

<b>Case Number:</b>	CM15-0212551		
<b>Date Assigned:</b>	11/02/2015	<b>Date of Injury:</b>	08/07/2014
<b>Decision Date:</b>	12/18/2015	<b>UR Denial Date:</b>	10/22/2015
<b>Priority:</b>	Standard	<b>Application Received:</b>	10/28/2015

### 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: Maryland, Virginia, North Carolina  
 Certification(s)/Specialty: Plastic 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:

The injured worker is a 40-year-old male, who sustained an industrial injury on 8-7-15. The injured worker is diagnosed with left hand pain, left index finger pain, left index finger contraction and left index finger decreased range of motion. His work status is modified duty. Notes dated 6-4-15 and 10-14-15 reveals the injured worker presented with complaints of constant left hand and left index finger pain described as sharp, pulsing and throbbing accompanied with numbness and tingling at the top of his hand and index finger and is rated at 3 out of 10. Physical examinations dated 9-30-15 and 10-14-15 revealed full range of motion noted in the left hand and index finger; however, he is unable to draw the index finger to the palm of his hand. There is a contractor deformity that does not allow him to flex the finger and there is loss of sensation to light touch along the entire shaft of the finger and the dorsum of the hand. There is muscle wasting in the affected index finger, cool to touch and pale in color. Treatment to date has included physical therapy, medications decrease the pain per note dated 7-24-15 and home exercise program. Diagnostic studies include left hand-finger MRI and x-rays and urine toxicology screens. A request for authorization dated 10-14-15 for repair flexor profundus tendon index finger, possible tendon graft, possible hunter rod-left index finger repair ulnar-radial digital artery with vein graft, neurolysis digital nerve with nerve axogen allograft x2 and 12 post-operative hand therapy sessions is non-certified, per Utilization Review letter dated 10-22-15.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Repair flexor profundus tendon index finger, possible tendon graft, possible hunter rod:**  
Overturned

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines, Forearm Wrist & Hand.

**MAXIMUS guideline:** Decision based on MTUS Forearm, Wrist, and Hand Complaints 2004, Section(s): Surgical Considerations.

**Decision rationale:** The patient is a 40 year old male with a history of a left index finger laceration on 8/7/14. Based on the medical records provided, he only had skin closure at the time. There is no evidence that he had had a tendon/nerve/vessel repaired. He is noted to have evidence of loss of function, despite undergoing conservative management of physical therapy. Although the previous MRI did not specifically show evidence of a tendon discontinuity, based on the examination he has sufficient loss of motion to warrant surgical exploration. He does not have active motion at the DIP joint and only 30 degrees of active motion at the PIP joint. Overall, at the least, he has a severely scarred-in flexor digitorum profundus or an unrepaired tendon laceration. Therefore, with exploration one has to be prepared to treat a tendon that is not in continuity. In addition, if the tendon is not in continuity, it is unlikely that a primary repair can be performed, necessitating a possible two stage reconstruction involving a Hunter rod. This is a zone II injury and thus the requested procedures are consistent with this more complex reconstruction. Therefore, the requested procedure is medically necessary. No further physical therapy or other conservative management is likely to improve the function of this patient. The UR states that separate testing of the profundus or superficialis tendons was not documented as well as minimal information about the initial treatment and initial deficits at the time of injury. The status of the superficialis is not critical at this juncture, as the complex reconstruction would likely solely focus on the profundus tendon and possible Hunter rod placement. In addition, based on the records provided for this review, the patient only had skin closure at the time of the injury. He had been noted to have poor range-of-motion prior to the evaluation by the requesting surgeon, as he had had previous unsuccessful physical therapy as early as March of 2015. From Chapter 11, page 270, ACOEM Referral for hand surgery consultation may be indicated for patients who: Have red flags of a serious nature. Fail to respond to conservative management, including worksite modifications. Have clear clinical and special study evidence of a lesion that has been shown to benefit, in both the short and long term, from surgical intervention. The patient is well-documented to have significant loss of hand function based on the lack of range-of- motion that has failed despite conservative management. The requested procedures are consistent with standard of care for complex flexor tendon reconstruction in a delayed manner.

**Left index finger repair ulnar/radial digital artery with vein graft, neurolysis digital nerve with nerve axogen allograft x 2:** Overturned

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines, Forearm Wrist & Hand.

**MAXIMUS guideline:** Decision based on MTUS Forearm, Wrist, and Hand Complaints 2004, Section(s): Surgical Considerations.

**Decision rationale:** The patient is a 40 year old male with a history of a left index finger laceration on 8/7/14. Based on the medical records provided, he only had skin closure at the

time. There is no evidence that he had had a tendon/nerve/vessel repaired. He is noted to have evidence of loss of function, despite undergoing conservative management of physical therapy. His signs and symptoms of the left index finger include pallor, coolness, atrophy of the index finger pulp and diminished sensation to light touch of the volar pad. These are relatively concerning signs consistent with neuro/vascular injury to the index finger. Given that the patient had a likely flexor tendon injury at the initial trauma, it is also likely that the patient had injury to both digital nerves and digital arteries as well. Given that the flexor tendon exploration and repair was considered medically necessary, it is reasonable and wise to assess the neurovascular system at the time of tendon reconstruction. Given the time elapse, it may be difficult to repair either vessel or both nerves with primary repair. Therefore, the use of a possible vein graft and nerve graft is reasonable as well. Left index finger repair ulnar/radial digital artery with vein graft, neurolysis digital nerve with nerve axogen allograft x 2 is medically necessary. The patient is unlikely to have any further improvement in sensation with more time. The UR stated that there is no description of sensory mapping of deficit, only sensory decrease at the tip. The tip is reportedly cool but there are no specific reporting of findings which would support conclusions that there is a significant vascular deficit. Based on the medical records provided for this review, there is sufficient documentation of a loss of sensation with numbness affecting function warranting exploration. As stated above, it is prudent to evaluate the digital nerves and digital arteries when complex flexor tendon reconstruction is being performed, especially with the clinical history of injury and likely injury to both neurovascular bundles of the finger. The patient does have evidence of vascular compromise with coolness, pallor and atrophy of the volar pad. From Chapter 11, page 270, ACOEM Referral for hand surgery consultation may be indicated for patients who: Have red flags of a serious nature. Fail to respond to conservative management, including worksite modifications. Have clear clinical and special study evidence of a lesion that has been shown to benefit, in both the short and long term, from surgical intervention

## **12 post op hand therapy visits: Overturned**

**Claims Administrator guideline:** Decision based on MTUS Postsurgical Treatment 2009, Section(s): Forearm, Wrist, & Hand.

**MAXIMUS guideline:** Decision based on MTUS Postsurgical Treatment 2009, Section(s): Forearm, Wrist, & Hand.

**Decision rationale:** As the procedures were considered medically necessary and that the flexor tendon reconstruction/exploration is in Zone 2 of the finger, the following guidelines were used: From page 20, post surgical treatment guidelines, Forearm, wrist and hand: Flexor tendon repair or tenolysis Zone 2 and other than Zone 2 [DWC]: Postsurgical treatment: Flexor tendon repair or tenolysis Zone 2: 30 visits over 6 months. Postsurgical physical medicine treatment period: 8 months. Postsurgical treatment: Other than Zone 2: 20 visits over 3 months. Postsurgical physical medicine treatment period: 6 months. Therefore, 12 physical therapy visits would be considered consistent with the guidelines and should be considered medically necessary. The total number of therapy visits allowable would be 30 and half that number (15) would be allowable for the initial therapy.