CLAIMS EVAL

Utilization Review and Peer Review Services

Notice of Independent Review Decision-WC

DATE OF REVIEW: 10-7-09

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Inpatient decompression, laminectomy lumbar disc with microscopic/Metrix LOS 1 day 63030, 61712

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

- 9-15-06 MRI of the pelvis and lumbar spine.
- 11-17-06 bone scan dated.
- 12-1-06 EMG/NCS of the lower extremities.
- 4-30-07 , MD., performed a Designated Doctor Evaluation.
- 6-26-07 , MD., office visit.
- , MD., office visits from 10-3-07 through 7-23-09.
- 4-18-08 MRI of the lumbar spine.
- 5-3-08 , MD., letter of clarification.
- 8-26-08 EMG/NCS performed by , DO., and , DO.
- 3-11-09 EMG/NCS of the lower extremities performed by Dr. .
- 4-23-09 MRI of the lumbar spine.
- 4-23-09 CT of the abdomen.
- 6-24-09, , MD., performed a Utilization Review.
- 7-22-09, , MD., performed an Appeal.

PATIENT CLINICAL HISTORY [SUMMARY]:

MRI of the pelvis dated 9-15-06 showed no occult fracture or marrow replacement.

MRI of the lumbar spine dated 9-15-06 showed at L1-L2 and L2-L3 mild degenerative disc disease with spondylosis. No disc herniation seen. At L4-L5, there is mild bilateral foraminal narrowing. At L5-S1, flattening of the thecal sac noted with bilateral facet joint arthrosis. There is moderate narrowing of the left with mild narrowing of the right neuroforamen.

A bone scan dated 11-17-06 shows mild increase activity in the right ankle and mid right tibia that is most likely posttraumatic in origin. Here is normal lumbar spine SPECT.

EMG/NCS of the lower extremities dated 12-1-06 performed by , DO., was normal.

On 4-30-07, MD., performed a Designated Doctor Evaluation. He certified the claimant had reached MMI and awarded the claimant 0% impairment.

On 6-26-07, , MD., notes the claimant has signs and symptoms of ruptured disc with L4, L5 nerve damage. The claimant has been recently evaluated by a neurosurgeon. He believes that past MRI studies were not adequate and recommend lumbar MRI.

On 10-3-07, the claimant was evaluated by , MD. The claimant reported lower back pain radiating to the lower extremities, left more than right. On exam, the claimant walks with an antalgic gait. SLR was positive at 30 degrees bilaterally. His right calf was measured as being 39 cm and his left calf was at 35.5 cm. beep tendon reflexes were found to be decreased in the right ankle area. Neurological exam showed decreased sensation at L5 bilateral and was found to have no gross motor deficit. The evaluator recommended x-rays of the lumbar spine, MRI of the lumbar spine, EMG/NCS of the lower extremity. The claimant was placed off work status.

MRI of the lumbar spine dated 4-18-08 showed mild disc bulge at L5-S1.

A letter provided by , MD., dated 5-3-08 notes at the time of his evaluation the records indicated an essentially normal EMG as well as MRI findings consistent with degenerative changes, which were not a result of the job related injury. Furthermore, the claimant had been evaluated by Dr. who concluded that the claimant was not a surgical candidate. Since no new objective information, that indicates that there has been significant pathology overlooked or not previously considered. His opinion remained the same.

EMG/NCS performed by , DO., and , DO., dated 8-26-08 was normal.

Office visit performed by Dr. , MD., dated 12-1-08 notes the claimant is a xx-year-old claimant that the evaluator had the opportunity to evaluate in my office on 10-3-07. The claimant has a history that he sustained an injury at work on xx/xx/xx, bumping his right hip, right groin and Iliac crest; at the time of Impact, he was pushed and hit his back against the wail of the ditch he was working in, almost falling to the ground. The claimant was able to get out of the ditch on his own with difficulty; started complaining of pain in his low back radiating to the lower extremities, more to the left than to the right pain in the right lilac crest and in the hip area. He was able to continue working in light duty. Despite the back pain, 2 weeks later, he was evaluated/n , at the by the doctor in the emergency room and was given conservative treatment. Then he was seen by Dr. in and given further conservative treatment; because of no improvement, he changed doctors and went to see Dr. who became his treating doctor. Due to lack of improvement with the conservative treatment, he was referred to Dr. from the

Orthopaedic Department, who treated him for about 7 months with conservative treatment then he was evaluated by Dr. in , for Pain Management and he received several injections with no help, he was referred back to Dr. and he was told that there was “nothing else more that he can do.” On 4-30-07, the claimant was evaluated by Dr. , acting as a Designated Doctor for the Texas Work Compensation, who gave him an MMI date of 4-30-07 with 0% Whole Person Impairment rating. On exam, the claimant has deep tendon reflexes, motor and sensory examination was normal in the lower extremities. He was found to have decreased range of motion of the lumbar spine with spasm; deep tendon reflexes with decreased ankle jerk, more in the right than left; decreased sensation in the distribution of the L5 root bilateral; straight leg raising was positive at 30 degrees bilateral. He has an antalgic gait. The claimant was found to have atrophy of the left calf; it measured 34.5 cm when the right calf measured 39 cm, a difference of 1.5”. The evaluator recommended an EMG/NCS of the lower extremities and a CT scan of the abdomen.

An EMG/NCS of the lower extremities performed by Dr. dated 3-11-09 showed evidence consistent with left L5-S1 chronic radiculopathy with chronic neurologic changes.

Followup visit dated 3-26-09 notes the claimant continues with low back pain radiating to the lower extremities. The evaluator recommended an MRI of the lumbar spine and CT of the abdomen. The claimant is continued with his analgesics. The claimant will remain off work.

Followup visit with Dr. dated 4-16-09 notes the claimant is having pain to the low back radiating to the lower extremities, left greater than right, all the way dawn to the left fact.. The results of the EMG/NCV of the lower extremities were reviewed with the claimant that demonstrated chronic radiculopathy at L5-S1 with chronic neurogenic changes. So far he has not had diagnostic workup. He continues with pain to the low back radiating to the lower extremities, left greater than right, to the feet. On exam, the claimant has decreased range of motion to the lumbar spine with spasms. Straight leg raising is positive at 40 degrees, right and 20 degrees, left. Atrophy to the lower extremities is the same. Deep tendon reflexes were found to be hypoactive although equal. The evaluator recommended an MRI of the lumbar spine and a CT of the abdomen. The claimant will remain off work.

MRI of the lumbar spine dated 4-23-09 shows minimal posterior central disc protrusion, left posterolateral disc bulge, left neural canal narrowing L5-S1.

CT of the abdomen dated 4-23-09 shows no evidence of an abdominal mass demonstrated.

Followup visit dated 4-30-09 notes the claimant is having low back pain radiating to the lower extremities, left greater than right. The evaluator recommended an evaluation at Hospital Spine department. He was given a prescription for Lortab and Soma.

Followup with Dr. on 5-21-09 notes the claimant continues with low back pain and radiation to the lower extremities. The claimant was subjected to an MRI of the lumbar spine that demonstrated a protruded disk at L5-S1. CT of the abdomen showed intra abdominal tumor. The claimant advised to have an evaluation at Department. Treatment options were discussed. The evaluator recommended decompressive laminectomy and discectomy to the left. The claimant was given a prescription for Lortab and Soma for pain.

On 6-24-09, MD., performed a Utilization Review. It was his opinion that the clinical information provided for review did not meet the practice guidelines for the use of the requested surgery. The claimant presented with clinical signs and symptoms of radiculopathy verified by an EMG; however, the MRI result only showed minimal posterior central disc protrusion, left posterolateral disc bulge, and left neural canal narrowing at L5-S1. It did nol indicate the severity or presence of compression. There was no evidence of foot, toe, or hamstring weakness or atrophy from the latest physical and neurologic examinations provided. There is insufficient documentation of failed conservative measures such as activity modification, medication, and ESI. Unless the provider furnishes additional clinical information to substantiate this request, the view of this evaluator is that this request is not recommended.

Followup visit with Dr. on 6-26-09 notes the claimant complains of severe pain to the low back radiating to the left lower extremity to the left foot. Treatment options were discussed with the claimant. He decided to proceed with surgery. The claimant continues with decreased range of motion and lumbar spasms. SLR is 30 degrees on the left. The atrophy to the calf is unchanged. DTR were hypoactive although equal and symmetrical. He continues with decreased sensation at L5-S1 on the left. The evaluator recommended surgery. The claimant was given a prescription for Lortab and Soma.

On 7-22-09, , MD., performed an Appeal. It was his opinion that the claimant sustained an injury dated xx/xx/xx. Claimant complained of low back pain with radiation to left lower extremity. Physical examination showed decrease sensory over the L5-S1, limited lumbar ROM with pain and tenderness. Based on the submitted clinical information, there was no recent complete physical and neurological examination of the claimant in the provided clinical notes. The documentations of failure of conservative management done to the claimant including physical progress notes, adequate pain medications were not provided for review. There was no psychological assessment done to the claimant regarding post surgical outcomes. The necessity of the requested surgical procedure was not established.

On 7-23-09, , MD., reported the claimant was last seen in my office on June 26, 2009. He was having severe pain in the low back radiating to the left lower extremity to the left foot. The claimant was explained the need of surgery as discussed before, He returns to my office for a scheduled follow up appointment. Surgery has not been authorized as per notification from June 24, 2009 because “there was not evidence of foot, toe or hamstring weakness or atrophy”. I do not know if the “reviewer” has reviewed the

claimant's information because the main problem he has is atrophy of the left calf. He complains of severe pain in the low back radiating to the left lower extremity to the foot. He describes the pain to be a 10 on a scale of 10. There is weakness in the left lower extremity. On exam, he continues with decreased range of motion of the lumbar spine with spasms. Straight leg raising was positive at 40 degrees, left. Deep tendon reflexes were hypoactive although equal and symmetrical. He continues with decreased sensation, at L4-L5, left greater than right. The evaluator reported the claimant continues with severe pain in the low back radiating to the left lower extremity, with atrophy of the left calf. The claimant needs to have surgery as requested before.

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

FOLLOWING REVIEW OF THE AVAILABLE MEDICAL RECORDS, I WOULD RECOMMEND AGAINST SURGICAL TREATMENT THE LOW BACK PAIN AND LEFT LEG PAIN.

REVIEW OF THE RECORDS SHOW AN MRI SHORTLY AFTER THE INJURY, WHICH SHOWED DEGENERATIVE CHANGES OF THE LUMBAR SPINE. LIKEWISE, TWO SEPARATE EMG/NERVE CONDUCTION STUDIES HAVE BEEN PERFORMED BY DR. AND REPORTED AS NORMAL. NOW 3 YEARS LATER, DR. REPORTS A POSITIVE MRI CHANGE AND A POSITIVE EMG.

THERE IS NOTED ATROPHY OF THE LEFT CALF BY DR. , WHICH IS NOT FOUND AND REPORTED BY PRIOR PHYSICIANS WHO EXAMINED THE CLAIMANT. FURTHERMORE, THE MECHANISM OF INJURY DESCRIBED WOULD BE DIFFICULT TO EXPLAIN A DISK HERNIATION AND RADICULOPATHY. THE RECOMMENDED SURGERY WILL PROBABLY NOT CHANGE OR ALTER HIS CURRENT CLINICAL COMPLAINTS. I WOULD RECOMMEND AGAINST INPATIENT DECOMPRESSION, LAMINECTOMY LUMBAR DISC WITH MICROSCOPIC/METRIX, LOS 1 DAY 63030, 61712

ODG-TWC, last update 10-2-09 Occupational Disorders of the Low Back – Lumbar laminectomy and discectomy: Recommended for indications below. Surgical discectomy for carefully selected patients with radiculopathy due to lumbar disc prolapse provides faster relief from the acute attack than conservative management, although any positive or negative effects on the lifetime natural history of the underlying disc disease are still unclear. Unequivocal objective findings are required based on neurological examination and testing. (Gibson-Cochrane, 2000) (Malter, 1996) (Stevens, 1997) (Stevenson, 1995) (BlueCross BlueShield, 2002) (Buttermann, 2004) Standard discectomy and microdiscectomy are of similar efficacy in treatment of herniated disc. (Bigos, 1999) While there is evidence in favor of discectomy for prolonged symptoms of lumbar disc herniation, in patients with a shorter period of symptoms but no absolute indication for surgery, there are only modest short-term benefits, although discectomy seemed to be associated with a more rapid initial

recovery, and discectomy was superior to conservative treatment when the herniation was at L4-L5. (Osterman, 2006) The SPORT studies concluded that both lumbar discectomy and nonoperative treatment resulted in substantial improvement after 2 years, but those who chose discectomy reported somewhat greater improvements than patients who elected nonoperative care. (Weinstein, 2006) (Weinstein2, 2006) A recent RCT compared decompressive surgery with nonoperative measures in the treatment of patients with lumbar spinal stenosis, and concluded that, although patients improved over the 2-year follow-up regardless of initial treatment, those undergoing decompressive surgery reported greater improvement regarding leg pain, back pain, and overall disability, but the relative benefit of initial surgical treatment diminished over time while still remaining somewhat favorable at 2 years. (Malmivaara, 2007) Patients undergoing lumbar discectomy are generally satisfied with the surgery, but only half are satified with preoperative patient information. (Ronnberg, 2007) If patients are pain free, there appears to be no contraindication to their returning to any type of work after lumbar discectomy. A regimen of stretching and strengthening the abdominal and back muscles is a crucial aspect of the recovery process. (Burnett, 2006) According to a major recent trial, early surgery (microdiscectomy) in patients with 6-12 weeks of severe sciatica caused by herniated disks is associated with better short-term outcomes, but at 1 year, disability outcomes of early surgery vs conservative treatment with eventual surgery if needed are similar. The median time to recovery was 4.0 weeks for early surgery and 12.1 weeks for prolonged conservative treatment. The authors concluded, "Patients whose pain is controlled in a manner that is acceptable to them may decide to postpone surgery in the hope that it will not be needed, without reducing their chances for complete recovery at 12 months. Although both strategies have similar outcomes after 1 year, early surgery remains a valid treatment option for well-informed patients." (Peul-NEJM, 2007) (Deyo-NEJM, 2007) A recent randomized controlled trial comparing decompression with decompression and instrumented fusion in patients with foraminal stenosis and single-level degenerative disease found that patients universally improved with surgery, and this improvement was maintained at 5 years. However, no obvious additional benefit was noted by combining decompression with an instrumented fusion. (Hallett, 2007) A recent British study found that lumbar discectomy improved patients' self-reported overall physical health more than other elective surgeries. (Guilfoyle, 2007) Microscopic sequestrectomy may be an alternative to standard microdiscectomy. In this RCT, both groups showed dramatic improvement. (Barth, 2008) There is consistent evidence that for patients with a herniated disk, discectomy is associated with better short-term outcomes than continued conservative management, although outcomes begin to look similar after 3 to 6 months. This is a decision to be made with the patients, discussing the likelihood that they are going to improve either way but will improve faster with surgery. Similar evidence supports the use of surgery for spinal stenosis, although the outcomes look better with surgery out to about 2 years. (Chou, 2008) Standard open discectomy is moderately cost-effective compared with nonsurgical treatment, a new Spine Patient Outcomes Research Trial (SPORT) study shows. The costs per quality-adjusted life-year gained with surgery compared with nonoperative treatment, including work-related productivity costs, ranges from $34,355 to $69,403, depending on the cost of surgery. It is wise and proper to wait before initiating surgery, but if the patient continues to experience pain and is missing work,

then the higher-cost option such as surgery may be worthwhile. (Tosteson, 2008) Note: Surgical decompression of a lumbar nerve root or roots may include the following procedures: discectomy or microdiscectomy (partial removal of the disc) and laminectomy, hemilaminectomy, laminotomy, or foraminotomy (providing access by partial or total removal of various parts of vertebral bone). Discectomy is the surgical removal of herniated disc material that presses on a nerve root or the spinal cord. A laminectomy is often involved to permit access to the intervertebral disc in a traditional discectomy.

Patient Selection: Microdiscectomy for symptomatic lumbar disc herniations in patients with a preponderance of leg pain who have failed nonoperative treatment demonstrated a high success rate based on validated outcome measures (80% decrease in VAS leg pain score of greater than 2 points), patient satisfaction (85%), and return to work (84%). Patients should be encouraged to return to their preinjury activities as soon as possible with no restrictions at 6 weeks. Overall, patients with sequestered lumbar disc herniations fared better than those with extruded herniations, although both groups consistently had better outcomes than patients with contained herniations. Patients with herniations at the L5-S1 level had significantly better outcomes than did those at the L4-L5 level. Lumbar disc herniation level and type should be considered in preoperative outcomes counseling. Smokers had a significantly lower return to work rate. In the carefully screened patient, lumbar microdiscectomy for symptomatic disc herniation results in an overall high success rate, patient satisfaction, and return to physically demanding activities. (Dewing, 2008) Workers' comp back surgery patients are at greater risk for poor lumbar discectomy outcomes than noncompensation patients. (DeBerard, 2008)

Spinal Stenosis: For patients with lumbar spinal stenosis, standard posterior decompressive laminectomy alone (without discectomy) offers a significant advantage over nonsurgical treatment. Discectomy should be reserved for those conditions of disc herniation causing radiculopahy. (See Indications below.) Laminectomy may be used for spinal stenosis secondary to degenerative processess exhibiting ligamental hypertrophy, facet hypertrophy, and disc protrusion, in addition to anatomical derrangements of the spinal column such as tumor, trauma, etc. (Weinstein, 2008) (Katz, 2008) See also Laminectomy.

Recent Research: Four-year results for the Dartmouth Spine Patient Outcomes Research Trial (SPORT, n= 1244) indicated that patients who underwent standard open discectomy for a lumbar disc herniation achieved significantly greater improvement than nonoperatively treated patients (using recommended treatments - active physical therapy, home exercise instruction, and NSAIDs) in all primary and secondary outcomes except work status (78.4% for the surgery group compared with 84.4%). Although patients receiving surgery did better generally, all patients in the study improved. Consequently, for patients who don't want an operation no matter how bad their pain is, this study suggests that they will improve and they will not have complications (e.g., paralysis) from nonoperative treatment, but those patients whose leg pain is severe and is limiting their function, who meet the ODG criteria for discectomy, can do better with surgery than without surgery, and the risks are extremely low. (Weinstein2, 2008) In most patients with low back pain, symptoms resolve without surgical intervention. (Madigan, 2009) This study showed that surgery for disc

herniation was not as successful as total hip replacement but was comparable to total knee replacement in success. Pain was reduced to within 60% of normal levels, function improved to 65% normal, and quality of life was improved by about 50%. The study compared the gains in quality of life achieved by total hip replacement, total knee replacement, surgery for spinal stenosis, disc excision for lumbar disc herniation, and arthrodesis for chronic low back pain. (Hansson, 2008) For radiculopathy with herniated lumbar disc, there is good evidence that standard open discectomy and microdiscectomy are moderately superior to nonsurgical therapy for improvement in pain and function through 2 to 3 months, but patients on average experience improvement either with or without surgery, and benefits associated with surgery decrease with long-term follow-up. (Chou, 2009)

ODG Indications for Surgery™ -- Discectomy/laminectomy --
Required symptoms/findings; imaging studies; & conservative treatments below:
I. Symptoms/Findings which confirm presence of radiculopathy. Objective findings on examination need to be present. For unequivocal evidence of radiculopathy, see AMA Guides, 5th Edition, page 382-383. (Andersson, 2000) Straight leg raising test, crossed straight leg raising and reflex exams should correlate with symptoms and imaging. Findings require ONE of the following:

A. L3 nerve root compression, requiring ONE of the following:
    1. Severe unilateral quadriceps weakness/mild atrophy
    2. Mild-to-moderate unilateral quadriceps weakness
    3. Unilateral hip/thigh/knee pain
B. L4 nerve root compression, requiring ONE of the following:
    1. Severe unilateral quadriceps/anterior tibialis weakness/mild atrophy
    2. Mild-to-moderate unilateral quadriceps/anterior tibialis weakness
    3. Unilateral hip/thigh/knee/medial pain
C. L5 nerve root compression, requiring ONE of the following:
    1. Severe unilateral foot/toe/dorsiflexor weakness/mild atrophy
    2. Mild-to-moderate foot/toe/dorsiflexor weakness
    3. Unilateral hip/lateral thigh/knee pain
D. S1 nerve root compression, requiring ONE of the following:
    1. Severe unilateral foot/toe/plantar flexor/hamstring weakness/atrophy
    2. Moderate unilateral foot/toe/plantar flexor/hamstring weakness
    3. Unilateral buttock/posterior thigh/calf pain

(EMGs are optional to obtain unequivocal evidence of radiculopathy but not necessary if radiculopathy is already clinically obvious.)
II. Imaging Studies, requiring ONE of the following, for concordance between radicular findings on radiologic evaluation and physical exam findings:

A. Nerve root compression (L3, L4, L5, or S1)
B. Lateral disc rupture
C. Lateral recess stenosis

Diagnostic imaging modalities, requiring ONE of the following:

1. MR imaging
2. CT scanning
3. Myelography

4. CT myelography & X-Ray

III. Conservative Treatments, requiring ALL of the following:

A. Activity modification (not bed rest) after patient education (>= 2 months)

B. Drug therapy, requiring at least ONE of the following:

1. NSAID drug therapy
2. Other analgesic therapy
3. Muscle relaxants
4. Epidural Steroid Injection (ESI)

C. Support provider referral, requiring at least ONE of the following (in order of priority):

1. Physical therapy (teach home exercise/stretching)
2. Manual therapy (chiropractor or massage therapist)
3. Psychological screening that could affect surgical outcome
4. Back school (Fisher, 2004)

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)**