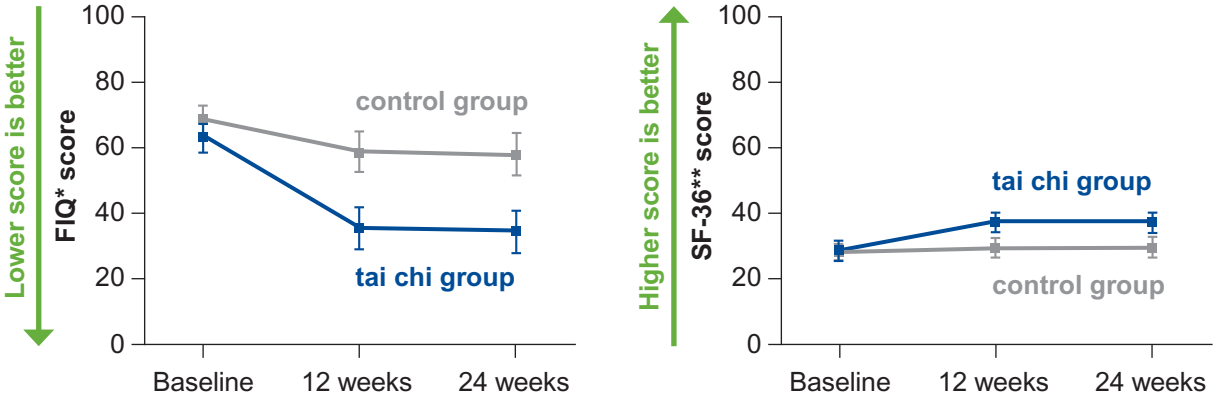
Pregabalin doses should be titrated to 300 mg per day as lower doses were no different from placebo.[15]

Nearly half of patients taking duloxetine had a 50% reduction in pain.[16] American Diabetes Association guidelines recommend pregabalin or duloxetine as initial treatment, reserving gabapentin for patients who are unable to afford pregabalin.[17]

Fibromyalgia

NON-DRUG OPTIONS

FIGURE 11. A study of 24 sessions of tai chi over 12 weeks vs. stretching controls reduced pain by the end of the intervention and beyond. Function improved during the study, but was not sustained when tai chi ended.[18]

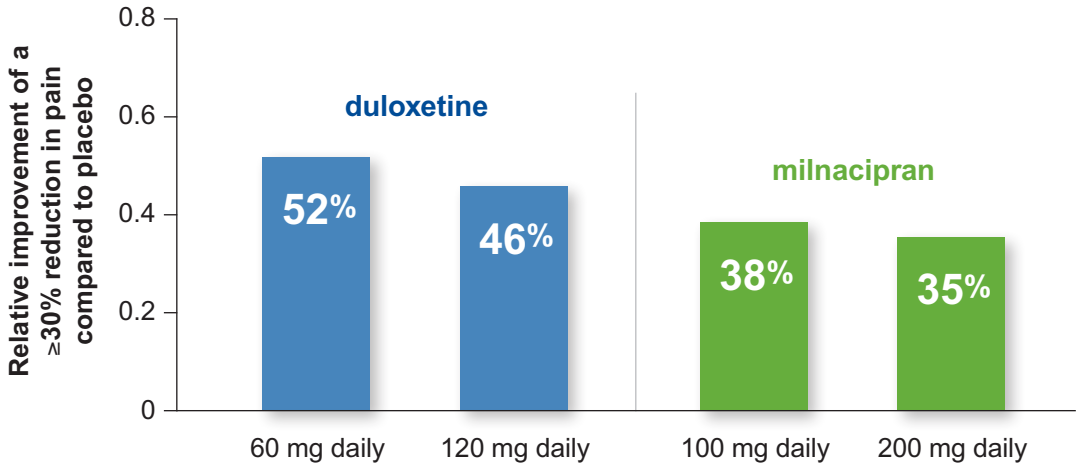


12 weeks = intervention end | **24 weeks =** post-intervention follow-up

*Fibromyalgia Impact Questionnaire **Medical Outcomes Study 36-Item Short-Form Health Survey

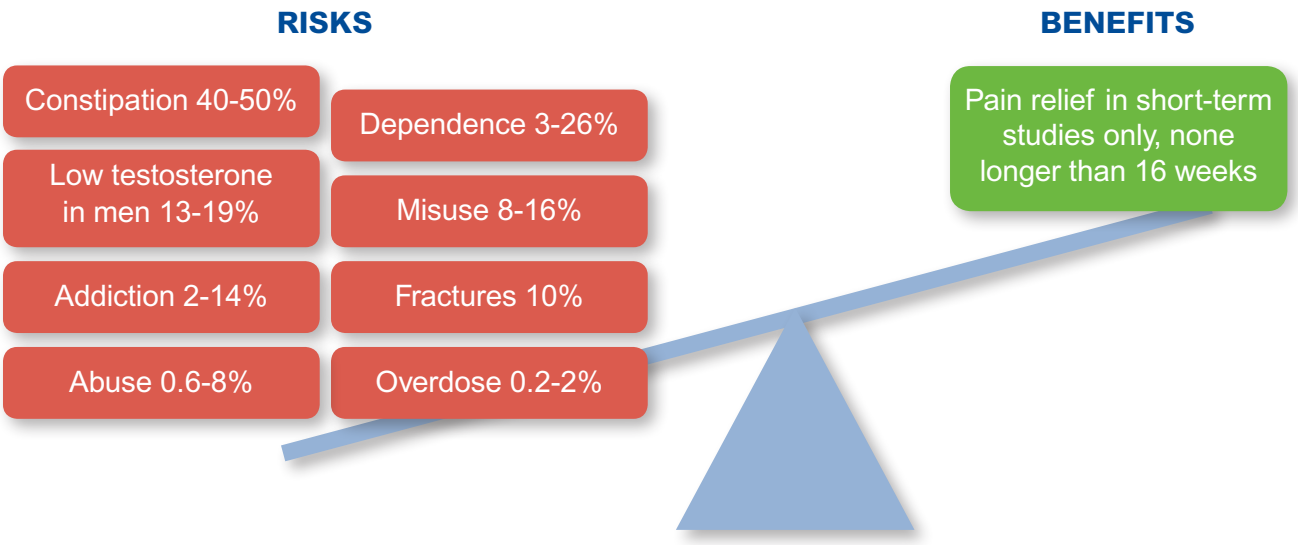
DRUG OPTIONS Serotonin-Norepinephrine Reuptake Inhibitors

FIGURE 12. Both duloxetine and milnacipran are more likely to reduce pain by at least 30% compared to placebo, but no trials directly compare these two drugs. However, more patients stopped milnacipran due to side effects.[19,20]



In unusual circumstances, opioid use is necessary for chronic pain

Assess benefits and risks of opioids at every visit.[21-26]



Work with the patient to explain why **opioid risks usually exceed benefits** for chronic non-cancer pain.

Utilize Screening, Brief Intervention, and Referral to Treatment (SBIRT) to refer patients with possible opioid use disorder (OUD) for treatment.

For links to more information about SBIRT and patient information, visit AlosaHealth.org/Pain.

Maximizing opioid safety for patients with chronic pain

Establish a written treatment agreement.

A sample treatment agreement is at drugabuse.gov/sites/default/files/files/SamplePatientAgreementForms.pdf.

Monitor use.

- **Check the prescription drug monitoring programs (PDMP)**, looking for drugs obtained from other prescribers, or co-prescribed benzodiazepines.

For Pennsylvania specific PDMP rules, visit: doh.pa.gov/PDMP

- **Use urine drug screens:** tips for interpreting urine drug screens and more are at mytopcare.org.

Use caution with high daily opioid doses.[27]

50 milligrams morphine milligram equivalents per day (MMED): oxycodone 30 mg

90 MMED: oxycodone 60 mg

Opioid dose calculator available at: agencymeddirectors.wa.gov/calculator/dosecalculator.htm

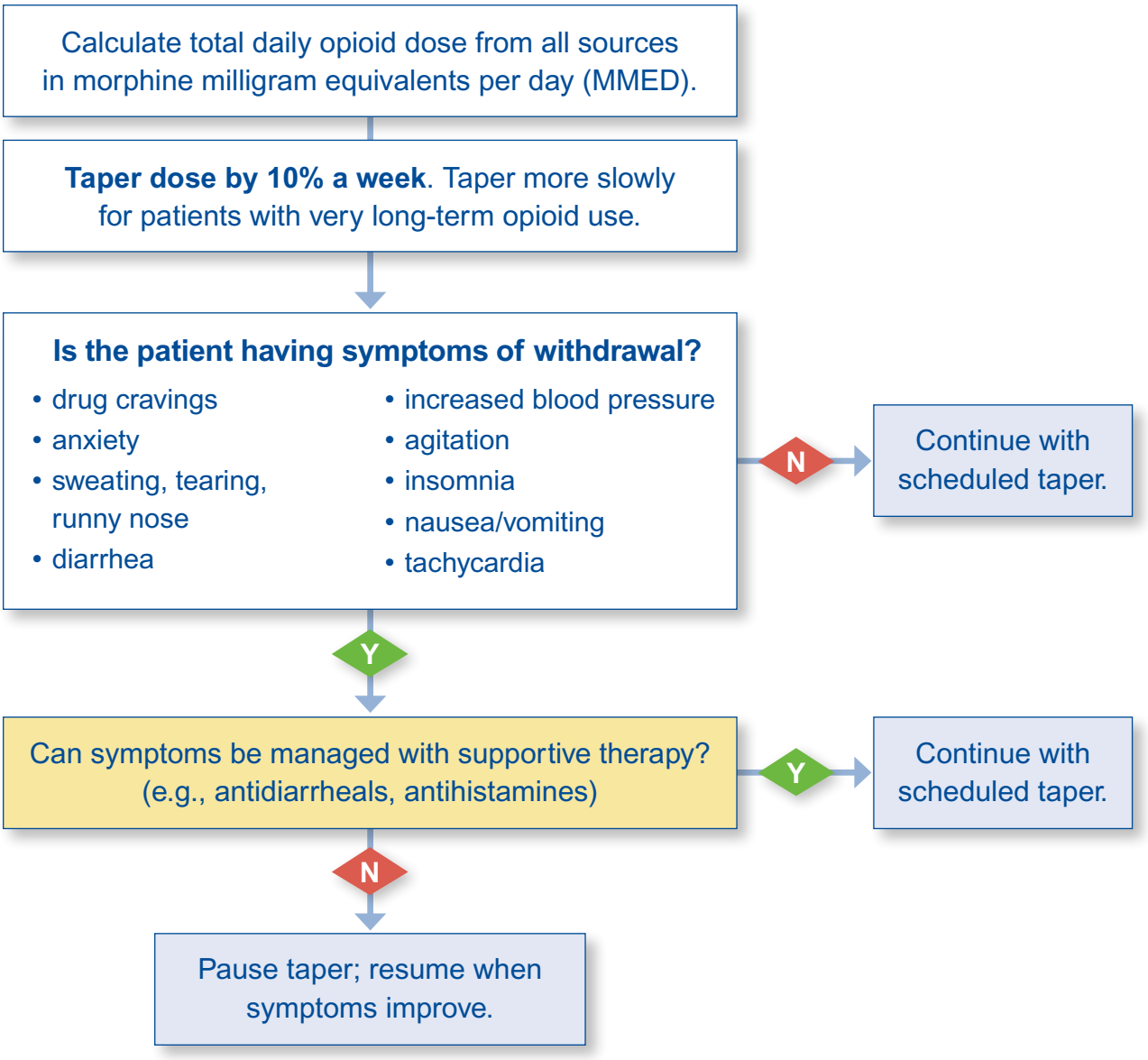
Prescribe naloxone to reduce overdose risk.

Taper or discontinue opioids.

Reducing opioid doses

Discuss reducing or discontinuing opioids with the patient at every visit. Develop a collaborative plan to lower opioid dose.

FIGURE 13. Algorithm for tapering opioids[27]



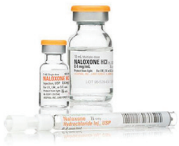
Naloxone can prevent opioid overdose death

Recommend it for patients at risk:[27]

- dose >50 MMED
- renal or hepatic dysfunction
- co-prescribed benzodiazepines

STANDING ORDERS:
Pennsylvania, Maryland, Massachusetts, and many other states have statewide orders that allow patients or family members to request naloxone directly from their pharmacist.

TABLE 3. Naloxone comes in many delivery options and doses. All are effective, but some may be preferred because of cost or ease of administration.

	Intranasal (w/atomizer)	Intranasal	Intramuscular (IM)	Auto-IM
				
Brand name		Narcan		Evzio
Strength	1 mg/1 mL	4 mg/ 0.1 mL	0.4 mg/1 mL	0.4 mg/1 mL
Sig for suspected overdose	Spray 1 mL into each nostril.	Spray full dose into one nostril.	Inject 1 mL into shoulder or thigh.	Use as directed by voice-prompt. Press firmly on outer thigh.
Second dose	Repeat after 2-3 min if no or minimal response.	Repeat into other nostril after 2-3 min if no or minimal response.	Repeat after 2-3 min if no or minimal response.	Repeat after 2-3 min if no or minimal response.
How supplied	Vial + mucosal atomizer	2 sprays	2 syringes	2 injectors
Cost	$40	$136	$20	$3,845

Identifying and managing opioid use disorder (OUD)

This is marked by clinically significant impairment or distress, with at least two additional criteria, such as:[28]

- persistent desire or unsuccessful attempts to control or reduce use
- significant time lost obtaining, consuming, and recovering from opioids
- craving, or a strong desire or urge to use opioids
- using opioids to prevent withdrawal symptoms

Screen for problematic opioid use using the Screening, Brief Intervention, and Referral to Treatment (SBIRT). It can:

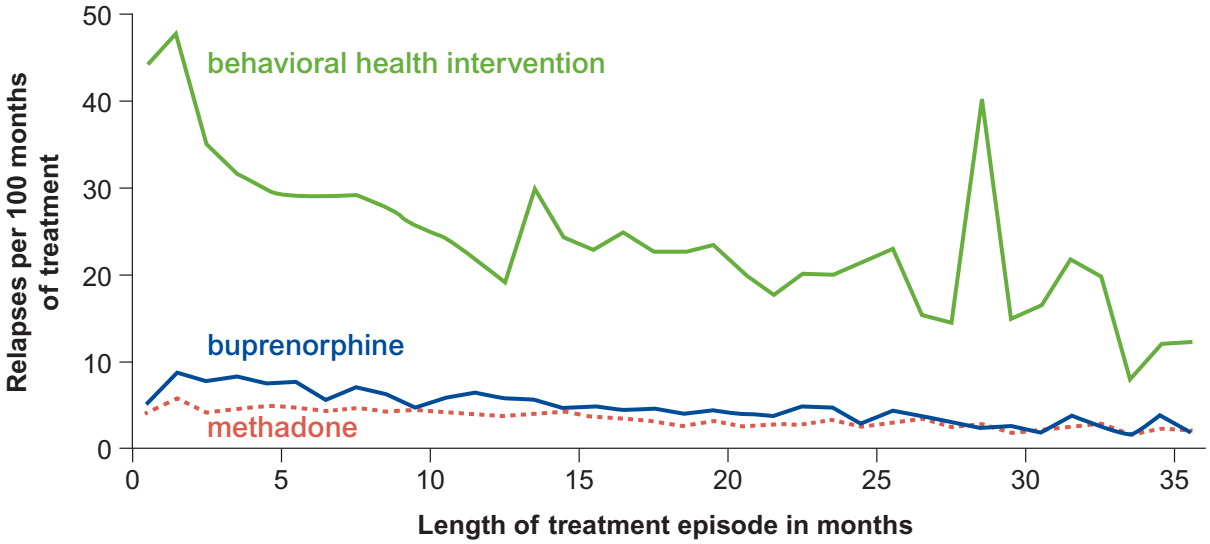
✓ identify patients with possible opioid use disorder.

✓ improve initial retention in treatment.[29]

It is a billable service. See samhsa.gov/sbirt/coding-reimbursement.

Medication assisted treatment is the most effective intervention for patients with OUD.

FIGURE 14. Medication assisted treatment with methadone or buprenorphine (Suboxone) is more effective than behavioral intervention.[30]



Primary care physicians can offer buprenorphine treatment by obtaining a DEA X number. To learn more about buprenorphine training provided by SAMHSA and PCSS-MAT, visit **AlosaHealth.org**.

Key messages

- Include clear functional goals and realistic expectations in chronic pain management plans.
- For patients not currently taking opioids, select evidence-based treatments (non-drug/non-opioid drug) based upon underlying pain diagnosis.
  - Begin with non-drug options, such as CBT, exercise, massage, acupuncture, or tai chi
  - then maximize non-opioid drug options, such as acetaminophen, NSAIDs, SNRIs, and anticonvulsants.
- For patients taking chronic opioids, discuss the risks and benefits of opioids at each visit.
  - Carefully monitor opioid use, related adverse events (gait disturbance, mental status change, constipation), and evidence of misuse or abuse.
  - Use caution when escalating patients above 50 mg MMED and carefully reassess all doses beyond 90 mg MMED.
- Recommend naloxone for patients with risk factors for possible overdose.
- Taper and discontinue opioids whenever possible, particularly in patients who have severe side effects or exhibit problematic behavior.
- Refer patients with suspected opioid use disorder or problematic behaviors to a specialist for medication assisted treatment.

More information is available at AlosaHealth.org/Pain.

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About this publication

These are general recommendations only; specific clinical decisions should be made by the treating physician based on an individual patient's clinical condition. More detailed information on this topic is provided in a longer evidence document at AlosaHealth.org.

IDIS Independent Drug Information Service

The Independent Drug Information Service (IDIS) is supported by the PACE Program of the Department of Aging of the Commonwealth of Pennsylvania.

Alosa Health

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