

# Medical Policy

## Orthognathic Surgery

**Policy Number:** 1033

Policy History			
Approve Date:	02/19/2015	Effective Date:	02/19/2015
Reviewed/Revised Date:	01/13/2016, 01/13/2017, 01/13/2018, 04/29/2019		

Preauthorization	
All Plans	Benefit plans vary in coverage and some plans may not provide coverage for certain service(s) listed in this policy. Decisions for authorization are subject to all terms and conditions of the applicable benefit plan, including specific exclusions and limitations as well as applicable state and/or federal laws. Please review the benefit plan descriptions for details.

### Policy

#### Indications of Coverage

- I. Orthognathic surgery involves widening, shortening, or lengthening the bones, in any dimension, in the upper or lower jaws to correct severe skeletal facial deformities. Trauma, congenital or acquired conditions and severe disproportional growth of the bones in the face and jaw can cause these skeletal deformities.
  
- II. Medically Necessary  
 Orthognathic (Mandibular/Maxillary) surgery is considered medically necessary to treat a significant physical functional impairment when the procedure can be reasonably expected to improve the physical functional impairment. Significant physical functional impairment includes any one of the following:
  - A. Dysphagia when all of the following criteria (i, ii, and iii) are met:
    - i. Symptoms related to difficulty chewing such as: choking due to incomplete mastication, or difficulty swallowing chewed solid food, or ability to chew only soft food or reliance on liquid food AND
    - ii. Symptoms must be documented in the medical record, must be significant and must persist for at least four months AND
    - iii. Other causes of swallowing or choking problems have been ruled out by history, physical exam and appropriate diagnostic studies OR
  - B. Speech abnormalities determined by a speech pathologist or therapist to be due to a malocclusion and not helped by orthodontia or at least six months of speech therapy OR
  - C. Intra-oral trauma while chewing related to malocclusion (e.g., loss of food through the lips during mastication, causing recurrent damage to the soft tissues of the mouth during mastication) OR
  - D. Masticatory dysfunction or malocclusion when criteria i, ii, and iii below are met:
    - i. Completion of skeletal growth with long bone x-ray or serial cephalometrics showing no change in facial bone relationships over the last three to six month period (Class II malocclusions and individuals age 18 and over do not require this documentation) AND
    - ii. Documentation of malocclusion with either intra-oral casts (if applicable) bilateral, lateral x-rays, cephalometric radiograph with measurements, panoramic radiograph or tomograms AND
    - iii. And ANY one of the following described in 1, 2, 3, or 4 is documented:

1. Anteroposterior discrepancies defined as either of the following:
  - a. Maxillary/Mandibular incisor relationship (established norm = 2mm) defined as one of the following:
    - (i) Maxillary/Mandibular incisor relationship (established norm = 2mm) defined as one of the following:
      - (a) Horizontal overjet of 5mm or more OR
      - (b) Horizontal overjet of zero to a negative value (Note: Overjet up to 5mm may be treatable with routine orthodontic therapy) OR
    - (ii) Maxillary/Mandibular anteroposterior molar relationship discrepancy of 4mm or more (norm 0 to 1mm).
  - b. Maxillary/Mandibular incisor relationship (established norm = 2mm) defined as one of the following:
    - (a) Horizontal overjet of 5mm or more OR
    - (b) Horizontal overjet of zero to a negative value (Note: Overjet up to 5mm may be treatable with routine orthodontic therapy) OR
2. Vertical discrepancies defined as any of the following:
  - a. Presence of a vertical facial skeletal deformity which is two or more standard deviations from published norms for accepted skeletal landmarks OR
  - b. Open bite (defined as one of the following):
    - (a) No vertical overlap of anterior teeth OR
    - (b) Unilateral or bilateral posterior open bite greater than 2mm OR
  - c. Deep overbite with impingement or irritation of buccal or lingual soft tissues of the opposing arch OR
  - d. Supra-eruption of a dentoalveolar segment due to lack of occlusion.
3. Transverse discrepancies defined as either of the following:
  - a. Presence of a transverse skeletal discrepancy which is two or more standard deviations from published norms OR
  - b. Total bilateral maxillary palatal cusp to mandibular fossa discrepancy of 4mm or greater, or a unilateral discrepancy of 3mm or greater, given normal axial inclination of the posterior teeth.
4. Asymmetries defined as the following:
  - a. Anteroposterior, transverse or lateral asymmetries greater than 3mm with concomitant occlusal asymmetry.

NOTE: When the condition involves treatment of skeletal deformity, the deformity must be documented either by computed tomography (CT), magnetic resonance imaging (MRI), or x-ray.

### III. Reconstructive

Orthognathic (Mandibular/maxillary) surgery is considered reconstructive when intended to address a significant variation from normal related to accidental injury, disease, trauma, or treatment of a disease or congenital defect.

### IV. Cosmetic and Not Medically Necessary

Orthognathic (Mandibular/maxillary) surgery is considered cosmetic and not medically necessary when intended to change a physical appearance that would be considered within normal human anatomic variation.

A genioplasty (or anterior mandibular osteotomy) is considered cosmetic and not medically necessary when not associated with masticatory malocclusion.

## Background

Orthognathic surgery is the surgical correction of skeletal anomalies or malformations involving the mandible (lower jaw) or the maxilla (upper jaw). These malformations may be present at birth or they may become evident as the individual grows and develops. Orthognathic surgery can be performed to correct malocclusion, which cannot be improved with routine orthodontic therapy and where the functional impairments are directly caused by the malocclusion. The overall goal of treatment is to improve function through correction of the underlying skeletal deformity.

Maxillary advancement is a type of orthognathic surgery that may be necessary to improve the facial contour and normalize dental occlusion when there is a relative deficiency of the midface region. This is done by surgically moving the maxilla with sophisticated bone mobilization techniques and fixing it securely into place.

Depending on the soft tissue profile of the face or the severity of an occlusal discrepancy, problems with the lower face may require surgery of the mandible. This can be performed in conjunction with or separate from maxillary surgery. The mandible can be advanced, set back, tilted or augmented with bone grafts. A combination of these procedures may be necessary. Following any significant surgical movement of the mandible, fixation may be accomplished with mini-plates and screws or with a combination of interosseous wires and intermaxillary fixation (IMF). Rigid fixation (screws and plates) has the advantage of needing limited or no IMF. However, if interosseous wiring is used, IMF is maintained for approximately six weeks.

## References

The above policy is based on the following references:

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