MAXIMUS Federal Services

Case Number:	CM15-0194373		
Date Assigned:	10/08/2015	Date of Injury:	07/02/2011
Decision Date:	11/16/2015	UR Denial Date:	09/30/2015
Priority:	Standard	Application Received:	10/02/2015

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: Illinois, California, Texas
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 injured worker is a 64-year-old female who sustained an industrial injury on 7/2/11. Injury occurred when she slipped and landed on her right knee. She underwent a right knee replacement in January 2012. The 9/3/15 treating physician report cited moderate grade 6/10 right knee pain. Pain increased with prolonged sitting, ascending and descending stairs, bending, and putting pressure on the knee. She had constant right knee swelling, tingling in the right foot, and severe loss of range of motion. She reported that her knee had gotten worse after surgery and was affecting her daily life and activities. Right knee x-rays showed well-fixed right total knee component with no evidence of migration or loosening. The patella appeared to be tracking well and joint space was symmetrical with no evidence of polyethylene wear. Physical exam documented an antalgic bent knee gait, range of motion 0-90 degrees, and 5/5 muscle strength. The knee was warm to touch but not tender. The diagnosis included painful right total knee and arthrofibrosis right total knee. The injured worker had not achieved good range of motion post-operatively but early on it was better. She was told at some point she had a stress fracture that had clearly resolved. She had a globally tender knee. Lab testing, including C reactive protein, sedimentation rate, and complete blood count was ordered. A CT scan of the right knee was ordered to assess component position and any evidence of loosening. A bone scan was ordered regarding possible loosening of the tibial tray. A dynamic fluoroscopy was recommended to document the range of motion and the pneumatic set up in the knee, and a hip to ankle scanogram was required to define the overall alignment of the leg. Authorization was requested for dynamic fluoroscopy and hip to ankle scanogram. The 9/30/15 utilization review denied the

request for dynamic fluoroscopy and hip to ankle scanogram as the injured worker had been approved on 9/28/15 for a right knee CT scan with 3D reconstruction and a bone scan regarding possible loosening and results from these tests should be considered prior to additional diagnostic procedures. Additionally, the hip to ankle scanogram was not considered to be performed imaging as there was noted under-detection of malalignment and the use of weight bearing full length x-rays was comprehensive for evaluation and resulted in less radiation exposure.

IMR ISSUES, DECISIONS AND RATIONALES

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

Dynamic fluoroscopy: Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Journal of Orthopedic Surgery and Research 2009, 4:6.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Weissman BN, Shah N, Daffner RH, Bancroft L, Bennett DL, Blebea JS, Bruno MA, Fries IB, Hayes CW, Kransdorf MJ, Luchs JS, Morrison WB, Palestro CJ, Roberts CC, Stoller DW, Taljanovic MS, Tuite MJ, Ward RJ, Wise JN, Zoga AC, Expert Panel on Musculoskeletal Imaging. ACR Appropriateness Criteria® imaging after total knee arthroplasty. [online publication]. Reston (VA): American College of Radiology (ACR); 2011. 13 p. [95 references].

Decision rationale: The California Medical Treatment Utilization Schedule and Official Disability Guidelines do not provide specific recommendations for dynamic fluoroscopy. The ACR Appropriateness Criteria for imaging after total knee arthroplasty states that radiographs are the standard method for evaluating loosening or infection but are limited in their sensitivity and specificity. Bone scans may be positive in asymptomatic patients even 2 years postoperatively and are, therefore, most helpful when evaluating patients many years after surgery. CT is helpful for measuring component rotational alignment. Guidelines state that fluoroscopy may be useful to see lucent lines in profile that could be obscured on standard anterior-posterior (AP) radiographs or sometimes for demonstrating loosening in real time under manipulation. This patient presents with persistent right knee pain, swelling, range of motion loss, and significant functional impairment following total knee arthroplasty. Initial evaluation with radiographs documented the component to be well placed with no evidence of loosening. Diagnostic studies, including CT scan with 3D reconstruction and bone scan, have been approved and were pending at the time of this request. Lab testing had also been ordered and were pending at the time of this request. Proceeding with CT scan and bone scan are consistent with evidence based medical guidelines. There is no compelling rationale to support the medical necessity of dynamic fluoroscopy at this time pending completion and assessment of recommended first-line diagnostic imaging. Therefore, this request is not medically necessary.

Hip to ankle scanogram: Upheld

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Knee. 2013 Jul 9. pii: S0968-0160(13)00102-6/j.knee.2013.05.009.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Gbejuade HO, White P, Hassaballa M, Porteous AJ, Robinson JR, Murray JR. Do long leg supine CT scanograms correlate with weight-bearing full-length radiographs to measure lower limb coronal alignment? Knee. 2014 Mar; 21(2): 549-52. doi: 10.1016/j.knee.2013.05.009. Epub 2013 Jul 10.; Holme TJ, Henckel J, Hartshorn K, Cobb JP, Hart AJ. Computed tomography scanogram compared to long leg radiograph for determining axial knee alignment. Acta Orthop. 2015;86(4):440-3. doi: 10.3109/17453674.2014.1003488. Epub 2015 Jan 13.

Decision rationale: The California MTUS and Official Disability Guidelines do not provide recommendations for hip to ankle scanograms. Peer-reviewed literature does not support the use of hip to ankle scanograms over weight bearing long leg radiographs for the assessment of knee alignment. [redacted] et al found a substantial under-detection of malalignment with scanogram and advised caution in the use for measurement of knee alignment in patients after total knee replacement. [redacted] et al compared scanogram to the reference standard of weight bearing long leg radiographic measurement of knee alignment and found similar precision but poor accuracy. They recommended that scanogram should not be used as a substitute for long leg weight bearing plain radiographs in measurement of the mechanical axis or anatomical axis of the knee. This patient presents with persistent right knee pain, swelling, range of motion loss, and significant functional impairment following total knee arthroplasty. Initial evaluation with radiographs documented the component to be well placed with no evidence of loosening. Diagnostic studies, including CT scan with 3D reconstruction and bone scan, have been approved and were pending at the time of this request. Lab testing had also been ordered and were pending at the time of this request. There is no compelling rationale provided to support the medical necessity of this request over standard weight bearing long leg radiographs for assessment of alignment and in the absence of current literature support. Therefore, this request is not medically necessary.