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IRO CASE #: XXXXXX

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

MRI cervical spine without contrast

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

American Board of Physical Medicine & Rehabilitation
American Board of Pain Medicine

REVIEW OUTCOME:

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

X Overturned (Disagree)

Medical documentation supports the medical necessity of the health care services in dispute.

Official Disability Guidelines criteria was used for the denials

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a XX who was injured on XXXX, when XX was working as a XX. XX was walking at work and XX fell landing on XX stretched right arm and back and pulled on the right shoulder.

On XXXX, a magnetic resonance imaging (MRI) of the cervical spine was performed at XX. The indication for the study was acute neck and right shoulder pain. The history was notable for XX. The study showed no evidence of acute traumatic injury to the cervical spine. There was no cervical spinal stenosis or neural foraminal narrowing. There was a small posterior disc abnormality in the mid-cervical spine and mild facet osteoarthritis inferiorly. There was no evidence of infection or neoplasm.

On XXXX, an electrodiagnostic consultation was completed by XX. On exam, the range of motion (ROM) of the cervical spine was full and pain-free. There was mild tenderness over the C6 and C7. The Spurling's test was negative bilaterally. The motor examination was unremarkable. The other examination was unremarkable. The diagnoses were cervical sprain/strain and numbness of the right upper extremity. The electromyography (EMG) of bilateral upper extremities was normal with no evidence of mononeuropathy, peripheral neuropathy, myopathy or cervical radiculopathy. It was felt that the patient's symptoms were suggestive of a cervical sprain/strain. There was no clinical or electrodiagnostic evidence of cervical radiculopathy.

On XXXX, an MRI of the thoracic and lumbar spine was performed at XX, interpreted by XX. The study showed a 4 mm central disc protrusion at the T8-T9 level which caused mild flattening of the anterior cord contour. There was a

broad-based disc protrusion at the L3-L4 level without significant spinal canal stenosis. There were bilateral facet arthropathy and synovitis at the L3-L4, L4-L5 and L5-S1 levels.

On XXXX, a computerized tomography (CT) myelogram of the cervical spine was performed at XX, interpreted by XX. The study was ordered by XX because of complaints of cervicalgia, right arm pain, numbness and tingling. The study showed at C4-C5, a central focal 3 mm disc protrusion narrowing of the anterior subarachnoid space below the level of the exiting nerve roots. The canal and foramina appeared patent. At C5-C6, there was a broad-based 2-3 mm hard and soft disc combination protrusion narrowing the subarachnoid space. The AP spinal canal diameter was adequately maintained. There was minimal bilateral foraminal narrowing. At C6-C7, there was a 3 mm broad-based central to right and slightly right lateral soft tissue disc protrusion combined with minimal broad-based spondylosis. There was right foraminal narrowing. The AP spinal canal diameter was adequately maintained. There was minimal bilateral facet sclerosis.

On XXXX, EMG/NCV of the upper extremities was performed by XX. The clinical history was notable for increased bilateral paracervical neck pain as well as intermittent painful paresthesias into the distal right arm. The study was ordered to rule out focal compression neuropathy versus peripheral neuropathy versus myopathy. The study showed positive evidence of right C6-C7 cervical radiculopathy which was both acute and chronic in nature. There was no evidence of left cervical radiculopathy. There was no evidence of distal focal compression neuropathy, diffuse peripheral neuropathy, myopathy or brachial plexopathy at this time. The nerve conduction testing in the bilateral upper extremities showed normal distal latencies, peak amplitude and conduction velocities with no sign of any conduction block or delay. However, long track testing with F waves showed asymmetric prolongation of the right media and ulnar F wave latencies. EMG needle testing showed abnormal findings in the right C6-C7 nerve root distribution indicated by marked increased insertional activity as well as abnormal positive sharp wave and fibrillation potentials in the right triceps, right pronator teres, right extensor carpi radialis longus, right upper cervical paraspinals and right lower cervical paraspinal muscles. In addition to this acute degeneration pattern, there was a chronic denervation pattern indicated by a few large amplitude polyphasic motor unit action potentials with drop out of a few motor units on active muscle contraction.

On XX, XX, saw the patient in an initial evaluation. The pain level was 6/10. On exam, there was decreased ROM of the cervical spine and right shoulder. The diagnoses were cervical sprain, right wrist sprain, right shoulder strain, lumbar strain, thoracic strain, cervical disc syndrome with radiculitis, lumbar disc syndrome and lumbar facet syndrome. An MRI of the right wrist was ordered and re-read of the MRI of the cervical spine was pending. Epidural steroid injection (ESI) was recommended. The patient was released to regular duty work (Handwritten notes are largely illegible)

On XXXX, an MRI of the right wrist was performed at XX, interpreted by XX. The study showed moderate tenosynovitis of extensor carpi radialis longus and brevis tendons. There was mild tenosynovitis of the extensor carpi ulnaris tendon. There was a partial tear of the scapholunate ligament with subchondral degenerative cystic changes and marrow edema. There was mild effusion in radiocarpal, STT joint, first carpometacarpal joint due to degenerative changes. No acute fracture was seen.

On XXXX, an MRI of the cervical spine was performed at XX, interpreted by XX. The study showed straightening of the expected degree of cervical lordotic curvature most likely related to muscular spasm, strain or pain. There was a 3.3 x 2.3 cm circumscribed fluid signal intensity collection posterior to the cerebellum. This was most likely an arachnoid cyst or less likely a giant cisterna magna variant. At C3-C4, 1 mm right posterolateral disc protrusion/herniation with mild right neural foraminal narrowing was noted. At C4-C5, 1 mm central disc bulge was present. At C5-C6, a broad 1 mm disc protrusion/herniation with borderline thecal sac stenosis and mild bilateral neural foraminal narrowing was present. At C6-C7, 1 mm retrolisthesis and a broad 1 mm disc protrusion/herniation with a 2 mm central component was seen. There was borderline thecal sac stenosis and mild bilateral neural foraminal narrowing.

On XXXX, MRI of the right shoulder was performed at XX, interpreted by XX. The history was notable for shoulder pain and strain. The study showed tendinopathy within the distal supraspinatus and infraspinatus components of the

rotator cuff. There was type II acromion with the acromiohumeral space measuring 4.4 mm. There were degenerative hypertrophic changes to the AC joint. There was no evidence of internal derangement.

On XXXX, the patient was evaluated by XX in follow-up evaluation. The patient continued to have neck pain radiating to the right upper extremity. On exam, there was decreased ROM of the cervical spine. Per a prescription note of the same date, the patient was referred to a neurosurgeon for a second opinion. The patient was advised to continue home exercise program. (Handwritten notes are largely illegible)

On XXXX, the patient was evaluated by XX, in an initial evaluation. The patient complained of right arm pain and neck pain. The pain level was 8/10. The patient had numbness and tingling. The patient also complained of difficulty with balance. The patient had tried PT and XX cervical ESIs with temporary relief. On exam, the motor strength of right biceps and right triceps was 4/5. The sensation was decreased in the right C6 and right C8 distribution. There was mild ataxia. The diagnoses were sprain of the cervical spine and strain of the lumbar region. XX ordered an MRI of the cervical spine to evaluate the patient for surgery.

On XXXX, XX, performed an MMI/IR-evaluation. XX opined the patient had reached statutory maximum medical improvement (MMI) on XXXX, with 5% whole person impairment (WPI).

Per a pre-authorization request dated XXXX, XX requested approval for an MRI of the cervical spine.

Per a utilization review dated XXXX, the request for an MRI of the cervical spine without contrast was denied. Rationale: *"As noted in ODG's Neck and Upper Back Chapter MRI Imaging topic, repeat MRI imaging is not routinely recommended and should be reserved for claimants with symptoms and/or findings suggestive of significant pathology, such as a tumor, fracture, infection, neural compression, or a recurrent disk herniation. In this case, however, it was not clearly stated what was sought. It was not clearly stated what was suspected. It was not clearly stated how the MRI imaging in question would influence or alter the treatment plan. There was, for instance, no mention of the claimant's willingness to consider or contemplate any kind of surgical intervention based on the outcome of the MRI imaging in question. As such, the request is not supported. Therefore, the requested MRI without contrast for cervical spine is not medically necessary."*

On XXXX, XX filed an appeal for reconsideration of the denied request.

Per a reconsideration dated XXXX, the request for MRI of the cervical spine was not certified. Rationale: *"There was a previous adverse determination dated XXXX whereby the request for magnetic resonance imaging (MRI) without contrast for cervical spine was non-certified. Request for appeal of MRI without contrast for the cervical spine in this XX patient with a date of injury XXXX with diagnoses of sprain of ligaments of cervical spine and strain of lumbar region. Most recent clinical encounter indicates neck pain with numbness and tingling to right arm. Interventions include anti-inflammatory medications, physical therapy, and cervical epidural steroid injections with minimal relief. Physical examination demonstrates the full cervical range of motion with the decreased strength to right biceps and triceps at 4/5 as well as decreased sensation in right C6 and C8 dermatome. Previous MRI of cervical spine XXXX findings indicate minimal disc bulging at multiple levels and a possible arachnoid cyst at the base of the cerebellum. EMG/NCS findings indicate a slight C6-7 radiculopathy. ODG Guidelines support the utilization of MRI for chronic neck pain with radiculopathy and neurologic signs/symptoms present. The information submitted is sufficient for consideration of MRI without contrast for the cervical spine. In this case, the guidelines are not met as a result of no new neurologic signs/symptoms or indications of worsening of condition submitted. Therefore, the requested appeal for MRI without contrast for the cervical spine is not medically necessary."*

In a letter dated XXXX, XX notified XX about the denial.

Per a correspondence dated XXXX, XX requested for consideration of MRI of the cervical spine. XX stated the patient had weakness and decreased sensation in the upper extremities on the physical examination and also increasing pain in the neck and arms. The previous MRI was done a XX, so the patient needed to obtain a new MRI of the cervical

spine to evaluate for the surgery.

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

Cervical and upper back

Not recommended except for indications list below. Patients who are alert, have never lost consciousness, are not under the influence of alcohol and/or drugs, have no distracting injuries, have no cervical tenderness, and have no neurologic findings, do not need imaging. Patients who do not fall into this category should have a three-view cervical radiographic series followed by computed tomography (CT). In determining whether or not the patient has ligamentous instability, magnetic resonance imaging (MRI) is the procedure of choice, but MRI should be reserved for patients who have clear-cut neurologic findings and those suspected of ligamentous instability. Repeat MRI is not routinely recommended, and should be reserved for a significant change in symptoms and/or findings suggestive of significant pathology (eg, tumor, infection, fracture, neurocompression, recurrent disc herniation). (Anderson, 2000) (ACR, 2002) See also ACR Appropriateness Criteria™. MRI imaging studies are valuable when physiologic evidence indicates tissue insult or nerve impairment or potentially serious conditions are suspected like tumor, infection, and fracture, **or for clarification of anatomy prior to surgery**. MRI is the test of choice for patients who have had prior back surgery. (Bigos, 1999) (Bey, 1998) (Volle, 2001) (Singh, 2001) (Colorado, 2001) For the evaluation of the patient with chronic neck pain, plain radiographs (3-view: anteroposterior, lateral, open mouth) should be the initial study performed. Patients with normal radiographs and neurologic signs or symptoms should undergo magnetic resonance imaging. If there is a contraindication to the magnetic resonance examination such as a cardiac pacemaker or severe claustrophobia, computed tomography myelography, preferably using spiral technology and multiplanar reconstruction is recommended. (Daffner, 2000) (Bono, 2007)

Indications for imaging -- MRI (magnetic resonance imaging):

- Chronic neck pain (= after 3 months conservative treatment), radiographs normal, neurologic signs or symptoms present
- Neck pain with radiculopathy if severe or progressive neurologic deficit
- Chronic neck pain, radiographs show spondylosis, neurologic signs or symptoms present
- Chronic neck pain, radiographs show old trauma, neurologic signs or symptoms present
- Chronic neck pain, radiographs show bone or disc margin destruction
- Suspected cervical spine trauma, neck pain, clinical findings suggest ligamentous injury (sprain), radiographs and/or CT "normal"
- Known cervical spine trauma: equivocal or positive plain films with neurological deficit
- Upper back/thoracic spine trauma with neurological deficit

The notes indicate that the patient is being evaluated for surgical intervention. The ODG considers MRI imaging valuable “for clarification of anatomy prior to surgery”. According to the ODG, the patient meets the criteria for a Cervical Spine MRI. The request for a MRI of the Cervical Spine without contrast is certified.

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

X ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES