Claims Eval

Notice of Independent Review Decision

January 28, 2013

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Lumbar spine discogram with CT for L4-L5 62290 x1, 72295.26 x1, 72132

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

American Board of Orthopaedic Surgery

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 medical necessity exists for each of the health care services in dispute.

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

- 4-28-11 x-rays of the lumbar spine
- 4-28-11
- 4-30-11

- 5-5-11 MRI of the lumbar spine
- 5-5-11 RAD MRI screen of the skull
- 5-5-11
- 5-12-11
- 5-21-11
- 6-1-11 office visit
- 6-18-11
- 6-19-11
- 7-18-11
- 8-24-11 medical evaluation
- 9-8-11 EMG/NCV
- 1-4-12 office visit
- 1-4-12 x-rays of the lumbar spine
- 1-23-12 x-rays of the lumbar spine
- 1-23-12 MRI of the lumbar spine
- Follow up with on 2-29-12
- 4-2-12 operative procedure
- Follow up on 11-7-12
- 11-20-12 MRI of the lumbar spine
- Follow up on 12-3-12
- 12-13-12 performed a UR
- 1-2-13 UR review

PATIENT CLINICAL HISTORY [SUMMARY]:

4-28-11 X-rays of the lumbar spine showed a normal lumbar spine.

4-28-11 the claimant has lower back pain. Hand written illegible notes.

4-30-11 the claimant is still having lower back pain that he rates a 7/10. Hand written illegible notes.

5-5-11 MRI of the lumbar spine showed there is a left paramedian disk protrusion at L5-S1 which touches the left S1 nerve root without definite displacement with mild left neural foraminal narrowing without canal stenosis.

5-5-11 RAD MRI screen of the skull showed normal Waters view of the face. No foreign bodies are identified which might preclude MR scanning.

5-5-11 hand written illegible notes.

5-12-11 hand written illegible notes.

5-21-11 hand written illegible notes.

6-1-11 the claimant has low back pain that radiates down the left buttocks and left leg that he rates an 8/10. Exam shows tender to palpation in the left lumbar spine. He has a slight limp favoring the left leg. Range of motion is restricted with pain. Straight leg raise bilaterally at 45 degrees. Hypesthesia over the left foot. Reflexes are diminished in the left ankle. Impression: Low back and left leg pain. Left L5-S1 paramedian disc protrusion impinging on the left S1 nerve root. Plan: Recommended physical therapy and lumbar ESI. Prescribed Relafen, Robaxin, and Tramadol. He can only do sedentary work if available.

6-18-11 hand written illegible notes.

6-19-11 hand written illegible notes.

7-18-11 hand written illegible notes.

8-24-11 performed a Designated Doctor Evaluation. He certified the claimant has not reached Maximum Medical Improvement but is expected to reach Maximum Medical Improvement on 11-25-11.

9-8-11 EMG/NCV of the bilateral lower extremities and lumbosacral paraspinal muscles showed evidence suggestive of mild S1 radiculopathy.

1-4-12 the claimant presents with low back pain and symptoms down the left leg. He reports that he was at work when he went through the entire first floor. Exam shows an antalgic gait patter. Straight leg raise on the left with back pain and symptoms down the left leg. Positive straight leg raise on the right as well with low back pain. He has decreased sensation of the posterior aspect of the left leg. Impression: Lumbar radiculopathy. Disk bulge. Disk degeneration in the lumbar spine. Plan: Get new MRI. Try Lyrica. X-rays of the lumbar spine shows no abnormal curvature noted. There is a loss of disk height at the 4-5 and 5-1 level. No signs of fractures or spondylolisthesis.

1-4-12 X-rays of the lumbar spine showed mild narrowing of the L5-S1 disc space.

1-23-12 X-rays of the lumbar spine showed mild narrowing of the L5-S1 disc space.

1-23-12 MRI of the lumbar spine showed slightly diminished size of a left paracentral disk protrusion at L5-S1. There is no central canal or neural foraminal narrowing.

Follow up on 2-29-12, the claimant rates his back pain a 9/10. Plan: Left sided root

block at L5-S1.

4-2-12 preoperative diagnosis: Lumbar disk herniation at L5-S1. Postoperative diagnosis: Lumbar disk herniation at L5-S1. Procedure: Use of C-arm fluoroscopy. Use of an operating microscope. Left sided transforaminal selective root block and epidural steroid.

Follow up on 11-7-12, the claimant follows up on lumbar and left leg pain. He states his symptoms did not improve following the L5-S1 injection. He feels his symptoms are worsening. Exam shows straight leg raise is positive on the left at 75 degrees. Impression: Left L5-S1 HNP with worsening symptoms. Plan: Recommended repeat MRI of the lumbar spine.

11-20-12 MRI of the lumbar spine showed broad based left paracentral disk protrusion at L5-S1 stable.

Follow up on 12-3-12, the claimant follows up on his MRI. He is continuing to have low back pain with left leg pain. He has one injection that worsened his symptoms. Impression: Left L5-S1 HNP with worsening symptoms. Plan: Recommended a discogram at L5-S1.

12-13-12 performed a UR. He notes that it is not clear as to whether other pain generators have been ruled out or not including lumbar facet mediated pain, radicular pain, sacroiliac joint pain or myofascial pain. Also discography is unproven in helping to clarify the specific pain generator and is not supported in the guideline criteria. Therefore, this request is not medically reasonable or medically necessary.

1-2-13 UR review. He notes that it is not clear as to whether other pain generators have been ruled out or not including lumbar facet mediated pain, radicular pain, sacroiliac joint pain or myofascial pain. Also discography is unproven in helping to clarify the specific pain generator and is not supported in the guideline criteria. Therefore, this request is not medically reasonable or necessary.

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

Medical records reflect a claimant with a history of low back pain who has been treated with medications, physical therapy, and an epidural steroid injection, which did not provide any improvement. He had an MRI that showed left L5-S1 HNP. There has been a request for a lumbar discogram.

Current evidence based medicine reflects that discogram is not recommended. The conclusions of recent, high quality studies on discography have significantly

questioned the use of discography results as a preoperative indication for either IDET or spinal fusion. It is not clear why this claimant is having such pain and why he has not responded to any form of treatment. Other pain generators have not been excluded. With literature not supporting this diagnostic procedure, the request for lumbar spine discogram with CT for L4-L5 62290 x1, 72295.26 x1, and 72132 is not reasonable or medically necessary.

Per ODG 2012 Discography: Not recommended. In the past, discography has been used as part of the pre-operative evaluation of patients for consideration of surgical intervention for lower back pain. However, the conclusions of recent, high quality studies on discography have significantly questioned the use of discography results as a preoperative indication for either IDET or spinal fusion. These studies have suggested that reproduction of the patient's specific back complaints on injection of one or more discs (concordance of symptoms) is of limited diagnostic value. (Pain production was found to be common in non-back pain patients, pain reproduction was found to be inaccurate in many patients with chronic back pain and abnormal psychosocial testing, and in this latter patient type, the test itself was sometimes found to produce significant symptoms in non-back pain controls more than a year after testing.) Also, the findings of discography have not been shown to consistently correlate well with the finding of a High Intensity Zone (HIZ) on MRI. Discography may be justified if the decision has already been made to do a spinal fusion, and a negative discogram could rule out the need for fusion on that disc (but a positive discogram in itself would not allow fusion). (Carragee-Spine, 2000) (Carragee2-Spine, 2000) (Carragee3-Spine, 2000) (Carragee4-Spine, 2000) (Bigos, 1999) (ACR, 2000) (Resnick, 2002) (Madan, 2002) (Carragee-Spine, 2004) (Carragee2, 2004) (Maghout-Juratli, 2006) (Pneumaticos, 2006) (Airaksinen, 2006) (Manchikanti, 2009) Discography may help distinguish asymptomatic discs among morphologically abnormal discs in patients without psychosocial issues. Precise prospective categorization of discographic diagnoses may predict outcomes from treatment, surgical or otherwise. (Derby, 2005) (Derby2, 2005) (Derby, 1999) Positive discography was not highly predictive in identifying outcomes from spinal fusion. A recent study found only a 27% success from spinal fusion in patients with low back pain and a positive single-level low-pressure provocative discogram, versus a 72% success in patients having a well-accepted single-level lumbar pathology of unstable spondylolisthesis. (Carragee, 2006) The prevalence of positive discogram may be increased in subjects with chronic low back pain who have had prior surgery at the level tested for lumbar disc herniation. (Heggeness, 1997) Invasive diagnostics such as provocative discography have not been proven to be accurate for diagnosing various spinal conditions, and their ability to effectively guide therapeutic choices and improve ultimate patient outcomes is uncertain. (Chou, 2008) Although discography, especially combined with CT scanning, may be

more accurate than other radiologic studies in detecting degenerative disc disease, its ability to improve surgical outcomes has yet to be proven. It is routinely used before IDET, yet only occasionally used before spinal fusion. (Cohen, 2005) Provocative discography is not recommended because its diagnostic accuracy remains uncertain, false-positives can occur in persons without low back pain, and its use has not been shown to improve clinical outcomes. (Chou2, 2009) This recent RCT concluded that, compared with discography, injection of a small amount of bupivacaine into the painful disc was a better tool for the diagnosis of discogenic LBP. (Ohtori, 2009) Discography may cause disc degeneration. Even modern discography techniques using small gauge needle and limited pressurization resulted in accelerated disc degeneration (35% in the discography group compared to 14% in the control group), disc herniation, loss of disc height and signal and the development of reactive endplate changes compared to match-controls. These finding are of concern for several reasons. Discography as a diagnostic test is controversial and in view of these findings the utility of this test should be reviewed. Furthermore, discography in current practice will often include injecting discs with a low probability of being symptomatic in an effort to validate other disc injections, a so-called control disc. Although this strategy has never been confirmed to increase test validity or utility, injecting normal discs even with small gauge needles appears to increase the rate of degeneration in these discs over time. The phenomenon of accelerated adjacent segment degeneration adjacent to fusion levels may be, in part, explained by previous disc puncture if discography was used in segments adjacent to the fusion. Similarly, intradiscal therapeutic strategies (injecting steroids, sclerosing agents, growth factors, etc.) have been proposed as a method to treat, arrest or prevent symptomatic disc disease. This study suggests that the injection procedure itself is not completely innocuous and a recalculation of these demonstrated risks versus hypothetical benefits should be considered. (Carragee, 2009) More in vitro evidence that discography may cause disc degeneration. (Gruber, 2012) Discography involves the injection of a water-soluble imaging material directly into the nucleus pulposus of the disc. Information is then recorded about the pressure in the disc at the initiation and completion of injection, about the amount of dye accepted, about the configuration and distribution of the dye in the disc, about the quality and intensity of the patient's pain experience and about the pressure at which that pain experience is produced. Both routine x-ray imaging during the injection and post-injection CT examination of the injected discs are usually performed as part of the study. There are two diagnostic objectives: (1) to evaluate radiographically the extent of disc damage on discogram and (2) to characterize the pain response (if any) on disc injection to see if it compares with the typical pain symptoms the patient has been experiencing. Criteria exist to grade the degree of disc degeneration from none (normal disc) to severe. A symptomatic degenerative disc is considered one that disperses injected contrast in an abnormal,

degenerative pattern, extending to the outer margins of the annulus and at the same time reproduces the patient's lower back complaints (concordance) at a low injection pressure. Discography is not a sensitive test for radiculopathy and has no role in its confirmation. It is, rather, a confirmatory test in the workup of axial back pain and its validity is intimately tied to its indications and performance. As stated, it is the end of a diagnostic workup in a patient who has failed all reasonable conservative care and remains highly symptomatic. Its validity is enhanced (and only achieves potential meaningfulness) in the context of an MRI showing both dark discs and bright, normal discs -- both of which need testing as an internal validity measure. And the discogram needs to be performed according to contemporary diagnostic criteria -- namely, a positive response should be low pressure, concordant at equal to or greater than a VAS of 7/10 and demonstrate degenerative changes (dark disc) on MRI and the discogram with negative findings of at least one normal disc on MRI and discogram. See also Functional anesthetic discography (FAD).

Discography is Not Recommended in ODG.

Patient selection criteria for Discography if provider & payor agree to perform anyway:

o Back pain of at least 3 months duration
o Failure of recommended conservative treatment including active physical therapy
o An MRI demonstrating one or more degenerated discs as well as one or more normal appearing discs to allow for an internal control injection (injection of a normal disc to validate the procedure by a lack of a pain response to that injection)
o Satisfactory results from detailed psychosocial assessment (discography in subjects with emotional and chronic pain problems has been linked to reports of significant back pain for prolonged periods after injection, and therefore should be avoided)
o Intended as screening tool to assist surgical decision making, i.e., the surgeon feels that lumbar spine fusion is appropriate but is looking for this to determine if it is not indicated (although discography is not highly predictive) (Carragee, 2006)
NOTE: In a situation where the selection criteria and other surgical indications for fusion are conditionally met, discography can be considered in preparation for the surgical procedure. However, all of the qualifying conditions must be met prior to proceeding to discography as discography should be viewed as a non-diagnostic but confirmatory study for selecting operative levels for the proposed surgical procedure. Discography should not be ordered for a patient who does not meet surgical criteria.
o Briefed on potential risks and benefits from discography and surgery
o Single level testing (with control) (Colorado, 2001)
o Due to high rates of positive discogram after surgery for lumbar disc herniation, this should be potential reason for non-certification.

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)**