

# AccuReview

An Independent Review Organization  
 569 TM West Parkway  
 West, TX 76691  
 Phone (254) 640-1738  
 Fax (888) 492-8305

**[Date notice sent to all parties]:** March 18, 2018

**IRO CASE #:** XXXXXX

## DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Right knee arthroscopy with partial meniscectomy, excision of popliteal cyst, extensive synovectomy, chondroplasty, abrasion arthroplasty, and removal of loose bodies 29880, 29881, 29879, 29877, 29876

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

This physician is Board certified in Orthopaedic Surgery with over 15 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]:

XXXX: MRI Lower Ext Joint (Knee) WO Contrast RT dictated by XX. Impression: 1. Complex tearing of the medial meniscus centered at the posterior body and horn junction. 2. Moderately severe tricompartmental osteoarthritis.

XXXX: Encounter dictated by XX. CC: knee pain after work injury XXXX with swelling and stiffness, decreased ROM in right knee. Walking exacerbates pain, reported right knee pops. PE: Right: over the lateral joint line and over the medial joint line. Mild effusion, ROM limited, painful active flexion 5-80 degrees. Positive McMurray test. Assessment & Plan: Complex tear of medial meniscus of right knee as current injury, subsequent encounter 836.0, S83.231D: right meniscal tear, chondromalacia, baker's cyst. Plan: MRI joint lower extremities wo contrast right; PT evaluation, arthrocentesis, aspiration and/or injection, methylprednisolone, x-ray of right knee. RX: diclofenac 3% gel.

XXXX: Encounter dictated by XX. CC: right knee pain. Medications: Mobic, fish oil, MVI, probiotic advanced. PE: Right knee: tenderness over the lateral joint line and over the medial joint line with mild effusion and positive McMurray's test. Assessment & Plan: Complex tear of medial meniscus of right knee as current injury, subsequent encounter 836.0, S83.231D. Right, meniscal tear, chondromalacia, baker's cyst. At this time, we will treat this claimant knee pain with a combination of medicine exercise, and a cortisone injection. The claimant was given a prescription for an anti-inflammatory as well as physical therapy focusing on strengthening and range of motion. In addition, the claimant was given a cortisone injection under sterile conditions into the knee and tolerated the procedure well. We will see the claimant back in XX. If not improving XX may benefit from arthroscopic surgery.

XXXX: Encounter dictated by XX. CC: right knee pain. Since XX injection XX, XX has had more increased pain in XX knee and stated that after XX injection XX has not been able to bend XX knee when XX walks and feels it lock up now. Plan: At this point the claimant continues to have mechanical symptoms including catching, locking, and the knee giving out. In addition, the claimant has activity limiting knee pain and has failed conservative therapy including anti-inflammatories, PT, and a cortisone injection. The claimant will likely require surgical intervention to improve. The plan will be Right knee arthroscopy with partial meniscectomy, excision of popliteal cyst, extensive synovectomy, chondroplasty, abrasion arthroplasty, and removal of loose bodies.

XXXX: UR performed by XX. Reason for denial: The MRI revealed right knee complex tearing of the medial meniscus centered at the posterior body and horn junction. Moderately severe tri-compartmental osteoarthritis. While the patient may need surgery, however, the patient has moderately severe tri-compartmental osteoarthritis (OA) and the guidelines do not recommend arthroscopic surgery for OA. In addition, there are no loose bodies seen on imaging. Recommend non-certification of the request for right knee arthroscopy with partial meniscectomy, excision of a popliteal cyst, extensive synovectomy, chondroplasty, abrasion arthroplasty, and removal of loose bodies.

XXXX: Encounter dictated by XX. CC: right knee pain, reported popping. PE: right knee: tenderness over the lateral joint and over the medial joint line with mild effusion and positive McMurray’s test. Plan: The claimant has activity limiting knee pain and has failed conservative therapy including anti-inflammatories, T, and a cortisone injection. Claimant requires surgical intervention to improve.

XXXX: UR performed by XX. Reason for denial: The ODG states meniscectomy is not recommended for OA in the absence of solid mechanical meniscal findings or in older patients with degenerative tears who are more appropriately treated with physical therapy/exercise. The ODG recommend loose body removal surgery where symptoms are noted consistent with a loose body, after the failure of conservative treatment, but knee arthroscopic surgery for chosen, all loose bodies, chondral flap tears and meniscal tears that could be causing the symptoms should be treated. Arthroscopic surgery in the presence of significant knee OA should only rarely be considered for major, definite and new mechanical locking/catching after the failure on non-operative treatment. In this case, the physical exam of the right knee revealed tenderness over the lateral joint line and over the medial joint line. The physician noted that the claimant continued to have mechanical symptoms including catching, locking, and the knee giving out. In addition, the claimant had activity-limiting knee pain and had failed conservative therapy to include anti-inflammatories, physical, and a cortisone injection. An MRI of the right lower extremity joint dated XXXX, revealed complex osteoarthritis. There was moderate knee joint effusion present and minimal edema localized to the Baker’s cyst. There were mild non-specific pre-patellar and pretibial soft tissue edema present. The claimant may need surgery, however, the claimant has moderate least severe tri-compartment OA. Furthermore, there were no findings in the MRI for large unstable chondral defect or loose body seen on imaging. Therefore, the case in its entirety is not medically necessary. As such, the request for right knee arthroscopy with partial meniscectomy, excision of a popliteal cyst, extensive synovectomy, chondroplasty, abrasion arthroplasty, and removal of loose bodies in non-certified.

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

The request for right knee arthroscopy with partial meniscectomy, excision of popliteal cyst, extensive synovectomy, chondroplasty, abrasion arthroplasty, and removal of loose bodies is denied. This claimant has continued pain in the right knee despite a course of conservative care, consisting of cortisone injection, anti-inflammatory medication, and physical therapy. XX MRI demonstrates complex tearing of the medial meniscus in the setting of moderately severe tricompartmental osteoarthritis. Knee arthroscopy with partial meniscectomy, excision of popliteal cyst, extensive synovectomy, chondroplasty, abrasion arthroplasty, and removal of loose bodies was recommended by the treating physician. Based on my review of the records, the claimant's primary source of pain is moderately severe tricompartmental osteoarthritis. The Official Disability Guidelines (ODG) and The American Academy of Orthopedic Surgeons (AAOS) do not support knee arthroscopy for osteoarthritis. Knee arthroscopy does not give long-term pain relief for moderate-severe tricompartmental osteoarthritis. Popliteal cyst excision is not recommended by the ODG. There is no indication for this procedure in this claimant. Therefore, after reviewing the medical records and documentation provided, the request for Right knee arthroscopy with partial meniscectomy, excision of popliteal cyst, extensive synovectomy, chondroplasty, abrasion arthroplasty, and removal of loose bodies 29880, 29881, 29879, 29877, 29876 is denied.

Per ODG:

Knee joint replacement	<p><b>ODG Indications for Surgery™ -- Knee arthroplasty:</b>                  (If only 1 compartment is affected, a unicompartmental or partial replacement may be considered. If 2 of the 3 compartments are affected, a total joint replacement is indicated.)                  Criteria for knee joint replacement:</p>
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**1. Conservative Care:**

- (a) Exercise therapy (supervised PT and/or home rehab exercises) AND
- (b) Medications (unless contraindicated: NSAIDs OR Viscosupplementation injections OR Steroid injections) {*Surgery should be delayed at least 6 months following any intra-articular corticosteroid injection due to the risk of infection*}. AND
- (c) Documented significant weight loss effort with BMI > 35 PLUS

**2. Subjective Clinical Findings:**

- (a) Stiffness AND
  - (b) Nighttime joint pain AND
  - (c) Marked daily pain despite conservative care AND
  - (d) Documentation of current significant functional limitations including limited mobility.
- PLUS

**3. Objective Clinical Findings:**

- (a) Over 50 years of age AND
- (b) Body mass index (BMI) < 40, as increased BMI poses elevated risks for post-op complications. {*Pre-operative bariatric surgery is not supported, but may be otherwise indicated for unrelated medical (disease of life) reasons*} PLUS

**4. Imaging Clinical Findings:** Osteoarthritis on either

- (a) Standing X-ray (documenting significant loss of chondral clear space in at least one of the three compartments; varus or valgus deformity with medial or lateral loss of joint space) OR
- (b) Previous arthroscopy (documenting advanced chondral erosion or exposed bone, especially if bipolar chondral defects are noted). ([Washington, 2003b](#)) ([Sheng, 2004](#)) ([Saleh, 2002](#)) ([Callahan, 1995](#))

For average hospital LOS if criteria are met, see [Hospital length of stay](#) (LOS). See also [Skilled nursing facility LOS](#) (SNF).

**Risk versus benefit:** The risk/benefit tradeoff for total knee arthroplasty (TKA) favors patients who have intense or severe symptoms of knee osteoarthritis, are at least 55 years old, have limited mobility, and have a BMI < 40. It is much less favorable for patients who have slight or moderate symptoms and have pain and functional loss less than that of the average patient undergoing TKA. TKA is probably not appropriate for patients with milder symptoms. ([Riddle, 2014](#)) After surgery, patients should be prepared to lose a few months to pain, limited mobility, and vigorous rehabilitation. Patients who do not commit to rehab will not regain the maximum range of motion. The primary reason for joint replacement is pain relief. Of secondary importance is improvement of joint function, but those results are less predictable. Knee replacement carries the same dangers as other major surgeries, including infections and blood clots. Patients with comorbidities, such as heart conditions, diabetes, or weak immune systems, are the most at risk. Other risks include implants that become loose or dislocate. Furthermore, the artificial knee might wear out after about 20 years, requiring another joint replacement down the road. Factors that increase the risk of dissatisfaction are younger age, being female, valgus alignment of the knee, and post-traumatic arthritis. ([Ayers, 2010](#)) In deciding who should have knee joint replacement surgery for osteoarthritis, there is a need to balance potential benefits against potential risks using the concept of capacity to benefit, and the benefits of overcoming functional limitations should considerably outweigh any likely risks or unintended consequences in an individual by a considerable margin for it to be indicated. ([Dieppe, 2011](#)) Surgeons and their patients sometimes will choose a partial replacement (PKR) for the sake of a more normal-feeling knee, less extensive surgery, and a lower risk for infection, knowing that they have the option of converting to a TKR if need be. However, partial replacement has a higher risk for revision surgery than total replacement, and a conversion TKR is more likely to require more follow-up than a primary TKR. ([Carr, 2012](#)) Citing the arduous rehabilitation and bone loss associated with traditional knee arthroplasty, some still opt for unicondylar knee arthroplasty, especially in young, high-demand patients. ([McAllister, 2008](#)) Consideration should be given to delaying total joint arthroplasty in a patient with a BMI > 40, especially when

associated with other comorbid conditions. Obese patients (BMI > 30) have similar satisfaction rates as the non-obese population following total joint arthroplasty; however, as BMI increases over 40, the functional improvement lessens and/or occurs more gradually and must be tempered with the associated increased complication profile. ([AAHKS, 2013](#)) ([Jämsen, 2012](#)) ([Baker2, 2012](#)) More than 90% of patients who have knee replacement surgery experience less pain and greater mobility in their knee after the procedure. ([Losina, 2009](#)) Fewer than 2% of total knee replacement surgeries result in serious complications, and the 30-day mortality rate for total knee replacement is about 0.25%. ([HCUP, 2015](#))

**NNH/NNT:** On average, the [NNH](#) (number needed to harm) is about 50, and the [NNT](#) (number needed to treat) is about 1.1.

**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)