MEDICAL POLICY

POLICY TITLE	ORTHOGNATHIC SURGERY
POLICY NUMBER	MP-1.101

Original Issue Date (Created):	**5/24/2004**
Most Recent Review Date (Revised):	**11/15/2018**
Effective Date:	**2/1/2019**

I. POLICY

Documentation of symptoms and signs must be present in the medical record of the primary care physician (if applicable) or other practitioners ***prior*** to the consultation with the operating surgeon. This documentation should include a medical history and physical examination, description of specific anatomic deformities, previous management of functional medical impairments, and details of any failed non-surgical/conservative therapies.

Dental molds, photographs and x-rays (Ortho-Panores, cephalometric), which includes the measurements and angles, are requirements for determining the medical necessity of the service.

Orthognathic surgery may be considered **medically necessary** in the following circumstances:

1. Correction of significant congenital (present at birth) deformity. This includes the Leforte III procedure for diagnoses such as Crouzon Syndrome, Pfeiffer Syndrome, cleft, Treacher Collins or Apert's Syndrome and mandibular surgery, including intraoral vertical ramus osteotomy or bilateral split sagital ramus osteotomy for congenital micrognathia resulting in respiratory obstruction, Pierre Robin or maxillary deformity from a cleft; **OR**

2. Restoration following trauma, tumor, degenerative diseases or infection (other than mild gingivitis); **OR**

3. Treatment of malocclusion that contributes to one or more significant functional impairments as defined below:

   A. Persistent difficulty swallowing, choking, or chewing food adequately, when the following are also met:
      1) Symptoms must be documented in the patient's medical record, including primary care physician's record (for PCP directed products), be significant, and must persist for at least four months;
      2) Episodes witnessed at home, school or work should be documented in the medical record; and

3) Other causes of swallowing/choking/chewing problems must have been ruled out (by history, physical, and/or other appropriate diagnostic studies) including:
   - Allergies, post nasal drip (diagnostic studies, therapeutic trial of antihistamine and/or decongestant);
   - Neurologic or metabolic diseases;
   - Hypothyroidism if enlarged tongue or thyroid gland is present on clinical exam.

B. Speech Abnormality – medical necessity criteria should include both of the following:
   1) Speech deficit is noticeable to a layperson or primary care physician and significantly impairs the patient's ability to communicate; and
   2) Professional speech evaluation indicates speech deficit is the direct result of anatomical jaw abnormality and is not amenable to speech therapy.

C. Malnutrition/failure to thrive related to an inability to masticate – medical necessity criteria includes either of the following:
   1) Significant involuntary weight loss over the prior four months; or
   2) Low serum albumin related to malnutrition.

D. Significant dental trauma (i.e. sheering of teeth, fractured teeth) related to malocclusion. Information should be supplied which indicates the severity and duration of the trauma.

E. Myofascial pain that has persisted for at least 6 months despite conservative treatment (e.g. medication, physical therapy).

F. Airway obstruction (such as obstructive sleep apnea) that is
   1) confirmed by appropriate sleep study; and
   2) persisting despite failed attempts at conservative treatment (e.g., CPAP, oral appliance) and/or less invasive surgical procedures.

<u>Additional Requirements</u>

In addition to meeting (3A, 3B, 3C, 3D, 3E, or 3F) the above requirements for functional impairment due to malocclusion, the patient must also meet **<u>all</u>** criteria from any one of the following anatomic requirements for orthognathic surgery to be considered **medically necessary**:

1. Anteroposterior discrepancies (each of the following values is two or more standard deviation from published norms):
   A. Maxillary/Mandibular incisor relationship: overjet of 5mm or more, or a zero to a negative value (normal is 2mm);
   B. Mandibular/Maxillary anteroposterior molar relationship discrepancy of 4mm or more (normal is zero to 1)

2. Vertical Discrepancies
    A. Presence of a vertical facial skeletal deformity, which is two or more standard deviations from published norms are accepted skeletal landmarks;
    B. Open Bite;
        1) No vertical overlap of anterior teeth
        2) Unilateral or bilateral posterior open bite greater than 2mm
    C. Deep overbite with impingement or irritation of buccal or lingual soft tissues of the opposing arch.
    D. Supra-eruption of a dentoaveolar segment due to lack of occlusion.
3. Transverse Discrepancies
    A. A transverse skeletal discrepancy is present (two or more standard deviations from published normal);
    B. Four (4) mm or greater total bilateral maxillary palatal cusp to mandibular fossa discrepancy, or a 3mm or greater unilateral discrepancy, given normal axial inclination of the posterior teeth.
4. Asymmetries
    A. Lateral, anteroposterior, or transverse asymmetries greater than 3mm with an occlusal asymmetry.

Orthognathic surgery performed for the following reasons is considered **not medically necessary**:

- Orthognathic surgery performed primarily for psychological, cosmetic or orthodontic purposes;
- Surgery designed to eliminate potential future problems, where functional impairment is not yet established according to the above criteria;
- Surgery where significant risk of recurrence of symptoms or structural abnormalities exist.

Cross-references:
MP-1.128 Surgical Treatment of Snoring and Obstructive Sleep Apnea
MP-2.062 Temporomandibular Joint Dysfunction

II. PRODUCT VARIATIONS Top

This policy is applicable to all programs and products administered by Capital BlueCross unless otherwise indicated below.

III. DESCRIPTION/BACKGROUND Top

POLICY TITLE	ORTHOGNATHIC SURGERY
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Orthognathic surgery is the surgical correction of elements of the facial skeleton to restore the proper anatomic and functional relationship in patients with acquired or congenital malformations involving the upper or lower jaw. These malformations may be present at birth, may become evident as the individual grows, or result from trauma, tumors, or infections. Surgery is often done in conjunction with orthodontics, which may be required before and/or after surgery in order to align the teeth.

Malformations of the jaw can cause abnormal speech, chewing and eating difficulties, loss of teeth, respiratory problems, and dysfunction of the temporomandibular joint. Malocclusion (abnormal jaw relation) may be caused by an excess or lack of bony tissue in one or both jaws, or by trauma to the facial bones.

Reconstruction of the mandibular ramus, mandibular or maxilla osteotomy, and reconstruction of the mandible or maxilla are considered orthognathic surgical procedures.

Surgical Procedures
In orthognathic surgery, an osteotomy is made in the affected jaw (i.e., bone is cut), and the bones are repositioned in a more normal alignment. The bones are held in position with plates, screws, and/or wires. Simultaneous osteotomies may be performed when deformities must be corrected in both jaws. Most maxillofacial deformities can be managed with three basic osteotomies: 1) the midface with the Le Fort I-type osteotomy, 2) the lower face with the sagittal split ramal osteotomy of the mandible, and 3) the horizontal osteotomy of the symphysis of the chin.

Various osteotomies are used to correct midfacial deformities, and the choice of procedure depends on the specific deformity. For most midfacial maxillofacial deformities, the Le Fort I osteotomy and its variations are adequate. The Le Fort I osteotomy involves separating the maxilla and the palate from the skull above the roots of the upper teeth through an incision inside the upper lip. The maxilla is fixed in its new position with titanium screws and plates.

For the lower face, various osteotomies are used to correct mandibular deformities, and the choice depends on the particular deformity. Currently, the sagittal split ramal osteotomy is the primary choice for correcting most cases of mandibular retrognathism (lack of growth of the mandible) and prognathism (protrusion of the mandible).

Deformities of the chin can exist independently of mandibular deformities, and the chin can be abnormally proportioned without occlusal involvement. While alloplastic chin implants are used most commonly for correction of minimal sagittal chin deficiencies, the horizontal osteotomy of the symphysis (osseous genioplasty) is a more versatile procedure. The chin can be repositioned in multiple planes, allowing for correction of significant sagittal and vertical deformities of deficiency (microgenia) or excess (macrogenia) and asymmetric conditions.

IV. DEFINITIONS

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N/A

V. BENEFIT VARIATIONS

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The existence of this medical policy does not mean that this service is a covered benefit under the member's contract. Benefit determinations should be based in all cases on the applicable contract language. Medical policies do not constitute a description of benefits. A member's individual or group customer benefits govern which services are covered, which are excluded, and which are subject to benefit limits and which require preauthorization. Members and providers should consult the member's benefit information or contact Capital BlueCross for benefit information.

VI. DISCLAIMER

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Capital BlueCross's medical policies are developed to assist in administering a member's benefits, do not constitute medical advice and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member's benefit information, the benefit information will govern. Capital BlueCross considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

VIII. CODING INFORMATION

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Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Covered when medically necessary:

CPT Codes®								
21081	21085	21089	21100	21110	21141	21142	21143	21145
21146	21147	21150	21151	21154	21155	21159	21160	21188
21193	21194	21195	21196	21198	21199	21206	21208	21209
21210	21215	21244	21245	21246	21247	21248	21249	21299
21431	21432	21433	21435	21436	21490	21497		

HCPCS Code	Description
D7946	LeFort I (maxilla - total); Surgical section of the upper jaw. This includes the surgical exposure, bone cuts, downfracture, repositioning, fixation, routine wound closure and normal post-operative follow-up care

D7947	LeFort I (maxilla - segmented); When reporting a surgically assisted palatal expansion without downfracture, this code would entail a reduced service and should be "by report."
D7948	LeFort II or LeFort III (osteoplasty of facial bones for midface hypoplasia or retrusion) - without bone graft; Surgical section of upper jaw. This includes the surgical exposure, bone cuts, downfracture, segmentation of maxilla, repositioning, fixation, routine wound closure and normal post-operative follow-up care.
D7949	LeFort II or LeFort III - with bone graft; Includes obtaining autografts.

IX. REFERENCES

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American Association of Oral and Maxillofacial Surgeons (AAOMS). Criteria for Orthognathic Surgery 2017. [Website]: https://www.aaoms.org/docs/practice_resources/clinical_resources/ortho_criteria.pdf Accessed November 15, 2018.

Bill J, Proff P, Bayerlein T, et al. Orthognathic surgery in cleft patients, Journal of Cranio-Maxillofacial Surgery, Volume 34, Supplement 2, September 2006, Pages 77-81.

Joss, CU, Vassalli, IM. Stability after bilateral sagittal split osteotomy advancement surgery with rigid internal fixation: a systematic review. J Oral Maxillofac Surg. 2009; 67(2):301-313.

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Mucedero, M, Coviello, A, Baccetti, T, Franchi, L, and Cozza, P. Stability factors after double-jaw surgery in Class III malocclusion. A systematic review. Angle Orthod. 2008; 78(6):1141-1152.

Patel PK, Han H, Kang N, et al. Craniofacial, Orthognathic Surgery. Emedicine. Updated October 5, 2016. [Website]: www.emedicine.com/plastic/topic177.htm. Accessed November 15, 2018.

Taber's Cyclopedic Medical Dictionary, 20th edition.

X. POLICY HISTORY

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MP 1.101	**CAC 12/2/03**
	CAC 2/24/04
	CAC 8/31/04
	CAC 8/30/05
	CAC 7/25/06
	CAC 7/31/07
	CAC 7/29/08
	CAC 7/28/09 Consensus Review

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	Administrative revision to policy to match benefit changes effective 10-1-10
	CAC 10/25/11 Consensus Review
	CAC 6/26/12 Minor Revision – Expanded list of documentation to be included with review (medical history and physical exam, description of specific anatomic deformities, previous management of functional medical impairments, and details of any failed non-surgical/conservative therapies). Persistent myofacial pain and airway obstruction such as OSA with specific criteria was added to the list of medically necessary indications. Medicare and FEP variation removed. (Please Note: No BCBSA policy exists)
	7/24/13 Admin coding review complete
	9/24/13 Consensus. No change to policy statements. References updated.
	CAC 9/30/14 Consensus review. References updated. No changes to the policy statements. Codes reviewed**.**
	CAC 9/29/15 Consensus review. References reviewed. No change to policy statements. Coding Reviewed. **04/06/16** Admin update.
	CAC 11/29/16 Consensus review. No change to the policy statements. References reviewed and updated**.** Variations reformatted**.**
	12/19/17 Consensus review. No changes to the policy statements. References reviewed and updated**.** Coding reviewed**.** All non-covered dental procedure codes removed from policy (HCPC codes that start with D)
	11/15/18 Consensus review. No changes to the policy statements. References updated.
	1/22/19 Admin coding correction.

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