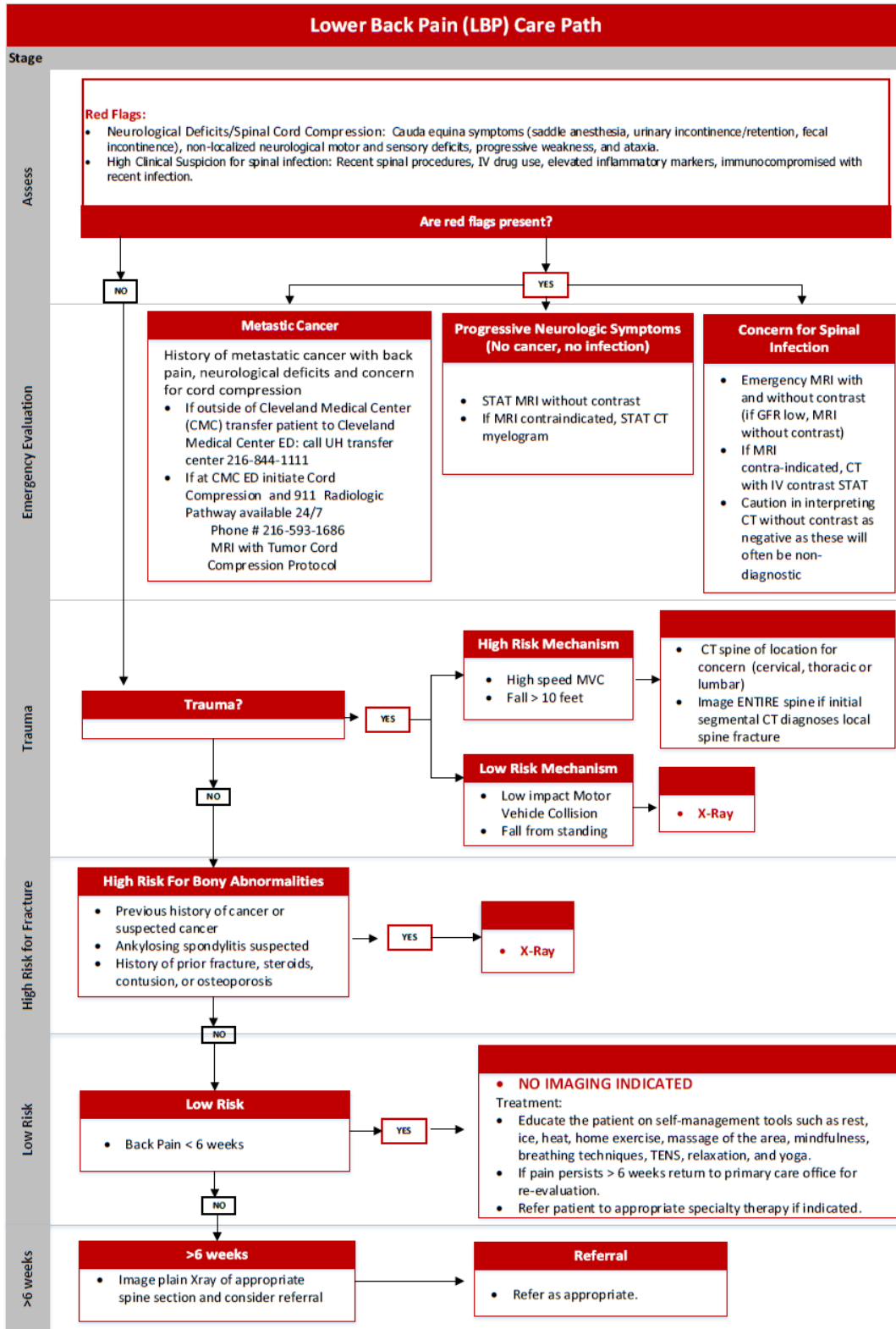


Clinical Practice Guideline

Lower Back Pain (LBP)



**These Clinical Practice Guidelines are guidelines only. In no way should these Clinical Practice Guidelines be used as a substitute for clinical or medical judgment.*

Clinical Practice Guidelines: Low Back Pain (LBP)

According to the National Council for Quality Assurance (NCQA, 2018), “approximately 2.5 million Americans visit outpatient clinical settings for low back pain each year. Approximately 75% of adults will experience low back pain at some time in their lives. In any three-month period, approximately 25% of Americans will experience at least one day of back pain.” The NCQA (2018) provides, that, “evidence shows that unnecessary or routine imaging (X-ray, MRI, CT scans) for low back pain is not associated with improved outcomes. It also exposes patients to unnecessary harms such as radiation and further unnecessary treatment. For the majority of individuals who experience severe low back pain, pain improves within the first two weeks of onset. Avoiding imaging for patients when there is no indication of an underlying condition can prevent unnecessary harm and unintended consequences to patients and can reduce health care costs. The following Clinical Practice Guideline (CPG) was developed and reviewed by the UH Quality Care Network (QCN) and the physician-led board of directors. The goal of this guideline is to provide a care path to improve quality patient outcomes for patients with lower back pain in the outpatient setting.

Remember

- Most acute low back pain is self-limited
- 70-90% improve within seven weeks
- Approximately 95% of patients who present with acute low back pain have low risk for cancer, spinal infection or progressive neurologic impairment (Knight et al, 2017)

Modifiable Risk Factors

Educate the patient on lifestyle changes that can impact lower back pain. Provide appropriate support and referral to the patient as indicated.

- Obesity (BMI >30)
- Depressive disorders
- Alcohol abuse
- Nicotine dependence
- Physical stress on spine
- Appropriate lifting techniques

Quality Metrics

There are quality metrics related to Lower Back Pain (LBP) from the National Council for Quality Assurance (NCQA), CMS (Centers for Medicare & Medicaid Services) and different payors.

Objective: Improve quality of care of patients with lower back pain.

As Measured By:

- HEDIS 2019: Use of Imaging Studies for Low Back Pain (LBP)
 - Applies to Commercial and Medicaid Populations
 - Metric: Assesses adults 18–50 with a primary diagnosis of low back pain who did not have an imaging study (plain X-ray, MRI or CT scan) within 28 days of the diagnosis

Specialty	Services Offered	Contact Information
Connor Whole Health	Non-pharmacologic therapies for acute and chronic pain including: <ul style="list-style-type: none"> • Acupuncture • Chiropractic • Massage • Meditation and mindfulness • Yoga Therapy • Lifestyle Medicine Consultations 	216-285-4070
Interventional Pain Referral	<ul style="list-style-type: none"> • Injections nerve and joints • Radiofrequency Ablation • Cryoneurolysis • Neuromodulation (spinal cord and peripheral nerve stimulation) • Intrathecal Drug Delivery • Physical Rehabilitation • Medications 	216-844-3771
Orthopedic Spine & Neurosurgery Spine	<ul style="list-style-type: none"> • Spine Surgery 	216-716-7898
Physical Medicine & Rehabilitation (PM&R)	<ul style="list-style-type: none"> • Acute and chronic pain (non-surgical, non-opioid) • In-office injections (joint, trigger, tendon) • Spasticity Management (Medications, botulinum toxins, intrathecal baclofen pump) • Electromyography/Nerve Conduction Studies (EMG/NCS) 	East Side: 440-285-7256 West Side: 216-844-7200 440-792-9055
Physical Therapy	<ul style="list-style-type: none"> • Aquatics therapy • Concussion rehabilitation • Dance rehabilitation • Lymphatic therapy • Neurologic therapy • Pediatric physical therapy • Pelvic floor therapy • Running program • Sports rehabilitation • Vestibular therapy 	Refer to UH Provider App for locations
Rheumatology	<ul style="list-style-type: none"> • Multidisciplinary care for rheumatic diseases • Inpatient and outpatient pain management 	1-844-377-4311
Addiction	If any red flags or concerns for addiction/drug seeking behavior, please consider referral to the addiction team. Misuse of legal and/or illegal substances, inability to consistently abstain from: <ul style="list-style-type: none"> • Substance misuse • Cravings/intense drive to use a substance • Impairment in behavioral control over substance use • Diminished recognition of problems with one's behaviors • Dysfunctional emotional response 	1-844-541-2087

Anticipatory Guidance– Frame Expectations

- Engage the patient to discuss their concerns and fears associated with lower back pain. Take time and talk with the patient and address their feelings.
- Discussion should differ between acute (should improve) and chronic low back pain (functional). Educate the patient on use of exercise for acute back pain and improved healing.
- Anticipate questions that the patient may ask or concerns that may come, and provide guidance.
- Explain to the patient what they can expect over the next few days, to weeks to frame the patient’s expectations. Evaluate if the patient has modifiable risk factors. Educate the patient about lifestyle changes that they can make to reduce their likelihood of recurrence. Refer as needed for additional support.
 - If the patient will be following up with a referral– provide anticipatory guidance.
 - For assistance scheduling the patient refer to UH4Care or the UH Provider App.
- Encourage the patient to call with any questions, concerns and or worsening symptoms. Provide the patient with an appropriate contact number, if the patient does not have it.
- Educate the patient to follow up with worsening symptoms, or urgent/emergency symptoms that indicate urgent or emergency follow-up.

Self Care at Home

Provide education on patient specific treatment options that the patient can do at home. Be mindful to address social determinants of health that may impact a patient’s ability to self treat. For example, the cost of over the counter medications that may impact a patient’s access to self treatment. Providing a prescription for the patient’s insurance can help with this.

- Heat to reduce muscle spasm
- NSAIDS , if not contraindicated
- Stretching
- Normal activities of daily life, increasing as pain permits
- Meditation (There is a free online guided meditation available through Connor Whole Health. When connected to internet, to access, click here: www.uhhospitals.org/guidedmeditation)

Social Determinants of Health Assessment

In order to engage and empower patients to be active in their care, it is also necessary to assess Social Determinants of Health (SDOH). Patients can be unwillingly impacted by SDOH, which will affect a patient’s capacity to adhere to his/her treatment plan. Keep this in mind and assess accordingly, to provide proper referrals to encircle the patient with support to achieve his/her optimal health.

Consider the following:

- Financial restrictions can impact a family’s ability to afford nutritious foods and medications or alternative therapies.
- Geography can impact accessibility of healthy and affordable food.
- The patient’s own understanding and perceptions.
- Capacity to exercise as well as physical and behavioral limitations that may require referrals to physical therapy or exercise support.
- Patient may have behavioral and/or psychological barriers that may be influencing and perpetuating lifestyle habits
- Health literacy and comprehension.


Resources

- [Choosing Wisely- Imaging for Low Back Pain](#)
- [Choosing Wisely- Patient Resources Imaging Tests for Back Pain](#)
- [Choosing Wisely Patient Resources Low Back Pain](#)
- [Connor Whole Health: Guided Meditation](#)
- [CoverMyMeds](#)
- [UH Intranet: UH Seidman Cancer Center Cord Compression Pathway 911](#)

Medications for Acute LBP

Medication	Dosing	Comments
NSAIDS		
Ibuprofen	Initial: 200-400 mg PO 3-4 times daily Max: 3200 mg / day	<ul style="list-style-type: none"> • May be more effective than acetaminophen • Scheduled dosing preferred over PRN • Avoid in chronic renal disease, uncontrolled hypertension, heart failure, and high GI or CV risk
Naproxen (base or sodium)	Initial: 220-550 mg PO twice daily Max: 1250 mg /day	
Diclofenac	Initial: 50 mg PO 2-3 times daily Max: 150 mg / day	
Meloxicam	Initial: 7.5 mg PO daily Max: 15 mg /day	
Skeletal Muscle Relaxants		
Tizanidine	Initial: 2mg PO TID PRN Titrate in 2-4 mg increments Max: 36 mg / day	<p>Second line in combination with NSAIDS</p> <ul style="list-style-type: none"> • No evidence they are more effective than acetaminophen or NSAIDs; benefit is likely due to a sedative effect • Tizanidine can cause hypotension • Cyclobenzaprine structurally similar to tricyclic antidepressants = anticholinergic risks • Limit use to a maximum of one week • Avoid in patients at risk of falls (e.g., elderly).
Cyclobenzaprine	Initial: 5 mg PO TID PRN Max: 10 mg PO TID PRN	
Corticosteroids		
Prednisone	5 – 60mg PO daily; taper	<ul style="list-style-type: none"> • Use only for patients with radicular symptoms
Methylprednisolone	Medrol dose pack; taper	
Topicals		
Capsaicin 0.025 – 0.1% cream	Apply thin film to affected area 3-4 times daily	<ul style="list-style-type: none"> • Use of topicals could be limited by cost
<p><i>*Current data do not support the use of Lidoderm patch or topical NSAIDS for acute LBP</i></p>		

For assistance scheduling follow-up appointments, please refer to the UH Provider app:

<p style="text-align: center; color: #c00000;">UH4CARE</p> <ul style="list-style-type: none"> • Call 1-800-UH4-CARE to schedule an appointment with a UH Quality Care Network Provider 	<p style="text-align: center; color: #c00000;">UH Provider App</p> <ul style="list-style-type: none"> • On your telephone or mobile device, download the UH Provider App • Use this App to refer to a specialist 	
--	---	---

Accuracy Matters.

- Timely and appropriate documentation has long term implications that affect the overall cost and quality of patient care.
- It is essential that the most appropriate and specific diagnosis codes are entered at each and every patient encounter.

References

American College of Radiology (2015). ACR Appropriateness Criteria : Clinical Condition Lower Back Pain. www.acr.org/ac.

Ann Intern Med. 2017;166:514-530. doi:10.7326/M16-2367 Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians Amir Qaseem, MD, PhD, MHA; Timothy J. Wilt, MD, MPH; Robert M. McLean, MD; and Mary Ann Forciea, MD; for the Clinical Guidelines Committee of the American College of Physicians.

Boston University School of Public Health. (26 September 2019). Physical therapy may reduce opioid prescriptions. Retrieved from: <https://www.bu.edu/sph/2019/09/26/physical-therapy-access-may-reduce-opioid-prescriptions/>.

HEDIS 2019 Changes: https://www.ncqa.org/wp-content/uploads/2018/08/20190000_HEDIS_Measures_SummaryofChanges.pdf.

National Committee for Quality Assurance. (2018). Use of imaging studies for low back pain (LBP). Retrieved from: <https://www.ncqa.org/hedis/measures/use-of-imaging-studies-for-low-back-pain/>.

Knight, C.L., Deyo, R.A., Staiger, T.O. & Wipf, J.E. (2017) Up to Date. *Treatment of acute low back pain*. Retrieved from https://www.uptodate.com/contents/treatment-of-acute-low-back-pain?sectionName=PROGNOSIS&topicRef=7782&anchor=H3768099668&source=see_link#H3768099668.

McKnight's Long Term Care News. (1 October 2019). Seeing physical therapist first for back pain may reduce opioid prescription. Retrieved from: <https://www.mcknights.com/news/clinical-news/seeing-physical-therapist-first-for-back-pain-may-reduce-opioid-prescriptions/>.

UpToDate. Retrieved from [https://www.uptodate.com/contents/evaluation-of-low-back-pain-in-adults?csi=f4416096-3de1-48f8-a9e8-287101d6Wheeler, S., Wipf, J., Staiger, T., Deyo, R., Jarvik, J. \(2018\). Evaluation of low back pain in adults. 2108&source=contentShare](https://www.uptodate.com/contents/evaluation-of-low-back-pain-in-adults?csi=f4416096-3de1-48f8-a9e8-287101d6Wheeler, S., Wipf, J., Staiger, T., Deyo, R., Jarvik, J. (2018). Evaluation of low back pain in adults. 2108&source=contentShare).

McKnight's Long Term Care News. (1 October 2019). Seeing physical therapist first for back pain may reduce opioid prescription. Retrieved from: <https://www.mcknights.com/news/clinical-news/seeing-physical-therapist-first-for-back-pain-may-reduce-opioid-prescriptions/>.

Special thanks to the CPG Development Team: Brad Hillard, DO, MBA, Todd Zeiger, MD, Jessica Goldstein, MD, Christopher Miller, MD, Christina Cheng, MD, Adan Francoise, MD, Ankit Maheshwari, MD, Jeanne Lackamp, MD, Anna Serels, MD, Maulik Purohit, MD, MPH, Howard Dickey-White, MD, George Topalsky, MD, David Vincent, DC, Christine Kaiser DACM, LAc, Dave Scotton, PT, Matthew Kostoff, PharmD, BCPS, BCACP, Tammy Brand, PharmD, Deanna Cox, MBA, MSN, RN, Terry Widenhofer, ASN, RN, CCM, Rebecca Klein, RN, CCM, and Betsy Mitman BSN, MSN, RN

© 2017 University Hospitals Health System, Inc.

The contents of University Hospitals Quality Care Network ("QCN") clinical practice guidelines ("CPGs") are to be used as practical and deliberately brief guides for licensed QCN provider participants. CPGs are not strict protocols and do not replace a licensed QCN provider participant's clinical judgment nor are they meant to be a replacement for licensed QCN provider participant's training, experience, continuing medical education and self-study on the latest literature and drug information. QCN has made every effort to ensure that the information provided in CPGs are based upon best available scientific evidence at the time of publication. Nonetheless, the CPGs should never be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of each patient. QCN accepts no responsibility for any inaccuracies in a CPG, evidence based changes to best practices after publication of a CPG, or outcomes of any treatment regime recommended within a CPG. Send feedback to: Brad Hillard, DO UH Quality Care Network Medical Director (Bradley.Hillard@UHhospitals.org)