Clinical Pathway: Low Back Pain Imaging, Outpatient

Updated: December 15, 2021

Clinical algorithm:

Patient schedules visit (virtual, in person, walk-in)

Patient is roomed

During provider assessment: Patient indicates low back pain

Non-urgent: Activate Epic Smart Set "Acute Low Back Pain"

Physical therapy for 6 weeks and standard medication therapy:
1. Analgesics (Non-Opioid): Tylenol or Nsaid
2. Muscle relaxors,
3. Corticosteroids 5 days
4. IF mod to severe neuropathy Gabapentin.
   (EBM does not suggest opioids)

Reassess clinical situation through 6-week follow-up appointment. Continued pain?

Yes

Order imaging: X-Ray of the Spine

Referral to SHMG spine clinic

Non-emergent: No neurologic symptoms

Refer to urgent spine clinic: Listed in Epic as "Spine"

Refer to Emergency Department

Emergent: neurologic symptoms

Provide the following Patient Education documents:
EMMI 102 - "Acute Low Back Pain Education" video
And handout "Lower Back Pain" (SHX18557)

Care Companion, Clinical Decision Support tool, triggers when advanced imaging ordered (CT, MRI)
Clinical pathway summary

CLINICAL PATHWAY NAME: Low Back Pain Imaging

PATIENT POPULATION AND DIAGNOSIS: Adults with low back pain

APPLICABLE TO: Spectrum Health West Michigan Primary Health sites and Urgent Care clinics

BRIEF DESCRIPTION: Care of patients who present to primary care with Low Back Pain. Aim to reduce high tech MRI CT / Low XR imaging and provide standard treatment.

OVERSIGHT TEAM LEADER(S): Kristopher Brenner, MD; Jason Fleeger

OWNING EXPERT IMPROVEMENT TEAM (EIT): Low Back Pain EIT

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Primary Health CPC

CPC APPROVAL DATE: October 28, 2021

OTHER TEAM(S) IMPACTED: Radiology, Physical Therapy, Neuroscience CPC

IMPLEMENTATION DATE: December 2021

LAST REVISED: 12.15.2021

FOR MORE INFORMATION, CONTACT: Kris Brenner, MD

Clinical pathways clinical approach

TREATMENT AND MANAGEMENT:

This clinical pathway guides clinicians in the initial evaluation of adults with acute, nontraumatic low back pain thought to be of a spinal/musculoskeletal origin. The evaluation may include a trial of conservative therapy, imaging of the lumbar spine, and/or evaluation of serum inflammatory markers. Choosing the correct approach depends on the patient's presentation and risk factors for malignancy, infection, and vertebral compression fractures.

Most patients who present to a primary care setting with back pain will have nonspecific back pain and will improve over a few to several weeks with conservative therapy. These patients typically do not need imaging or measurement of serum inflammatory markers.

OPTIMIZED EPIC ELEMENTS:

- Acute Low Back Pain Smartset
- Care Companion, Clinical Decision Support tool, triggered when advanced imaging ordered (CT, MRI)
PATIENT EDUCATION:
- EMMI 102 - "Acute Low Back Pain Education" video
- Handout "Lower Back Pain" (SHX18557)

REFERENCES:

1. North American Spine Society: [NASS Diagnosis and treatment of low-back pain guideline (spine.org)](http://spine.org)

2. American Academy of Orthopaedic Surgeons: [Low Back Pain - OrthoInfo - AAOS](http://orthoinfo.org)

3. American College of Physicians Endorsed by: American Academy of Family Physicians:
   a. [Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians | Annals of Internal Medicine (acpjournals.org)](http://acpjournals.org)
   b. [Low Back Pain (aafp.org)](http://aafp.org)

4. National Institute for Health and Guidance
   a. [Recommendations | Low back pain and sciatica in over 16s: assessment and management | Guidance | NICE](http://nice.org.uk)