CASEREVIEW

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Notice of Independent Review Decision

[Date notice sent to all parties]: February 24, 2013

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:
EMG/Nerve Conduction tests Lower Extremity (95886-2units, 95904-8units, 95903-4units, 95934-50 2units)

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:
The Reviewer is a Chiropractor with over 22 years of experience.

REVIEW OUTCOME:

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

☒ 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:

06/22/12: MRI Lumbar Spine
06/29/12: Clinical Encounter Summary
08/29/12: New Patient Note
10/05/12: Lumbar Epidural Steroid Injection
10/15/12: Office Visit Note
11/16/12: Initial Evaluation Report
11/27/12: Consultation
12/04/12: UR Performed
12/26/12: UR Performed
01/30/13: Interim Report
02/12/13: Evaluation

PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant is a male who suffered a lifting injury at work on xx/xx/xx. He was lifting 50-60 pounds above shoulder level and felt discomfort in his low back. He has a positive past surgical history for lumbar disc displacement x 2. He was initially sent where he was given crutches because of right leg pain. He underwent physical therapy and prescribed Ibuprofen 800 mg. He was referred who ordered an MRI.

On June 22, 2012, MRI Lumbar Spine, Impression: 1. L3-4 large focal 8 mm right paracentral disc extrusion that results in severe right subarticular recess narrowing with impingement of the descending right L4 nerve root and a moderate spinal canal stenosis. There is mild bilateral inferior neural foraminal narrowing. 2. Postsurgical changes with interbody fusion and laminectomy at L4-5 and L5-S1 with mild bilateral neural foraminal narrowing at L4-5. 3. L2-3 diffuse disc bulge with a broad-based 3-4 mm central disc protrusion with a high-intensity zone with mild right inferior neural foraminal narrowing.

On June 29, 2012, the claimant was re-evaluated for continued low back pain radiating into the right lower extremity. It was reported he had completed 6 session of physical therapy. On physical examination he had some tenderness to palpation in his lower lumbar spine region and in his right buttock region. He continued to have 5/5 motor strength in his lower extremities with normal sensation to light touch in his lower extremities with the exception being that he has decreased sensation in his right lateral leg and dorsum of his right foot in this first web space. He has 2+ reflexes which are symmetric in his bilateral lower extremities including patellar tendon and Achilles tendon reflexes. He has downgoing toes with plantar stimulation but continues to have a positive straight leg raising on the right side at 40 degrees with exacerbation of both back and lower extremity pain. Assessment: 1. Displacement of thoracic or lumbar intervertebral disc without myelopathy; Lumbar intervertebral disc without myelopathy. 2. Degeneration of thoracic or lumbar intervertebral disc; lumbar or lumbosacral intervertebral disc. Plan: Epidural steroid injections on the right at L3-4 and a Medrol Dosepak.

On October 5, 2012, the claimant underwent a Lumbar Epidural Steroid Injection. Indications: 1. Lumbar radiculopathy. 2. Low pain threshold, who suffer severe pain. Procedures Performed: 1. Right L3 transforaminal epidural steroid injection. 2. Right L4 transforaminal epidural steroid injection. 3. Fluoroscopic guidance and interpretation. 4. MAC

On October 15, 2012, the claimant was re-evaluated who reported the claimant didn't know if the injection helped him. The claimant stated it may have helped for a couple of days and did help with his pain down his right leg. Plan: LESI

On November 16, 2012, the claimant was evaluated for constant low back sore and sharp pain that was rated a 7/10. The claimant also had pain radiating into

the right hip and leg with numbness along the right leg, thigh and calf. On examination he was noted to have antalgic position at the low back. Minor's Sign was found to be positive. Lumbar ROM was restricted. Right Patellar deep tendon reflex was hypomobile; left was normal. Right Achilles deep tendon reflex was absent, left hypomobile. There were areas of hypoesthesia noted within the dermatome areas corresponding to the nerve root levels of L4 on the left and L5, S1 on the right. SLR was positive on the left producing moderate pain at 50 degrees and right at 55 degrees. Fabere Patrick Test was positive bilateral producing moderate pain. Valsalva's Maneuver positive bilateral producing mild to moderate pain. Positive Toe and Heel walk bilaterally. Lumbar paraspinals revealed muscle spasms with tightness and guarding. There was also moderate tenderness to palpation in the lumbar region. Diagnosis: 1. Disc Displacement Lumbar, 2. Radiculitis Lumbar. 3. Myofascial Pain Syndrome. Plan: The claimant was to be seen 3 times per week for a period of 4 weeks. Due to the nature of his condition, the claimant would be referred out for a nerve conduction test.

On November 27, 2012, the claimant was evaluated on physical exam found tenderness around the midline lumbar scar and around the L4-L5 lumbar area. There was also increased paraspinal tone in his lumbar spine. He had restricted lumbosacral ROM. He had difficulty toe walking on the right side, but walks on his heels okay. There were no sensory focal deficits to light touch or pinprick and his motor strength was more-or-less normal. He had negative straight leg raising bilaterally. Impression: 1. Lumbar radiculopathy. 2. Rule out lumbar disc bulge. Plan: Continue chiropractic therapy and review the MRI.

On December 4, 2012, performed a UR. Rationale for Denial: Nerve conduction studies are not recommended when findings are presumed to be based on radiculopathy as in this case. ODG has provision for selective use of needle EMG. However, the aforementioned is not generally recommended when signs of radiculopathy are clearly evident as in this case. As such, the request is inconsistent with evidence-based recommendations.

On December 26, 2012, performed a UR. Rationale for Denial: The initial report dated 11/16/12 stated he was given a lumbar epidural steroid injection (10/8/12). Subjective findings stated "pain is radiating into the right leg and hip". Deep tendon reflexes noted Patellar was hypo mobile and Achilles was absent. Hypoesthesia was noted along L4 and L5-S1 dermatomes. SLR was positive. Heel/toe walk was positive. Valsalva's test was positive. Muscle strength was rated at "3". The objective findings clearly determine presence of radiculopathy. The request is not in keeping with the ODG guidelines that recommend electrodiagnostic studies when radiculopathy is not clearly defined. stated during the peer to peer that the test was necessary to diagnose the patient, however his examination report clearly provides adequate findings for diagnosis. There is no compelling rationale for an EMG/NCV at this time.

On January 30, 2013, the claimant was re-evaluated who reported he still had complaints of constant low back sore and sharp pain rated 6/10. He reported mild

relief with Ibuprofen 800 mg. He also indicated home exercise program makes his low back pain more severe. He continued to have pain radiating into the right hip and leg with numbness along both legs down to his feet, more severe on right calf area. On physical exam his movements seem to be guarded. Minor's Sign was found to be positive. There was moderate tenderness to palpation in the lumbar region. Muscle Strength: Lumbar paraspinals fair (grade 3). Right Patellar reflex was absent, left was normal. Right Achilles reflex was absent, left was hypomobile. There were areas of hypoesthesia noted within the dermatome areas corresponding to the nerve root levels of L4 on the left and L5, S1 on the right. SLR was positive on the left producing moderate pain at 54 degrees and at 52 degrees on the right. Fabere Patrick Test was positive bilateral producing moderate pain. Valsalva's Maneuver positive bilateral producing mild to moderate pain. Positive Toe and Heel walk bilaterally. Plan: referred for a pain management evaluation since is not longer seeing patients. He was also referred our for a neurosurgeon's evaluation.

On February 12, 2013, the claimant was evaluated for continued back pain that radiates to the bilateral hips, bilateral buttocks, bilateral legs, bilateral thighs, bilateral calves, and bilateral feet. On physical examination, sensory was diminished in the left leg, right leg, left foot and right foot. Motor exam was 5/5 in all musculature, but the right Quad was 4/5. DTRS were Left Knee 1, Right Knee 0, Left Ankle 1, and Right Ankle 0. Plan: Based on the patient's clinical exam and pertinent data, I have recommended the patient to undergo bilateral lower EMG to evaluate for severity of nerve damage. If the EMG and MRI show concordinate results a decompressive laminectomy of L3-L4 and translumbar interbody fusion could be recommended. goes on to state that because of the patient's severity of pain with mild to moderate radiographic compression, an EMG would be needed to help confirm lumbar radiculopathy and evaluate for permanent nerve damage. Other medical necessity reasons for an EMG are previous surgery, patient still in pain, evaluation for nerve damage, severity of disease, still in pain despite conservative treatment.

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

The previous adverse determinations for requested services of EMG/Nerve Conduction tests Lower Extremity (95886-2units, 95904-8units, 95903-4units, 95934-50 2units) are partially overturned. There are primarily two things that establish lumbar radiculopathy and they are decreased deep tendon reflexes to associated areas and/or atrophy at the lower extremity more 2 cm or more above or below the knee to associated areas per AMA Guidelines to the Evaluation of Permanent Impairment. Regarding deep tendon reflexes with review of records I see inconsistencies with examinations noting reflexes of the lower extremities to be normal with some examinations and decreased with other examinations leading to no real clarity regarding lumbar radiculopathy. There are no examinations I see where atrophy is noted or lower extremities even measured in circumference. Based on this information performing electrodiagnostic testing

including needle EMG and H-reflex tests are recommended to help support the diagnosis of lumbar radiculopathy. This is per ODG. Establishment of lumbar radiculopathy would be very important in determining whether surgery is indicated, helpful regarding impairment rating, if needed, and important in treating patient for, if radiculopathy is present, regarding medical management for neuropathic pain. Needle EMG of the lower extremities is supported by ODG and in my opinion is medically reasonable and necessary in this case and therefore approved. I would not support the necessity of NCV testing, surface EMG's, or F-wave testing, per ODG and therefore the request of NCV of the lower extremities is denied.

PER ODG:

Electrodiagnostic studies (EDS)	See also Nerve conduction studies (NCS) which are not recommended for low back conditions, and EMGs (Electromyography) which are recommended as an option for low back. Electrodiagnostic studies should be performed by appropriately trained Physical Medicine and Rehabilitation or Neurology physicians. For more information and references, see the Carpal Tunnel Syndrome Chapter. Below are the Minimum Standards from that chapter. **Minimum Standards for electrodiagnostic studies:** The American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM) recommends the following minimum standards: (1) EDX testing should be medically indicated (i.e., to rule out radiculopathy, lumbar plexopathy, peripheral neuropathy). (2) Testing should be performed using EDX equipment that provides assessment of all parameters of the recorded signals. Studies performed with devices designed only for "screening purposes" rather than diagnosis are not acceptable. (3) The number of tests performed should be the minimum needed to establish an accurate diagnosis. (4) NCSs (Nerve conduction studies) should be either (a) performed directly by a physician or (b) performed by a trained individual under the direct supervision of a physician. Direct supervision means that the physician is in close physical proximity to the EDX laboratory while testing is underway, is immediately available to provide the trained individual with assistance and direction, and is responsible for selecting the appropriate NCSs to be performed. (5) EMGs (Electromyography - needle not surface) must be performed by a physician specially trained in electrodiagnostic medicine, as these tests are simultaneously performed and interpreted. (6) It is appropriate for only 1 attending physician to perform or supervise all of the components of the electrodiagnostic testing (e.g., history taking, physical evaluation, supervision and/or performance of the electrodiagnostic test, and interpretation) for a given patient and for all the testing to occur on the same date of service. If both tests are done, the reporting of NCS and EMG study results should be integrated into a unifying diagnostic impression. (7) If both tests are done, dissociation of NCS and EMG results into separate reports is inappropriate unless specifically explained by the physician. Performance and/or interpretation of NCSs separately from that of the needle EMG component of the test should clearly be the exception (e.g. when testing an acute nerve injury) rather than an established practice pattern for a given practitioner. (AANEM, 2009) Note: For low back NCS are not recommended and EMGs are recommended in some cases, so generally they would not both be covered in a report for a low back condition.

EMGs	Recommended as an option (needle, not surface). EMGs (electromyography) may

(electromyography)	be useful to obtain unequivocal evidence of radiculopathy, after 1-month conservative therapy, but EMG's are not necessary if radiculopathy is already clinically obvious. (Bigos, 1999) (Ortiz-Corredor, 2003) (Haig, 2005) No correlation was found between intraoperative EMG findings and immediate postoperative pain, but intraoperative spinal cord monitoring is becoming more common and there may be benefit in surgery with major corrective anatomic intervention like fracture or scoliosis or fusion where there is significant stenosis. (Dimopoulos, 2004) EMG's may be required by the AMA Guides for an impairment rating of radiculopathy. (AMA, 2001) (Note: Needle EMG and H-reflex tests are recommended, but Surface EMG and F-wave tests are not very specific and therefore are not recommended. See Surface electromyography.)

Nerve conduction studies (NCS)	Not recommended. There is minimal justification for performing nerve conduction studies when a patient is presumed to have symptoms on the basis of radiculopathy. (Utah, 2006) See also the Carpal Tunnel Syndrome Chapter for more details on NCS. Studies have not shown portable nerve conduction devices to be effective. EMGs (electromyography) are recommended as an option (needle, not surface) to obtain unequivocal evidence of radiculopathy, after 1-month conservative therapy, but EMG's are not necessary if radiculopathy is already clinically obvious.

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)**