



Notice of Independent Review Decision-WC  
**CLAIMS EVAL REVIEWER REPORT - WC**



**DATE OF REVIEW: 6-21-11**

**CLAIMS EVAL**

**IRO CASE #:**

*Utilization Review and  
Peer Review Services*

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE**

MRI lumbar

**A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION**

American Board of Orthopaedic Surgery-Board Certified

**REVIEW OUTCOME**

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations should be:

- Upheld (Agree)
- Overturned (Disagree)
- Partially Overturned (Agree in part/Disagree in part)

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

**INFORMATION PROVIDED TO THE IRO FOR REVIEW**

- 8-10-09 MRI of the lumbar spine.
- 8-12-09 EMG/NCS of the lower extremities performed by MD.
- Physical therapy notes on 1-9-10, 1-26-10, 3-8-10, 3-9-10, 3-10-10, 3-11-10, 3-15-10, 3-16-10, 3-17-10, 3-19-10, 3-26-10, 3-30-10, 3-31-10, 4-1-10, 4-22-10, 4-23-10, 4-26-10, 5-12-10.
- 8-14-10 MD., performed a Designated Doctor Evaluation.
- 8-23-10 MRI of the lumbar spine.
- 11-10-10 MD., performed a Carrier Selected Evaluation.
- 2-15-11 MD., office visit.
- 3-15-11 UR review performed by MD.
- 4-6-11 MD., provided a letter.
- 4-19-11 UR performed by DO.

**PATIENT CLINICAL HISTORY [SUMMARY]:**

**8-10-09** MRI of the lumbar spine shows degenerative disc disease with left sided posterolateral 3 mm protrusion/osteophyte complex at L5-S1 creating encroachment on the left side of the thecal sac and left S1 nerve root. Broad based annular bulge with mild bilateral facet arthroplasty at L4-L5 crating flattening of the thecal sac and mild bilateral lateral recess encroachment. Degenerative disc disease with broad based annular bulge and posterior spondylosis at L2-L3, most notably on the right, creating flattening of the thecal sac without significant nerve root compromise.

**8-12-09** EMG/NCS of the lower extremities performed by MD., showed findings consistent with acute denervation process involving the left S1 nerve.

**8-14-10** MD., performed a Designated Doctor Evaluation. He certified the claimant had not reached MMI but expected to reach MMI on 11-14-10. The evaluator recommended a lumbar MRI, evaluation with lumbar epidural steroid injection for treatment, and additional physical therapy if needed.

**8-23-10** MRI of the lumbar spine shows at L1-L2: There is no disc bulge, herniation or neural foraminal narrowing. At L2-L3: Posterior 1-2 mm disc protrusion presses on the thecal sac with superimposed bilateral posterolateral 2 mm disc protrusion/herniation narrowing the medial aspect of the neural foramen bilaterally. At L3-L4: Minimal posterior 1-2 mm disc protrusion presses on the thecal sac with no neural foraminal narrowing. At L4-L5: Posterior 1-2 mm disc protrusion presses on the thecal sac narrowing the medial aspect of the neural foramen bilaterally. At L5-S1: Minimal posterior 1-2 mm disc protrusion contacts the anterior aspect of the S1 nerve root bilaterally, as they began to emerge from the thecal sac on each side as seen on T1 weighted axial image #13. Disc pathology extends laterally to narrow the medial aspect of the neural foramen on each side. Disc pathology appears to extend laterally to the left on T2 weighted axial image #13 and may in fact impinge on the thecal sac in that location.

**11-10-10** MD., performed a Carrier Selected Evaluation. He certified the claimant had not reached MMI and estimated 2-1-11 as the date of MMI. The evaluator recommended a CT myelography to better delineate any significant underfilling at the L5-S1 level that might be amenable to limited laminectomy/decompression.

**2-15-11** MD., the claimant is XX years old female who injured her low back at work. She was trying to get out of a door to get out of the way while trying to catch someone. This person assaulted her as he thought she was trying to block the door. She has been in pain since. She has been on pain medications, muscle relaxers prescribed by Dr.. She has concluded 12 physical therapy sessions. She had a right epidural steroid injection that provided 70% pain relief for six months on the left for 10 days. On exam, the claimant has mild paraspinal muscle pain with palpation. Range of motion is decreased. Muscle strength is 5/5 except at 4+/5 at left gastroc. Sensory was reduced at left S1. DTR are 2+ at patella bilaterally, right Achilles DTR was 2+ and on the left 1+. The claimant does not want another injection. The evaluator reported that there is no doubt that the patient sustained significant injury to the lumbar spine with disc protrusion at LEFT L5-S1 causing significant impingement and LEFT S1 nerve root. Since that injury the patient has undergone multiple sessions of physical therapy followed by a trial of lumbar epidural steroid injection at the effected level. Despite the interventional pain procedure the pain level is persistent with sharp shooting radiations to LEFT lower extremity. Patient documents no relief with the procedure and has failed conservative care. On clinical examination she has documented radiculopathy with decreased deep tendon reflexes at Left S1. In addition to that the patient has a sensory deficit at the affected dermatomes. She qualifies for lumbar hemilaminectomy and discectomy at LEFT L5-S1 which seems to be an effective approach to relieve her low back and left lower extremity pain.

**3-15-11** UR review performed by, MD., the claimant Request for lumbar MRI. Most recent MD note is 2-15-11. Claimant had a recent MRI in 8/10 and a CT myelogram which has not been supplied for her review. However there does not appear to be any significant change in physical examination findings in which to support request for additional diagnostic testing. Request not medically necessary. Refer to ODG section 722.1 subsection under MRI.

**4-6-11 MD.**, provided a letter. Based on the clinical signs and symptoms and anticipating surgery to the lumbar spine without requested MRI of the lumbar spine without contrast which was denied by the insurance company on March 2011. The rationale provided by the reviewing physician and a letter of denial was: The patient did have MRI on August 2010 and a CT myelogram was not supplied for his review. In addition that there does not appear to be any significant change in the clinical examination and support diagnostic testing. With respect he would like to bring to the attention that there has not been no CT myelogram performed on this claimant. In addition, he documented that there was a deterioration in the claimant's clinical status with reduction and DTR as well as sensory findings. He was anticipating surgical intervention that would be necessary for prolonged pain relief and resolution of the left lower extremity radiculopathy. Based on the previous MRI, surgery was requested. However, the reviewing physician again denied the surgery based on the fact that the CT myelogram was not provided for review. The evaluator noted that the MRI without contrast has been recommended to decide the exact level of surgery that is needed for prolonged pain relief and resolve her lower extremity radiculopathy.

**4-19-11 UR** performed by DO., notes an MRI of the lumbar spine is not medically necessary or appropriate. This XX-year-old female was injured XX/XX/XXXX, when a person pulled her left arm up and put his knee on her lower back slamming her against the wall on top of a fire extinguisher. The claimant had an MRI of the shoulder August 10, 2010, and had an MRI of the thoracic spine performed the same date. The claimant subsequently was then treated with physical therapy, chiropractic treatment, TENS, and injections. The designated doctor evaluation of August 14, 2010, documented decreased left L4, L5, and S1 sensation and documented deep tendon reflexes (DTRs) of patella at 2+ bilaterally and Achilles at 0 bilaterally. The MRI at that time was noted to reveal an L5-S1 disc bulge to the left and felt the claimant was not at MMI. Subsequently, in response to a denial, Dr. stated the claimant had not had a CT myelogram. The claimant had worsening of her clinical status with reduction in the deep tendon reflexes and sensory findings but does not specifically document the worsening. As the designated doctor found 0 DTRs for the Achilles and 2+ for the patella, Dr. needs to describe what worsening deep tendon reflex is present and, as the prior review indicated decreased sensation left L4, L5, and S1, again, Dr. needs to discuss where the sensory change has taken place. Therefore, in line with ODG criteria for repeat MRIs, the requested study is non-certified.

**ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION.**

I have reviewed the records provided and there is not adequate documentation to support the request for a repeat MRI of the Lumbar Spine.

Likewise, the findings on the Lumbar MRI of 08/10/09 revealed pre-existing degenerative changes which were not produced by the mechanism of injury reported. Therefore, the request for a lumbar MRI is not reasonable or medically necessary.

**ODG-TWC, last update 6-17-11 Occupational Disorders of the Low Back – MRI:** Recommended for indications below. MRI's are test of choice for patients with prior back surgery. Repeat MRI is not routinely recommended, and should be reserved for a significant change in symptoms and/or findings suggestive of significant pathology (eg, tumor, infection, fracture, neurocompression, recurrent disc herniation). (Bigos, 1999)

(Mullin, 2000) (ACR, 2000) (AAN, 1994) (Aetna, 2004) (Airaksinen, 2006) (Chou, 2007) Magnetic resonance imaging has also become the mainstay in the evaluation of myelopathy. An important limitation of magnetic resonance imaging in the diagnosis of myelopathy is its high sensitivity. The ease with which the study depicts expansion and compression of the spinal cord in the myelopathic patient may lead to false positive examinations and inappropriately aggressive therapy if findings are interpreted incorrectly. (Seidenwurm, 2000) There is controversy over whether they result in higher costs compared to X-rays including all the treatment that continues after the more sensitive MRI reveals the usual insignificant disc bulges and herniations. (Jarvik-JAMA, 2003) In addition, the sensitivities of the only significant MRI parameters, disc height narrowing and annular tears, are poor, and these findings alone are of limited clinical importance. (Videman, 2003) Imaging studies are used most practically as confirmation studies once a working diagnosis is determined. MRI, although excellent at defining tumor, infection, and nerve compression, can be too sensitive with regard to degenerative disease findings and commonly displays pathology that is not responsible for the patient's symptoms. With low back pain, clinical judgment begins and ends with an understanding of a patient's life and circumstances as much as with their specific spinal pathology. (Carragee, 2004) Diagnostic imaging of the spine is associated with a high rate of abnormal findings in asymptomatic individuals. Herniated disk is found on magnetic resonance imaging in 9% to 76% of asymptomatic patients; bulging disks, in 20% to 81%; and degenerative disks, in 46% to 93%. (Kinkade, 2007) Baseline MRI findings do not predict future low back pain. (Borenstein, 2001) MRI findings may be preexisting. Many MRI findings (loss of disc signal, facet arthrosis, and end plate signal changes) may represent progressive age changes not associated with acute events. (Carragee, 2006) MRI abnormalities do not predict poor outcomes after conservative care for chronic low back pain patients. (Kleinstück, 2006) The new ACP/APS guideline as compared to the old AHCPR guideline is more forceful about the need to avoid specialized diagnostic imaging such as magnetic resonance imaging (MRI) without a clear rationale for doing so. (Shekelle, 2008) A new meta-analysis of randomized trials finds no benefit to routine lumbar imaging (radiography, MRI, or CT) for low back pain without indications of serious underlying conditions, and recommends that clinicians should refrain from routine, immediate lumbar imaging in these patients. (Chou-Lancet, 2009) Despite guidelines recommending parsimonious imaging, use of lumbar MRI increased by 307% during a recent 12-year interval. When judged against guidelines, one-third to two-thirds of spinal computed tomography imaging and MRI may be inappropriate. (Deyo, 2009) As an alternative to MRI, a pain assessment tool named Standardized Evaluation of Pain (StEP), with six interview questions and ten physical tests, identified patients with radicular pain with high sensitivity (92%) and specificity (97%). The diagnostic accuracy of StEP exceeded that of a dedicated screening tool for neuropathic pain and spinal magnetic resonance imaging. (Scholz, 2009) Clinical quality-based incentives are associated with less advanced imaging, whereas satisfaction measures are associated with more rapid and advanced imaging, leading Richard Deyo, in the Archives of Internal Medicine to call the fascination with lumbar spine imaging an idolatry. (Pham, 2009) Primary care physicians are making a significant amount of inappropriate referrals for CT and MRI, according to new research published in the Journal of the American College of Radiology. There were high rates of inappropriate examinations for spinal CTs (53%), and for spinal MRIs (35%), including

lumbar spine MRI for acute back pain without conservative therapy. (Lehnert, 2010) Degenerative changes in the thoracic spine on MRI were observed in approximately half of the subjects with no symptoms in this study. (Matsumoto, 2010) This large case series concluded that iatrogenic effects of early MRI are worse disability and increased medical costs and surgery, unrelated to severity. (Webster, 2010) Routine imaging for low back pain is not beneficial and may even be harmful, according to new guidelines from the American College of Physicians. Imaging is indicated only if they have severe progressive neurologic impairments or signs or symptoms indicating a serious or specific underlying condition, or if they are candidates for invasive interventions. Immediate imaging is recommended for patients with major risk factors for cancer, spinal infection, cauda equina syndrome, or severe or progressive neurologic deficits. Imaging after a trial of treatment is recommended for patients who have minor risk factors for cancer, inflammatory back disease, vertebral compression fracture, radiculopathy, or symptomatic spinal stenosis. Subsequent imaging should be based on new symptoms or changes in current symptoms. (Chou, 2011) The National Physicians Alliance compiled a "top 5" list of procedures in primary care that do little if anything to improve outcomes but excel at wasting limited healthcare dollars, and the list included routinely ordering diagnostic imaging for patients with low back pain, but with no warning flags, such as severe or progressive neurologic deficits, within the first 6 weeks. (Aguilar, 2011) Owning MRI equipment is strongly correlated with patients receiving MRI scans, and having an MRI scan increases the probability of having surgery by 34%. (Shreibati, 2011) There is support for MRI, depending on symptoms and signs, to rule out serious pathology such as tumor, infection, fracture, and cauda equina syndrome. Patients with severe or progressive neurologic deficits from lumbar disc herniation, or subjects with lumbar radiculopathy who do not respond to initial appropriate conservative care, are also candidates for lumbar MRI to evaluate potential for spinal interventions including injections or surgery. For unequivocal evidence of radiculopathy, see AMA Guides. (Andersson, 2000) See also ACR Appropriateness Criteria™. See also Standing MRI.

Indications for imaging -- Magnetic resonance imaging:

- Thoracic spine trauma: with neurological deficit
- Lumbar spine trauma: trauma, neurological deficit
- Lumbar spine trauma: seat belt (chance) fracture (If focal, radicular findings or other neurologic deficit)
- Uncomplicated low back pain, suspicion of cancer, infection, other "red flags"
- Uncomplicated low back pain, with radiculopathy, after at least 1 month conservative therapy, sooner if severe or progressive neurologic deficit.
- Uncomplicated low back pain, prior lumbar surgery
- Uncomplicated low back pain, cauda equina syndrome
- Myelopathy (neurological deficit related to the spinal cord), traumatic
- Myelopathy, painful
- Myelopathy, sudden onset
- Myelopathy, stepwise progressive
- Myelopathy, slowly progressive
- Myelopathy, infectious disease patient
- Myelopathy, oncology patient

**A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:**

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN
- INTERQUAL CRITERIA
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
- MILLIMAN CARE GUIDELINES
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
- TEXAS TACADA GUIDELINES
- TMF SCREENING CRITERIA MANUAL
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)