02-12000-17

Original Effective Date: 08/15/13

Reviewed: 05/22/25

Revised: 06/15/25

Subject: Orthognathic Surgery

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DESCRIPTION:

Orthognathic surgery is the surgical correction of skeletal abnormalities of the mandible, maxilla or both. The underlying abnormality may be congenital (intrinsic), present at birth. These abnormalities may be recognized at birth or may not become obvious until the individual grows and develops. The dysmorphology may be extrinsic, the result of traumatic injuries or secondary to systemic diseases.

Intrinsic or congenital abnormalities include, but are not limited to, cleft lip and palate; dentofacial skeletal deformities (mandibular hyper or hypoplasia, maxillary hyper or hypoplasia, apertognathia, facial asymmetry, maxillary and mandibular transverse discrepancies); craniofacial macrosomia; dysmorphic syndromes such as Noonan and Treacher Collins; Pierre Robin sequence; and chromosomal anomalies, including 22q11.2 deletion syndrome.

Extrinsic, or acquired abnormalities include, but are not limited to, traumatic facial skeletal injuries; cysts and tumors of the jaws; obstructive sleep apnea; temporomandibular joint disorders resulting in skeletal malocclusion; rheumatoid arthritis; degenerative arthritis; condylar atrophy; growth disturbances; and condylar hyperplasia.

Summary and Analysis of Evidence: In 2023, the American Association of Oral and Maxillofacial Surgeons published a clinical paper titled “Indications for Orthognathic Surgery” [(AAOMS ParCare), Seventh Edition, 2023.] They defined orthognathic surgery as “the surgical correction of skeletal abnormalities of the mandible, maxilla or both. The underlying abnormality may be congenital (intrinsic), present at birth. These abnormalities may be recognized at birth or may not become obvious until the individual grows and develops. The dysmorphology may be extrinsic, the result of traumatic injuries or secondary to systemic diseases. Often, the severity of these deformities necessitates surgical correction in combination with other rehabilitative services, including no surgical therapies. The primary goal of treatment is to improve form and

function through correction of the underlying skeletal deformity." The paper further stated, "the classification and analysis of dentofacial skeletal deformities is complex and involves discrepancies in all planes of space. However, they can generally be classified as … congenital anomalies and acquired anomalies … Orthognathic surgery may be indicated and considered medically appropriate in the following circumstances:

A. Anteroposterior discrepancies (established norm=2mm)
B. Vertical discrepancies (two or more standard deviations from published norms for accepted skeletal landmarks)
C. Transverse discrepancies (two or more standard deviations from published norms)
D. Asymmetries (anteroposterior, transverse or lateral asymmetries greater than 3mm with concomitant occlusal asymmetry)

These indications relate verifiable clinical measurements to significant facial skeletal deformities, maxillary and/or mandibular facial skeletal deformities associated with masticatory malocclusion."

Knoedler et al (2023) retrospectively analyzed a multi-institutional database to investigate outcomes of orthognathic surgery (OS) and identify risk factors for peri- and postoperative complications. They identified patients who underwent OS for mandibular and maxillary hypo- and hyperplasia. The postoperative outcomes of interest included 30-day surgical and medical complications, reoperation, readmission, and mortality. They also evaluated risk factors for complications. The study population included 674 patients. Adverse events were relatively rare, with a total of 29 (4.3%) complications reported. The most common surgical complication was superficial incisional infection. While the multivariable analysis revealed isolated single lower jaw surgery to be independently associated with surgical complication occurrence, it also identified an association between the outpatient setting and the frequency of surgical complications and readmissions. In addition, Asian ethnicity was identified as a risk factor for bleeding and readmission. The authors concluded their analysis "underscored the positive (short-term) safety profile of OS. We found OS of the mandible to be associated with higher complication rates. The calculated risk role of OS in the outpatient setting warrants further investigation. A significant correlation between Asian OS patients and postoperative adverse events was found. Implementation of these novel risk factors into the surgical workflow may help facial surgeons refine their patient selection and improve patient outcomes."

Zammit et al (2023) published a review article to highlight the contemporary practice of orthognathic surgery, stating "orthognathic surgery has been a mainstay of craniomaxillofacial surgical treatment for over a century. Osteotomies of the midface and mandible are utilized in contemporary craniomaxillofacial practice to address three-dimensional dysmorphology of the maxillomandibular complex, with positive effects on the occlusion, facial aesthetics, and management of airway obstruction." … "Orthognathic surgical treatment involves a sequential approach with presurgical orthodontic preparation (12–18 months), followed by surgery, and post-surgical orthodontic coordination (6–12 months). The pre-surgical stage is designed to "decompensate" the dentition such that the dental deformity matches the skeletal deformity. This is followed by surgical care where the bone position is altered to morphometric norms, and post-surgical orthodontic coordination in order to finish the occlusion to have optimal interdental contacts. Despite the conventional approach standing the test of time, drawbacks include prolonged treatment time as well as potential aggravation of facial aesthetics during the presurgical treatment period. Recent advancements in the mechanics of tooth movements, stability of specific skeletal movements in the context of rigid fixation and understanding of

the effects of surgery on tooth movement have allowed for the introduction of several different approaches to address skeletal dysplasia, including surgery-first and surgery-only approaches, as well as the use of clear orthodontic aligners in lieu of conventional metal braces. In appropriately selected patients, these protocols each offer several benefits, including reduced treatment time, greater quality of life, and improved patient satisfaction." … "In contrast to the conventional paradigm, "surgery-first" orthognathic treatment plans involve moving the jaws to the appropriate position with no or very limited pre-surgical orthodontic coordination. The success of the surgery-first orthognathic approach lies in its utilization of the body's natural compensatory adaptation process, eliminating the need for a decompression procedure. By applying only postsurgical orthodontics, the surgery-first approach takes advantage of the regional accelerated phenomenon (RAP), a known facilitator of postsurgical dental movement." … "In patients without the need for significant alterations in the occlusion, but the need for the reorientation of the jaw position to address asymmetry or for primary aesthetic purposes, a "surgery-only" protocol can be utilized. This approach is not novel, per se, as moving the jaws without altering the occlusion has been practiced for decades and shares similarities with maxillofacial trauma surgery. What has changed has been the ability of the surgeon to utilize customized three-dimensional planning to effectively move the jaws reliably and consistently without the use of intermaxillary fixation appliances peri-operatively. The use of customized cutting guides and fixation plates reduces the need to rely on occlusal splints, in many instances obviating the need for splints altogether. Asymmetry corrections in particular benefit from these types of devices, as the precise placement of the fixation device recapitulates the planned skeletal movement created in the virtual environment." … "There has been tremendous innovation in orthognathic surgery over the past century, with a particularly rapid evolution over the past twenty years. Advances in imaging, computer-aided surgical planning, patients-specific fixation, and improved understanding of the pathophysiology of airway obstruction have allowed surgeons to treat an ever-expanding group of diagnoses and effectively address even the most complex anatomic presentations."

POSITION STATEMENT:

***NOTE: Per Florida statute:**

A health plan that covers a child under the age of 18 must provide coverage for treatment of **cleft lip and cleft palate** for the child. **See Florida Statutes, Section 627.66911** below (**OTHER** section).

1. A health plan that provides coverage for any diagnostic or surgical procedure involving bones or joints of the skeleton shall not discriminate against coverage for any similar diagnostic or surgical procedure involving bones or joints of the **jaw and facial region**, if, under accepted medical standards, such procedure or surgery is medically necessary to treat conditions caused by **congenital or developmental deformity, disease, or injury**. See **Florida Statutes, Sections 627.419(7); 627.65735; 641.31094** below (**OTHER** section).

Orthognathic surgery to correct skeletal deformities of the maxilla or mandible **meets the definition of medical necessity** when the **(1.) skeletal deformity, (2.) functional impairment** and **(3.) documentation** requirements below are met.

1. **Skeletal deformities**, either A or B:
    A. **One or more of the following skeletal deformities exists:**

Anteroposterior discrepancies:

- Maxillary/mandibular incisor relationship: horizontal overjet of +5 millimeters (mm) or more, **OR** horizontal overjet of zero to a negative value (established norm = 2mm), **OR**
- Maxillary/mandibular antero-posterior molar relationship discrepancy of 4mm or more (established norm = 0 to 1mm); **OR**

Vertical discrepancies:

- Open bite, demonstrated by **ONE** of the following:
  - No vertical overlap of anterior teeth; **OR**
  - Unilateral or bilateral posterior open bite greater than 2mm; **OR**
- Deep overbite with impingement or irritation of buccal or lingual soft tissues of the opposing arch; **OR**
- **Supraeruption** of a dentoalveolar segment due to lack of occlusion; **OR**

Transverse discrepancies:

- 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; **OR**

Asymmetries:

- Anteroposterior, transverse or lateral asymmetry greater than 3mm with concomitant occlusal asymmetry

B. There is a skeletal abnormality due to injury / trauma (e.g., fracture), disease or illness (e.g., neoplasm or osteonecrosis).

2. Physical functional impairment

One or more of the following physical functional impairments exists:

- Masticatory (chewing) dysfunction due to skeletal deformity (e.g., inability to incise/and or chew solid foods, loss of food through the lips, intra-oral trauma to soft tissue during chewing); **OR**
- Swallowing dysfunction (dysphagia) due to skeletal deformity (e.g., choking on incompletely chewed solid foods); **OR**
- Myofascial pain due to skeletal deformity that has persisted for at least 6 months and has not responded to conservative therapy such as physical therapy or splinting; **OR**
- Speech impairments (documented by a speech pathologist or therapist) due to skeletal deformity that do not respond to orthodontia or speech therapy; **OR**
- Obstructive sleep apnea, when **ALL** of the following are met:

- Criteria for a positive airway pressure (PAP) device are met and the member is unable to tolerate PAP or has failed a trial of PAP (refer to 09-E0000-21, Positive Airway Pressure Devices), **AND**
- There is a skeletal deformity.

3. **The following documentation is required:**
    - Medical history, physical examination and description of the skeletal deformity present; **AND**
    - **Panorex** and **cephalometric** radiographs; **AND**
    - Cephalometric tracings and analysis; **AND**
    - Anterior posterior radiographs for asymmetry deformities; **AND**
    - Medical records from treating physician documenting evaluation, diagnosis and previous management of the functional impairment(s); **AND**
    - Photographs that demonstrate the skeletal deformity.

Orthognathic surgery when performed for cosmetic purposes **does not meet the definition of medical necessity**.

Genioplasty (surgery of the chin to correct a receding chin with an implant or reduce a prominent chin) when performed in conjunction with orthognathic surgery, for the sole purpose of improving appearance and/or profile, is considered cosmetic and **non-covered.**

Orthodontic treatment for congenital or developmental malformations related to or developed as a result of **cleft palate, with or without cleft lip, meets the definition of medical necessity**. The member must have a confirmed diagnosis of cleft palate, with or without cleft lip, with a demonstrated malocclusion.

The following are considered dental services that are subject to coverage available through dental benefits:

- **Endosteal (dental) implants**, when used to serve as an abutment for teeth or orthodontic appliances
- Surgery for **torus mandibularis** and/or surgery for **torus palatinus** for fabrication of dentures
- Orthodontic treatment for conditions other than cleft palate (with or without cleft lip).

BILLING/CODING INFORMATION:

CPT Coding:

21120	Genioplasty; augmentation (autograft, allograft, prosthetic material) **(non-covered)**
21121	Genioplasty; sliding osteotomy, single piece **(non-covered)**
21122	Genioplasty; sliding osteotomies, two or more osteotomies (e.g., wedge excision or bone wedge reversal for asymmetrical chin) **(non-covered)**

21123	Genioplasty; sliding, augmentation with interpositional bone grafts (includes obtaining autografts) **(non-covered)**
21141	Reconstruction midface, LeFort I; single piece, segment movement in any direction (e.g., for Long Face Syndrome), without bone graft
21142	Reconstruction midface, LeFort I; 2 pieces, segment movement in any direction, without bone graft
21143	Reconstruction midface, LeFort I; 3 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; 2 pieces, segment movement in any direction, requiring bone grafts (includes obtaining autografts) (e.g., ungrafted unilateral alveolar cleft)
21147	Reconstruction midface, LeFort I; 3 or more pieces, segment movement in any direction, requiring bone grafts (includes obtaining autografts) (e.g., ungrafted bilateral alveolar cleft or multiple osteotomies)
21150	Reconstruction midface, LeFort II; anterior intrusion (e.g., 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 (e.g., mono bloc), requiring bone grafts (includes obtaining autografts); without LeFort I
21160	Reconstruction midface, LeFort III (extra and intracranial) with forehead advancement (e.g., mono bloc), requiring bone grafts (includes obtaining autografts); with LeFort I
21181	Reconstruction by contouring of benign tumor of cranial bones (e.g., fibrous dysplasia), extracranial
21182	Reconstruction of orbital walls, rims, forehead, nasoethmoid complex following intra- and extracranial excision of benign tumor of cranial bone (e.g., fibrous dysplasia), with multiple autografts (includes obtaining grafts); total area of bone grafting less than 40 sq cm
21183	Reconstruction of orbital walls, rims, forehead, nasoethmoid complex following intra- and extracranial excision of benign tumor of cranial bone (e.g., fibrous dysplasia), with multiple autografts (includes obtaining grafts); total area of bone grafting greater than 40 sq cm but less than 80 sq cm
21184	Reconstruction of orbital walls, rims, forehead, nasoethmoid complex following intra- and extracranial excision of benign tumor of cranial bone (e.g., fibrous dysplasia), with multiple autografts (includes obtaining grafts); total area of bone grafting greater than 80 sq cm
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
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 (e.g., Wassmund or Schuchard)
21210	Graft, bone; nasal, maxillary or malar areas (includes obtaining graft)
21215	Graft, bone; mandible (includes obtaining graft)

REIMBURSEMENT INFORMATION:

Refer to section entitled **POSITION STATEMENT**

PROGRAM EXCEPTIONS:

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Advantage products: No National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) were found at the time of the last guideline reviewed date.

If this Medical Coverage Guideline contains a step therapy requirement, in compliance with Florida law 627.42393, members or providers may request a step therapy protocol exemption to this requirement if based on medical necessity. The process for requesting a protocol exemption can be found at Coverage Protocol Exemption Request.

DEFINITIONS:

Anteroposterior: also referred to as A/P; from the front to the back of the body.

Asymmetries: lacking symmetry; parts of the body are unequal in shape and/or size.

Cephalometric: a scientific measurement of the head; the interpretation of lateral skull x-rays taken under standardized conditions.

Endosteal implant: dental implant made of metal, ceramic, or polymeric material, consisting of a blade, screw, pin, or vent, inserted into the jaw bone through the alveolar or basal bone, with a post protruding through the mucoperiosteum into the oral cavity to serve as an abutment for dentures or orthodontic appliances, or to serve in fracture fixation.

Malocclusion: imperfect contact of opposing teeth in the upper and lower jaws.

Mandible: the horseshoe-shaped bone forming the lower jaw.

Maxilla: a paired bone that forms the skeletal base of the upper face, roof of the mouth, sides of the nasal cavity and floor of the orbit (contains the eye); the upper jaw.

Maxillofacial: pertaining to the maxilla (upper jaw) and the face.

Occlusion: bringing the opposing surfaces of the teeth of the two jaws (mandible and maxilla) into contact with each other.

Panorex: a two-dimensional dental x-ray that displays the upper and lower jaws and teeth in the same film; also known as an orthopantomogram.

Supraeruption: the occurrence of a tooth continuing to grow out of the gum if the opposing tooth in the opposite jaw is missing.

Torus mandibularis: a bony prominence sometimes seen on the lingual aspect of the mandible at the base of its alveolar part.

Torus palatinus: a fixed nodule of bone occurring commonly in the midline of the hard palate.

Transverse: in a direction across the body from side to side.

Vertical: upright or straight up and down.

RELATED GUIDELINES:

Reconstructive Surgery/Cosmetic Surgery, 02-12000-01

Diagnosis and Treatment of Temporomandibular Joint Disorder, 02/20000-12

OTHER:

Mandated Coverage

Florida Statutes, Section 627.66911:

Required coverage for **cleft lip and cleft palate**. A health insurance policy that covers a child under the age of 18 must provide coverage for treatment of cleft lip and cleft palate for the child. The coverage must include medical, dental, speech therapy, audiology, and nutrition services only if such services are prescribed by the treating physician or surgeon and such physician or surgeon certifies that such services are medically necessary and consequent to treatment of the cleft lip or cleft palate. The coverage required by this section is subject to terms and conditions applicable to other benefits. This section does not apply to specified-accident, specified-disease, hospital indemnity, limited benefit disability income, or long-term care insurance policies.

Florida Statutes, Section 627.419(7):

Construction of policies. No health insurance policy, health care services plan, or other contract which provides coverage for any diagnostic or surgical procedure involving bones or joints of the skeleton shall discriminate against coverage for any similar diagnostic or surgical procedure involving bones or joints of the jaw and facial region, if, under accepted medical standards, such procedure or surgery is medically necessary to treat conditions caused by **congenital or developmental deformity, disease, or injury**. This subsection shall not be construed to affect any other coverage under this part or to restrict the scope of

coverage under any policy, plan, or contract. Nothing in this subsection shall be construed to discourage appropriate nonsurgical procedures or to prohibit the continued coverage of nonsurgical procedures in the treatment of a bone or joint of the jaw and facial region. Furthermore, nothing in this subsection requires coverage for care or treatment of the teeth or gums, for intraoral prosthetic devices, or for surgical procedures for cosmetic purposes. This section does not apply to accident only, disability income, specified disease, hospital indemnity, credit, Medicare supplement, or long-term care insurance policies.

Florida Statutes, Section 627.65735:

Nondiscrimination of coverage for surgical procedures. No group, franchise, or blanket health insurance contract or policy which provides coverage on a group or individual basis for any diagnostic or surgical procedure involving bones or joints of the skeleton shall discriminate against coverage for any similar diagnostic or surgical procedure involving bones or joints of the jaw and facial region, if, under accepted medical standards, such procedure or surgery is medically necessary to treat conditions caused by congenital or developmental deformity, disease, or injury. This section shall not be construed to affect any other coverage under this part or to restrict the scope of coverage under any policy, plan, or contract. Nothing in this section shall be construed to discourage appropriate nonsurgical procedures or to prohibit the continued coverage of nonsurgical procedures in the treatment of a bone or joint of the jaw and facial region. Furthermore, nothing in this section requires coverage for care or treatment of the teeth or gums, for intraoral prosthetic devices, or for surgical procedures for cosmetic purposes. This section does not apply to accident-only disability income, specified disease, hospital indemnity, credit, Medicare supplement, or long-term care insurance policies.

Florida Statutes, Section 641.31094:

Nondiscrimination of coverage for certain surgical procedures involving bones or joints. No health maintenance contract or policy which provides coverage for any diagnostic or surgical procedure involving bones or joints of the skeleton shall discriminate against coverage for any similar diagnostic or surgical procedure involving bones or joints of the jaw and facial region, if, under accepted medical standards, such procedure or surgery is medically necessary to treat conditions caused by congenital or developmental deformity, disease, or injury. This section shall not be construed to affect any other coverage under this part or to restrict the scope of coverage under any policy, plan, or contract. Nothing in this section shall be construed to discourage appropriate nonsurgical procedures or to prohibit the continued coverage of nonsurgical procedures in the treatment of a bone or joint of the jaw and facial region. Furthermore, nothing in this subsection requires coverage for care or treatment of the teeth or gums, for intraoral prosthetic devices, or for surgical procedures for cosmetic purposes.

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COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 05/22/25.

GUIDELINE UPDATE INFORMATION:

08/15/13	New Medical Coverage Guideline.
01/01/14	Revision; position statement updated. Reformatted guideline.
08/15/14	Scheduled review. Maintained position statement. Revised Other section (Florida Statutes). Updated references.
07/15/15	Scheduled review. Maintained position statement and updated references.
11/01/15	Revision: ICD-9 Codes deleted.
07/15/16	Scheduled review. Maintained Position Statement. Updated references.
10/01/16	Revision: Billing/Coding Information section updated.
07/15/17	Scheduled review. Maintained position statement and updated references. Reformatted guideline.
09/15/18	Scheduled review. Maintained position statement and updated references.
09/15/19	Scheduled review. Maintained position statement and updated references.
02/15/21	Scheduled review. Revised description, maintained position statement, and updated references.
11/15/22	Scheduled review. Maintained position statement and updated references.
05/23/23	Update to Program Exceptions section.
01/01/24	Position statements maintained.
09/15/24	Revision. Changed coverage designation for genioplasty from “does not meet the definition of medical necessity” to “non-covered”.
06/15/25	Scheduled review. Revised description, maintained position statement and updated references.