

<b>Case Number:</b>	CM14-0106412		
<b>Date Assigned:</b>	08/06/2014	<b>Date of Injury:</b>	02/06/2014
<b>Decision Date:</b>	09/12/2014	<b>UR Denial Date:</b>	07/02/2014
<b>Priority:</b>	Standard	<b>Application Received:</b>	07/09/2014

### 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 Dentistry 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:

There are no narrative dental narrative reports available for review. The hand written dental evaluation form and chart is barely legible. This IMR reviewer had to solely based their decision on records reviewed by utilization review dentist report dated 7/2/14. Utilization report states clinical review report dated 6/9/14 indicates that the claimant is a 68-year-old female, who was sustained a traumatic injury on 2/6/14. The claimant was hit in the mouth/face with a wooden sign, causing fractures to a pre-existing upper bridge and teeth. Up on x-rays and examination the general dentist confirms gumline fractures sustained on the pre-existing bridge from #9-14, as well as teeth #2, 3,4,7,8. The bridge was temporarily cemented back on and the claimant was referred to an oral surgeon for extraction of teeth numbers 2, 9, 10, and 14. The claimant presented to Dr. [REDACTED] on 5/6/14 for an implant consultation regarding teeth #2, 5, 9, 10, 12, and 14. After reviewing the CAT, provider recommends bilateral sinus lifts for #2 and #12-14 areas along with additional bone grafting and the #5 and #9-10 areas. After four months of healing, and new CAT scan will be taken to confirm that these areas have had adequate bone regeneration. About that time the provider will place implants in the #2, 5, 9, 10, 12 and 14 areas. The discussion was conducted with [REDACTED] who spoke for Dr. [REDACTED] stating that the only other possible option for this claimant would be a conventional bridge, but the damage teeth are so spaced out and there are a lot of virgin teeth in between and a conventional bridge would not be workable. However, the block to other options remains that spacing out of the teeth recommended for implant. Utilization review dentist has denied this request stating there is no documentation of clear rationale for implant restoration over other conservative options. There are no x-rays, periodontal charting or previous dental notes prior to accident. Therefore the request for implants is not supported.

## IMR ISSUES, DECISIONS AND RATIONALES

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

### **Phase I: Osseous osteoperiosteal, or cartilage graft UR & UL: Overturned**

**Claims Administrator guideline:** The Claims Administrator did not cite any medical evidence for its decision.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: Medscape Reference. Dental Implant Placement. Author: Jeff Burgess, DDS, MSD; Chief Editor: Arlen D Meyers, MD, MBA Aust Dent J. 2014 Mar;59(1):48-56. doi: 10.1111/adj.12098. Epub 2013 Aug 6. Current perspectives on the role of ridge (socket) preservation procedures in dental implant treatment in the aesthetic zone. Kassim B1, Ivanovski S, Mattheos N.

**Decision rationale:** By referring to the citations listed above, it is found that the Bone Grafting is necessary for Ridge. The patient will be having extractions of several teeth, and bone graft will be necessary to preserve the ridge. It was found that Ridge preservation techniques are effective in minimizing post-extraction alveolar ridge contraction (Kassim B, 2014) and in cases where there has been extensive alveolar bone loss following extraction, it may be necessary to provide bone augmentation prior to implant placement. (Burgess) Therefore, Osseous osteoperiosteal, or cartilage graft UR & UL is medically necessary.

### **Sinus augmentation with bone or bone substitutes UR & UL: Overturned**

**Claims Administrator guideline:** The Claims Administrator did not cite any medical evidence for its decision.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: J Korean Assoc Oral Maxillofac Surg. 2013 Dec;39(6):274-82. doi: 10.5125/jkaoms.2013.39.6.274. Epub 2013 Dec 23. Assessment of the autogenous bone graft for sinus elevation. Peng W, Kim IK, Cho HY, Pae SP, Jung BS, Cho HW, Seo JH. And A review of Literature and a technique Proposal. Int J Dent. 2012; 2012:849093.

**Decision rationale:** As stated by the guidelines; "The posterior maxillary region often provides a limited bone volume for dental implants. Maxillary sinus elevation via inserting a bone graft through a window opened in the lateral sinus wall has become the most common surgical procedure for increasing the alveolar bone height in place of dental implants in the posterior maxillary region. The purpose of this article is to assess the change of bone volume and the clinical effects of dental implant placement in sites with maxillary sinus floor elevation and autogenous bone graft through the lateral window approach."Taschieri S, Corbella S, Saita M, Tsesis I, Del Fabbro M. Osteotome-Mediated Sinus Lift without Grafting Material: A review of Literature and a technique Proposal. Int J Dent. 2012; 2012:849093 "Implant rehabilitation of the edentulous posterior maxilla may be a challenging procedure in the presence of insufficient bone

volume for implant placement. Maxillary sinus augmentation with or without using grafting materials aims to provide adequate bone volume. According to references cited above, Sinus augmentation with bone or bone substitutes UR & UL is medically necessary in order to provide adequate bone volume for implant placement.

**Collection and application of autologous blood concentrate product UR & UL: Overturned**

**Claims Administrator guideline:** The Claims Administrator did not cite any medical evidence for its decision.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation J Maxillofac Oral Surg. 2013 Dec;12(4):387-94A prospective study involving the use of platelet rich plasma in enhancing the uptake of bone grafts in the oral and maxillofacial region. Kumar KA, Rao JB, Pavan Kumar B, Mohan AP, Patil K, Parimala K.

**Decision rationale:** According to the above mentioned reference: Autologous PRP (platelet rich plasma) was a safe, biocompatible, effective, source for growth factors and carries no risk of transmissible diseases. It enhances and accelerates bone regeneration of autogenous bone grafts. Therefore, Collection and application of autologous blood concentrate product UR & UL is medically necessary.

**Deep sedation/general anesthesia first 30 minutes: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not cite any medical evidence for its decision.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) Head (updated 06/04/13), Dental trauma treatment (facial fractures).

**Decision rationale:** Deep sedation/general anesthesia first 30 minutes is not medically necessary, as there is no documentation in the records provided by treating dentist justifying the need (example: anxiety, severe dental phobia,) for deep sedation/general anesthesia for this patient. Therefore, the request of deep sedation/general anesthesia first 30 minutes is not medically necessary and appropriate.

**Deep sedation/general anesthesia additional 15 minutes, 9 times: Upheld**

**Claims Administrator guideline:** The Claims Administrator did not cite any medical evidence for its decision.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines (ODG) ODG Head(updated 06/04/13), Dental trauma treatment (facial fractures).

**Decision rationale:** Deep sedation/general anesthesia first 30 minutes is not medically necessary, as there is no documentation in the records provided by treating dentist justifying the need (example: anxiety, severe dental phobia...) for deep sedation/general anesthesia for this patient. As such, the request of deep sedation/general anesthesia additional 15 minutes, 9 times is not medically necessary and appropriate.

**Panoramic radiographic image:** Overturned

**Claims Administrator guideline:** The Claims Administrator did not cite any medical evidence for its decision.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: Implant Soc. 1995; 5(5):7-11. Radiographic modalities for diagnosis and treatment planning in implant dentistry. Garg AK1, Vicari A.1 Center for Dental Implants, Division of Oral/Maxillofacial Surgery & Dentistry, University of Miami School of Medicine, Florida, USA.

**Decision rationale:** According to reference cited above, Today, the two most often employed and most applicable radiographic studies for implant treatment planning are the panoramic radiograph and tomography. Although distortion can be a major problem with panoramic radiographs, when performed properly they can provide valuable information, and are both readily accessible and cost efficient. To help localize potential implant sites and assist in obtaining accurate measurements, it is recommended that surgical stents be used with panoramic radiographs. Therefore, the request of panoramic radiograph is medically necessary for proper placement of implants.

**Surgical placement of implant-endosteal implant #2, 5, 9, 10, 12, 14:** Overturned

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines-Dental Trauma Treatment, Head 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) ODG Head(updated 06/04/13), Dental trauma treatment (facial fractures).

**Decision rationale:** According to ODG Head; Trauma to the oral region occurs frequently and comprise 5 percent of all injuries for which people seek treatment. Among all facial injuries, dental injuries are the most common, of which crown fractures and luxations occur most frequently. An appropriate treatment plan after an injury is important for a good prognosis. The International Association of Dental Traumatology (IADT) has developed guidelines for the evaluation and management of traumatic dental injuries. Dental implants, dentures, crowns, bridges, onlays, inlays, braces, pulling impacted teeth, or repositioning impacted teeth, would be options to promptly repair injury to sound natural teeth required as a result of, and directly related to, an accidental injury. Any dental work needed due to underlying conditions unrelated to the industrial injury would be the responsibility of the worker. If part of the tooth is lost, but

the pulp is not irrevocably damaged, a porcelain veneer or crown may be used. If the pulp has been seriously damaged, the tooth will require root canal treatment before a crown. A tooth that is vertically fractured or fractured below the gum line will require root canal treatment and a protective restoration. If there is no sufficient structure remaining to hold a crown, tooth extraction may be needed, and bridges, implants or a removable appliance may be used. Rather than resting on the gum line like removable dentures, or using adjacent teeth as anchors like fixed bridges, dental implants are long-term replacements. The goal of replacing missing teeth while respecting otherwise untouched tooth structure and the avoidance of crown reduction in bridge preparation make the use of dental implants an option for restoring traumatic tooth loss. Therefore, the request of surgical placement of endosteal implants #2,5,9,10,12,14 is medically necessary to repair the injury this patient has suffered on industrial basis.

**Precision attachment #2, 5, 9, 10, 12, 14: Overturned**

**Claims Administrator guideline:** The Claims Administrator did not base their decision on the MTUS. Decision based on Non-MTUS Citation Official Disability Guidelines-Dental Trauma Treatment.

**MAXIMUS guideline:** The Expert Reviewer did not base their decision on the MTUS. Decision based on Non-MTUS Citation Other Medical Treatment Guideline or Medical Evidence: J Indian Prosthodont Soc. 2012 Mar;12(1):59-62. doi: 10.1007/s13191-011-0100-y. Epub 2011 Aug 28. Precision attachment: retained overdenture. Jayasree K1, Bharathi M, Nag VD, Vinod B.

**Decision rationale:** According to the guidelines cited above, Precision attachments are small interlocking devices to connect prosthesis and abutments that offer a variety of solutions to the challenge of balance between functional stability and cosmetic appeal. Precision attachments have wide applications, used in fixed removable bridge, removable partial dentures, overdentures, implant retained overdentures, and maxillofacial prosthesis. Attachment retained overdentures helps in distribution of masticatory forces, minimizes trauma to abutments and soft tissues, attenuate ridge resorption, improves the esthetics and retains proprioception. The following case report discusses the use of resilient stud attachments. As such, the request of precision attachment #2, 5, 9, 10, 12, 14 is medically necessary since it has been found that Attachment retained overdentures helps in distribution of masticatory forces, minimizes trauma to abutments and soft tissues, attenuate ridge resorption, improves the esthetics and retains proprioception.