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Notice of Independent Review Decision

DATE OF REVIEW: December 29, 2008

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Inpatient bilateral knee arthroscopy with possible meniscectomies and post patient - LOS 1 day

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

Certified by the American Board of Orthopaedic Surgery

REVIEW OUTCOME

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

Upheld (Agree)

INFORMATION PROVIDED TO THE IRO FOR REVIEW

- Utilization review (11/07/08)
- Reconsideration review (11/25/08)
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- Utilization reviews (11/07/08)
- Reconsideration review (11/25/08)
- Office records (05/06/08 – 10/27/08)
- Diagnostics (04/07/08)

- Office records (05/06/08 – 11/24/08)
- Diagnostics (04/07/08)
- Utilization review (11/07/08)
- Reconsideration review (11/25/08)

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a xx-year-old male driving a pick-up truck when it blew a tire, hit the driveway culvert, and rolled over three times. He was thrown from the window and sustained multiple injuries including a right hand open laceration.

Initially, the patient was treated in the emergency room (ER) for right hand open laceration. He underwent a reconstructive tendon surgery for significant hand

dysfunction, was prescribed medications, and sent to physical therapy (PT). Additionally, he was diagnosed with a C6-C7 compression fracture 14 days post injury with anterior wedging of C6, compression of C7, and anterior wedging of T1. The patient was placed on supplemental O2 and had been receiving a BiPAP machine for respiratory insufficiency status post traumatic brain injury. Electrodiagnostic studies revealed left and right median nerve abnormality, whereas magnetic resonance imaging (MRI) of the cervical spine revealed multilevel mild spondylosis with minimal C3-C6 and C7-T1 disc bulging, old less than 50% superior C7 endplate fracture, and mild-to-moderate right C4-C5 neuroforamen encroachment. The patient had also been provided an extensive neuropsychological evaluation. He exhibited diminished cervical range of motion (ROM) with cervical radicular symptoms into the right hand, evidence of ongoing median nerve injury in the right hand, tenderness over the right hip with diminished ROM, vestibular dysfunction, obstructive sleep apnea, crepitation and swelling in his feet, and the bilateral knee pain.

, M.D., performed a designated doctor evaluation (DDE) on April 11, 2007, and opined that the patient had not yet reached a plateau consistent with maximum medical improvement (MMI) due to some lapses in his early care. He really was not capable of returning to work due his vestibular issues.

In a letter of clarification, Dr. stated that due to the accident the patient had multiple severe traumas including cervical fracture, radiculopathy, hip injury, vestibular dysfunction, inhalation injury, mechanical knee pain, and depression. He further stated that both shoulders, both knees, both hips, lung inhalation injury, the multiple-level cervical stenosis, and spinal stenosis were all a direct result of his injury. The multilevel spondylosis was pre-existing, but was aggravated and injured as a result of the motor vehicle injury.

On February 18, 2008, Dr. performed another DDE to assess whether or not the patient had sustained urethral trauma or whether his voiding issues were a direct result of his pre-existing benign prostate hypertrophy (BPH) or some other prostatic abnormality. Dr. noted that Dr. had placed the patient at MMI and had assigned 5% whole person impairment (WPI) rating based on abnormalities and lack of clinical radiculopathy. Dr. requested a required medical evaluation (RME) or an evaluation with a urologist to answer the question. Prostate specific antigen (PSA) had been performed and showed no evidence of abnormality that would suggest prostatic carcinoma as a cause for his urinary retention, outflow obstruction, and inability to urinate.

Magnetic resonance imaging (MRI) of the right knee revealed small suprapatellar joint effusion secondary to posttraumatic synovitis and a popliteal cyst whereas MRI of the left knee revealed a 3.6-cm popliteal cyst medial to the medial head of the gastrocnemius.

In May 2008, , M.D., saw the patient for bilateral knee pain and left shoulder pain. Examination of the bilateral knees revealed patellofemoral crepitation and positive apprehension signs. Dr. assessed bilateral knee traumatic chondromalacia status post anterior knee contusions with intermittent effusions and crepitations. He performed Hyalgan injections x3 to the bilateral knees without much improvement.

In October, , M.D., noted positive patellofemoral grind test in the bilateral knees. X-rays of the left and right knee revealed osteoarthritis. Dr. administered a steroid injection into the bilateral knees, which helped only for a few days. Due to failure of conservative treatment, Dr. recommended bilateral knee arthroscopy with partial medial and lateral meniscectomy and chondroplasty.

On November 7, 2008, M.D., denied inpatient bilateral knee arthroscopy with possible meniscectomy, postoperative PT, and LOS a one day with the following rationale: *“Discussion held with Dr. reveals that the patient does not appear to have significant effusion, documented mechanical instability, fracture, or other significant abnormality. Studies have been done documenting the fact that arthroscopic debridement for just chondromalacia/ arthritis without preoperative documentation of a meniscal abnormality usually do not have a long-term outcome. In light of the fact that there is no clear documentation of an internal derangement or clear positive physical finding to correlate with a specific diagnosis and the fact that this patient has a left knee MRI without evidence of internal derangement, then the surgical request is not medically necessary.”*

On November 24, 2008, Dr. assessed MMI as of May 19, 2008, and assigned 55% WPI rating.

On November 25, 2008, , M.D., denied the reconsideration request for bilateral knee arthroscopy with the following rationale: *“The study, combined with other evidence, indicates that osteoarthritis of the knee is not an indication for arthroscopic surgery and indeed has been associated with inferior outcomes after arthroscopic knee surgery. The clinician has not demonstrated clinical findings consistent with meniscal tear nor do the MRI findings reflect meniscal tears. The claimant has osteoarthritis, which would not respond to this bilateral knee arthroscopy and may actually make him worse.”*

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

Based on the documentation provided, as well as the rationale of the reviewers inclusive of the previous two denials for inpatient (1 day LOS) bilateral knee arthroscopy with partial medial and/or lateral meniscectomies and chondroplasties, I concur with the opinion of the previous reviewers whose rationale is medically reasonable and supportable by evidence-based standards such as ODG. There is insufficient evidence of an acute, focal pathoanatomic lesion that may be directly attributed to the MOI, the initial presenting symptoms, the interval history, or pertinent positive physical exam findings (or lack thereof). Evidence-based musculoskeletal literature is replete with evidence that many persons in this age group may have significant appearing “abnormal” findings on imaging studies, yet may be *completely asymptomatic*. Therefore, careful clinical correlation must be consistently established based on specific clinical findings. Such correlation is not evident in the documentation herewith.

The MRI findings related to both knees are consistent with typical degenerative arthritis and are medically most probably a pre-existing condition that was neither caused by nor permanently aggravated/exacerbated by the MOI, as there is insufficient evidence of an acute, focal pathoanatomic lesion that may be directly

attributed to the MOI, the initial presenting symptoms, the interval history, or pertinent positive physical exam findings (or lack thereof).

ODG Integrated Treatment/Disability Duration Guidelines **Knee**

Note: The Treatment Planning sections outline the most common pathways to recovery, but there is no single approach that is right for every patient and these protocols do not mention every treatment that may be recommended. See the [Procedure Summaries](#) for complete lists of the various options that may be available, along with links to the medical evidence.

Initial Diagnosis

Knee ailments are among the ten most common causes of reported work-related complaints and workers' compensation claims. Initially, the practitioner should make sure that there are no indications of a potentially serious disease or condition (red flags), the presence of which would require that the patient be referred immediately to a specialist. In the absence of such red flags, the occupational provider can safely manage the healing process.

Initial Evaluation

First visit: with Primary Care Physician MD/DO (100%)

- 1) 1) Check for serious underlying conditions often indicated by deformity or bone crepitation (fractures), displaced patella, tibia or fibula (dislocation), severe pain with motion, infection, additional pain in the back or hip, excessive swelling, nontender mass (possibly indicating tumor), or neurovascular symptoms such as pale, cold skin, painless swelling, and/or paralysis.
- 2) 2) Determine the incident or incidents that caused the complaint, especially torsion, fixed foot "pop", external lateral force, or forward force with abrupt halt in gait.
- 3) 3) Determine whether the problem is acute, sub-acute, chronic, or of insidious onset.
- 4) 4) Determine the severity and specific anatomic location of the pain.
- 5) 5) Describe location and severity of pain.
- 6) 6) Assess the ability of the patient to lift and carry weight, from no to full lifting ability.
- 7) 7) Assess the ability to climb stairs and hills, and walk on uneven ground.
- 8) 8) Determine any present medication.
- 9) 9) Determine any previous medical history, history of systemic disease, or history of previous knee injury, previous knee surgery, discomfort or related disability.
- 10) 10) Investigate non-industrial reasons that commonly exacerbate knee complaints; i.e., recreational sports or other exercise that aggravates the knee, degenerative disorders, and past acute injury.
- 11) 11) Compare clinical exam findings of injured knee to opposite knee.

Presumptive Diagnosis

Observe the patient's walk and stance for abnormalities, including swelling, deformity, discoloration, inability to extend and difficulty walking.

Examine the knee in an extended position for tenderness and range of motion.

Check for ligament stability while applying pressure with the joint slightly flexed.

Pull the tibia forward to examine the knee at 30 degrees ([Lachman test](#)). Problems with both flexation and extension at once could indicate the need for surgery.

Aspiration can be used on initial atraumatic effusions, but only if there is no sign of cellulitis/infection of the skin. Anterior knee pain, popping and clicking, and possible cartilage loss (shown through MRI), are indicators of Patellofemoral Syndrome.

Other anterior knee pains, along with tenderness over the patellar tendon, could be signs of patellar tendinitis. Swelling over the tibial tubercle could indicate Osgood-Schatter disease, a congenital condition (common in adolescents – not work related).

Prepatellar bursitis and contusion/periostitis could be caused by direct force, prepatellar bursitis by repetitive friction force.

Unexplained knee pain, semi-locking, catching and swelling could be patellofemoral instability, which is often mistaken for a ligament injury. Patellofemoral instability is successfully treated with physical therapy. Neurologic condition should be assessed, especially in regard to evidence of lumbar disk disease with possible radiation to the knee.

Immediate referral is recommended for patients with neurologic symptoms, infections, tumor, or deformity.

Initial Therapy

The first step is to reduce pain and make the patient feel comfortable, usually with nonprescription analgesics or prescribed pharmaceuticals if necessary. At-home exercises such as bicycling and straight leg lifting or other retraining and weight-bearing activities may aid in rehabilitation, although a physical therapist may be necessary depending on patient motivation and degree of pain. Exercise and movement have been shown to be more beneficial than total rest, but care must be taken not to overload the knee during weight bearing exercises.

Imaging

If a fracture is considered, patients should have radiographs if the Ottawa criteria are met. Among the 5 decision rules for deciding when to use plain films in knee fractures, the Ottawa knee rules (injury due to trauma and age >55 years, tenderness at the head of the fibula or the patella, inability to bear weight for 4 steps, or inability to flex the knee to 90

degrees) have the strongest supporting evidence. Diagnostic performance of MR imaging is recommended for the menisci and cruciate ligaments of the knee.

Surgery

Immediate emergency surgery is usually unnecessary with knee injuries unless there is a need to drain acute effusions. Otherwise, most knee problems are greatly improved with physical methods alone. Only when exercise programs are unable to increase strength and range of motion in the knee after more than a month, should surgery be considered, and even then it may not be necessary. Surgery may be considered in the following cases:

Anterior Cruciate Ligament (ACL) Tears: The decision on whether or not to surgically repair an ACL tear should take into account the patient's work and life needs. For those whose life does not include active use or load of the knee, surgery may be unnecessary. The rehabilitation process following surgery involves six months of very intense therapy so non-surgical recovery should be allowed to occur as much as possible before any surgery takes place. Confirmation of a complete tear in the ligament through MRI findings, clear signs of instability confirmed through the [Lachman](#) and [pivot test](#), and a history of frequent falls or giving way, are consistent with this condition. See [ODG Indications for Surgery](#) -- Anterior cruciate ligament (ACL) repair.

ODG Return-To-Work Pathways
Severe (tear), Grade III¹, ACL repair, sedentary/modified work: 35 days
Severe (tear), ACL repair, manual/standing work: 180 days
(See ODG Capabilities & Activity Modifications for Restricted Work under "[Work](#)" in Procedure Summary)

Collateral Ligament Tears: Surgery is usually unnecessary; healing often occurs with rehabilitative exercises alone.

Meniscus Tears: Patients with meniscus tears that are not severely limiting or progressive may not need surgical attention. In patients younger than 35, arthroscopic meniscal repair can preserve meniscal function, although the recovery time is longer compared to partial meniscectomy. Arthroscopy and meniscus surgery may not be as beneficial for older patients who are exhibiting signs of degenerative changes, possibly indicating osteoarthritis.

ODG Return-To-Work Pathways
Without surgery, clerical/modified work: 0-2 days
Without surgery, manual/standing work: 21 days
With arthroscopy, clerical/modified work: 14 days
With arthroscopy, manual/standing work: 42 days
With arthrotomy, clerical/modified work: 28 days
With arthrotomy, manual/standing work: 56 days
With arthrotomy, heavy manual/standing work: 84 days

Osteochondral Defects: Studies are still being done to test the effectiveness of osteochondral autograft transplant system (OATS) procedures for osteochondral defects. Patients under 40 years old with active lifestyles may benefit from OATS and the procedure may delay the development of osteoarthritis.

Patellofemoral Syndrome (PFS): While commonly treated with arthroscopic patellar shaving, this procedure is not proven in terms of long-term improvement. In cases of severe patellar degeneration, surgery is usually not helpful. For patients with rheumatoid conditions, patellectomy and patellar replacements are sometimes performed on active patients. Other possible surgeries for PFS are lateral arthroscopic release and surgical realignment of the extensor mechanism.

ODG Return-To-Work Pathways
Arthroscopy, clerical/modified work: 7-10 days
Arthroscopy, manual work: 28 days
Arthroscopy, debridement of cartilage, clerical/modified work: 7-14 days
Arthroscopy, debridement of cartilage, manual work: 30 days
Arthrotomy, clerical/modified work: 21 days
Arthrotomy, manual work: 49 days

Arthritis: Therapeutic exercises are beneficial for knee osteoarthritis. Acetaminophen is an effective agent for relief of knee pain. Although safer, it is less effective than NSAIDs. For safety reasons acetaminophen should be the first line treatment, with NSAIDs reserved for those who do not respond. Glucosamine may provide effective symptomatic relief for patients with osteoarthritis of the knee. In addition, glucosamine has shown promising results in modifying the progression of arthritis over a 3-year period. Glucosamine has a tolerability profile similar to that of placebo and is better tolerated than ibuprofen or piroxicam. Intra-articular injection of hyaluronic acid (e.g., Synvisc) can decrease symptoms of osteoarthritis of the knee. The short-term benefit of intra-articular (IA) corticosteroids in treatment of knee osteoarthritis is well established, and few side effects have been reported. Longer-term benefits have not been confirmed. Total knee arthroplasties are well accepted as reliable and suitable surgical procedures to return patients to function.

ODG Return-To-Work Pathways

Medical treatment: 0 days Visco injection, knee: 7 days Partial arthroplasty, knee: 28 days Arthroplasty, knee, clerical/modified work: 42 days Arthroplasty, manual work: 84 days Obesity comorbidity (BMI \geq 30), multiply by: 1.31
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¹ **Definition of Sprain/Strain Severity Grade:** In general, a **Grade I** or mild sprain/strain is caused by overstretching or slight tearing of the ligament/muscle/tendon with no instability, and a person with a mild sprain usually experiences minimal pain, swelling, and little or no loss of functional ability. Although the injured muscle is tender and painful, it has normal strength. A **Grade II** sprain/strain is caused by incomplete tearing of the ligament/muscle/tendon and is characterized by bruising, moderate pain, and swelling, and a **Grade III** sprain/strain means complete tear or rupture of a ligament/muscle/tendon. A sprain is a stretch and/or tear of a ligament (a band of fibrous tissue that connects two or more bones at a joint). A strain is an injury to either a muscle or a tendon (fibrous cords of tissue that connect muscle to bone). ([Hannafin-NIH, 2004](#))

ODG Indications for Surgery™ -- Meniscectomy:

Criteria for meniscectomy or meniscus repair (Suggest 2 symptoms and 2 signs to avoid scopes with lower yield, e.g. pain without other symptoms, posterior joint line tenderness that could just signify arthritis, MRI with degenerative tear that is often false positive):

- 1. Conservative Care:** (Not required for locked/blocked knee.) Physical therapy. **OR** Medication. **OR** Activity modification. PLUS
 - 2. Subjective Clinical Findings (at least two):** Joint pain. **OR** Swelling. **OR** Feeling of give way. **OR** Locking, clicking, or popping. PLUS
 - 3. Objective Clinical Findings (at least two):** Positive McMurray's sign. **OR** Joint line tenderness. **OR** Effusion. **OR** Limited range of motion. **OR** Locking, clicking, or popping. **OR** Crepitus. PLUS
 - 4. Imaging Clinical Findings:** (Not required for locked/blocked knee.) Meniscal tear on MRI.
- ([Washington, 2003](#))

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