



**CLAIMS EVAL**

*Utilization Review and  
Peer Review Services*

Notice of Independent Review Decision-WCN

**DATE OF REVIEW: 5-28-09 (AMENDED JUNE 9, 2009)**

**IRO CASE #:**

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

Repeat EMG/NCS bilateral upper extremity CPT 95900, 95904, 95861

**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**

- 12-22-08 MD., performed an Independent Medical Evaluation.
- 1-19-09 MD., performed a Designated Doctor Evaluation.
- 1-29-09 Functional Capacity Evaluation.
- DO., office visits from 2-2-09 through 4-6-09.
- 3-17-09 Utilization Review.
- 4-13-09 Utilization Review.

### **PATIENT CLINICAL HISTORY [SUMMARY]:**

An Independent Medical Evaluation dated 12-22-08 performed by MD., notes the claimant is a female who presents today with pain in multiple areas. She states since her last visit she has had testing and an Injection in her low back. She had surgery on her left hand and left shoulder. The claimant now complains of pain in her low back to both legs to feet, left worse than right. She states she has numbness in both legs. She has pain with sitting and being on her feet. She also complains of pain in her neck to both hands. She has pain with neck motion. She has numbness in both hands. She wakes up with numbness in her hands. She states she had her left hand Injected (question for tunnel syndrome) without relief. She states she has pain and weakness in her hand. She also complains of pain in the left shoulder. She has pain with shoulder motion. She has occasional popping and feels like it wants to slide out. She states pain is different before in her shoulder. She still has pain in her right shoulder. She states she had an injection with slight temporary relief. The evaluator reported that he has been very clear about his opinion on this patient in his previous reports. Despite the evaluator saying that he really did not think she needed any other surgeries, she continues to have more surgeries. She states she is not doing better at all. The evaluator strongly suggested that she get other opinions to decide what she really wants to do that since she claims to not be any better at all. The finding of her being unable to lift her shoulders over 90 degrees makes him think that psychological factors are playing a very large role In this case. This is understandable because she has had chronic pain for so long. The evaluator reported the claimant would not be able to do any work in the future.

On 1-19-09, MD., performed a Designated Doctor Evaluation to determine her ability to return to work. The claimant was injured on xx/xx/xx. She stated that her foot was caught in some computer wiring; she lost her balance and fell to the ground. She tried to catch herself on a cabinet with her left hand and struck the left hand on the corner of the cabinet. The claimant sustained injuries to her cervical and lumbar spine, shoulders, right knee, right hip and left wrist. The patient has been seen by a variety of doctors since that time and is currently seeing Dr. a spine surgeon, and Dr. an orthopedic surgeon. She is also seeing Dr. a pain management specialist as well as Dr. D.C. She was initially evaluated by Dr. and Dr. an orthopedic surgeon, but no records were available from those doctors or her subsequent treating doctor, Dr. The patient initially had conservative management and was referred to Dr. who evaluated the patient and recommended arthroscopic surgery. This surgery was performed on 9/30/03 and she was found to have tears of the medial and lateral meniscus, as well as chondromalacia and she underwent partial medial and partial lateral meniscectomy of the right knee, as well as chondroplasty. The claimant was seen for follow-up through March of 2005 (the last record the evaluator received from Dr. ) at which time the claimant's surgical wounds were well healed. She still had some discomfort in the knee but no further surgery was anticipated with regard to the right knee. The claimant has also been evaluated by Dr. a spine surgeon, who initially saw the patient on 1/13/05. MRI performed previously in January of 2004, which indicated a central disc herniation at L5-S1 with collapse of the space. Her neurologic evaluation demonstrated right sided diminished sensation on the dorsum of the foot and lateral border of the foot and weakness of the foot on eversion on the right side. There were decreased ankle jerks, but normal at the knee. These symptoms were consistent with lumbar radiculopathy. Surgery was recommended and the claimant underwent spinal surgery on 3/30/05 by Dr. She had a laminectomy at L5-S1 with decompression and fusion with instrumentation. The patient continues to have back and right sided leg pain. The pain also extends into the right hip, as well as distalward. The claimant had currently started with some epidural steroid injections and she reports that if this is not successful, then further surgical procedures may be indicated for the lumbar spine. The claimant also has been evaluated by Dr. a spine for her cervical and lumbar complaints. He examined the patient in January of 2004 and indicated a normal sensory exam in the upper extremities, normal reflexes, as well as some tenderness in the cervical spine. Motor testing was difficult because of poor effort by the patient. No objective changes of radiculopathy were noted. The claimant has also been evaluated by Dr. a hand surgeon, who recommended surgery of the left wrist for tenosynovitis. She was also seen by Dr. an upper extremity specialist who is currently seeing the patient. The patient apparently was last seen by Dr. in October of 2008, at which time he recommended further evaluation of her continuing problems with an EMG, but this has not yet been performed. Since her last evaluation, the claimant had an arthroscopic carpal tunnel release in approximately July of 2001 and in October of 2006, had a left shoulder subacromial decompression. She continues to have pain and popping in the left shoulder and is dropping things with the left hand. No surgery had been recommended for the patient's cervical spine. The patient also had complaint of pain in the right hip. X-rays and MRI of the right hip in August of 2003 did not demonstrate any significant abnormalities other than early degenerative change. No surgery has been

performed on the hip nor is anticipated at this time. At the current time, the patient continues to have pain in the cervical spine and both shoulders. She also has pain in the lower back with bilateral leg pain and cramping and some paresthesias radiating into the legs. She continues to have pain in the left wrist and right hip. The claimant has been seen in follow-up and treatment by Dr. She had been referred to Dr. , whose note in September of 2008 indicated that the claimant had markedly decreased range of motion and positive straight-leg raising and weakness. A CT scan performed in August of 2008 demonstrates instrumented fusion, which is solid; however, there is marked arthropathy and canal stenosis, as well as retrolisthesis at L3-L4 with foraminal stenosis. The evaluator felt the claimant should proceed with epidural steroid injection and if that was not effective, consider extending the fusion to the L3 level. The patient has had an epidural steroid injection performed, which was not helpful and the patient needs to see Dr. for further evaluation and possible surgery. The evaluator reported the claimant continues to have significant symptoms in the areas noted above. An EMG/NCS has been recommended by Dr. and she should see him for follow-up after the completion of this test. The claimant has continuing back pain with radiating symptoms into the legs and it appears that surgery may be necessary to extend the fusion in the lumbar spine, for which she should see Dr. for follow-up and evaluation. It does not appear on examination today that the claimant will be able to return to work. The evaluator ordered a Functional Capacity Evaluation to determine if there is any work level that the claimant would be able to perform.

A Functional Capacity Evaluation dated 1-29-09 notes the claimant was functioning at a less than Sedentary level.

On 2-2-09, the claimant was evaluated by DO. The claimant complains of neck pain, low back pain, right hip pain, bilateral shoulder pain, right leg pain, left hand and wrist pain. The claimant reports that the pain comes from the neck and radiates to the right shoulder as well as bilateral arms and hands, more so on the left and from the low back to the bilateral leg, posterior thighs. The claimant has not improved much with transforaminal epidural steroid injection. The claimant reports muscle spasms to bilateral legs. The claimant reported the transforaminal epidural steroid injection performed on 11-7-08 provided 20% pain relief. On exam, the claimant has tenderness to palpation at the cervical spine with muscle spasms. She had decreased range of motion. Exam of the shoulders show tenderness to palpation of the trapezius bilaterally. The claimant has positive Neer impingement test bilaterally. Exam of the lumbar spine shows tenderness on palpation along the midline and the right spinous processes. The claimant had muscle spasms. Range of motion was decreased. SLR was positive bilaterally. motor testing shows weakness on the bilateral upper extremities. Reflexes were 0 at the biceps; reflexes of the ankles were 1+. The evaluator recommended EMG/NCS of the upper extremities to determine the source of her neurological symptoms. The claimant is continued with her medications to include Tramadol, Ambien, Amitriptyline, Lidoderm patches, Zanaflex and Cymbalta.

Follow up with Dr. dated 3-12-09 notes no changes in the claimant's condition. The evaluator continued to recommend EMG/NCS to bilateral upper extremities.

On 3-17-09, Physician Advisor provided an adverse determination to the requested repeat EMG/NCS testing. The evaluator reported the case is complex because of her clinical course with multiple surgeries, and also because she currently has multiple complaints regarding several areas of her body. It is not clear why the requesting provider wanted the requested test, and what he planned on doing with the results of the test. Would a repeat surgery be considered? Also, is it necessary to do bilateral studies when the symptoms of concern are on the left? Finally, could an EMG be done without the NCV, or are both required? Additional information from the requesting provider would be helpful. The Physician Advisor reported he had a peer-to-peer discussion with Dr. (he was not the requesting provider, but the treating provider). He last saw the injured worker on 3/12/09. He started seeing her six months ago. She had a DDI on 1/19/09 and she saw her hand surgeon at that time also. He thinks that they are trying to determine whether the symptoms on the left are from the c-spine or peripheral. He thinks that the Designated Doctor Evaluation might think that her symptoms are progressing. Complaints and exam had not changed. The physician Advisor did not recommend authorizing the request for an EMG/NCS of the bilateral upper extremities.

Follow with Dr. dated 4-6-09 notes the claimant continues taking her medications without side effects. The claimant reports she is performing a daily home exercise program. The claimant is frustrated regarding the denial of the EMG and feels that she is not improving. The claimant is continued with her oral medications.

On 4-13-09, an Adverse determination was provided for the requested EMG/NCS of bilateral upper extremities. The Physician Advisor reported there is minimal justification for performing nerve conduction studies when a patient is presumed to have symptoms on the basis of radiculopathy. The Physician Advisor reported the claimant has a long-standing history of neck pain. She has had extensive diagnostic workup. The reason for repeat EMG's is not indicated in these records. She does not appear to be a candidate for surgery. There is no indication of a progressive neurologic deficit. Her symptoms have been rather chronic and it would not appear that there has been any recent change in her condition. For these reasons, the request for repeat EMG/NCS cannot be recommended.

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

MEDICAL RECORDS REFLECTS A CLAIMANT WITH MULTIPLE COMPLAINTS WHO HAS HAD SEVERAL INTERVENTIONS. THE CLAIMANT HAS CONTINUED SYMPTOMS WITH MINIMAL OBJECTIVE FINDINGS. CURRENT EVIDENCE BASED MEDICINE REFLECTS THAT ELECTRODIAGNOSTIC TESTING IS RECOMMENDED AS AN OPTION IN SELECTED CASES. A REPEAT EMG/NCS TO BILATERAL UPPER EXTREMITY WOULD BE BENEFICIAL TO DETERMINE OBJECTIVE CAUSE OR STRUCTURAL CAUSE OF HER ONGOING COMPLAINTS AND POSSIBLE AID

IN GUIDING HER TO MMI. I RECOMMEND CERTIFICATION FOR THE REQUESTED TESTING.

**ODG-TWC, last update 5-22-09 Occupational Disorders of the Neck and Upper Back – EMG/NCS:** Recommended (needle, not surface) as an option in selected cases. The American Association of Electrodiagnostic Medicine conducted a review on electrodiagnosis in relation to cervical radiculopathy and concluded that the test was moderately sensitive (50%-71%) and highly specific (65%-85%). (AAEM, 1999) EMG findings may not be predictive of surgical outcome in cervical surgery, and patients may still benefit from surgery even in the absence of EMG findings of nerve root impingement. This is in stark contrast to the lumbar spine where EMG findings have been shown to be highly correlative with symptoms.

*Positive diagnosis of radiculopathy:* Requires the identification of neurogenic abnormalities in two or more muscles that share the same nerve root innervation but differ in their peripheral nerve supply.

*Timing:* Timing is important as nerve root compression will reflect as positive if active changes are occurring. Changes of denervation develop within the first to third week after compression (fibrillations and positive sharp waves develop first in the paraspinals at 7-10 days and in the limb muscles at 2-3 weeks), and reinnervation is found at about 3-6 months

*Acute findings:* Identification of fibrillation potentials in denervated muscles with normal motor unit action potentials (usually within 6 months of symptoms: may disappear within 6 weeks in the paraspinals and persist for up to 1-2 years in distal limbs).

*Chronic findings:* Findings of motor unit action potentials with increased duration and phases that represent reinnervation. With time these become broad, large and polyphasic and may persist for years.

*Anatomy:* The test primarily evaluates ventral (anterior) root function (motor) and may be negative if there is dorsal root compression (sensory) only. Only C4-8 and T1 in the neck region have limb representation that can be tested electrodiagnostically. The anatomic basis for this lies in the fact that the cervical nerve roots have a motor and a sensory component. It is possible to impinge the sensory component with a herniated disc or bone spur and not affect the motor component. As a result, the patient may report radicular pain that correlates to the MRI without having EMG evidence of motor loss.

*Paraspinal fibrillation potentials:* May be seen in normal individuals and are nonspecific for etiology. The presence of these alone is insufficient to make a diagnosis of radiculopathy and they may be absent when there is a diagnosis of radiculopathy secondary to sampling error, timing, or because they were spared. They may support a diagnosis of radiculopathy when corresponding abnormalities are present in the limb muscles.

*Indications when particularly helpful:* EMG may be helpful for patients with double crush phenomenon, in particular, when there is evidence of possible metabolic pathology such as neuropathy secondary to diabetes or thyroid disease, or evidence of peripheral compression such as carpal tunnel syndrome.

*H-reflex*: Technically difficult to perform in the upper extremity but can be derived from the median nerve. The test is not specific for etiology and may be difficult to obtain in obese patients or those older than 60 years of age.

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.

**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)**