



Summary of the American College of Physicians Guideline on Noninvasive Treatments for Acute, Subacute, or Chronic Low Back Pain

Disease/Condition	Low back pain
Target Audience	All clinicians
Target Patient Population	Adults with acute, subacute, or chronic low back pain
Interventions Evaluated	<p>Pharmacologic interventions: NSAIDs, nonopioid analgesics, opioid analgesics, tramadol and tapentadol, antidepressants, SMRs, benzodiazepines, corticosteroids, antiepileptic drugs</p> <p>Nonpharmacologic interventions: interdisciplinary or multicomponent rehabilitation; psychological therapies; exercise and related interventions, such as yoga or tai chi; complementary and alternative medicine therapies, including spinal manipulation, acupuncture, and massage; passive physical modalities, such as heat, cold, ultrasound, transcutaneous electrical nerve stimulation, electrical muscle stimulation, interferential therapy, short-wave diathermy, traction, LLLT, lumbar supports/braces</p>
Outcomes Evaluated	Pain, function, health-related quality of life, work disability/return to work, global improvement, number of back pain episodes or time between episodes, patient satisfaction, adverse effects
Benefits	<p>Acute low back pain</p> <p>Pharmacologic</p> <ul style="list-style-type: none"> NSAIDs: improved pain and function (small effect) SMRs: improved pain (small effect) <p>Nonpharmacologic</p> <ul style="list-style-type: none"> Heat wrap: improved pain and function (moderate effect) Massage: improved pain and function (at 1 but not 5 wk) (small to moderate effect) Acupuncture: improved pain (small effect) Spinal manipulation: improved function (small effect) <p>Chronic low back pain</p> <p>Pharmacologic</p> <ul style="list-style-type: none"> NSAIDs: improved pain (small to moderate effect) and function (no to small effect) Opioids: improved pain and function (small effect) <ul style="list-style-type: none"> Tramadol: improved pain (moderate effect) and function (small effect) Buprenorphine (patch or sublingual): improved pain (small effect) Duloxetine: improved pain and function (small effect) <p>Nonpharmacologic</p> <ul style="list-style-type: none"> Exercise: improved pain and function (small effect) Motor control exercise: improved pain (moderate effect) and function (small effect) Tai chi: improved pain (moderate effect) and function (small effect) Mindfulness-based stress reduction: improved pain and function (small effect) Yoga: improved pain and function (small to moderate effect, depending on comparator) Progressive relaxation: improved pain and function (moderate effect) Multidisciplinary rehabilitation: improved pain (moderate effect) and function (no to small effect) Acupuncture: improved pain (moderate effect) and function (no to moderate effect, depending on comparator) LLLT: improved pain and function (small effect) Electromyography biofeedback: improved pain (moderate effect) Operant therapy: improved pain (small effect) Cognitive behavioral therapy: improved pain (moderate effect) Spinal manipulation: improved pain (small effect) <p>Radicular low back pain</p> <ul style="list-style-type: none"> Exercise: improved pain or function (small effect)
Harms	<p>Generally poorly reported</p> <p>Pharmacologic</p> <ul style="list-style-type: none"> NSAIDs: increased adverse effects compared with placebo and acetaminophen (COX-2–selective NSAIDs decreased risk for adverse effects compared with traditional NSAIDs) Opioids: nausea, dizziness, constipation, vomiting, somnolence, and dry mouth SMRs: increased risk for any adverse event and central nervous system adverse events (mostly sedation) Benzodiazepines: somnolence, fatigue, lightheadedness Antidepressants: increased risk for any adverse event <p>Nonpharmacologic</p> <ul style="list-style-type: none"> Poorly reported, but no increase in serious adverse effects