

<b>Case Number:</b>	CM14-0051622		
<b>Date Assigned:</b>	07/07/2014	<b>Date of Injury:</b>	06/12/2013
<b>Decision Date:</b>	08/27/2014	<b>UR Denial Date:</b>	03/28/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	04/18/2014

### 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. The expert reviewer is Board Certified in Orthopedic Surgery and is licensed to practice in Indiana. 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/services. He/she is familiar with governing laws and regulations, including the strength of evidence hierarchy that applies to Independent Medical Review determinations.

### CLINICAL CASE SUMMARY

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

The member is a 52-year-old male who sustained a work-related injury to his right and left knees on 6/12/13 due to a slip and fall. Initially, the member was treated conservatively with physical therapy, NSAIDs, analgesics, intra-articular steroid injections, orthovisc injections and activity modification. X-rays revealed bone-on-bone wear of the medial compartment of the right knee with moderate associated patellofemoral arthritis. The member has failed all conservative treatment modalities and surgery has been approved for a right total knee arthroplasty. The issue in dispute in this case is whether an MRI of the right knee prior to knee replacement should be approved. In this member's case, the MRI is not being requested for diagnostic purposes, but rather is being requested to manufacture preoperative patient specific instruments to be used at the time of surgery for total knee replacement to potentially improve the accuracy of the boney cuts.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**MRI of the right knee prior to knee replacement:** 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)- MRI (magnetic resonance imaging).

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Non-MTUS: Official Disability Guidelines (ODG) Knee and Leg (Acute and Chronic), Magnetic Resonance Imaging, as well as Other Medical Treatment Guideline or Medical Evidence: JAAOS, September 2013, Vol.21, No. 9, page(s) 513 - 518, Patient-Specific Instruments for Total Knee Arthroplasty.

**Decision rationale:** In this specific case, the requested MRI is being performed to develop Patient Specific Instrumentation (PSI) to potentially improve the accuracy of the cuts performed during this member's total knee surgery. Unfortunately, in a recent review article in the JAAOS on Patient Specific Instruments in Total Knee Arthroplasty, the studies we reviewed showed that PSI for TKA had very little impact on improving the surgical procedure, and no studies have assessed whether the use of PSI results in improved implant survival, patient satisfaction, or function (and it was concluded) PSI may have a small and specific role in very complex knee replacements, but additional data are required before they can be justified for routine use. These instruments should continue to be studied on a research basis only to evaluate whether or not they provide any benefit to the patient. For the reasons noted above, the requested MRI prior to knee arthroplasty is not medically necessary.