

Vanguard MedReview, Inc.

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Notice of Independent Review Decision

September 19, 2014

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Right Knee MRI and MRI of the Thoracic Spine

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

This Physician is a Board Certified Physical Medicine and Rehabilitation Doctor with over 16 years of experience.

REVIEW OUTCOME:

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

Upheld (Agree)

Provide a description of the review outcome that clearly states whether medical necessity exists for each of the health care services in dispute.

PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant is a female who was injured in a fall on xx/xx/xx. She suffered injuries to her right knee, right shoulder and thoracic spine. There is a history of recent right knee surgery.

03/20/2013: MRI of the Right Knee. **Impression:** 1. Small joint effusion. 2. Suspicious appearance for osteochondritis dessecans involving the medial femoral condyle as described. 3. Small focal tear of the posterior horn of the medial meniscus. 4. Proximal patellar tendinosis.

04/30/2014: Office Visit. **HPI:** Pain in the right shoulder joint(s) when actively moved, when passively moved, causing an inability to sleep. Causes difficulty lying on affected side, is decreased by raising the arm in any direction. Swelling of the right shoulder joint, shoulder joint stiffness on the right. A clicking sensation in the shoulder. The shoulder catches during movement, right knee joint pain, when passively moved, when actively moved, worse with weight bearing, is increased

by bending it, by kneeling, knee joint swelling on the right. Intermittent knee locking. The knee catches during movement. A clicking sensation in the knee, a grating sensation in the knee. A popping sound was heard in the knee, a shock like sensation in the knee, shoulder weakness. **Current Medication:** Effexor XR 75 MG CP24, twice a day, 0 days, 0 refills, MetFORMIN HCl 500 MG tabs, twice a day, 0 days, 0 refills, Verapamil HCl CR 240 MG CP24, once a day, 0 refills. **PE:** Thoracic Spine: Some tenderness on palpation, no swelling, no induration, no ecchymosis, no instability. Right Knee: Anteromedial and anterolateral aspect was tender on palpation. Medial and lateral collateral ligaments were tender on palpation. Active and passive motion was decreased. Pain was elicited by flexion and extension. **Assessment:** Sprained right shoulder, sprained anterior cruciate ligament of the knee, sprained right knee, thoracic strain **Plan:** Shoulder Sprain right-Radiology: Shoulder 2 views. Knee Sprain cruciate ligament anterior Aleve 220 MG Caps, once a day, 30 days, 0 refills. Knee Sprain right- Radiology: Knee 4 or more views. Back Strain Thoracic- Radiology: T-Spine AP/LAT. Knee brace, rest the extremity, education and instructions, reduced physical activity, go to the emergency room if condition worsens, analgesics, physical therapy service for 1 month, ice, heat therapy, follow-up visit in 2 days, physical activity restrictions. **Tests: Imaging:** Skeletal X-Rays showed scoliosis. **X-Ray Shoulder:** No fracture and did not show a dislocation. Osteopenia and showed narrowing of the joint space. No proliferative changes. Complete, two or more views of the right shoulder were performed. **X-Ray of the Thoracic Spine:** An x-ray of the thoracic spine with anteroposterior and lateral views was performed. No fracture of the thoracic spine and no subluxation. Generalized osteopenia of the regional bones, narrowing of the disc space, and osteophyte(s) are found projecting. No lytic lesion. **X-Ray Knee:** No fracture of the right distal femur, no fracture of the right patella, no fracture of the right proximal tibia, no dislocation of the right tibiofemoral joint, not of the right patella, and not of the right proximal tibiofibular joint. Narrowing of the right knee joint space. No knee ankyloses. AP and lateral view x-rays of the right knee were performed.

05/13/2014: Initial Evaluation. **Objective History:** Patient complains of pain at medial and lateral aspect of right knee aggravated by prolonged standing or walking activities. Patient also complains of significant pain in right side of upper back and left shoulder aggravated by attempting repetitive or forceful activities of right upper extremity. **Observation:** Posture time of evaluation was guarded with right arm held in a protective position. Visible inflammation diffusely in right knee at time of evaluation. **Palpation:** Tenderness on palpation of anterior aspect of right shoulder with evidence of right upper trapezius and thoracic paraspinal muscle tightness. Tenderness also on palpation of medial and lateral aspect of right knee. **ROM:** Right knee flexion 110° with complaints of tightness at end of range. Right shoulder flexion 140° with complaints of pain at end range. **Strength:** Isometric testing indicates weakness level IV\5 in right glenohumeral complex limited by increased pain on attempting forceful activities. Weakness also elicited in right quadriceps hamstring and gastrocnemius muscle groups measured at 4\5. **Gait Patterns:** Antalgic favoring right leg. **Functional Deficits:** Patient complains of difficulty with prolonged standing activities and also with forceful or repetitive activities of right upper extremity. Functional disability questionnaire indicates

functional disability at 18%. **Assessment:** Right knee strain with associated inflammation. Right shoulder strain with associated upper trapezius muscle spasm. Decreased range pain free motion in right shoulder and right knee. Weakness in right glenohumeral complex and right quadriceps hamstring and gassiness muscle groups. Antalgic gait pattern. Decreased tolerance of prolonged standing or walking activities. **Plan:** Moist heat by 15 minute to right shoulder with electrical stimulation at 80\150 Hz by 4 Polar. Myofascial release by 15 minutes to right shoulder and right upper trapezius muscle. Ultrasound at 1.3 W. per centimeter squared by 50% by 8 minutes to circumference of right patella. Implementation of flexibility and strengthening exercises to right glenohumeral complex and right quadriceps hamstring and gastrocnemius muscle groups. Education of home exercise program. Proprioceptive and balance reeducation. Functional reeducation.

06/10/2014: UR. **Rationale for Denial:** For the described medical situation, the above noted reference would not support the requested diagnostic studies to be of medical necessity. There are a lack of indicated "red flags" on physical examination of the affected body regions to presently support the requested diagnostic studies to be of medical necessity. As such, based upon the records available for review, medical necessity for the requested diagnostic studies is not currently established. Peer to Peer contact was attempted and unsuccessful. This review results in the following determination regarding the treatment being requested: Adverse determination.

07/11/2014: UR. **Rationale for Denial:** The request for appeal MRI of the right knee and an MRI of the thoracic spine is non-certified. The ODG recommend an MRI of the knee to evaluate soft tissue injuries. The exam notes noted decreased ROM and the treatment plan includes continued physical therapy. There is a significant lack of quantitative clinical evidence suggestive of knee pathology such as orthopedic tests to support the necessity of the requested MRI. There is also a significant lack of clinical evidence of the efficacy of the physical therapy in the evidence provided. Therefore, due to the significant lack of quantified clinical indication of functional deficits and the efficacy of the physical therapy trial, the request for an MRI of the right knee is not supported. In regard to the MRI of the thoracic spine, the ODG may recommend an MRI of the thoracic spine after at least 1 month of conservative therapy. The patient has undergone a physical therapy trial; however, the efficacy of that trial is not included in the evidence provided. Furthermore, the physical exam noted no functional deficits or neurological deficits of the thoracic spine. Therefore, due to the significant lack of clinical indication and functional deficits of the thoracic spine and the lack of evidence of the efficacy of the trial of physical therapy, the request for thoracic spine MRI is not supported. As such, in agreement with the previous determination, the request for appeal MRI of the right knee and an MRI of the thoracic spine is non-certified. Peer to peer contact was attempted and unsuccessful.

07/31/2014: Re Evaluation. **Subjective History:** Patient has completed a total of 12 sessions of Physical Therapy. Patient continues with residual complaints of

severe pain in right knee. Patient does report improvement in active range of motion in right shoulder and cervical spine. **Objective History:** Patient has been compliant with attendance of physical therapy. **Observation:** Posture has improved with implementation of shoulder retraction exercises protocols. Continued inflammation in right knee at time of reevaluation. **Palpation:** Tenderness on palpation of anterior aspect of right shoulder with minimal residual evidence of upper trapezius muscle spasm. Continued tenderness on palpation of medial and lateral aspect of right knee. **ROM:** Right knee flexion 115° with complaints of pain at end of range. Right shoulder flexion 165° with complaints of pain at end range. **Strength:** Isometric testing indicates strength level 4+/5 in right glenohumeral complex tested in neutral position. Continued weakness level IV\5 in right quadriceps hamstring and gastrocnemius muscle groups. **Gait Patterns:** Antalgic favoring right leg. **Functional Deficits:** Patient continues complain of difficulty with prolonged standing and walking activities. Residual functional disability questionnaire indicates functional disability at 12%. **Assessment:** Patient should continue with implementation of physical therapy protocols with further 2 weeks with emphasis on increasing pain free ROM in right shoulder and increasing strength in quadriceps hamstring and gastrocnemius muscle groups. **Plan:** Continue with physical therapy 3 times per week for 2 weeks and then reevaluate. Recommend orthopedic evaluation form right knee pain.

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

The previous adverse determinations are UPHELD/AGREED UPON. Other than weakness, there is lack of abnormalities documented on right knee exam suggestive of any pathology or internal derangement. There is no documentation of effusion, nor crepitus, nor provocative testing such as McMurray reflective of meniscus pathology, nor any testing suggestive of ligament laxity. In regards to the Thoracic spine, there is no neurological deficit, nor provocative testing such as seated twist about the thoracic region to demonstrate pathology to necessitate an MRI. For these reasons, Right Knee MRI and MRI of the Thoracic Spine is not medically necessary at this time and should be denied.

Per ODG:

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

- Acute trauma to the knee, including significant trauma (e.g, motor vehicle accident), or if suspect posterior knee dislocation or ligament or cartilage disruption.
- Nontraumatic knee pain, child or adolescent: nonpatellofemoral symptoms. Initial anteroposterior and lateral radiographs nondiagnostic (demonstrate normal findings or a joint effusion) next study if clinically indicated. If additional study is needed.
- Nontraumatic knee pain, child or adult. Patellofemoral (anterior) symptoms. Initial anteroposterior, lateral, and axial radiographs nondiagnostic (demonstrate normal findings or a joint effusion). If additional imaging is necessary, and if internal derangement is suspected.

- Nontraumatic knee pain, adult. Nontrauma, nontumor, nonlocalized pain. Initial anteroposterior and lateral radiographs nondiagnostic (demonstrate normal findings or a joint effusion). If additional studies are indicated, and if internal derangement is suspected.

- Nontraumatic knee pain, adult - nontrauma, nontumor, nonlocalized pain. Initial anteroposterior and lateral radiographs demonstrate evidence of internal derangement (e.g., Peligrini Stieda disease, joint compartment widening).

- *Repeat MRIs:* Post-surgical if need to assess knee cartilage repair tissue. ([Ramappa, 2007](#)) Routine use of MRI for follow-up of asymptomatic patients following knee arthroplasty is not recommended. ([Weissman, 2011](#))

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](#)TM. 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

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)**