MAXIMUS Federal Services

Case Number:	CM15-0118963		
Date Assigned:	06/29/2015	Date of Injury:	08/30/2013
Decision Date:	08/25/2015	UR Denial Date:	06/10/2015
Priority:	Standard	Application Received:	06/19/2015

HOW THE IMR FINAL DETERMINATION WAS MADE

MAXIMUS Federal Services sent the complete case file to an expert reviewer. He/she has no affiliation with the employer, employee, providers or the claims administrator. He/she has been in active clinical practice for more than five years and is currently working at least 24 hours a week in active practice. The expert reviewer was selected based on his/her clinical experience, education, background, and expertise in the same or similar specialties that evaluate and/or treat the medical condition and disputed items/Service. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

The Expert Reviewer has the following credentials:
State(s) of Licensure: Minnesota, Florida
Certification(s)/Specialty: Orthopedic Surgery

CLINICAL CASE SUMMARY

The expert reviewer developed the following clinical case summary based on a review of the case file, including all medical records:

This is a 47 year old female with an August 30, 2013 date of injury. A progress note dated May 18, 2015 documents subjective complaints (knee pain; clicking and popping of the knee; pain all the time), objective findings (knee has slight recurvatum; knee flexes to 130 degrees; medial compartment opens about one to two millimeters with valgus stress; clicking at the posteromedial knee with deep flexion), and current diagnoses (painful left unicompartmental knee arthroplasty). Treatments to date have included knee surgery, x-ray of the knee (May 18, 2015; showed valgus alignment, and narrowing of the lateral compartment of the knee by at least 50%), physical therapy, bracing, and medications. The treating physician documented a plan of care that included a left total knee arthroplasty and associated services.

IMR ISSUES, DECISIONS AND RATIONALES

The Final Determination was based on decisions for the disputed items/services set forth below:

Left total knee arthroplasty: Overturned

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Knee and Leg, Knee arthroplasty.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Section: Knee, Topic Knee joint replacement: Revision Total knee arthroplasty and Other Medical Treatment Guidelines Int. Orthop. 2010 Dec; 34(8) 1137-1143 Long-term clinical results of the Oxford medial unicompartmental knee arthroplasty. Mercier, Wimsey, et al.

Decision rationale: The injured worker is a 47-year-old female with a date of injury of 8/30/2013. The diagnosis was osteoarthritis involving the medial compartment of the left knee. She underwent conservative treatment including Synvisc injections, cortisone injections and physical therapy and subsequently had a unicompartmental arthroplasty on February 24, 2014. The postoperative course was prolonged and she was in physical therapy longer than usual. She was having difficulties with the iliotibial band. She returned to work in August 2014. In October 2014 she was kneeling on her right knee and had acute onset of left medial knee pain. At the time of her examination of December 15, 2014 she was tender on the medial aspect of the left knee. She also had pain across the anterior aspect at the joint line. On examination there was a crepitus palpable at the medial joint line of the left knee. A prior examination of 8/4/2014 had documented her knee was in valgus alignment after surgery. A subsequent orthopedic qualified medical reevaluation was performed on April 22, 2015. The notes indicate that she developed marked left knee pain when kneeling down to pat a dog in October 2014. She was put on Celebrex and a knee brace was prescribed. She indicated that the left knee was painful and occasionally gave way. She also stated that her pain worsened with activities. The pain was both medial and lateral and was associated with slipping of the knee. On examination she weighed 190 pounds and had valgus alignment of the left knee in the standing position and also in the stance phase of the gait cycle. The left knee measured 12 of valgus in the lying position. X-rays of the left knee also revealed valgus alignment compared to the right knee. And there was no obvious loosening documented. Mild degenerative changes were noted in the patellofemoral joint and the lateral compartment. The examiner opined that she should try physical therapy, NSAIDs and a corticosteroid injection. However, if symptoms persist then she would be a candidate for total knee arthroplasty. California MTUS guidelines do not address this topic. ODG guidelines and a literature review is therefore conducted. ODG guidelines indicate that revision total knee arthroplasty is an effective procedure for failed knee arthroplasties based on global knee rating scales. It would be recommended for failure of the original approved arthroplasty. In order to understand the reason for the failure of the unicompartmental arthroplasty a literature search was carried out with regard to the valgus alignment which has been reported in the medical records by at least two examiners.Long-term clinical results of the Oxford medial unicompartmental knee arthroplasty were published in the literature in International Orthopedics 2010 December 30 4 (8) 1137-1143 by Mercier, Wimsy, et al. The purpose of this study was to investigate the mode of failure and survivorship of an independently performed series of medial Oxford unicompartmental knee arthroplasties. The study included 43 knees in 40 patients with a mean follow-up of 14.88 years. The study concluded that the most obvious surgeon associated failure is progression of arthritis in the lateral compartment. This failure which is commonly due to over correction (into valgus) should never occur as a direct result of the operation. The mean time to revision was 7 years. In all cases the knees were overcorrected. None of them occurred within 5 years whereas relatively rapid deterioration needing revision has been seen in other series and has been attributed to over correction of the varus deformity. Kennedy and White have shown that the best results occurred when the

alignment is slightly under corrected. The reason why the knees are overcorrected is to achieve stability of the mobile-bearing. There is a tendency to use the largest possible bearing with the potential unintentional consequence of over correcting the knee into val gus alignment. The worst situation is represented when the varus is low with an over-reducibility of the deformity. The authors concluded that some of the failures indicate that the surgical procedure is technically challenging, in particular the overcorrection of the knee axis. It was very hard to control the under correction, ligamentous tension and the stability of the meniscal bearing. A review of this literature as well as other articles indicates that valgus alignment of the knee is not desirable after a unicompartmental arthroplasty of the medial compartment. The QME documented 12 of valgus in the supine position which would obviously increase in the standing position. The associated load transfer to the lateral compartment and altered biomechanics of the knee are not conducive to optimum function. This would explain the persisting global pain in the knee after the surgical procedure. Although conservative treatment has been offered, ODG guidelines as well as the medical literature support a revision to a total knee arthroplasty which is inevitable. As such, the request for a total knee arthroplasty is supported and the medical necessity has been substantiated.

Pre-operative labs: Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Preoperative testing.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Section: Low back, Topic: Preoperative lab testing.

Decision rationale: The injured worker is undergoing a major surgical procedure with anesthesia and fluid exchange as well as possibility of significant blood loss. As such a laboratory workup is supported. However, the request as stated does not specify the laboratory tests that are being requested. As such, the medical necessity of the request cannot be determined.

Pre-operative electrocardiogram (EKG): Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG), Preoperative testing.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Section: Low back. Topic: Preoperative electrocardiography.

Decision rationale: ODG guidelines classify a total knee arthroplasty as an intermediate risk surgical procedure. Preoperative electrocardiograms are recommended for patients undergoing high risk surgery and those undergoing intermediate risk surgery who have additional risk

factors. The risk factors include history of ischemic heart disease, history of compensated or prior heart failure, and history of cerebrovascular disease, diabetes mellitus, or renal insufficiency. The documentation provided does not indicate the presence of these risk factors. As such, the preoperative electrocardiogram is not supported by guidelines and the medical necessity of the request has not been substantiated.

12 post-operative physical therapy sessions: Overturned

Claims Administrator guideline: Decision based on MTUS Postsurgical Treatment Guidelines.

MAXIMUS guideline: Decision based on MTUS Postsurgical Treatment Guidelines Page(s): 24.

Decision rationale: California MTUS postsurgical treatment guidelines indicate 24 visits over 10 weeks for a total knee arthroplasty. The initial course of therapy is one half of these 24 visits which is 12. Then with documentation of continuing functional improvement a subsequent course of therapy of the remaining 12 visits may be prescribed. The request as stated is for 12 visits which is appropriate and medically necessary.