



Lumetra

Brighter insights. Better healthcare.

One Sansome Street, Suite 600
San Francisco, CA 94104-4448

415.677.2000 Phone
415.677.2195 Fax
www.lumetra.com

Notice of Independent Review Decision

DATE OF REVIEW: 10/22/09

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Inpatient cervical spine surgery: Revision cervical surgery - hardware removal, repair of pseudoarthrosis at C6-7, cervical decompression, discectomy, arthrodesis with cages, anterior instrumentation C4-5, 2-day inpatient stay

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

Certified by the American Board of Orthopaedic Surgery

REVIEW OUTCOME

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

Upheld (Agree)

Overturned (Disagree)

Partially Overturned (Agree in part/Disagree in part)

Injury date	Claim #	Review Type	ICD-9 DSMV	HCPCS/ NDC	Upheld/ Overturned
		Prospective	722.81	63076	Upheld
		Prospective	722.81	63081	Upheld
		Prospective	722.81	63082	Upheld
		Prospective	722.81	69990	Upheld
		Prospective	722.81	62290	Upheld
		Prospective	722.81	22554	Upheld
		Prospective	722.81	22585	Upheld
		Prospective	722.81	22851	Upheld
		Prospective	722.81	20938	Upheld
		Prospective	722.81	20845	Upheld
		Prospective	722.81	22845	Upheld

Notice of Independent Review Decision
Page 2

		Prospective	722.81	63075	Upheld
--	--	-------------	--------	-------	--------

INFORMATION PROVIDED TO THE IRO FOR REVIEW

Correspondence throughout appeal process, including first and second level decision letters, reviews, letters and requests for reconsideration, and request for review by an independent review organization.

Physician notes dated 9/8/09, 9/7/09, 8/26/09

MRI reports dated 5/20/09, 7/15/08

X-ray reports dated 9/5/08, 7/15/08

Official Disability Guidelines cited but not provided-Neck and Upper Back Chapter, ODG Indications for Surgery-Discectomy/laminectomy (excluding fractures)

ODG, Neck and Upper Back, fusion

ODG, Neck and Upper Back, Discectomy-laminectomy-laminoplasty

PATIENT CLINICAL HISTORY:

According to the information provided, this claimant was injured on xx/xx/xx following a fall. The claimant is status post cervical spine surgeries (in 2004, 2006, and 2007). The claimant continues to require narcotic analgesic medications. The treating provider recommended cervical spine surgery: revision cervical surgery.

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

The Reviewer noted the information provided which reported that prior to the date of injury (xx/xx/xx) this claimant had undergone cervical surgery with hardware at the C5-6 level. Subsequent to the date of injury, there was a surgery at the C6-7 level. It was also noted that the hardware at C6-7 was removed in April 2007. Additionally, there was a reported solid fusion at the C6-7 level.

The Reviewer noted the request dated 9/11/09, which noted pseudoarthrosis at the C6-7 level.

The Reviewer commented that the treating provider felt that the plain films noted an “instrumented pseudoarthrosis and paresthesias at several levels. The treating provider reviewed the MRI scan and noted that the claimant demonstrated inflammation at C6-7 consistent with pseudoarthrosis. The Reviewer noted that the reading by the radiologist does not mention a pseudoarthrosis at that level.

As per the Division mandated Official Disability Guidelines:

(2) *Fusion with autograft versus allograft*: The Cochrane review found limited evidence that the use of autograft provided better pain reduction than animal allograft. It also found that there was no difference between biocompatible osteoconductive polymer or autograft (limited evidence). ([Jacobs-Cochrane, 2004](#)) ([McConnell, 2003](#)) A problem

Notice of Independent Review Decision
Page 3

with autograft is morbidity as related to the donor site including infection, prolonged drainage, hematomas, persistent pain and sensory loss. ([Younger, 1989](#)) ([Sawin, 1998](#)) ([Sasso, 2005](#)) Autograft is thought to increase fusion rates with less graft collapse. ([Deutsch, 2007](#)). See [Decompression, myelopathy](#).

(3) *Fusion with autograft with plate fixation versus allograft with plate fixation, Single level:* A recent retrospective review of patients who received allograft with plate fixation versus autograft with plate fixation at a single level found fusion rates in 100% versus 90.3% respectively. This was not statistically significant. Satisfactory outcomes were noted in all non-union patients. ([Samartzis, 2005](#))

(4) *Fusion with different types of autograft:* The Cochrane review did not find evidence that a vertebral body graft was superior to an iliac crest graft. ([McGuire, 1994](#))

(5) *Fusion with autograft versus fusion with autograft and additional instrumentation: Plate Fixation:* In single-level surgery there is limited evidence that there is any difference between the use of plates and fusion with autograft in terms of union rates. For two-level surgery, there was moderate evidence that there was more improvement in arm pain for patients treated with a plate than for those without a plate. Fusion rate is improved with plating in multi-level surgery. ([Wright, 2007](#)) See [Plate fixation, cervical spine surgery](#).

Cage: Donor site pain may be decreased with the use of a cage rather than a plate, but donor site pain was not presented in a standardized manner. At two years, pseudoarthrosis rate has been found to be lower in the fusion group (15%) versus the cage group (44%). A six-year follow-up of the same study group revealed no significant difference in outcome variables between the two treatment groups (both groups had pain relief). In the subgroup of patients with the cage who attained fusion, the overall outcome was better than with fusion alone. Patients treated with cage instrumentation have less segmental kyphosis and better-preserved disc height. This only appears to affect outcome in a positive way in cage patients that achieve fusion (versus cage patients with pseudoarthrosis). ([Poelsson, 2007](#)) ([Varuch, 2002](#)) ([Hacker 2000](#)) See also [adjacent segment disease/degeneration](#) (fusion).

(6) *Fusion with allograft alone versus with allograft and additional instrumentation: Plate Fixation:* Retrospective studies indicate high levels of pseudoarthrosis rates (as high as 20% for one-level and 50% for two-level procedures) using allograft alone. In a recent comparative retrospective study examining fusion rate with plating, successful fusion was achieved in 96% of single-level cases and 91% of two-level procedures. This could be compared to a previous retrospective study by the same authors of non-plated cases that achieved successful fusion in 90% of single-level procedures and 72% of two-level procedures. ([Kaiser, 2002](#)) ([Martin, 1999](#))

Notice of Independent Review Decision
Page 4

In the Reviewer's opinion, with the conflicting readings between the radiologist and the treating provider; there is insufficient clinical data presented to support the need for the requested procedure, with 2-day inpatient stay.

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)**

Notice of Independent Review Decision
Page 5