Alosa Health

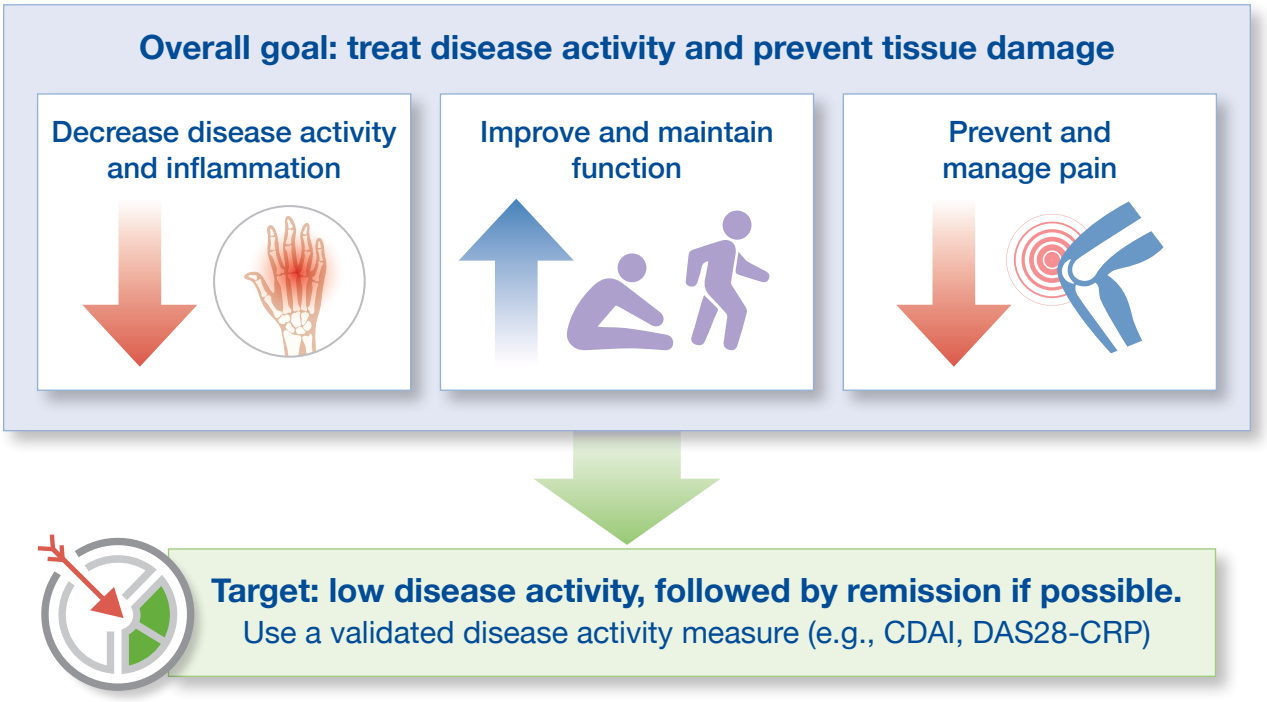
Balanced information for better care

Maximizing function, managing pain

Evidence-based, non-opioid care in rheumatology

Controlling disease activity is the foundation of care in rheumatoid arthritis

FIGURE 1. The treat-to-target approach uses a standardized assessment tool in caring for patients with rheumatoid arthritis (RA).[1]



Clinical disease activity index (CDAI): uses a count of tender and swollen joints as well as patient and provider assessment of disease activity. Remission ≤ 2.8; low > 2.8 to 10; moderate > 10 to 22; high > 22. CDAI form available at: https://qrco.de/CDAI

Disease activity score 28-joint count (DAS28-CRP): uses a count of tender and swollen joints, C-reactive protein (CRP) level, and global health assessment based on a visual analog scale. Remission < 2.6; low 2.6 to < 3.2; moderate > 3.2 and ≤ 5.1; high > 5.1. Online calculator available at: https://qrco.de/DAS-28_CRP

Disease modifying anti-rheumatic drugs (DMARDs) are the backbone of RA management.

- Ensure patients are prescribed a DMARD (e.g., methotrexate) to reduce disease activity, achieve disease remission, and minimize or prevent long-term damage.
- Start with methotrexate for most patients, adding a different oral DMARD or biologic (e.g., a tumor necrosis factor [TNF] alpha inhibitor) if disease activity persists. Patients with low initial disease activity may begin with hydroxychloroquine or sulfasalazine.
- Choosing the specific DMARD(s) to use is beyond the scope of this handout.

Pain in RA may persist even during remission and when inflammation is quiescent. Nearly 70% of RA patients reported pain as one of the most important symptoms.[2]

Principles for managing RA pain

Establish clear treatment goals.

- Aim to achieve either remission or the lowest disease activity possible.
- Focus on maintaining good functional status.

Ensure the patient understands their disease and the anticipated course of treatment.

- Educational handouts are available from **rheumatology.org**.

Educational handouts

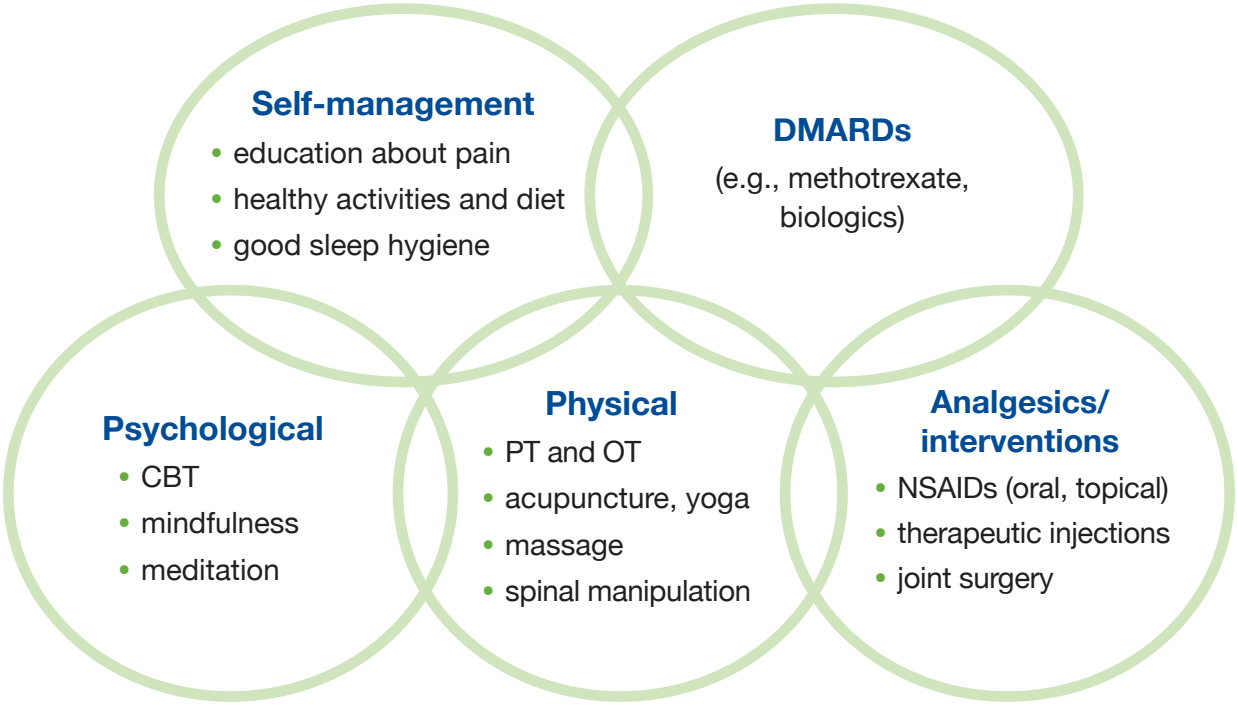
English Spanish

If pain persists, evaluate for other overlapping conditions, especially if RA appears to be to be in remission.

- These include fibromyalgia, osteoarthritis, mechanical back pain, and small-fiber neuropathy, among others.

Use a variety of modalities to achieve treatment goals.

FIGURE 2. Combine different options to improve function and alleviate pain.[3]



CBT: cognitive behavioral therapy; PT: physical therapy; OT: occupational therapy

Evidence-based treatments for improving function and reducing pain

TABLE 1. Review of treatment options for patients with musculoskeletal conditions

	INTERVENTION	Rheumatoid arthritis	Fibromyalgia	Osteoarthritis
Non-pharmacologic options	**exercise**	🟡	🟢	🟢
	physical therapy	🟡	—	🟢
	tai chi	○	🟢	🟢
	weight loss	🟢	🟡	○
	yoga	○	○	🟡
	acupuncture	🟡	○	🟡
	massage	🟡	🟡	🟡
	TENS*	—	○	○
	cognitive behavioral therapy	🟢	🟡	○
	mindfulness meditation	○	○	○
	self-management	🟡	○	🟡
Non-opioid pharmacologic options	**acetaminophen**	🟡	—	🟡
	NSAIDs—oral	🟢	—	🟢
	NSAIDs—topical	🟢	—	🟢
	duloxetine (Cymbalta, generics)	🟡	🟢	🟡
	tricyclic antidepressants (TCAs)	○	🟡	—
	pregabalin (Lyrica, Lyrica CR)	—	🟢	🟡
	gabapentin (Neurontin, generics)	—	🟡	—
	topical lidocaine (Lidoderm, generics)	—	—	○
	cannabis/cannabinoids	🟡	○	—
Opioids	**tramadol** (Ultram)	○	○	○
	buprenorphine (Belbuca, Butrans)	—	—	○
	other opioids	🔴	🔴	🔴

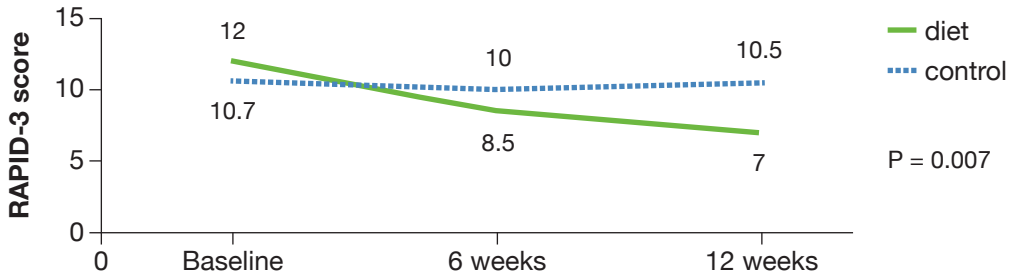
Risk/benefit: 🟢 = favorable; 🟡 = potentially favorable; 🔴 = unfavorable; ○ = no clear benefit; — = insufficient data

***TENS:** transcutaneous electrical nerve stimulation

Other effective options to treat pain

Weight loss may reduce pain and improve function in RA.

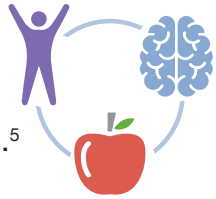
FIGURE 3. In a small trial, patients randomized to hypocaloric meal replacement who lost weight* had improved markers of pain and function (RAPID-3) compared to control.[4]



*Mean weight loss over 12 weeks: 9.5 kg (diet) vs. 0.5 kg (control)

FIBROMYALGIA

Mind and body approaches can help in fibromyalgia.



Exercising, maintaining a healthy weight, and engaging in psychotherapy (e.g., cognitive behavioral therapy) were shown to positively impact function and pain.[5]

Some medications can also be effective for pain.

Duloxetine, milnacipran, and pregabalin reduced pain in fibromyalgia compared to placebo.[6] Combining duloxetine and pregabalin reduced pain more than either medication alone.[7] But these drugs have important risks, especially in older patients and in those taking opioids.

OSTEOARTHRITIS (OA)

Selective and non-selective NSAIDs effectively reduce osteoarthritis-related pain.[8]

- **Use caution with long-term NSAID use in older adults.**
- Add a proton pump inhibitor if risk of gastrointestinal (GI) bleeding.
- Monitor blood pressure, liver, and renal function.
- Avoid in patients taking anticoagulants or anti-platelet agents, or with coronary artery disease, peptic ulcer disease, history of GI bleeding or gastric bypass surgery, severe thrombocytopenia, or inflammatory bowel disease.

In rare cases when an opioid is used

1 Explain to the patient that opioids do not treat disease activity.

2 Check the prescription drug monitoring program.

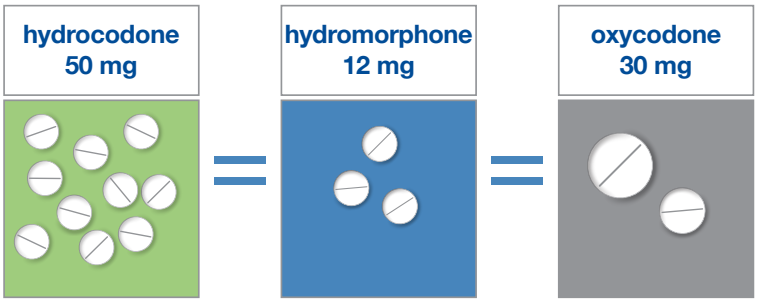
- Look for opioids or benzodiazepines prescribed by other clinicians.

3 Establish a plan for opioid use.[9]

- Define a duration of anticipated opioid use, and re-evaluate the need regularly.
- Ask patients if they are taking their opioid as prescribed, and be alert to requests for early refills.
- Consider the benefits and risks of toxicology testing.

4 Use caution with opioid doses above 50 morphine milligram equivalents (MME) per day, which can increase the risk of overdose.

50 morphine milligram equivalents translates to:



Opioid dose calculator available at:
https://qrco.de/dose_calculator

Tramadol should be monitored like other opioids given its potential for misuse and overdose.

5 Re-evaluate continued opioid prescriptions beyond 30 days, as such use is more likely to become long-term.[9]

6 Coordinate with other clinicians, especially if the patient may be at risk for opioid misuse.

7 Reduce risk of opioid misuse.

- Counsel patients on safe storage and disposal of opioids.
- Recommend naloxone to reduce overdose risk.
  - Naloxone is widely available as an intranasal spray (e.g., Narcan or generics 4 mg, Kloxxado 8 mg) or an intramuscular injection (Zimhi 5 mg).

Key points

- **Prescribe a DMARD for patients with rheumatoid arthritis and active inflammatory disease.**
- **Select evidence-based treatments** to improve function and reduce pain:
  - Non-pharmacologic: weight loss and cognitive behavioral therapy
  - Pharmacologic: NSAIDs (oral or topical) or other analgesic medication such as duloxetine to target an overlapping pain condition
- **If opioids must be used, mitigate their risks** by checking the PDMP, prescribing the lowest possible dose for a defined period of time, and counseling patients on addiction risk, safe use, and disposal.

Visit AlosaHealth.org/RA
for links to a comprehensive evidence document and other resources.

References:

(1) Geenen R, Overman CL, Christensen R, et al. EULAR recommendations for the health professional's approach to pain management in inflammatory arthritis and osteoarthritis. *Ann Rheum Dis.* Jun 2018;77(6):797-807.
(2) Heiberg T, Kvien TK. Preferences for improved health examined in 1,024 patients with rheumatoid arthritis: pain has highest priority. *Arthritis Rheum.* Aug 2002;47(4):391-7.
(3) Flynn DM. Chronic Musculoskeletal Pain: Nonpharmacologic, Noninvasive Treatments. *Am Fam Physician.* Oct 15 2020;102(8):465-477.
(4) Ranganath VK, La Cava A, Vangala S, et al. Improved outcomes in rheumatoid arthritis with obesity after a weight loss intervention: randomized trial. *Rheumatology (Oxford).* Feb 1 2023;62(2):565-574.
(5) Bair MJ, Krebs EE. Fibromyalgia. *Ann Intern Med.* Mar 3 2020;172(5):Itc33-itc48.
(6) Farag HM, Yunusa I, Goswami H, Sultan I, Doucette JA, Eguale T. Comparison of Amitriptyline and US Food and Drug Administration-Approved Treatments for Fibromyalgia: A Systematic Review and Network Meta-analysis. *JAMA Netw Open.* May 2 2022;5(5):e2212939.
(7) Gilron I, Chaparro LE, Tu D, et al. Combination of pregabalin with duloxetine for fibromyalgia: a randomized controlled trial. *Pain.* Jul 2016;157(7):1532-40.
(8) da Costa BR, Reichenbach S, Keller N, et al. Effectiveness of non-steroidal anti-inflammatory drugs for the treatment of pain in knee and hip osteoarthritis: a network meta-analysis. *Lancet.* 2017;390(10090):e21-e33.
(9) Dowell D, Ragan KR, Jones CM, et al. CDC Clinical Practice Guideline for Prescribing Opioids for Pain—United States, 2022. *MMWR Recomm Rep.* Nov 4 2022;71(3):1-95.

About this publication

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

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