



## Medical PA Criteria Document

Medical Procedure Class:	<b>MRI of Thoracic Spine</b>
Date:	May 1, 2007
Updated:	July 28, 2009

### Executive Summary

<b>Purpose:</b>	To identify and discourage the inappropriate use of high tech, high cost diagnostic imaging
<b>Why was this Issue Selected:</b>	<p>The indiscriminate use of expensive imaging exams for common and uncomplicated clinical presentations of the back and spine, e.g. chronic neck or back pain, have contributed to the perception of low value from these studies and to the high costs in managing these conditions.</p> <p>Patients with normal radiographic results (plain film X-rays) and no neurologic signs or symptoms will usually require no further imaging. However, patients with normal radiographs and positive neurologic signs or symptoms may require MR imaging.</p>
<b>Procedures subject to Pre-Certification</b>	<ul style="list-style-type: none"> <li>• 72146 Magnetic resonance (eg, proton) imaging, spinal canal and contents, thoracic; without contrast material</li> <li>• 72147 Magnetic resonance (eg, proton) imaging, spinal canal and contents, thoracic; with contrast material(s)</li> <li>• 72157 Magnetic resonance (eg, proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences, thoracic</li> </ul>

<b>Setting &amp; Population:</b>	All Medicaid fee-for-service patients
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<b>Type of Criteria:</b>	<input type="checkbox"/> Increased risk of ADE <input checked="" type="checkbox"/> Appropriate Indications	<input type="checkbox"/> Non-Preferred Agent <input type="checkbox"/>
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<b>Data Sources:</b>	<input type="checkbox"/> Only administrative databases <input checked="" type="checkbox"/> Databases + Prescriber-supplied
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### Setting & Population

- Procedure Group for review: MRI of Thoracic Spine

- Common Diagnostic Indications: Pain, radiculopathy, new or progressive neurologic symptoms or deficits.
- Considerations: Unless contraindicated, MRI is the preferred modality for most thoracic spine imaging over CT, except for a few indications such as evaluation of suspected fracture or fracture follow-up.
- Age range: All patients

## Approval Criteria

### **Patients with any of the following diagnostic indications for MRI of the Thoracic Spine, which may include supporting clinical information:**

- Persistent pain or radiculopathy, with > 6 weeks of conservative therapy and inadequate response to treatment. Note: children may not require 6 weeks
- New or progressive neurologic symptoms or deficits, e.g. motor or sensory loss attributable to thoracic spine pathology
- Signs or symptoms of spinal cord or nerve root compression, e.g. from disc herniation or spinal stenosis
- Multiple Sclerosis or other demyelinating diseases or myelopathies
- Infectious or inflammatory processes
- Possible spinal cord injury and post-traumatic neurologic deficit
- Post-operative evaluation, with new neurologic findings
- Tumor evaluation, for suspected or documented lesions
- Cauda /Equina Syndrome which may present with bilateral Radiculopathy, saddle anesthesia, bowel or bladder dysfunction
- Fracture evaluation for suspected or known fracture
- Severe scoliosis, which may include pre- or post-operative evaluation

## Approval Diagnoses (Appendix A)

Condition	Submitted ICD-9 Diagnoses	CPT	Date Range
Persistent pain or radiculopathy with > 6 weeks of conservative therapy and inadequate response to treatment.	720.0 - 724.9, 729.2, 781 - 781.99, 782	62310, 97530, 97810 - 97814, 98925 - 98929, 98940 - 98942	12 months
New or progressive neurologic symptoms or deficits (motor/sensory loss) attributable to Thoracic spine pathology	720.0 - 724.9, 729.2, 781 - 781.99, 782	NA	12 months
Signs or symptoms of spinal cord or nerve root compression (disc herniation/spinal stenosis)	720.0 - 724.9, 729.2, 781 - 781.99, 782	NA	12 months
Multiple sclerosis or other demyelinating diseases or myelopathies	340, 341 - 341.9	NA	12 months
Infectious or inflammatory processes	730.9	NA	12 months
Possible spinal cord injury and post-traumatic neurological deficit	952.1 - 952.19, 952.8, 952.9	NA	12 months
Post-operative evaluation, with new neurologic findings	720.0 - 724.9, 729.2, 781 - 781.99, 782	NA	12 months
Tumor evaluation, for suspected or documented lesions	170, 192.2, 192.3, 192.8, 192.9, 198.3, 198.4, 213.2, 225.3, 225.4, 225.8, 225.9, 237.5	NA	12 months
Cauda Equina Syndrome, which may present with bilateral radiculopathy, saddle anesthesia, bowel or bladder dysfunction	344.6 - 344.61	NA	12 months
Fracture evaluation, for suspected or known fracture	805.2 - 805.3, 806.2 - 806.39	NA	12 months
Other and unspecified Prion Disease of the Central Nervous System	046.79	NA	12 months

## Denial Criteria

**Requests will be denied if patient has none of the above diagnostic indications for MRI of the Thoracic Spine. Some of these requested exams may be approvable upon the submission of appropriate supporting clinical information.**

- For patients with chronic back pain and the absence of neurologic signs and symptoms, plain radiographs should usually be the initial study performed in their evaluation
- Has not had a Thoracic Spine X-ray in the last 60 days
- Have had a CT or MRI of the Thoracic Spine in the last 180 days

## References

1. Hitzelberger WE, Witten RM. Abnormal myelograms in asymptomatic patients. *J Neurosurg* 1968; 28(3):204-206.
2. Wiesel SW, Tsourmas N, Feffer HL, et al. A study of computer-assisted tomography. I. The incidence of positive CAT scans in an asymptomatic group of patients. *Spine* 1984; 9(6):549-551.
3. Saifuddin A. MRI of acute spinal trauma. *Skeletal Radiol* 2001; 30(5):237-246.
4. Brown CVR, Antevil JL, Sise MJ, Sack DI. Spiral computed tomography for the diagnosis of cervical, thoracic, and lumbar spine fractures: Its time has come. *J Trauma* 2005; 58(5):890-896.
5. Wintermark M, Mouhsine E, Theumann N, et al. Thoracolumbar Spine Fractures in Patients who have Sustained Severe Trauma: Depiction with Multi-Detector Row CT. *Radiology* 2003; 227: 681-689.
6. Jaramillo D, Poussaint TY, Grottka BE. Scoliosis: Evidence-Based Diagnostic Evaluation. *Neuroimag Clin N Am* 2003; 13: 335-341.