



Subject: Orthognathic Surgery*

Effective Date: May 28, 1996

Department(s): Utilization Management

Policy: Orthognathic surgery is reimbursable under Plans administered by QualCare, Inc., when criteria in this policy are met.

Objective: To assure proper and consistent reimbursement and to delineate criteria of medical necessity of a specific category of surgery.

Procedure:

1. The following information must accompany all requests for orthognathic surgery:
 - a. Medical history and physical examination documenting symptoms and physical findings related to deformity to be addressed by the proposed orthognathic procedure
 - b. Description of functional impairment caused by the facial deformity to be addressed by the proposed orthognathic procedure, which must include at least one of the following:
 - i. Persistent difficulties with mastication and swallowing (ICD-9 V41.6; ICD-10 R13.10)
 - ii. Malnutrition, weight loss, or failure-to-thrive (ICD-9 783.41, 783.7; ICD-10 R62.51, R62.7)

- iii. Speech dysfunction which a licensed speech-language pathologist attributes to the facial deformity (**ICD-9 784.51; ICD-10 R47.1**)
 - iv. Myofascial pain of face and/or jaws (**ICD-9 729.1; ICD-10 M60.80**) of at least six months' duration unresponsive to less invasive measures
 - v. Airway obstruction in patients with BOTH of the following:
 - a) polysomnogram-documented obstructive sleep apnea (**ICD-9 327.23; ICD-10 G47.33**) in patients who meet criteria for CPAP but are intolerant of or have failed a trial of CPAP
 - b) failure of less invasive surgical intervention OR narrowed posterior airway space
 - vi. Temporomandibular joint (TMJ) dysfunction(**ICD-9 524.60 – 524.69; ICD-10 M26.60, M26.69**), when surgical management of TMJ dysfunction is covered under the specific SPD
- c. Lateral and anterior-posterior cephalometric radiographs
 - d. Cephalometric tracings
 - e. Photographs, frontal and lateral, demonstrating the deformity to be addressed by the proposed orthognathic procedure
2. ONE of the following facial skeletal deformities must be present for orthognathic surgery to be covered (**ICD-9 524.00-524.59, 526.89, 748.1, 754.0; ICD-10 M26.00-M26.07, M26.09, M27.8, Q30.8, Q30.9, Q67.0, Q67.1, Q67.4**):
- a. Anteroposterior (A-P) discrepancies

- i. Maxillary/mandibular overjet of ≥ 5 mm or ≤ 0
 - ii. Maxillary/mandibular A-P molar relationship of ≥ 4 mm
 - b. Vertical discrepancies
 - i. Vertical facial skeletal deformity ≥ 2 standard deviations from published norms as documented in the letter of medical necessity
 - ii. Open bite with no vertical overlap of anterior teeth
 - iii. Deep overbite causing impingement or irritation of buccal or lingual soft tissue of the opposing arch
 - iv. Eruption-related dysfunction of a dentoalveolar segment not manageable with conventional prosthetics, due to absence of opposing occlusion
 - c. Transverse discrepancies
 - i. Transverse skeletal discrepancy ≥ 2 standard deviations from published norms as documented in the letter of medical necessity
 - ii. Total bilateral maxillary palatal cusp-to-mandibular fossa discrepancy of ≥ 4 mm or unilateral discrepancy of ≥ 3 mm
 - d. Asymmetries
 - i. Anteroposterior, transverse, or lateral asymmetries > 3 mm with concomitant occlusal asymmetry.
- 3. In the absence of one of the deformities listed in Paragraph 2 above, orthognathic surgery is reimbursable for patients with craniofacial skeletal deformities that contribute to obstructive sleep apnea or other airway dysfunction, when the obstructive sleep apnea or other dysfunction has not improved with non-surgical treatments including positive airway pressure and oral airway appliance therapy.

4. In the absence of one of the deformities listed in Paragraph 2 or Paragraph 3, orthognathic surgery is considered cosmetic and is not reimbursable.

5. Orthodontic treatments (**HCPCS D8010 – D8999**) required in conjunction with orthognathic surgery are not covered by medical plans administered by QualCare, Inc. The member should be referred to his/her dental plan to determine whether orthodontic treatments are covered by it.

6. **CPT and HCPCS codes** in the category of orthognathic surgery include but are not limited to:
 - a. Interdental fixation device application (**21110**)
 - b. Prosthetic mandibular augmentation (**21125**)
 - c. Bone graft mandibular augmentation (**21127**)
 - d. LeFort I midface reconstruction
 - i. **21141**
 - ii. **21142**
 - iii. **21143**
 - iv. **21145**
 - v. **21146**
 - vi. **21147**
 - e. LeFort II midface reconstruction
 - i. **21150**
 - ii. **21151**
 - iii. **D7948**
 - f. LeFort III midface reconstruction
 - i. **21154**
 - ii. **21155**
 - iii. **D7948**
 - g. Mandibular reconstruction
 - i. **21193**
 - ii. **21194**
 - iii. **21195**
 - iv. **21196**
 - v. **21247** (bone, cartilage autografts, including obtaining graft)
 - h. Osteotomy

- i. Mandible, segmental (**21198**)
 - ii. Maxilla, segmental (**21206**)
 - i. Osteoplasty, facial bones (**D7940**)
 - i. Augmentation (**21208**)
 - ii. Reduction (**21209**)
 - j. Bone graft (includes obtaining graft)
 - i. Nasal, maxillary, or malar (**21210**)
 - ii. Mandible (**21215**)
7. Computer-assisted technologies, including computerized tomography guided planning procedures and three-dimensional virtual treatment planning, are considered integral to the primary procedure when performed as part of orthognathic surgery.
8. Procedures such as rhinoplasty, genioplasty or rhytidectomy performed in conjunction with orthognathic surgery for the sole purpose of improving individual appearance and profile are not reimbursable because they are considered cosmetic in nature and not medically necessary.
9. All requests orthognathic surgery must be submitted for medical review.

References

Almutairi FL, Hodges SJ, Hunt NP. Occlusal outcomes in combined orthodontic and orthognathic treatment. *J Orthod.* 2017;44(1):28-33(Mar)

Azarmehr I, Stokbro K, Bell RB, Thygesen T. Surgical Navigation: A Systematic Review of Indications, Treatments, and Outcomes in Oral and Maxillofacial Surgery. *J Oral Maxillofac Surg.* 2017;75(9):1987-2005(Sep)

American Association of Oral and Maxillofacial Surgeons-Clinical Paper- Criteria for Orthognathic Surgery, 2015. Accessed at aaoms.org.

Uribe F, Adabi S, Janakiraman N, Allareddy V, Steinbacher D, Shafer D, Villegas C. Treatment duration and factors associated with the surgery-first approach: a two-center study. *Prog Orthod.* 2015;16(1):29(Dec)

Huang CS, Hsu SS, Chen YR. Systematic review of the surgery-first approach in orthognathic surgery. *Biomed J.* 2014;37(4):184–90

Haas Jr OL, Becker OE, de Oliveira RB. Computer-aided planning in orthognathic surgery-systematic review. *J Oral Maxillofac Surg.* 2014: S0901-5027(Nov)

Kechoyan DY Orthognathic Surgery: General Consideration *Semin Plast Surg.* 2013 ; 27(3): 133–136s(Aug)

Buchanan EP, Hyman CH. LeFort I Osteotomy. *Semin Plast Surg.* 2013;27(3):149-54(Aug)

Monson LA. Bilateral sagittal split osteotomy. *Semin Plast Surg.* 2013;27(3):145-8(Aug)

Liou EJ, Chen PH, Wang YC, Yu CC, Huang CS, Chen YR. Surgery-first accelerated orthognathic surgery: orthodontic guidelines and setup for model surgery. *J Oral Maxillofac Surg.* 2011;69(3):771-80(Mar)

Murphy C, Kearns G, Sleeman D, Cronin M, Allen PF. The clinical relevance of orthognathic surgery on quality of life. *Int J Oral Maxillofac Surg.* 2011;40(9):926-30(Sep)

Mattos CT, Vilani GN, Sant'anna EF, Ruellas AC, Maia LC. Effects of orthognathic surgery on oropharyngeal airway: a meta-analysis. *Int J Oral Maxillofac Surg.* 2011 Jul 20. [Epub ahead of print]

American Association of Oral and Maxillofacial Surgeons. Criteria for Orthognathic Surgery 2008. available at http://www.aaoms.org/docs/practice_mgmt/ortho_criteria.pdf accessed 07/24/09

Vandersea BA, Ruvo AT, Frost DE. Maxillary transverse deficiency – surgical alternatives to management. *Oral Maxillofac Surg Clin North Am* 2007;19(3):351-368 (Aug)

Reyneke JP, Ferretti C. Anterior open bite correction by LeFort I or bilateral sagittal split osteotomy. *Oral Maxillofac Surg Clin North Am* 2007;19(3):321-338 (Aug)

O’Gara M, Wilson K. The effects of maxillofacial surgery on speech and velopharyngeal function. *Clin Plast Surg* 2007;34(3):395-402 (Jul)

Reyneke JP. Basic guidelines for the surgical correction of mandibular anteroposterior deficiency and excess. *Clin Plast Surg* 2007;34(3):501-517 (Jul)

American Association of Oral and Maxillofacial Surgeons. Criteria for Orthognathic Surgery. available at http://www.aaoms.org/ortho_criteria.php. accessed 10/31/07

Chu YM, Po-Hsuh Chen R, Morris DE, *et al.* Surgical approach to the patient with bimaxillary protrusion. *Clin Plast Surg* 2007;34(3):535-546 (Jul)

O’Gara M, Wilson K. The effects of maxillofacial surgery on speech and velopharyngeal function. *Clin Plast Surg* 2007;34(3):395-402 (Jul)

Nakata Y, Ueda HM, Kato, M *et al.* Changes in stomatognathic function induced by orthognathic surgery in patients with mandibular prognathism. *J Oral Maxillofac Surg* 2007;65(3):444-451 (Mar)

Rinchuse DJ, Rinchuse DJ. Developmental occlusion, orthodontic interventions, and orthognathic surgery for adolescents. *Dent Clin North Am* 2006;50(1):69-86 (Jan)

Couch ME, Senior B. Nonsurgical and surgical treatments for sleep apnea. *Anesthesiol Clin N Amer* 2005;23(3):525-534 (Sep)

Drafted By: MLadov, DDS/MMacdonald,RN 05/96

Approved By/Date: QM Committee 05/28/96

Revised By/Date: M Ladov, DDS 05/08/01

Approved By/Date: QM Committee 07/24/01

Revised By/Date: BFisher, MD 10/31/07

Approved By/Date: QM Committee 12/11/07

Revised By/Date: BFisher, MD 07/24/09

Approved By/Date: QM Committee 09/08/09

Revised By/Date: MMcNeil, MD 10/05/11

Approved BY/Date: QM Committee 10/25/11

Revised By/Date: MMcNeil, MD 10/13/15

Approved By/Date: QM Committee: 12/15/15

Revised By/Date: MMcNeil, MD 09/11/17

Approved By/Date: QMC, 10/17/17

*Consistent with Summary Plan Description (SPD). When there is discordance between this policy and the SPD, the provisions of the SPD prevail.