SELECT HEALTH NETWORK, INC.
PHYSICIAN PRACTICE GUIDELINES

SUBJECT: **MRI Lumbar Spine** **Date Issued: 2/97**

Date Reviewed/Revised: **5/05, 9/06, 03/08, 02/09, 02/10, 03/11, 03/12, 3/13, 3/14, 3/15, 6/16, 4/17, 6/18, 6/19, 5/20**

Sources: Milliman, Inc.
American College of Radiology Appropriateness Criteria
https://acsearch.acr.org/docs/69483/Narrative/
https://acsearch.acr.org/docs/69483/EvidenceTable/

Medical evidence does not support MRI Lumbar Spine for:

I. Back pain, even if radicular, without neurologic findings at initial visit.

Indications:

II. Urgently when ANY ONE (1) of the following is suspected:
    A. Evidence of conus medullaris syndrome or cauda equina syndrome due to the presence of ANY ONE (1) of the following:
        1. Urinary incontinence or retention
        2. Incontinence of stool
        3. Significant sensory or motor deficits or persistent neurological deficits.
        4. Saddle anesthesia
    B. Neurological deficit on examination
    C. Significant or progressive focal neuromotor deficits
    D. Neoplasm in lumbar spine due to presence of ANY ONE (1) of the following:
        1. New onset back pain associated with history of neoplasm
        2. Persistent or progressive back pain that fails conservative therapy
    E. Epidural abscess, when ALL (3) of the following are present:
        1. Pain
        2. Fever
        3. Rapidly progressive weakness
    F. Disk space infection
    G. Osteomyelitis of the vertebrae when ANY ONE (1) of the following is present:
        1. Positive bone scan
        2. Persistent back pain and ANY ONE (1) of the following:
            a. Elevated sedimentation rate
            b. Pain exacerbated by motion and relieved by rest
            c. Localized tenderness over spine segment
    H. Back pain and ALL of the following:
        1. Severe, disabling pain
        2. Unresponsive to any comfort measures and conservative therapy
    I. Suspected postoperative infection, ie, spondylodiskitis

III. Less urgently for ANY ONE (1) of the following:
    A. Severe, disabling back pain unresponsive to comfort measures
    B. When low back pain fails to improve after 6 weeks of conservative treatment.
    C. Spondylolisthesis documented with plain films causing ANY ONE (1) of the following:

1. Radicular symptoms
2. Spinal claudication

D. Recurrent lumbar pain after previous lumbar surgery, to differentiate between scar and disk if ALL (2) of the following are present: (generally requires enhancement)
    1. Significant new symptoms
    2. Surgical management is being considered
E. Spinal claudication, as indicated by presence of ALL (2) of the following:
    1. Pain is worse with prolonged standing and activities requiring Lumbar extension
    2. Pain is relieved by either sitting or forward flexion
F. Radicular symptoms below knee and equivocal findings on non-enhanced studies
G. Suspected inflammatory process in the nerve root not secondary to compression

IV. Suspected spinal injury and ONE (1) or more of the following:
A. Fracture and concern for ligamentous injury
B. Neurologic symptoms associated with thoracolumbar trauma and suspicion of ONE (1) or more:
    1. Epidural hematoma
    2. Traumatic disc herniation
    3. Cord contusion

Red Flags: Taken from ACR guidelines

Table 1. Red Flags: Indications of a more complicated status include back pain/radiculopathy in the following settings (adapted from [7]).

Red Flag	Potential Underlying Condition as Cause of LBP
• History of cancer • Unexplained weight loss • Immunosuppression • Urinary infection • Intravenous drug use • Prolonged use of corticosteroids • Back pain not improved with conservative management	• Cancer or infection
• History of significant trauma • Minor fall or heavy lift in a potentially osteoporotic or elderly individual • Prolonged use of steroids	• Spinal fracture
• Acute onset of urinary retention or overflow incontinence • Loss of anal sphincter tone or fecal incontinence • Saddle anesthesia • Global or progressive motor weakness in the lower limbs	• Cauda equina syndrome or severe neurologic compromise