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Notice of Independent Review Decision

Date notice sent to all parties: 01/30/15

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Right wrist hardware removal, flexor tenosynovectomy, open carpal tunnel release, and cubital tunnel release

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:

Board Certified in Orthopedic Surgery
Board Certified in Hand Surgery

REVIEW OUTCOME:

Upon independent review, the reviewer finds that the previous adverse determination/adverse determinations should be:

- Upheld (Agree)
- Overturned (Disagree)
- Partially Overturned (Agree in part/Disagree in part)

Provide a description of the review outcome that clearly states whether medical necessity exists for each of the health care services in dispute.

Right wrist hardware removal - Overturned
Flexor tenosynovectomy - Overturned
Open carpal tunnel release - Overturned
Cubital tunnel release - Upheld

PATIENT CLINICAL HISTORY [SUMMARY]:

examined the patient on 01/10/13. He had fallen 17 feet and injured his right wrist, chest, back/neck, and both knees. He was to follow-up with an orthopedist for his right wrist. He also noted he sustained head injuries. He had no tenderness in the cervical spine and he had left lumbar paraspinal tenderness at L4 and L5. Gait was normal. His bilateral knees were stable with no distinct tenderness. Right wrist x-rays revealed comminuted impacted fracture. The assessments were a closed wrist fracture, lumbar strain, knee contusion, and chest wall contusion. He was referred to an orthopedist asap for the right wrist. Physical therapy was recommended three times a week for two weeks for the lumbar strain. Right elbow x-rays on 01/10/13 were normal. examined the patient on 01/11/13. He had a displaced distal radius fracture and DRUJ disruption on the right. He had been splinted. Examination showed 1+ swelling and ecchymosis. He had normal finger extension and flexion and normal sensibility in the fingers. X-rays showed a comminuted intrarticular fracture of the distal radius with DRUJ disruption. ORIF and possible DRUJ ORIF was recommended. On 01/18/13, approved the requested surgery. performed ORIF of the right radius and distal radioulnar joint and application of a short arm splint on 01/18/13. On 01/25/13, noted the patient was doing well and he was having appropriate pain. He was taking two Vicodin at night. His incision was clean, dry, and intact. The patient would remain off of work through 02/22/13. On 02/01/13, performed aspiration of the right knee. The patient was two weeks post surgery when he returned on 02/08/13. He had been in full supination the splint. His incision and pin sites were clean and he had normal sensibility in the fingers. He could extend the elbow 50 degrees and flex to 130 degrees. He was asked to return in three weeks so his pins could be removed. He would start therapy as soon as the pins were removed. He would remain off of work. reevaluated the patient on 03/08/13. He missed his appointment for two weeks and was not six weeks status post surgery. It was noted they were supposed to pull the pins at four weeks. He had mildly limited finger extension, but he had good flexion. The index finger was still slightly unable to make a tight fist. Wrist extension was 30 degrees and flexion was 0 degrees. Sensation was normal. His pins were removed and therapy was recommended twice a week for four weeks. He would remain off of work through 03/29/13. Right wrist x-rays dated 03/08/13 revealed findings suggestive of satisfactory status post ORIF of the right distal radius fracture. On 03/29/13, noted he had not been to therapy yet, as he had been instructed to do. Aggressive therapy was recommended at that time. He was in a removable wrist splint. He was placed on modified duty through 04/19/13. On 04/08/13, Coventry approved eight sessions of therapy for the right wrist. The patient then followed-up on 04/19/13. He had some moderate stiffness and was in therapy. He stated he was feeling better. His DRUJ was stable on exam and wrist extension was 30 degrees and flexion was 20 degrees. Supination was full and pronation was 20 degrees. Finger flexion and extension were normal. Continued aggressive therapy was recommended and he was kept on light duty through 05/17/13. noted on 05/17/13 that the patient's pain was essentially zero and he had been much more active. Extension was 40 degrees, flexion was 30

degrees, supination was 90 degrees, and pronation was 45 degrees. Sensation was normal. The impression was a healed radius fracture and DRUJ disruption. He was continued on modified duty through 06/14/13 and in therapy twice a week for four weeks. The patient was five months status post surgery when he returned on 06/21/13. He was doing very well. Extension was 50 degrees, flexion was 40 degrees, supination was full, and pronation was 70 degrees. He had full range of motion of his fingers. Home exercises and activities as tolerated were recommended. He was continued on light duty through 07/26/13. reexamined the patient on 09/06/13. It was noted he missed his appointment in July and did not reschedule. He was seven months status post surgery and still complained of stiffness and some pain. He had been lifting in the 35-40 pound range. Extension was 30 degrees, flexion was 20 degrees, supination was 80 degrees, and pronation was 90 degrees. He could make a full fist. Aggressive range of motion exercises were recommended and he was continued on light duty through 10/11/13. reexamined the patient on 07/18/14. He was following-up for his lumbar contusion and right wrist fracture. He had no change in the wrist, but claimed numbness over the thumb and index finger. He had lumbar paraspinal tenderness. He was referred to hand surgery. On 07/19/14, noted the patient was unchanged from the day before. examined the patient on 08/07/14. He noted since surgery, he had pain, difficulty moving the arm, and numbness of the hand that had not been addressed. He had been released and told he did not need the plate removed. His primary problem was pain across the volar wrist into the hand and numbness in all the fingers, but mostly in the thumb, index, and small fingers. noted that the patient had missed several appointments. His incisions were well healed without scar adherence. He had numbness diffusely around the hand and two-point discrimination in the thumb was greater than two. He had no trophic changes and there was no evidence of CRPS. He had no atrophy and his fingers had nearly full range of motion. He could close the fingers all the way, except for the long finger that lacked 2 cm. to the distal palmar crease, but it could painless be flexed passively. Wrist flexion was 42 degrees, extension was 47 degrees, pronation was 49 degrees, and supination was 75 degrees. X-rays revealed a volar radius plate that was prominent distally, but the bone was healed. He had 14 degrees of persistent dorsal angulation with 0 ulnar variance. There was a lunate depression and articular deformity. The ulnar looked fairly normal and there was irregularity of the DRUJ. An EMG was recommended, as well as plate removal. noted he might require radioscapulohumeral fusion in the future. It was also felt he needed a carpal tunnel release. X-rays of the right wrist on 08/07/14 revealed chronic healed fracture of the distal radius metaphysis and articular surface and status post ORIF. X-rays of the elbow revealed a subacute fracture of the base of the radial head. Mobeen Choudhri, M.D. performed an EMG/NCV study on 09/09/14 that revealed evidence of a mild to moderate right median nerve lesion at the wrist and moderate right ulnar nerve lesion. There was no evidence of peripheral neuropathy or cervical radiculopathy. reexamined the patient on 09/25/14. His pain was rated at 8/10. He had no swelling, effusion, or tenderness of the right elbow. Range of motion was full. In the right wrist there was moderate volar swelling, which described as a fullness, not really a swelling. He thought he could

palpate the distal edge of the plate, which was tender. Flexion was 38 degrees, extension was 49 degrees, pronation was 50 degrees, and supination was 78 degrees. He still could not full flex the index finger. Watson's and Finkelstein's were negative. Median nerve sensation was decreased and Tinel's and Phalen's were positive. Ulnar sensation was also decreased and Tinel's was positive. His two-point discrimination was noted to be highly variable. Radial sensation was intact. The EMG/NCV study was reviewed. The impressions were complication from hardware, wrist flexor tenosynovitis, carpal tunnel syndrome, and cubital tunnel syndrome. recommended plate removal and cubital and carpal tunnel releases. On 11/03/14, provided a non-authorization for the requested surgical procedures. On 12/08/14, provided another non-authorization for the requested right wrist hardware removal, flexor tenosynovectomy, and open carpal and cubital tunnel releases.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION:

In the reviewed available medical records there is no discernible documentation that validates that the surgical plate of the volar right radius is broken or loose. In the note of 10/28/14, documented that the patient presented for right wrist pain and there was a fullness on the volar right wrist, and pushing firmly I think I can palpate the distal edge of the plate and it is tender there. "He has clear prominence of the distal edge of the plate... ." X-rays of the right wrist revealed the hardware was not loose. The plate from prior surgery was visible and the distal edge was quite prominent, as it was just past the watershed line. The volar surface of the distal radius was separated from the flexor tendons and median nerve by the pronator quadratus. Just beyond the distal edge of pronator quadratus the volar surface sloped distally and dorsally. This demarcation was called the watershed line. It should be noted that volar plates should not be placed beyond this line as it would project anteriorly and also lack the coverage by pronator quadratus and cause flexor tendon irritation. Based on these facts, it is reasonable to conclude that removal of the surgical plate device from the distal right radius is deemed to be reasonable and medically necessary. Although such surgical plates are not currently routinely removed without adequate justification, the documentation contains specific data which justifies as reasonable and medically necessary the removal of the plate. It should be noted that removal of a surgical plate from bone, along with the screws affixing the plate to the bone, leaves screw holes which are "stress risers - places where stress lines from applied forces concentrate within a structure. Breakage is most likely to occur at these places. In long bones or orthopedic plates, for example, stress lines from forces applied at the ends tend to produce uniform cross sectional stress lines. Discontinuities, such as screw holes, redistribute these forces concentrating them close to the holes where fracture is most likely to occur." Therefore, at the time of the surgical removal of such surgical plates, care should be taken to minimize the potential for re-fracture of the bone.

Relating to the request for flexor tenosynovectomy in the area of the surgical plate from the distal right radius and from the right wrist area, in the note of 10/28/14, documented, "He cannot quite fully flex the index finger." This most likely is the result of the tissue reaction surrounding the surgical plate in the distal right radius. This surgical procedure is an integral part of the surgical procedure to remove the surgical plate from the distal right radius, in order to free up the tendons from the surgical scar, and to mobilize the soft tissue in order to expose the plate. The flexor tenosynovectomy in the area of the distal right radius and wrist is deemed to be reasonable and medically necessary.

Relating to the request for right carpal tunnel release, in the report of 10/28/14, did not document in detail the results of the two-point discrimination testing of the right hand/fingers. He merely indicated that the sensory was decreased in the median and ulnar nerves in the hand (no area specified, and no measurement of the two-point test results). He indicated "His two point discrimination was tested, but it was highly variable, my impression was that it was increased in all digits roughly equally, except the long finger which was reliably 5/5." The electrodiagnostic study of the right upper extremity indicated "electrophysiological evidence of a mild to moderate right median nerve lesion at the wrist and moderate right ulnar nerve lesion." Relating to this study, the following should be noted: This study was not documented to have been performed in compliance with the standards for validity of such studies as established by the American Association of Electrodiagnostic Medicine Guidelines. Therefore, the study cannot be considered to be valid and diagnoses based on the results of this study cannot be considered to be validated, and properly established. However, although no diagnosis of right carpal tunnel syndrome has been properly established based on the ODG/Treatment in Workers' Compensation, the fact that the site of the surgery for removal of the surgical plate and the wrist tenosynovectomy is intimately associated with the anatomic site of the carpal tunnel proper, a carpal tunnel release is deemed to be reasonable and medically necessary, since postoperative swelling in the carpal tunnel can reasonably be anticipated.

Relating to the request for right cubital tunnel release, in the reviewed medical records, there is no discernible documentation that fulfills the standard criteria for validating a diagnosis of cubital tunnel syndrome, such as a detailed sensory examination on physical examination that is compatible with the ulnar innervated dermatomes of the right upper extremity. In the note of 10/28/14, indicated the presence of a "positive ulnar elbow Tinel's, it radiated down to the small finger once...and all the other times it radiated down to the distal ulnar forearm. Tinel's, Phalen's, and Durkan's tests/signs are all subjective, not objective, so they are subject to considerable lack of credibility and consistency. Sensory physical examination revealed "his two point discrimination was tested, but it was highly variable... ." There was no discernible documentation of validated atrophy or weakness of specific muscles innervated by the ulnar nerve. Review of the available medical records indicates that the listed diagnosis of right cubital tunnel syndrome was based primarily on the results of the electrodiagnostic study of the

right upper extremity that indicated “electrophysiological evidence of a mild to moderate right median nerve lesion at the wrist and moderate right ulnar nerve lesion.” Again, as noted above, the following should be noted this study was not documented to have been performed in compliance with the standards for validity of such studies as established by the American Association of Electrodiagnostic Medicine Guidelines. Therefore, the study cannot be considered to be valid, and diagnoses based on the results of this study cannot be considered to be validated, and properly established. The data in the reviewed medical records does not fulfill the criteria in this classification sufficiently to validate the diagnosis of right cubital tunnel syndrome. Based on review of the available medical records and based on the data detailed above, the request for right cubital tunnel release is not deemed to be reasonable and medically necessary. Therefore, the requested right wrist hardware removal, flexor tenosynovectomy, and open carpal tunnel release are appropriate and medically necessary and the previous adverse determinations should be overturned at this time. However, the requested cubital tunnel release is not appropriate or medically necessary and the previous adverse determinations should be upheld at this time.

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN
- INTERQUAL CRITERIA
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE, AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
- MILLIMAN CARE GUIDELINES
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
- TEXAS TACADA GUIDELINES
- TMF SCREENING CRITERIA MANUAL
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)

American Association of Electrodiagnostic Medicine Guidelines