Case Number:	CM14-0057111		
Date Assigned:	07/09/2014	**Date of Injury:**	12/07/2011
Decision Date:	08/08/2014	**UR Denial Date:**	03/31/2014
Priority:	Standard	**Application Received:**	04/28/2014

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 Hand Surgery and is licensed to practice in Oregon. 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:

This 58-year-old female was diagnosed with bilateral carpal tunnel syndrome and de Quervain syndrome in addition to bilateral basilar thumb osteoarthritis. The claimant was given injections to the basilar joints with some benefit. The claimant had bilateral carpal tunnel release and de Quervain's release on 09/13/12 and 05/01/13. A repeat NCS shows that the left side is worse than the right. Currently, the claimant has constant pain in the wrist, thumb, and forearm with numbing, tingling, and sharp stabbing sensation into the fingers at times. This is made worse with activity using the hands, elbows and heavy lifting, and improved by over-the- counter medicine, massage, heat, and cold compression. The claimant has been through physical therapy and TENS unit with minimal benefit. Examination shows tenderness on the lateral aspect of the elbow over the lateral epicondyle with positive Tinel's sign over the carpal tunnels bilaterally, positive Finkelstein bilaterally, and some hypoesthesia and dysesthesia diffuse over all the fingers. Electrodiagnostic evaluation report dated 10/29/13 reveals evidence of mild right carpal tunnel syndrome and mild, bordering moderate left carpal tunnel syndrome. Follow-up visit report dated 03/18/14 notes that the claimant reports no improvement in the right hand. The claimant is awakened at night by the symptoms. The claimant's braces have worn out due to continued use. The claimant has discomfort with gripping and grasping with the thumb. Even simple things such as writing or pinching are painful. At home, the claimant has difficulty holding pots and pans and many of the household chores are painful. The previous two injections only helped temporarily. Examination reveals tenderness to palpation of the right thumb basilar joint and painful grind test. Carpal tunnel compression test reproduces numbness and Phalen's test reproduces pain. The claimant declined further injections. The provider recommends thumb suspension, arthroplasties and revision carpal tunnel release

IMR ISSUES, DECISIONS AND RATIONALES

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

Right revision carpal tunnel release: Overturned

Claims Administrator guideline: Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints Page(s): 270. Decision based on Non-MTUS Citation Official Disability Guidelines Treatment For Workers' CompensationCarpal Tunnel Syndrome Procedure Summary.

MAXIMUS guideline: Decision based on MTUS ACOEM Chapter 11 Forearm, Wrist, and Hand Complaints Page(s): 270.

Decision rationale: According to the ACOEM guidelines, Chapter 11, page 270, "Surgical decompression of the median nerve usually relieves Carpal Tunnel Syndrome (CTS) symptoms. High-quality scientific evidence shows success in the majority of patients with an electrodiagnostically confirmed diagnosis of CTS. Patients with the mildest symptoms display the poorest post-surgery results; patients with moderate or severe CTS have better outcomes from surgery than splinting. CTS must be proved by positive findings on clinical examination and the diagnosis should be supported by nerve-conduction tests before surgery is undertaken." This patient has significant symptoms of carpal tunnel syndrome, an exam consistent with carpal tunnel syndrome and positive repeate elecrodiagnostic studies for median nerve compression. Per the ACOEM guidelines, carpal tunnel release is medically necessary and appropriate.

Post Op Custom Splinting: Overturned

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines Treatment For Workers' CompensationCarpal Tunnel Syndrome Procedure Summary.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Forearm, Wrist and Hand, "Splints".

Decision rationale: Per the ODG guidelines regarding splints: Arthritis: A recent randomized controlled study concluded that prefabricated wrist working splints are highly effective in reducing wrist pain after 4 weeks of splint wearing in patients with wrist arthritis. (Veehof, 2008) Hand splints can ease arthritis pain, according to a new systematic review. Short and rigid day splints cut hand pain in half after six months of use, according to one high-quality study. Another study found that hand pain was also cut in half by wearing a long rigid splint every night for a year, but the splints usually did not improve hand function or strength. The findings mean that splints have about the same effect on pain as ibuprofen, the most common drug in osteoarthritis. A small splint for pain relief during the day combined with a custom-made and rigid splint for prevention of deformities at night may be an optimal regimen. ODG supports a custom splint following surgery for this patient with arthritis. The request is medically necessary and appropriate.

Post Operative Occupational Therapy Right Hand and Right Wrist: Overturned

Claims Administrator guideline: Decision based on MTUS Postsurgical Treatment Guidelines.

MAXIMUS guideline: Decision based on MTUS Chronic Pain Treatment Guidelines Post-surgical guidelines, Forearm, Wrist and Hand.

Decision rationale: Per MTUS:Tendon transfers - thumb or finger [DWC]:Postsurgical treatment: 26 visits over 4 months; Postsurgical physical medicine treatment period: 6 months Carpal tunnel syndrome (ICD9 354.0): Postsurgical treatment (endoscopic): 3-8 visits over 3-5 weeks; Postsurgical physical medicine treatment period: 3 months Postsurgical treatment (open): 3-8 visits over 3-5 weeks; Postsurgical physical medicine treatment period: 3 months. MTUS supports postoperative therapy for thumb trapeziectomy and tendon interposition and also for carpal tunnel syndrome.

Right thumb ligament reconstruction tendon interposition with tendon transfer, tendon graft: Overturned

Claims Administrator guideline: The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines Treatment For Workers' CompensationWrist and Hand Procedure Summary.

MAXIMUS guideline: The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation X Official Disability Guidelines (ODG) Forearm, Wrist and Hand, thumb arthroplasty.

Decision rationale: The patient has end-stage CMC arthritis. Splinting and analgesics are generally effective for stage I and II CMC arthritis, but this patient has stage III arthritis with collapse of her joint and osteophytes. Her symptoms are unrelieved with analgesics. Splinting and steroid injections have provided only transient improvement. According to Green's Operative Hand Surgery, "Nonoperative treatment includes anti-inflammatory medication, intra- articular corticosteroid injection, hand- or forearm- based thumb spica splint immobilization, and thenar muscle isometric conditioning. Although none of these measures may provide permanent or even long-lasting relief from symptoms, they may indeed provide temporary relief and, in so doing, allow the patient a more active role in participating in the acceptance and timing of surgical intervention. Ligament reconstruction tendon interposition (LRTI) is designed to eliminate painful degenerative articulations and reconstruct the volar beak ligament. Excellent results are maintained at long-term follow-up. There are few complications, and revisions are rarely required. Potential loss of height may occur despite interposition and ligament reconstruction, but this is of questionable clinical relevance. Stages II, III, and IV disease are relative indications for LRTI. "Splinting may transiently improve her condition, but it will not cure her arthritis, and the standard of care for stage III CMC arthritis is removal of the trapezium and suspension with the FCR or APL tendon. According to the ODG guidelines, "In our series, total joint arthroplasty of the thumb CMC joint has proven to be efficacious with improved motion, strength, and pain relief for the treatment of stage III and early stage IV osteoarthritis of

the CMC joint in older patients with low activity demands. According to a 2012 study by Vandenberghe et al, "we recommend the trapeziectomy with ligament reconstruction and tendon interposition as opposed to arthroplasty as the first choice in the treatment of basal joint osteoarthritis of the thumb." The medical literature, ODG guidelines and Green's Operative Hand Surgery support the medical necessity for CMC arthroplasty for this patient. The request is medically necessary and appropriate.