Michigan Quality Improvement Consortium

Michigan Quality Improvement Consortium Guideline
Management of Acute Low Back Pain

The following guideline recommends assessment, diagnosis and treatment interventions for the management of acute low back pain in adults.

Eligible Population	Key Components	Recommendation and Level of Evidence
Adults with low back pain or back-related leg symptoms for < 6 weeks	Assessment to identify potential serious pathology **(red flags)**	◆ **Cauda Equina** (severe or progressive neurologic deficit, recent bowel or bladder dysfunction, saddle anesthesia) ◆ **Cancer** (especially if age > 50; insidious onset; no relief at bedtime or worsening when supine; constitutional symptoms, e.g. fever, unexplained weight loss; male with diffuse osteoporosis or compression fracture) ◆ **Fracture** (especially women age > 50; traumatic injury or onset, cumulative trauma; steroid use history) ◆ **Infection (**more likely with these risks: steroid use history; diabetes mellitus; immune suppression; history UTI or other infection; no relief at bedtime or worsening when supine; HIV; previous surgery; insidious onset; IV drug use; history of TB; severe or progressive neurologic deficit) ◆ **Anticoagulation** ◆ **Recent instrumentation**
	Patients with low risk of serious pathology (no red flags)	**Reassure:** ◆ 90% of episodes resolve within 6 weeks regardless of treatment **[C].** Advise that minor flare-ups may occur in the subsequent year. **Therapy:** ◆ Stay active and continue ordinary activity within the limits permitted by pain. Avoid bed rest **[A].** Early return to work is associated with less disability. ◆ Injury prevention (e.g. use of proper body mechanics, safe back exercises). ◆ Recommend ice for painful areas and stretching exercises **[D].** ◆ McKenzie exercises **[A]** are helpful for pain radiating below the knee. **Referral:** ◆ Before considering surgery refer patient for physiatry consult **[B]**, or manual therapy **[D]**. ◆ If persistent disability at 2 weeks, consider referral for non-invasive therapy for improving flexibility and strength, **not** modalities such as heat, traction, ultrasound, TENS. ◆ If persistent disability at 6 weeks, consider referral to a program that provides a multidisciplinary approach for back pain, especially if psychosocial risks to return to work exist. ◆ Surgical referral usually not required. **Medication Strategies:** ◆ **Prescribe medications on a time-contingent basis, not pain-contingent basis.** ◆ No drug categories have been proven to be more effective in pain control, consider side-effect profiles. ◆ Opiates are generally not indicated as first-line treatment. Although opiates relieve pain, early opiate use may be associated with longer disability, even after controlling for case severity [D]. ◆ If prescribed, opiate use should be limited to short-term (i.e. two weeks). **Testing:** ◆ Diagnostic tests or imaging usually not required. Consider imaging if red flags are present, or if no improvement after 6 weeks.
	Patients with high risk of serious pathology (red flags and high index of suspicion)	◆ Cauda Equina syndrome or severe or progressive neurologic deficit — Refer for emergency studies and definitive care **[C].** ◆ Spinal fracture or compressions — Plain LS spine X-ray **[B]**. After 10 days, if fracture still suspected or multiple sites of pain, consider either bone scan **[C]** or referral **[D]** before considering CT or MRI. ◆ Cancer or infection — CBC, urinalysis, ESR **[C]**. If still suspicious, consider referral or seek further evidence (e.g. bone scan **[C]**, other labs - negative plain film X-ray does not rule out disease).

Levels of Evidence for the most significant recommendations: A = randomized controlled trials; B = controlled trials, no randomization; C = observational studies; D = opinion of expert panel

This guideline lists core management steps. It is based on several sources, including the Adult Acute and Subacute Low Back Pain Guideline, Institute for Clinical Systems Improvement, 2012 (**www.icsi.org**). Individual patient considerations and advances in medical science may supersede or modify these recommendations.