PRIME 400 LLC

240 Commercial Street, Suite D
Nevada City, California 95959

Notice of Independent Review Decision

DATE OF REVIEW: JANUARY 5, 2009

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

EMG/NCV

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

MD, Board Certified in Physical Medicine and Rehabilitation
Subspecialty Board Certified in Pain Management
Subspecialty Board Certified in Electrodiagnostic Medicine

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.

The reviewer finds that medical necessity does not exist for EMG/NCV.

INFORMATION PROVIDED TO THE IRO FOR REVIEW

Adverse Determination Letters, 7/21/08, 12/1/08
ODG Guidelines and Treatment Guidelines
, MD, 2/11/08
Prescription, 2/6/08

Initial PT Evaluation, 2/6/08
PT Progress Notes, 2/27/08, 2/29/08, 3/3/08, 3/24/08, 3/26/08, 4/1/08, 4/4/08, 4/8/08, 4/22/08
, MD, 3/4/08, 4/8/08, 6/2/08, 6/17/08

PATIENT CLINICAL HISTORY [SUMMARY]:

This is a with bilateral upper extremity sensory complaints. The examination at the time of her EMG last winter described some reduced sensation in her lateral upper left arm in addition to the CTS complaints. The electrodiagnostic studies on 2/11/08 showed mild CTS based upon prolongation of the median sensory latencies. Her EMG did not show any evidence of a radiculopathy, but the paraspinal muscles were not examined. There was no slowing to suggest any type of neuropathy. She initially improved with therapy, but then the symptoms worsened. Dr. (6/17/08) requested a new EMG. She had positive Phalen and Tinel signs, greater on the left than the right.

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

The ODG comments on the need to repeat electrodiagnostic studies only if normal and the clinical picture is consistent with CTS. Her EMG was consistent with CTS. The only other justification for repeating the studies is if the surgeon questions the diagnosis. There was no comment to that extent in his note. In the absence of any examination or diagnostic study showing a neuropathy or radiculopathy, the reviewer cannot agree that repeating the complete study is medically necessary. The reviewer finds that medical necessity does not exist for EMG/NCV.

Electrodiagnostic studies (EDS)
Recommended in patients with clinical signs of CTS who may be candidates for surgery. Electrodiagnostic testing includes testing for nerve conduction velocities (NCV), but the addition of electromyography (EMG) is not generally necessary. See also Nerve conduction studies (NCS) and Electromyography (EMG). In general, **carpal tunnel syndrome should be proved by positive findings on clinical examination and should be supported by nerve conduction tests before surgery is undertaken**. **Mild CTS with normal electrodiagnostic studies (EDS) exists,** but moderate or severe CTS with normal EDS is very rare. Positive EDS in asymptomatic individuals is not CTS. Studies have not shown portable nerve conduction devices to be effective. Appropriate electrodiagnostic studies (EDS) include nerve conduction studies (NCS). In more difficult cases, electromyography (EMG) may be helpful. **NCS and EMG may confirm the diagnosis of carpal tunnel syndrome but may be normal in early or mild cases of CTS. If the EDS are negative, tests may be repeated later in the course of treatment**. (Various references listed under "Detection of Neurologic Abnormalities") (Smith, 2002) (Jablecki2, 2002) (AHRQ, 2003) (Podnar, 2005) (Lew, 2005) (Schrijver, 2005) (Sheu, 2006) Poor overlap between various screening procedures warns against the use of electrodiagnostic findings alone without also considering the symptom presentation. (Homan, 1999) A large cohort study showed that over one third of patients undergoing CTR may have had an inappropriate electrodiagnostic workup before the surgery. (Storm, 2005) Despite the fact that electrodiagnostic testing is considered by many to be the "gold standard" for the diagnosis of CTS, some studies have suggested that it not be a requirement. According to one systematic review, **"in cases of clear-cut clinical CTS, electrodiagnosis is not warranted either as a diagnostic test, where clinical symptoms are well defined**, or as a predictive indicator of surgical outcome, but it may still be useful in cases where the clinical diagnosis is not clear." (Jordan, 2002)…

Regarding preplacement nerve testing for CTS, not hiring workers with abnormal post-offer preplacement median nerve tests to reduce costs of work-related CTS is not a cost-effective strategy for employers. (Franzblau, 2004) NC-stat technology cannot be recommended for screening or diagnosis of CTS in an industrial population. (Katz, 2006) For more information see NC-stat nerve conduction studies. There is concordance between the results of EDS and the initial diagnostic hypothesis only 40% of the time, confirming the usefulness EDS. (Cocito, 2006) In using demographic and clinical data to identify the clinical pattern that predicts the diagnosis of CTS, the best pattern associated with the diagnosis was the presence of paresthesias or pain in at least 2 of the first 4 digits in association with one of the following: female gender, symptoms worsening at night or on awakening, a BMI >/=30, thenar atrophy, or other sign (Tinel's, Phalen's, or Reversed Phalen's signs). However, the clinical picture alone in the workers' compensation case, without neurophysiologic studies, may not be sufficient to correctly predict the diagnosis of CTS. (Gomes, 2006) See also Multiple extremity testing. ..
Note: ODG recommends that NCS should be done to support the diagnosis of CTS prior to surgery in workers' compensation cases. If an individual has appropriate responses to treatment (i.e. injections, modification of activities, meds) but still has symptoms with normal NCS, surgery may be appropriate on a case-by-case basis and reasonable documentation by the treating physician.

Electromyography (EMG)
Recommended only in cases where diagnosis is difficult with nerve conduction studies (NCS). In more difficult cases, needle electromyography (EMG) may be helpful as part of electrodiagnostic studies which include nerve conduction studies (NCS). There are situations in which both electromyography and nerve conduction studies need to be accomplished, such as when defining whether neuropathy is of demyelinating or axonal type. Seldom is it required that both studies be accomplished in straightforward condition of median and ulnar neuropathies or peroneal nerve compression neuropathies. Electromyographic examinations should be done by physicians. (Utah, 2006) Surface EMG is not recommended. See Electrodiagnostic studies.

Nerve conduction studies (NCS)
Recommended in patients with clinical signs of CTS who may be candidates for surgery. Appropriate electrodiagnostic studies (EDS) include nerve conduction studies (NCS**). Carpal tunnel syndrome must be proved by positive findings on clinical examination and should be supported by nerve conduction tests before surgery is undertaken. Mild CTS with normal electrodiagnostic studies (EDS) exists**, but moderate or severe CTS with normal EDS is very rare. Positive EDS in asymptomatic individuals is not CTS. There is minimal justification for performing nerve conduction studies when a patient is presumed to have symptoms on the basis of radiculopathy. Nerve conduction studies should be done by a qualified technician working directly under the supervision of a physician. (Utah, 2006)

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)**