

<b>Case Number:</b>	CM14-0131930		
<b>Date Assigned:</b>	08/22/2014	<b>Date of Injury:</b>	08/09/2013
<b>Decision Date:</b>	09/24/2014	<b>UR Denial Date:</b>	08/05/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	08/18/2014

### 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 California. 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 patient is a 53-year-old male with an 8/9/13 date of injury, due to a crush injury to the left hand. 3/24/14 Progress note documented that the left hand symptoms are the same. The progress note was handwritten and mostly illegible. Diagnosis included ORIF of the left middle and ring fingers (8/19/13); crush injury of the left hand; and healed proximal phalanx fracture of the left index and middle finger. The patient is on restricted duties with limited use of the left hand. The patient underwent removal of retained k-wire on 1/14/14, and is status post ORIF with crush injuries to the index, middle, and ring fingers. Bone scan from 3/26/14 revealed "focal intense increased uptake in the proximal phalanx of the middle finger of the left hand at the site of fracture." 7/28/14 Progress note described numbness and tingling with throbbing of the left hand, with reduced range of motion in the proximal, middle, and distal fingers. Grip strength on the right was 90/90/90 and on the left 25/25/25. Surgical intervention was requested.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Surgery: Removal of hardware, tenolysis & possible capsulotomy of the left index finger:**  
Upheld

**Claims Administrator guideline:** The Claims Administrator did not cite any medical evidence for its decision.

**MAXIMUS guideline:** Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints Page(s): 270. Decision based on Non-MTUS Citation x Official Disability Guidelines (ODG) Forearm, wrist, and hand chapter; hardware implant removal (fracture fixation) 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. Recommend removal of hardware when fractures are not involved, the pins are stabilizing a joint while a ligament or tendon repair is healing and they must be removed so that the joint can resume function, for example, a pin in the dip joint of a finger to stabilize while an extensor tendon is healing in place or in the wrist to stabilize carpal bones while a scapholunate or other ligament reconstruction is healing. 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) Other Medical Treatment Guideline or Medical Evidence:Extensor tenolysis: a modern version of an old approach.Skoff HD.AbstractThe concept of tenolysis has been in existence for at least 50 years. Its function is to free tendon from posttraumatic scar tissue. To retard the recurrence of rescarring, membrane interposition between tendon and bone has been recommended. In the setting of postfracture extensor tenolysis, I prospectively employed a 3-mm section of passive Hunter rod as an interpositional material in eight consecutive patients. After an average follow-up of 23 months, the patients maintained 92 percent of operatively attained motion; only 56 percent was maintained in six patients without membrane interposition. There was no instance of rod dislocation, rod removal, or adverse silicone reaction. Extensor tenolysis with silicone membrane (Hunter rod) interposition is more predictable and enduring than tenolysis alone.<http://www.ncbi.nlm.nih.gov/pubmed/8134463>.

**Decision rationale:** Medical necessity is not established for the requested surgical intervention. This request previously obtained an adverse determination, as there was no diagnostic injection confirming the hardware as a pain generator. ODG does not recommend routine removal of hardware, except in cases of broken hardware or persistent pain, after ruling out other causes. In addition, tenolysis and capsulotomy have been requested, however there are no finger range of motion measurements noted. Finger stiffness of the fingers is a common problem following injury to the digits and scarring can restrict movement, which can be treated with tenolysis. Aggressive hand therapy is recommended prior to proceeding with surgical intervention. However, it is unclear how much hand therapy was provided following the last surgery, and if there has been a plateau of improvement following surgical and postoperative treatment. The request remains unsubstantiated.