

<b>Case Number:</b>	CM15-0010393		
<b>Date Assigned:</b>	01/27/2015	<b>Date of Injury:</b>	10/17/2014
<b>Decision Date:</b>	03/24/2015	<b>UR Denial Date:</b>	01/12/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	01/19/2015

### 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: New Jersey, Michigan, California  
 Certification(s)/Specialty: Neurology, Neuromuscular Medicine

### 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 injured worker is a year old male who sustained an industrial injury on 10/17/2014. Diagnoses include status post right fibula fracture open reduction and internal fixation of the proximal fibular fracture, and internal fixation of the syndesmosis, on 10/29/2014. Treatment to date has included medications, and surgery. A physician progress note dated 12/23/2014 documents the wound is clean and x-rays shows satisfactory position. Treatment requested is for Pre-operative laboratory, and removal of hardware. On 01/12/2015 Utilization Review non-certified the request for pre-operative labs citing Official Disability Guidelines-Pre-operative laboratory studies testing. On 01/12/2015 Utilization Review non-certified the request for removal of hardware, and cited was Official Disability Guidelines, Ankle and foot, Hardware Implant Removal (fracture Fixation).

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Removal of hardware:** 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 Ankle & Foot

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Hardware implant removal (fracture fixation)

**Decision rationale:** According to ODG guidelines, hardware removal, Not recommend the routine removal of hardware implanted for fracture fixation, except in the case of broken hardware or persistent pain, after ruling out other causes of pain such as infection and nonunion. Not recommended solely to protect against allergy, carcinogenesis, or metal detection. Although hardware removal is commonly done, it should not be considered a routine procedure. The decision to remove hardware has significant economic implications, including the costs of the procedure as well as possible work time lost for postoperative recovery, and implant removal may be challenging and lead to complications, such as neurovascular injury, refracture, or recurrence of deformity. Current literature does not support the routine removal of implants to protect against allergy, carcinogenesis, or metal detection. (Busam, 2006) Despite advances in metallurgy, fatigue failure of hardware is common when a fracture fails to heal. Revision procedures can be difficult, usually requiring removal of intact or broken hardware. (Hak, 2008) Following fracture healing, improvement in pain relief and function can be expected after removal of hardware in patients with persistent pain in the region of implanted hardware, after ruling out other causes of pain such as infection and nonunion. (Minkowitz, 2007) The routine removal of orthopaedic fixation devices after fracture healing remains an issue of debate, but implant removal in symptomatic patients is rated to be moderately effective. Many surgeons refuse a routine implant removal policy, and do not believe in clinically significant adverse effects of retained metal implants. Given the frequency of the procedure in orthopaedic departments worldwide, there is an urgent need for a large randomized trial to determine the efficacy and effectiveness of implant removal with regard to patient-centred outcomes. (Hanson, 2008). There is no documentation of broken hardware and persistent pain in this case. The patient less physical examination demonstrated no infection, normal neurological and vascular examination. Therefore, the request for hardware removal is not medically necessary.

**Pre-operative laboratory:** 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 Low Back

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Preoperative lab testing

**Decision rationale:** According to ODG guidelines, pre-op lab testing Recommended as indicated below. Preoperative additional tests are excessively ordered, even for young patients with low surgical risk, with little or no interference in perioperative management. Laboratory tests, besides generating high and unnecessary costs, are not good standardized screening instruments for diseases. The decision to order preoperative tests should be guided by the patient's clinical history, comorbidities, and physical examination findings. Preoperative routine tests are appropriate if patients with abnormal tests will have a preoperative modified approach (i.e., new tests ordered, referral to a specialist or surgery postponement). Testing should generally be done to confirm a clinical impression, and tests should affect the course of

treatment. (Feely, 2013) (Sousa, 2013)Criteria for Preoperative lab testing:- Preoperative urinalysis is recommended for patients undergoing invasive urologic procedures and those undergoing implantation of foreign material. Electrolyte and creatinine testing should be performed in patients with underlying chronic disease and those taking medications that predispose them to electrolyte abnormalities or renal failure. Random glucose testing should be performed in patients at high risk of undiagnosed diabetes mellitus. In patients with diagnosed diabetes, A1C testing is recommended only if the result would change pre-operative management. A complete blood count is indicated for patients with diseases that increase the risk of anemia or patients in whom significant perioperative blood loss is anticipated.- Coagulation studies are reserved for patients with a history of bleeding or medical conditions that predispose them to bleeding, and for those taking anticoagulants. AS the request for hardware removal was not certified, the request for preoperative lab is not medically necessary.