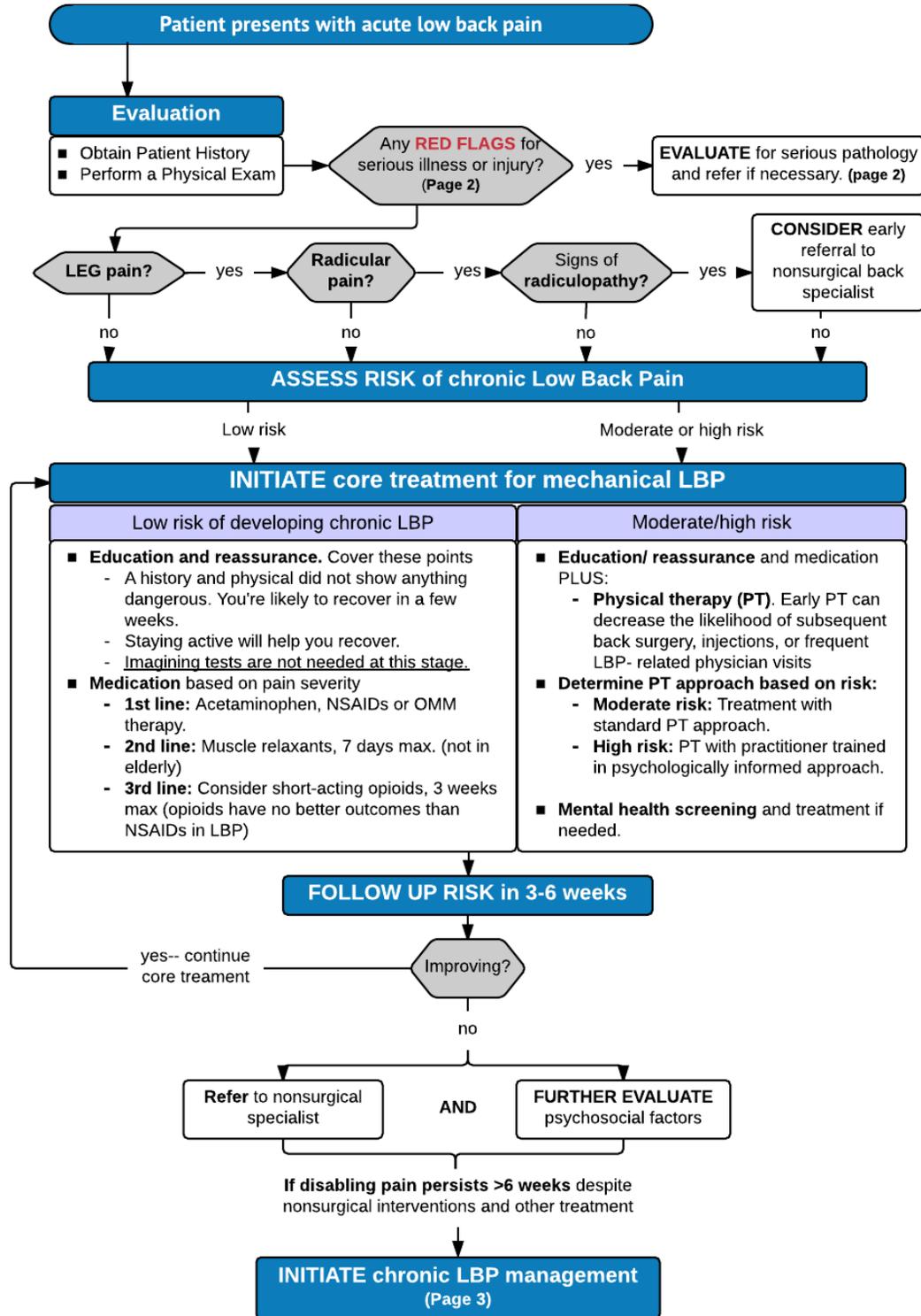


Low Back Pain Care Path

Diagnosis and Core treatment



*** Red Flag evaluation and response**

Suspected Conditions and signs	Labs	Imaging	Referral
<p>Suspected cauda equina syndrome:</p> <ul style="list-style-type: none"> New bowel or bladder dysfunction Perineal numbness/saddle anesthesia Persistent/increasing lower motor neuron weakness <p>Myelopathy/upper motor neuron changes:</p> <ul style="list-style-type: none"> New-onset Babinski or sustained clonus New-onset gait or balance abnormalities Upper motor neuron weakness 		<ul style="list-style-type: none"> For suspected cauda equina: spinal MRI* For myelopathy/upper motor neuron changes: MRI* or CT, spine or brain 	URGENT referral to ortho/neuro spine surgeon
Recent trauma with suspected spinal fracture		<ul style="list-style-type: none"> X-ray: anteroposterior (AP) and cone down, consider CT or MRI* if x-ray is non-diagnostic 	URGENT referral to ortho/neuro spine surgeon if imaging reveals fracture
Suspected compression fracture: Osteoporosis or osteoporosis risk		<ul style="list-style-type: none"> X-ray: AP and cone down; repeat in 2 weeks if suspicion high Consider MRI* if suspicion high. 	Referral to nonsurgical back specialist if imaging reveals compression fracture
Suspected cancer: History of cancer, multiple cancer risk factors, or strong clinical suspicion	CBC, ESR, CRP	<ul style="list-style-type: none"> X-ray (evaluate in context with ESR) If negative x-ray but strong suspicion remains: consider T1 weighted, non-contrasted spinal MRI* (full study w/contrast for abnormal areas) 	URGENT referral to oncologist
Suspected infection: immunocompromised patient, UTI, IV drug use, recent spinal procedure, or fever/chills in addition to pain with rest or at night	CBC, ESR, CRP	<ul style="list-style-type: none"> Consider MRI* with gadolinium or bone scan 	URGENT referral may be needed, depending on type of infection
Suspected spinal deformity or spondylolysis: Age <20, pain with standing, walking, and extension (occurs more often in athletes and dancers)		<ul style="list-style-type: none"> Standing x-rays, 3 view, flexion, extension, plus cone down Consider MRI* to identify spondylolysis represented by pedicle edema 	Referral to sports medicine specialist, nonsurgical back specialist, or ortho/neuro spine surgeon if x-ray or MRI positive
<p>Suspected spondyloarthropathies:</p> <ul style="list-style-type: none"> Ankylosing spondylitis (AS): at least 4 of the following: age of pain onset <40 years; insidious onset; improvement with exercise; no improvement with rest; pain at night (with improvement upon rising); also consider morning stiffness. Reactive arthritis/Reiter's Syndrome: recent history of genitourinary or gastrointestinal tract infection; acute onset; usually affecting lower joints; asymmetrically painful and swollen joints; weight loss; high temperatures. Spondyloarthritis associated with inflammatory bowel disease (IBD): abrupt onset asymmetric, affecting lower limbs; generally subsides in 6-8 weeks; 10% develop chronic arthritis; other symptoms: uveitis, chronic skin lesions, dactylitis, enthesitis. Psoriatic arthritis: asymmetric, affecting distal joints; morning stiffness; pain accentuated by prolonged immobility, alleviated by physical activity; psoriatic lesions. 	CBC, ESR, CRP, RF, anti-CCP, HLA B27	<ul style="list-style-type: none"> X-ray: lumbar spine and sacroiliac joint. Note: If clinical features lasting longer than 3 month strongly suggest AS despite negative radiographs of SI joint, consider close follow up and/or referral to rheumatologist. 	Referral to rheumatologist.

*Ensuring a quality MRI. To reduce the need for repeat MRI, ensure that the imaging center uses a 1.5 tesla magnet .large bore and standard MRIs usually provide better image quality than open MRIs. Order sedation if necessary to get a quality MRI.

Please note: The Via Christi Health Alliance in Accountable Care, Inc. (the "ACO") in consultation with its affiliated ACO providers developed these care pathways and guidelines based on the most recent evidenced based medicine data. The ACO is continually researching and updating its care pathways and guidelines to reflect the most recent evidence based standards. This information is intended to provide health professionals with information to improve the quality of care and ultimately lower the cost of such care to the patients they serve. By providing this evidence based information, it is not the intention of the ACO to provide specific medical advice for particular patients. Rather we urge each provider to review this material when consulting and evaluating the treatment options suitable for their patients. The ACO affiliated providers are solely responsible for confirming the accuracy, timeliness, completeness, appropriateness and helpfulness of this material and making all medical, diagnostic or prescription decisions.

Chronic low back pain management

- Patients with LBP > 6 weeks that does not improve with core treatment or nonsurgical back specialist treatment- and interferes with work and/or life activities- will need chronic management. If the patient asks about surgery, stress the guidance that a nonsurgical back specialist can provide.

Pain assessment

- For patients who have received core LBP treatment and nonsurgical specialist treatment without success:** Follow the advice in Intermountain’s *Management of Chronic Non -Cancer Pain Care Process Model (CPM)* (see sidebar) to assess psychosocial factors, medication-related risks, and other factors that can impact chronic pain management.
- For patients who present to you with LBP of 12 weeks or more:** Screen for red flags that may indicate serious pathology (see page 2); refer if needed. If the patient has not yet been assessed by a nonsurgical back specialist, refer the patient for evaluation. If nonsurgical back specialist treatment is not helpful, follow the assessment advice in the *Non- Chronic Cancer Pain CPM*.

Psychosocial evaluation

- If a patient has not yet been evaluated using the *MHI Adult Baseline Packet* administer the packet and create a treatment plan for any mental health conditions that are identified, based on their complexity and severity. Other screening tools are *Screeners and Opioid Assessment for Patients with Pain (SOAPP)*, *Diagnosis, Intractability, Risk, Efficacy (DIRE)*, *Opioid Risk Tool (ORT)*.

Treatment options for chronic low back pain

Exercise Therapy	Exercise therapy reduces pain and improves function in patients with chronic nonspecific LBP, as shown by several studies. Exercise therapy can be guided by a physical therapist or nonsurgical back specialist. Common exercise strategies for low back pain include: <ul style="list-style-type: none"> Walking and aerobic exercises, which increase baseline physical activity levels, improve blood flow, and may increase endurance of postural muscles. Core strengthening exercises, which focus on abdominal, paraspinal, gluteal, diaphragm, and pelvic floor muscles to foster lumbar stability. End-range flexion/extension stretches with repeated movements (such as the McKenzie method), which are likely to be most effective when customized by a physical therapist or physician for each patient. Aquatic exercise, which may be preferred by some patients, as warm water can enhance flexibility and support movement.
Physical Therapy	Spinal manipulation and mobilization, patient education/counseling, and exercise plans, guided by a physical therapist, can improve mobility and reduce pain/disability in some patients with chronic LBP.
Yoga	Several studies showed that yoga brought significantly better pain reduction than usual care, education, or conventional exercises.
Team-based programs	Functional restoration programs that integrate medical and psychosocial treatment improve function and reduce pain in patients with chronic LBP.
Shared decision-making	Key elements of shared decision-making include: <ul style="list-style-type: none"> Using conversational techniques that enhance communication. Helping patients and families weigh the risk and cost of an option against its potential benefits.
Cognitive behavioral therapy (CBT)	Cognitive behavior therapy or psychoeducation are recommended to treat chronic LBP in multiple evidence-based guidelines. Multiple trials have shown that CBT is more effective for pain, functional status, and behavioral outcomes than placebo or no treatment.
Surgery for lumbar spinal stenosis, radiculopathy, or deformity	<ul style="list-style-type: none"> Lumbar spinal stenosis: In highly symptomatic patients (with or without degenerative spondylolisthesis), the best proven intervention is surgery. Radiculopathy or radicular pain: In general, surgery brings moderate benefits, according to American Pain Society Guidelines (Note that radiculopathy with progressive neurologic deficit or cauda equine syndrome is an absolute indication for surgery.) Deformity: Surgery is an effective treatment for scoliosis or spondylolisthesis.

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References:

1. "Management of Low Back Pain."—American Family Physician. Intermountain Healthcare, n.d.August 2014.