



Specialty Independent Review Organization

Notice of Independent Review Decision

Date notice sent to all parties: 9/10/2014

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

The item in dispute is the prospective medical necessity of a right hand prosthetic.

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

The reviewer is a Medical Doctor who is board certified in Orthopedic 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)

The reviewer disagrees with the previous adverse determination regarding the prospective medical necessity of a right hand prosthetic.

A copy of the ODG was not provided by the Carrier or URA for this review.

PATIENT CLINICAL HISTORY [SUMMARY]:

The claimant sustained a crush injury of the right hand resulting in amputation (and revascularization) of the index finger (at the MP joint) and long finger (between the MP and PIP joints), on xx/xx/xx. The record also documents a partial amputation of the thumb. The patient was treated with an extensive course of therapy as documented. A functional capacity evaluation from February 26, 2014 revealed that maximal effort was being utilized in rehabilitation. There were persistent limitations with regards to grip strength and easy fatigability of the right wrist and hand. There was also a decrease in fine motor skills and lifting capability. Prior job demands were noted to be inclusive of needing to be able to

lift at least 50 pounds with his most recent capability being only of that of 15 pounds on the right. There was a consideration for work conditioning and a right-hand prosthesis including a microprocessor. On April 25, 2014 there was noted to be a report of significant weakness in grip strength regarding the right-hand. Minimal tenderness of palpation of the affected area was documented as was slightly decreased grip strength. Denial letters included the lack of evidence of having participated in a work hardening a work conditioning program. In addition there was noted to be a lack of evidence of patient motivation to learn to use the prosthesis. Finally, decreasing pain and improved functional abilities and lack of a significant functional limitation were noted in the denial letters. The August 20, 2014 dated letter appeal was reviewed. The indication for the "functional prosthesis" was to allow the claimant "to perform normal activities of daily living more effectively, reduce undue stress of remaining fingers of his hand, as well as undo any overuse stress to sound side arm and hand, allowing him to perform day to day tasks more appropriately and efficiently, and thus as best possible, return him to an optimal level of functional rehabilitation and independence.." Inability to perform certain activities of prehension "which studies of normal hand functions have proven accounts for approximately 60% or more of an individual's activities of daily living" was noted. In addition; certain type of grasping, use of hand tools, manipulation requiring force and carrying were also noted to be unable to be performed by the claimant. These were elucidated in detail. The medical necessity of the myoelectric prosthesis was discussed in detail, including after "myotesting" in which the claimant "was able to reach and maintain a defined functional state within a reasonable period of time." The claimant was noted to also be "motivated to learn how to use the i-limb digits and will be trained and have support services at any time you may need." The prescription for the prosthesis was also noted, as was the letter of medical necessity.

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

The claimant's residual deficits have been well-documented. This is in spite of the passage of a significant period of time and extensive post injury therapy. It is quite evident that this individual has residual motion, strength and functional deficits that are not expected to materially decrease over time with or without additional active therapy, work hardening/conditioning. The deficits in both work capability and activities of daily living have been documented in this individual. It is noted that the claimant is motivated and has proven to be able to achieve designated functional goals within a reasonable period of time. The multiple digit nature of the residual portion of the hand has resulted in the documented functional deficits despite reasonable treatments to date. The documentation supporting medical necessity is well delineated and does support the prosthesis as the following guideline criteria referenced have been met.

ODG Forearm/Wrist/Hand Prostheses/Artificial Limbs:

Recommended as indicated below. A prosthesis is a fabricated substitute for a missing body part. On-board microprocessor-controlled joints are making prosthetic arms easier to control by the user. Prognoses following amputation will certainly rise, factoring into the surgeon's decision to attempt to save a limb versus perform an amputation. Recently, there have been several new multi-articulating prosthetic hands that have come to market, with multiple motors to control different fingers and hand positions. All of them have several pre-programmed hand positions that the user can select from such as: finger point, lateral key pinch, power grasp, mouse click, precision pinch, opposition, and wrist flexion and extension. Once the hand position is selected, using myoelectric signals or switches, the user can use myoelectric signals to control the opening and closing of the hand with the particular hand position selected. Multi-articulating hands include: the Michelangelo from Otto Bock, iLimb-Pulse from Touch Bionics, and BeBionic V2 from Steeper. (Harvey, 2012) The FDA approved the first prosthetic arm that can perform multiple simultaneous powered movements using electrical signals from electromyogram (EMG) electrodes. EMG electrodes in the DEKA Arm System convert electrical signals from the contraction of muscles close to the prosthesis into up to 10 powered movements. (FDA, 2014) See also Amputation (surgery); Hand transplantation; I-Limb® (bionic hand); Myoelectric upper extremity (hand and/or arm) prosthesis; & Targeted muscle reinnervation.

Criteria for the use of prostheses:

A prosthesis may be considered medically necessary when:

1. The patient will reach or maintain a defined functional state within a reasonable period of time;
2. The patient is motivated to learn to use the limb; and
3. The prosthesis is furnished incident to a physician's services or on a physician's order as a substitute for a missing body part. (BlueCross BlueShield, 2004)

The requested treatment is considered medically necessary according to the ODG.

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)**