Clinical Policy: Orthognathic Surgery

Reference Number: LA.CP.MP.202
Date of Last Revision: 09/~~24~~25

Coding Implications
Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description

This policy describes the medical necessity requirements for orthognathic surgery ~~to improve form and function through correction of an underlying skeletal deformity.~~[1].

Policy/Criteria

I. It is the policy of Louisiana Healthcare Connections that orthognathic surgery is **medically necessary** when all of the following are met:

A. ~~When any~~One of the following skeletal deformities (associated with masticatory malocclusion) are present:

1. Anteroposterior discrepancy, one of the following:
   a. Maxillary/mandibular incisor relationship: overjet of ~~greater than~~≥ 5 mm, or a zero to negative value (norm = 2 mm);
   b. Maxillary/mandibular anteroposterior molar relationship discrepancy of ≥ 4 mm ~~or greater~~ (norm = 0 to 1 mm);
2. Vertical discrepancy, one of the following:
   a. Presence of a vertical facial skeletal deformity which is ~~two or more~~≥ 2 standard deviations from published norms for accepted skeletal landmarks;
   b. Open bite with no vertical overlap of anterior teeth or unilateral or bilateral posterior open bite ~~greater than~~≥ 2 mm;
   c. Deep overbite with impingement ~~or irritation~~ of ~~buccal or lingual~~palatal soft ~~tissues of the opposing arch~~tissue;
   d. Supraeruption of a dentoalveolar segment resulting from lack of occlusion when dentition in segment is intact;
3. Transverse discrepancy, one of the following:
   a. Presence of a transverse skeletal discrepancy which is ~~two or more~~≥ 2 standard deviations from published norms;
   b. Total bilateral ~~maxillary~~ palatal cusp to mandibular fossa discrepancy of ≥ 4 mm ~~or greater~~, or a unilateral discrepancy of ≥ 3 mm ~~or greater~~, given normal axial inclination of the posterior teeth;
4. Anteroposterior, transverse or lateral asymmetries ~~greater than~~≥ 3 mm, with concomitant occlusal asymmetry.

B. Presence of ~~any~~at least one of the following functional impairments:

1. Persistent difficulties with mastication and swallowing after causes such as neurological or metabolic diseases have been excluded;
2. Malnutrition, significant weight loss, or failure-to-thrive secondary to facial skeletal deformity;
3. Speech dysfunction directly related to ~~a~~ jaw deformity as determined by a speech and language pathologist;

4. Myofascial pain secondary to facial skeletal deformity that has persisted for at least six months~~,~~ despite compliant conservative treatment, such as physical therapy and splints;
5. Airway obstruction, such as obstructive sleep apnea~~,~~ documented by polysomnogram, when both of the following criteria are met:
   a. ~~Criteria for positive airway pressure (PAP) met and individual has proved intolerant~~Intolerant to or failed a trial of PAP;
   b. ~~Individual has~~Has failed ~~prior~~ or is not a candidate for less invasive surgical procedures ~~OR has craniofacial skeletal abnormalities that are associated with a narrowed posterior airway space and tongue base obstruction~~.

II. It is the policy of ~~Louisiana Healthcare Connections~~Centene Corporation that orthognathic surgery is **not medically necessary** when any of the following are present:
A. When the sole purpose is to improve individual appearance, regardless of whether ~~it is~~they are associated with psychological disorders, because ~~it is~~they are considered cosmetic in nature;
B. When the member/enrollee is still developing and the deformity could be corrected with less intrusive treatment (e.g., expander or head gear).

Background
Orthognathic surgery is the surgical correction of abnormalities of the mandible, maxilla, or both. The underlying abnormality may be present at birth or may become evident as the patient grows and develops or may be the result of traumatic injuries ~~or systemic diseases. Often, the~~. The severity of these deformities precludes adequate treatment through dental treatment alone. Such skeletal abnormalities may cause difficulties with eating or chewing, abnormal speech patterns, or dysfunction of the temporomandibular joint (TMJ). The overall goal of treatment is to improve function through correction of the underlying skeletal deformity.[1]

Abnormalities generally occur as a result of a differential in growth between the upper facial skeleton and the lower facial skeleton, resulting in a discrepancy of the normal relationship that exists between the upper jaw (maxilla) and lower jaw (mandible). Genetic predisposition and ~~environmental factors~~acquired causes can influence the normal growth of the facial skeleton~~. Genetic causes can include cleft palate and other~~ from syndromes~~,~~ such as Apert and Crouzon~~.~~[1,2] or from facial clefts. Traumatic events can displace the normal structural elements or may disturb future normal growth. Other etiologies that can result in significant dentofacial anomalies include neoplasms, surgical resection and iatrogenic radiation. Developmental anomalies, however, are the most common condition. All of these deformities may result in diminished bite forces, restricted mandibular excursions, abnormal chewing patterns, speech deficits, malocclusions and/or abnormal facial appearance. There is a relationship between facial skeletal abnormalities and malocclusions, including Class II (disto-occlusion), Class III (mesio-occlusion) and open-bite (teeth do not meet) deformities.[1]

The American Association of Oral and Maxillofacial Surgeons (AAOMS) classification of occlusion/malocclusion[1]
Class I: Exists with the teeth in a normal relationship when the mesial-buccal cusp of the maxillary first permanent molar coincides with the buccal groove of the mandibular first molar.

Class II: Malocclusion occurring when the mandibular teeth are behind the normal relationship with the maxillary teeth. This can be due to a deficiency of the lower jaw (*Type 1*) or an excess of the upper jaw (*Type 2*).
Class III: Commonly referred to as an under bite, Class III malocclusion occurs when the lower dental arch is in front of (mesial to) the upper dental arch. People with this type of occlusion usually have a strong or protrusive chin, which can be due to either horizontal mandibular excess or horizontal maxillary deficiency.

Surgical Procedures
In orthognathic surgery, an osteotomy is made in the affected jaw, and the bones are repositioned in a more normal alignment. The bones are held in position with plates, screws and/or wires. Intermaxillary fixation, a procedure in which arch bars are placed on both jaws, may also be needed to provide added stability. Simultaneous osteotomies may be performed when deformities must be corrected in both jaws. Grafts from the ribs, hip or skull may be performed for patients with deficient bone tissue; alloplastic bone replacement may also be required. Orthognathic surgery~~, which was initially introduced in the 19th century,~~ is generally performed under general anesthesia on an inpatient basis.[3] ~~The gold standard for treatment of malocclusion is orthodontic management followed by surgery; however, over the last few decades, support has been increasing for a surgery first approach.~~[4] Although sometimes performed for cosmetic purposes, orthognathic surgery is generally considered to be medically necessary when performed to treat a significant abnormality ~~(e.g., mandible forward to cranial base, increase mandibular length, short ramal length or obtuse gonial angle)~~ that is causing considerable functional impairment.[2,3]

Coding Implications
This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted ~~2023~~2024, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. The following codes are for informational purposes only and may not support medical necessity. They are current at time of review of this policy. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

NOTE: Coverage is subject to each requested code's inclusion on the corresponding LDH fee schedule. Non-covered codes are denoted (*) and are reviewed for Medical Necessity for members under 21 years of age on a per case basis.

CPT®* Codes	Description
21110	Application of interdental fixation device for conditions other than fracture or dislocation, includes removal
21120	Genioplasty; augmentation (autograft, allograft, prosthetic material)
21121	Genioplasty; sliding osteotomy, single piece

CPT®* Codes	Description
21122	Genioplasty; sliding osteotomies, 2 or more osteotomies (eg, wedge excision or bone wedge reversal for asymmetrical chin)
21123	Genioplasty; sliding, augmentation with interpositional bone grafts (includes obtaining autografts)
21125	Augmentation, mandibular body or angle; prosthetic material
21127	Augmentation, mandibular body or angle; with bone graft, onlay or interpositional (includes obtaining autograft)
21141	Reconstruction midface, LeFort I; single piece, segment movement in any direction (eg, for Long Face Syndrome), without bone graft
21142	Reconstruction midface, LeFort I; two pieces, segment movement in any direction, without bone graft
21143	Reconstruction midface, LeFort I; three or more pieces, segment movement in any direction, without bone graft
21145	Reconstruction midface, LeFort I; single piece, segment movement in any direction, requiring bone grafts (includes obtaining autografts)
21146	Reconstruction midface, LeFort I; two pieces, segment movement in any direction, requiring bone grafts (includes obtaining autografts) (eg, ungrafted unilateral alveolar cleft)
21147	Reconstruction midface, LeFort I; three or more pieces, segment movement in any direction, requiring bone grafts (includes obtaining autografts) (eg, ungrafted bilateral alveolar cleft or multiple osteotomies)
21150	Reconstruction midface, LeFort II; anterior intrusion (eg, Treacher-Collins Syndrome)
21151	Reconstruction midface, LeFort II; any direction, requiring bone grafts (includes obtaining autografts)
21154	Reconstruction midface, LeFort III (extracranial), any type, requiring bone grafts (includes obtaining autografts); without LeFort I
21155	Reconstruction midface, LeFort III (extracranial), any type, requiring bone grafts (includes obtaining autografts); with LeFort I
21159	Reconstruction midface, LeFort III (extra and intracranial) with forehead advancement (eg, mono bloc), requiring bone grafts (includes obtaining autografts); without LeFort I
21160	Reconstruction midface, LeFort III (extra and intracranial) with forehead advancement (eg, mono bloc), requiring bone grafts (includes obtaining autografts); with LeFort I
21188	Reconstruction midface, osteotomies (other than LeFort type) and bone grafts (includes obtaining autografts)
21193	Reconstruction of mandibular rami, horizontal, vertical, C, or L osteotomy; without bone graft
21194	Reconstruction of mandibular rami, horizontal vertical, C, or L osteotomy; with bone graft (includes obtaining graft)
21195	Reconstruction of mandibular rami and/or body, sagittal split; without internal rigid fixation

CPT®* Codes	Description
21196	Reconstruction of mandibular rami and/or body, sagittal split; with internal rigid fixation
21198	Osteotomy, mandible, segmental
21199	Osteotomy, mandible, segmental; with genioglossus advancement
21206	Osteotomy, maxilla, segmental (eg, Wassmund or Schuchard)
21208	Osteoplasty, facial bones; augmentation (autograft, allograft, or prosthetic implant)
21209	Osteoplasty, facial bones; reduction
21210	Graft, bone; nasal, maxillary or malar areas (include obtaining graft)
21215	Graft, bone; mandible (includes obtaining graft)
21244	Reconstruction of mandible, extraoral, with transosteal bone plate (e.g., mandibular staple bone plate)
21245	Reconstruction of mandible or maxilla, subperiosteal implant; partial
21246	Reconstruction of mandible or maxilla, subperiosteal implant; complete
21247	Reconstruction of mandibular condyle with bone and cartilage autografts (includes obtaining grafts) (eg, for hemifacial microsomia)
21248	Reconstruction of mandible or maxilla, endosteal implant (eg, blade, cylinder); partial
21249	Reconstruction of mandible or maxilla, endosteal implant (eg, blade, cylinder); complete

Reviews, Revisions, and Approvals	Review Date	Approval Date
Rebranded Corporate policy to LHCC	2/22	4/10/22
Reformatted criteria II. and added II.B. as additional non-medically necessary indication. Additional minor rewording with no clinical significance. Background updated. CDT codes removed from policy. References revised and updated. Reviewed by external and internal specialists.	12/22	2/28/23
Annual review. Added CPT codes 21248 and 21249. References reviewed and updated.	11/23	1/23/24
Annual review. Updated Criteria I.A.1.b. from greater than 4 mm to 4 mm or greater. Updated Criteria I.A.2.c. to include irritation of buccal or lingual soft tissues of the opposing arch. Added clarifying language to Criteria I.A.3.b. References reviewed and updated. Added note regarding non-covered codes. Reviewed by internal specialist and external specialist.	09/24	11/20/24
Annual review. Minor verbiage updates throughout policy with no impact to criteria. Updated I.A.2.c. to "with impingement of palatal soft tissue." Updated I.B.5.a. to Intolerant to or failed a trial of PAP and I.B.5.b to "Has failed....less invasive surgical procedures." References reviewed and updated.	09/25	

References

1. American Association of Oral and Maxillofacial Surgeons. ~~Criteria for orthognathic~~Orthognathic surgery indications. ~~https://www.aaoms.org/docs/practice_resources/clinical_resources/ortho_criteria.pdf.~~ https://aaoms.org/publications/position-papers/clinical-papers/. Published ~~2020~~2025. Accessed July ~~19, 2024.~~18, 2025.
2. American Academy of Pediatric Dentistry. Management of the developing dentition and occlusion in pediatric dentistry. The Reference Manual of Pediatric Dentistry. Chicago, ~~III~~Ill.: American Academy of Pediatric Dentistry; ~~2021:466 to 483~~ 2024:475-93.
3. Singh G, Kumar S, Gulati U. Orthognathic surgery. In: Singh G, ed. *Textbook of orthodontics*. 3rd ed. New Delhi India: Jaypee Brothers Medical Publishers (P) Ltd., 2015:298 to 307. ISBN 978-93-5152-440-3
4. Jandali D, Barrera JE. Recent advances in orthognathic surgery. *Curr Opin Otolaryngol Head Neck Surg*. 2020;28(4):246 to 250. doi:10.1097/MOO.0000000000000638
5. Chang YJ, Lai JP, Tsai CY, Wu TJ, Lin SS. Accuracy assessment of computer-aided three-dimensional simulation and navigation in orthognathic surgery (CASNOS). *J Formos Med Assoc*. 2020;119(3):701 to 711. doi:10.1016/j.jfma.2019.09.017
6. Lin HH, Lonic D, Lo LJ. 3D printing in orthognathic surgery - A literature review. *J Formos Med Assoc*. 2018;117(7):547 to 558. doi:10.1016/j.jfma.2018.01.008
7. Khechoyan DY. Orthognathic surgery: general considerations. *Semin Plast Surg*. 2013;27(3):133 to 136. doi:10.1055/s-0033-1357109
8. Abrahamsson C, Henrikson T, Bondemark L, Ekberg E. Masticatory function in patients with dentofacial deformities before and after orthognathic treatment-a prospective, longitudinal, and controlled study. *Eur J Orthod*. 2015;37(1):67-72. doi:10.1093/ejo/cju011
9. Huang CS, Hsu SS, Chen YR. Systematic review of the surgery-first approach in orthognathic surgery. *Biomed J*. 2014;37(4):184 to 190. doi:10.4103/2319-4170.126863
10. Buchanan, EP. Syndromes with craniofacial abnormalities. UpToDate. http://www.uptodate.com. Updated November 30, 2022. Accessed July ~~11, 2024~~18, 2025.

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy,

contract of insurance, etc.), as well as to state and federal requirements and applicable LHCC administrative policies and procedures.

This clinical policy is effective as of the date determined by LHCC. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. LHCC retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom LHCC has no control or right of control. Providers are not agents or employees of LHCC.

This clinical policy is the property of LHCC. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members/enrollees and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members/enrollees and their representatives agree to be bound by such terms and conditions by providing services to members/enrollees and/or submitting claims for payment for such services.