UniMed Direct

IRO# 5356
5068 West Plano Parkway Suite 122
Plano, Texas 75093
Phone: (972) 931-5100

DATE OF REVIEW: JULY 13TH, 2010

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:
IRO - MRI of the lumbar spine 3T with contrast

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:
This case was reviewed by a Texas licensed MD, specializing in Orthopedic Surgery. The physician advisor has the following additional qualifications, if applicable:

ABMS Orthopaedic Surgery
ABMS Orthopaedic Surgery

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

☒ Upheld

Health Care Service(s) in Dispute	CPT Codes	Date of Service(s)	Outcome of Independent Review
IRO - MRI of the lumbar spine 3T with contrast		-	Upheld

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

No	Document Type	Provider or Sender	Page Count	Service Start Date	Service End Date
1	IRO Request		14	06/23/2010	06/23/2010
2	Claim Dispute Notice		1	03/25/2010	03/25/2010
3	Claim File		2	04/23/2010	04/23/2010
4	Claim File		2	03/04/2009	01/25/2010
5	Designated Doctor Report		6	07/01/2009	07/01/2009
6	Diagnostic Test		2	02/18/2009	02/18/2009
7	Diagnostic Test		5	08/25/2009	01/07/2010
8	Impairment/Disability Rating Report		2	04/29/2010	04/29/2010
9	Impairment/Disability Rating Report		2	02/02/2010	02/02/2010
10	Office Visit Report		4	05/18/2010	05/18/2010
11	Office Visit Report		11	01/28/2009	03/11/2009
12	Office Visit Report		7	08/18/2009	01/12/2010

13	PT Notes		4	02/19/2009	02/19/2009
14	PT Notes		4	11/03/2009	01/28/2010
15	UR Request		4	05/27/2010	06/14/2010
16	Archive		70	02/18/2009	06/23/2010

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a male who suffered a straining injury to the lumbar spine on xx/xx/xx. He was initially evaluated xxxxx He reported an ill defined injury xxx weeks prior to the injury lifting the heavy barrel on 01/26/2009. An initial diagnosis of lumbar strain syndrome was established and treatment was instituted utilizing activity modification, medication and physical therapy. An MRI scan revealed large HNP L4-L5, less so L3-L4. Subsequently, he developed left leg pain. Physical findings included diminished range of motion of the lumbosacral spines and SLR test positive. A lumbar discectomy at L4-L5 was performed on 7/16/2009. The patient has suffered persistent severe low back pain. He has been evaluated for "failed back syndrome". He has been treated with physical therapy for SI joint dysfunction. A lumbar myelogram was performed 1/7/10 revealing degenerative changes at L5-S1 and post operative changes L4-L5. The patient has been evaluated on 05/18/2010 for chronic pain management. The current request is for repeat MRI scan utilizing 3 tesla technology. The request has been considered and denied. It was reconsidered and denied.

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

1. Is the performance of a repeat MRI scan utilizing 3 tesla technology medically necessary and appropriate?

No. The applicable passage from the ODG, 2010, low back chapter is cited below. This patient suffers a "failed back syndrome". He has had special imaging studies including a CT myelogram on 1/7/2010 indicating the gradual development of lumbar degenerative disc disease and spondylosis. There does not appear to be any significant changes in objective neurological findings. In the absence of changes in neurological findings, repeat MRI imaging is not medically necessary. The prior denials appear to have been appropriate and should be upheld.

MRIs (magnetic resonance imaging)	Recommended for indications below. MRI's are test of choice for patients with prior back surgery. Repeat MRI's are indicated only if there has been progression of neurologic deficit. (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 controversary 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 anular 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) 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. 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. (For unequivocal evidence of radiculopathy, see AMA Guides, 5th Edition, page 382-383.) (Andersson, 2000) - 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)**