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Notice of Independent Review Decision

Date: August 30, 2013

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

MRI right knee without contrast

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

Diplomate, American Board of Physical Medicine and Rehabilitation and Pain Medicine

REVIEW OUTCOME:

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

Overturned (Disagree)

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

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

- Utilization reviews (07/05/13, 08/06/13)
- Procedure (11/30/11)
- Review (01/29/13)
- Diagnostics (04/29/13)
- Office visits (05/24/13 - 07/24/13)
- Utilization reviews (07/05/13, 08/06/13)
- Office visits (01/11/13 - 07/24/13)
- Diagnostics (04/29/13)

ODG criteria have been utilized for the denials.

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a male who indicated that he had an injury on xx/xx/xx. He hit his left knee on the concrete floor.

On November 30, 2011 an orthopedic surgeon, evaluated the patient for left knee internal derangement and posterior horn medial meniscus tear. He carried a

procedure to include examination under anesthesia (EUA), diagnostic left knee arthroscopy, partial medial meniscectomy, medial femoral condyle chondroplasty, lateral femoral condyle chondroplasty (separate compartment), intra-articular loose body removal (lengthened incision), synovectomy, anteromedial/anterolateral compartments; anesthetic injection and simple closure. Postoperative diagnoses were left knee internal derangement, posterior horn medial meniscus tear, focal traumatic chondral defect, lateral femoral condyle with intra-articular loose body, diffuse degenerative chondromalacia, medial femoral condyle with loose marginal flaps, grade III and synovitis, anteromedial/anterolateral compartments.

Per physician progress note dated January 11, 2013, the patient complained of sharp, shooting and burning pain in the left knee. The patient was recommended to continue medications, pain management, and rehabilitation and consulting an orthopedic surgeon for further care and planning.

On the follow-up visit the patient complained of sharp, shooting and burning pain. He reported that he had been treated. He had a few swelling. He had undergone imaging. He was seeing a pain management. His medications included hydrocodone (Norco), Ketoprofen and Bupivacaine.

Per physician progress note dated January 28, 2013, the patient complained of constant, sharp, shooting and burning left knee pain. Examination of the left knee showed tenderness to palpation, good range of motion (ROM) and pain worse with ambulation. The patient was referred for further treatment and consultation. The patient was to continue use of knee brace. The handwritten report is illegible.

On January 28, 2013 an orthopedic surgeon, evaluated the patient for ongoing left knee pain. The patient had undergone physical therapy (PT) with no relief and subsequently ended up undergoing surgery. He also had postoperative PT. He continued to follow-up. postoperatively with continued pain. He subsequently underwent several intra-articular joint injections with cortisone, which did not provide any relief. He also had series of three Synvisc injections to the left knee. He was being seen currently for pain management with a pain management specialist. He also reported that when he was at work following his surgery, his knee would bother him even more while wearing the required steel-toed boots. He was told that he would need either a hemiarthroplasty or a total knee arthroplasty. History was positive for asthma. Examination of the left knee showed positive McMurray with noted popping in the medial compartment. There was slight joint effusion present. diagnosed internal derangement of the left knee status post left knee surgery and continued left knee pain. He recommended x-rays and magnetic resonance imaging (MRI) of the left knee.

On January 29, 2013 performed a designated doctor evaluation (DDE) and opined that the accident/incident gave rise to the compensable injury of left knee internal derangement, left knee posterior horn medial meniscus tear, aggravation of tricompartmental osteoarthritis and aggravation of the left knee patellofemoral chondromalacia. The tricompartmental osteoarthritis and patellofemoral

chondromalacia were not caused by the claimed injury although based on the review of medical records and medical evaluation on January 29, 2013, the claimed injury aggravated the above conditions. The tricompartmental osteoarthritis and patellofemoral chondromalacia were not the result from the treatment from the work-related injury. Examination of the left knee revealed tenderness over the anterolateral aspect of the left knee and over the lateral aspect of the articular line. Palpation of the bilateral hip, right knee and bilateral ankle/foot was normal without tenderness or spasm. Mild effusion was noted on the left knee but none on the right knee. Valgus stress, varus stress, Lachman, McMurray and Posterior Drawer tests were negative bilaterally. Crepitation was mild on the left and none on the right knee

Per physician progress note dated February 25, 2013, the patient complained of sharp, throbbing pain in the left knee. He stated that the pain levels had increased since the last visit. He was not able to walk for long periods of time due to pain. He had noticed numbness and tingling in the left knee two weeks ago. The patient was recommended continuing modified duty and waiting for the imaging studies.

Per physician progress note dated March 21, 2013, the patient complained of constant throbbing pain in the left knee. Walking a lot, sitting for a long time and cold weather made his pain worse. Use of brace, rest and medications helped his pain. His job would not let him come back on restrictions. The patient was recommended continuing modified duty.

On April 29, 2013, x-rays of the left knee showed moderate osteophytes of the tibiofemoral and patellofemoral joints and small knee joint effusion.

On April 29, 2013, MRI of the left knee showed: (1) There had been partial meniscectomy of the discoid lateral meniscus. (2) There was evidence of partial medial meniscectomy. There was oblique horizontal tear pattern reaching the inferior articular surface of the posterior horn in an area with very little partial meniscectomy. The pattern was similar to what was seen previously. This could be residual signal or re-tear. There was degenerative signal of the body of the medial meniscus. Areas of high-grade chondromalacia affected the weightbearing surfaces of the medial and lateral tibiofemoral joints, similar to what was seen previously, associated with areas of subchondral bone marrow edema and subchondral cyst formation of mild degree. High-grade chondromalacia of the trochlea was fairly widespread, similar to what was seen previously. The patellar cartilage demonstrated mild low-grade chondromalacia with surface irregularity inferiorly. This was stable. There were moderate osteophytes of the tibiofemoral and patellofemoral joints again noted. There was a small knee joint effusion. There was mild subcutaneous edema encircling the knee.

On May 24, 2013 evaluated the patient for ongoing throbbing and sharp left knee pain. The patient had a limp due the knee pain and he was currently off work. Examination of the left knee revealed positive crepitus and positive McMurray's. reviewed the MRI findings of the left knee and diagnosed meniscal tear and high-

grade chondromalacia and moderate osteoarthritis of the tibial femoral and patellofemoral joints. He recommended obtaining a precertification for a left knee total arthroplasty.

Per physician progress note dated May 24, 2013, the patient had numbness along with pain in the left knee. He was not able to weight-bear on his left knee. The handwritten report is illegible.

On May 30, 2013 evaluated the patient for ongoing left knee pain. He had followed up. the previous week and went over the imaging reports. The patient had been recommended left knee replacement and also right knee imaging studies to evaluate the right knee pain. The patient felt that he was starting to have back pain. Examination of the left knee showed pain and tenderness mostly along lateral aspect and also some numbness inferior to the patella. There was some crepitus noted with flexion/extension. diagnosed chronic left knee pain, increased the dosage of hydrocodone and continued ketoprofen/Bupivacaine topical cream. He recommended losing weight so that any recommended surgeries could be done and continuing home exercise program (HEP). He noted that the medications had improved the quality of life and activities of daily living. He recommended considering a urine drug screen.

Per physician progress note dated June 24, 2013, the patient complained of constant pain while walking. Examination showed tenderness to palpation in the medial joint lines of the bilateral knees. The patient was diagnosed with bilateral knee with derangement, left greater than right and was recommended follow-up with an orthopedic surgeon on June 28, 2013.

There was a preauthorization sent on July 1, 2013, for MRI of the right knee without contrast. had requested the medical treatment because of the ongoing condition. The patient was not able to return to work due to his disabilities and those disabilities were as a result of a work-related injury.

Per utilization review dated July 5, 2013, the request for MRI of the right knee without contrast was denied based on the following rationale: *"In my judgment, the clinical information provided does not establish the medical necessity of this request. According to the Official Disability Guidelines, indications for MRI to the knee include acute trauma to knee including significant trauma (e.g. motor vehicle accident) or if suspect posterior knee dislocation or ligament or cartilage disruption. In this case, the patient fell on his left knee. There are no findings for the right knee to support a right knee MRI within these guideline criteria. There is no indication of internal derangement, no indication of range of motion loss or pain or any other findings. Therefore, medical necessity has not been established for this request."*

On July 13, 2013 evaluated the patient for left knee pain. Examination of the left knee revealed full ROM, but moderate crepitus and mild effusion. reviewed the diagnostic studies that revealed a moderate degree of degenerative chondromalacia relatively severe in certain areas. The patient had standing

anteroposterior maintaining some joint space with spurring laterally. diagnosed severe painful chondromalacia grade III-IV, left knee and recommended left total knee replacement.

Per physician progress note dated July 24, 2013, the patient complained of swelling in the left knee and chronic left knee pain. He was not able to bend his knee. Examination showed tenderness to palpation in the bilateral knees. The patient was diagnosed with bilateral knee derangement and with severe chondromalacia and was recommended getting an approval for MRI of the right knee. The handwritten report is illegible.

On August 1, 2013, a request was made for MRI of the right knee for the diagnosis of internal derangement of the right knee.

Per reconsideration review dated August 6, 2013, the appeal for reconsidering MRI of the right knee without contrast was denied based on the following rationale: *"In my judgment, the clinical information provided does not establish the medical necessity of this request. According to the Official Disability Guidelines regarding MRI of the right knee, 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. Initial anteroposterior and lateral radiographs non-diagnostic (demonstrate normal findings or a joint effusion) next study if clinically indicated. If additional study is needed. Non-traumatic knee pain, child or adult. Patellofemoral (anterior) symptoms. Initial anteroposterior, lateral, and axial radiographs non-diagnostic (demonstrate normal findings or a joint effusion). If additional imaging is necessary, and if internal derangement is suspected. Non-traumatic knee pain, adult. Non-trauma, non-tumor, non-localized pain. Initial anteroposterior and lateral radiographs non-diagnostic (demonstrate normal findings or a joint effusion). If additional studies are indicated, and if internal derangement is suspected. Non-traumatic knee pain, adult non-trauma, non-tumor, non-localized pain. Initial anteroposterior and lateral radiographs demonstrate evidence of internal derangement (e.g., Pellegrini Stieda disease, joint compartment widening)." There is nothing documented in the medical record to support any injury or damage to the right knee that would require an MRI. The right knee does not fit in the criteria stated in the Official Disability Guidelines for requiring an MRI. Therefore, this request has not been established to be medically necessary."*

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

Patient with bilateral knee derangement for which MRI is medically necessary and fits into ODG criteria as noted below (criteria to assess cartilage, internal derangement, either traumatic or non traumatic /exacerbation).

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

☒ ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES

MRI's (magnetic resonance imaging)

Recommended as indicated below. Soft-tissue injuries (meniscal, chondral surface injuries, and ligamentous disruption) are best evaluated by MRI. ([ACR, 2001](#)) See also [ACR Appropriateness Criteria](#)TM. Diagnostic performance of MR imaging of the menisci and cruciate ligaments of the knee is different according to lesion type and is influenced by various study design characteristics. Higher magnetic field strength modestly improves diagnostic performance, but a significant effect was demonstrated only for anterior cruciate ligament tears. ([Pavlov, 2000](#)) ([Oei, 2003](#)) A systematic review of prospective cohort studies comparing MRI and clinical examination to arthroscopy to diagnose meniscus tears concluded that MRI is useful, but should be reserved for situations in which further information is required for a diagnosis, and indications for arthroscopy should be therapeutic, not diagnostic in nature. ([Ryzewicz, 2007](#)) This study concluded that, in patients with nonacute knee symptoms who are highly suspected clinically of having intraarticular knee abnormality, magnetic resonance imaging should be performed to exclude the need for arthroscopy. ([Vincken, 2007](#)) In most cases, diagnosing osteoarthritis with an MRI is both unnecessary and costly. Although weight-bearing X-rays are sufficient to diagnose osteoarthritis of the knee, referring physicians and some orthopaedic surgeons sometimes use magnetic resonance imaging (MRI) either with or instead of weight bearing X-rays for diagnosis. For total knee arthroplasty (TKA) patients, about 95% to 98% of the time they don't need an MRI. Osteoarthritis patients often expect to be diagnosed with MRIs, and this demand influences MRI use. Average worker's compensation reimbursement is also higher for the knee MRI (\$664) than for the knee X-rays (\$136). ([Goldstein, 2008](#)) Repeat MRIs are recommended if need to assess knee cartilage repair tissue. In determining whether the repair tissue was of good or poor quality, MRI had a sensitivity of 80% and specificity of 82% using arthroscopy as the standard. ([Ramappa, 2007](#)) MRI scans are accurate to diagnose meniscus tears, but MRI is a poor predictor of whether or not the tear can be repaired. Surgeons cannot tell whether the tear will be repairable until the surgery is underway, and it affects recovery because repaired meniscus tears have a more involved recovery compared with surgical removal of the tissue. ([Bernthal, 2010](#)) In this case series, in more than half of patients who had an MRI at the request of their referring physician, the MRI was not necessary. MRI was considered unnecessary if: X-rays alone could establish the diagnosis, patellofemoral pain with a normal ligamentous and meniscal exam, the knee pain resolved before seeing an orthopedic surgeon, or the MRI findings had no effect on treatment outcome. MRI studies were deemed necessary if they were indicated by history and/or physical examination to assess for meniscal, ligamentous, or osteochondral injury or osteonecrosis, or if the patient had an unexpected finding that affected treatment. ([Khanuja, 2011](#)) Routine use of MRI for follow-up of asymptomatic patients following knee arthroplasty is not recommended, but may be appropriate for pain after TKA with a negative radiograph for loosening and low probability of infection. ([Weissman, 2011](#)) MRI of knees with no radiographic evidence of osteoarthritis are still likely to identify structural lesions associated with osteoarthritis (ie, osteophytes, cartilage damage, bone marrow lesions). ([Guermazi, 2012](#))

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](#))