

<b>Case Number:</b>	CM14-0085146		
<b>Date Assigned:</b>	07/23/2014	<b>Date of Injury:</b>	12/08/2011
<b>Decision Date:</b>	09/12/2014	<b>UR Denial Date:</b>	05/15/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	06/06/2014

### 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 Physical Medicine and Rehabilitation has a subspecialty in Interventional Spine 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 58 year old with an injury date on 12/8/11. Patient complains of cervical pain and upper extremity pain, primarily the left shoulder pectoral area and left lower forearm, hands, and fingers per 4/17/14 report. He complains of decreased dexterity in his left hand, increased pain with use and radiculopathy in C5-C6 distribution per 4/17/14report. Based on the 4/17/14 progress report provided by Dr. [REDACTED] the diagnoses are: 1. left HNP at C6-C7 with bilateral foraminal stenosis. 2. Left upper extremity myelopathy. 3. s/p C6-C7 ACDF. Exam on 4/17/14 showed "move all extremities well. Left upper extremity strength is 3/5. Poor finger flexion/extension and a very weak grip." Dr. [REDACTED] is requesting cervical four-poster brace purchase. The utilization review determination being challenged is dated 5/15/14. Dr. [REDACTED] is the requesting provider, and he provided treatment reports from 11/6/14 to 5/5/14.

### IMR ISSUES, DECISIONS AND RATIONALES

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

**Cervical four poster brace purchase:** Overturned

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Treatment Index, Current Edition (Web), Neck and Upper Back: Cervical collar, post-operative (fusion).

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation ODG-TWC, Neck and Upper back section. Cervical Collars: Not recommended after single-level anterior cervical fusion with plate. The use of a cervical brace does not improve the fusion rate or the clinical outcomes of patients undergoing single-level anterior cervical fusion with plating. Plates limit motion between the graft and the vertebra in anterior cervical fusion. Still, the use of cervical collars after instrumented anterior cervical fusion is widely practiced. This RCT found there was also no statistically significant difference in any of the clinical measures between the Braced and Nonbraced group. The SF-36 Physical Component Summary, NDI, neck, and arm pain scores were similar in both groups at all time intervals and showed statistically significant improvement when compared with preoperative scores. There was no difference in the proportion of patients working at any time point. Independent radiologists reported higher rates of fusion in the Nonbraced group over all time intervals, but those were not statistically significant. (Campbell, 2009) See also Back brace, post operative (fusion).X ODG-TWC, Low Back, Lumbar and Thoracic:Back brace, post operative (fusion)Under study, but given the lack of evidence supporting the use of these devices, a standard brace would be preferred over a custom post-op brace, if any, depending on the experience and expertise of the treating physician. There is conflicting evidence, so case by case recommendations are necessary (few studies though lack of harm and standard of care). There is no scientific information on the benefit of bracing for improving fusion rates or clinical outcomes following instrumented lumbar fusion for degenerative disease. Although there is a lack of data on outcomes, there may be a tradition in spine surgery of using a brace post-fusion, but this tradition may be based on logic that antedated internal fixation, which now makes the use of a brace questionable. For long bone fractures prolonged immobilization may result in debilitation and stiffness; if the same principles apply to uncomplicated spinal fusion with instrumentation, it may be that the immobilization is actually harmful. Mobilization after instrumented fusion is logically better for health of adjacent segments, and routine use of back braces is harmful to this principle. There may be special circumstances (multilevel cervical fusion, thoracolumbar unstable fusion, non-instrumented fusion, mid-lumbar fractures, etc.) in which some external immobilization might be desirable. (Resnick, 2005).

**Decision rationale:** This patient presents with neck pain, upper extremity pain. The treating Physician has asked for cervical four-poster brace purchase on 4/17/14. The patient is s/p C6-7 discectomy/fusion, anterior approach. Regarding neck collars, ODG states, "May be appropriate where post-operative and fracture indications exist." The guidelines do not provide much more discussion and ACOEM/MTUS does not discuss it under post-operative care. Given the patient's neck discectomy/fusion, this request is medically necessary.