

Orthognathic Surgery*



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Medical Policy #: 07.01.85

Original Effective Date: August 2022

Reviewed: August 2022

Revised:

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Benefit determinations are based on the applicable contract language in effect at the time the services were rendered. Exclusions, limitations, or exceptions may apply. Benefits may vary based on contract, and individual member benefits must be verified. Wellmark determines medical necessity only if the benefit exists and no contract exclusions are applicable. This medical policy may not apply to FEP. Benefits are determined by the Federal Employee Program.

This Medical Policy document describes the status of medical technology at the time the document was developed. Since that time, new technology may have emerged, or new medical literature may have been published. This Medical Policy will be reviewed regularly and updated as scientific and medical literature becomes available; therefore, policies are subject to change without notice.

DESCRIPTION

Note: Some group health plans may not have benefits to cover orthognathic surgery and/or temporomandibular joint disorder (TMJ/TMD). Please refer to the member's benefit booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore, member benefit language should be reviewed before applying the terms of this medical policy.

Orthognathic surgery is performed to widen, lengthen, or shorten bones in the upper jaw (maxilla) or lower jaw (mandible) in order to correct significant facial skeletal deformities. These skeletal deformities may be classified as congenital (intrinsic) present at birth (e.g. cleft lip and palate, congenital dentofacial skeletal deformities) or acquired (extrinsic) the result of traumatic injuries or secondary systemic diseases (e.g. accidental injury/trauma [facial skeletal injuries], growth disturbances, cysts or tumors of the jaw, infection; disease processes affecting the temporomandibular joint [TMJ]; airway dysfunction – moderate or severe obstructive sleep apnea [OSA])

Orthognathic surgery is performed when the severity of the deformity results in significant functional impairment and the deformity cannot be adequately treated through dental or orthodontic services alone. Examples of orthognathic surgical procedures include sagittal split osteotomy and Lefort I, II, and III osteotomies. The overall goal of treatment is to improve function through correction of the underlying skeletal deformity.

Malocclusion

Malocclusion is defined as the misalignment of the upper and lower teeth when biting or chewing. Malocclusion can also be defined as a bad bite and is quite often hereditary. Malocclusion is the most common reason for referral to an orthodontist. Most problems are minor and do not require treatment.

Malocclusion may be referred to as an irregular bite, crossbite, underbite or overbite. A handicapping malocclusion can be defined as one that severely interferes with function (proper mastication, speech, ability to maintain good oral hygiene) that typically includes crooked, crowded, or protruding teeth that affect appearance, speech, and/or the ability to eat. Malocclusions may require a combination of pre-surgical orthodontics and surgery for correction and improved function of the masticatory arches and therefore occlusion. Severe cases are typically those where orthodontic services alone cannot solely treat the malocclusion. Diagnoses include but are not limited to severe lateral or anterior open bite deformities, severe class II malocclusion with impingement of the lower incisors into the palatal tissues/mucosa (deep, destructive bite), and class III malocclusions (severe underbite or lower jaw protrusion). There are certain handicapping malocclusions that are associated with severe craniofacial deformities and include but are not limited to: cleft lip/cleft palate, Treacher Collins Syndrome, severe dento-facial trauma.

Angle classification is a manner in which malocclusion is classified by the dental profession. The classification is based upon the position of the upper first molar and specifically the alignment of the mesiobuccal cusp of the upper first molar with the buccal groove of the lower first molar. The teeth should fit on a line of occlusion which, in the upper arch, is a smooth curve through the central fossae of the posterior teeth and cingulum of the canines and incisor teeth, and in the lower arch, is a smooth curve through the buccal cusps of the posterior teeth and incisal edges of the anterior teeth. Any variations from this normocentric or neutrocentric occlusion define the classification of the malocclusion. It is possible to have different classifications of malocclusion that are side dependent, right or left. Variations in occlusion classifications can be associated with craniofacial relationships.

- **Class I: Neutroclusion** - the molar relationship of the occlusion is normal where the mesiobuccal cusp of the upper first molar occludes with the buccal groove of the lower first molar. However, it is possible for the remaining teeth to encounter problems such as spacing, crowding, over or under eruption, etc.

Class I malocclusion is treated with comprehensive orthodontics, there are two main therapeutic approaches: extraction and non-extraction. Extractions are

routinely used to address dental crowding and reduce protrusion of the teeth and the overlying soft tissue. The alternative treatment is expansion of the arches.

- **Class II: Distocclusion** (also associated or defined as retrognathism – may note lower incisor teeth in a destructive occlusion with the soft tissues of the palate) the mesiobuccal cusp of the upper first molar is not aligned with the buccal groove of the lower first molar as it is anterior to it. A typical finding is to have the upper first molar mesiobuccal cusp occluding between the first mandibular molars and second premolars.

There are two subtypes:

- **Class II Division 1:** is when the mandibular arch is behind the upper jaw with a consequential protrusion of the upper front teeth.
- **Class II Division 2:** exists when the mandibular teeth are behind the upper teeth, with a retrusion of the maxillary front teeth.

Both of these malocclusions have a tendency toward a deep bite because of the uncontrolled migration of the lower front teeth upwards. Commonly referred to as an overbite.

- **Class III: Mesioocclusion** (also known as prognathism – in this situation, the lower incisor teeth are forward of the upper incisor teeth creating an underbite) the mesiobuccal cusp of the upper first molars are not within the mesiobuccal groove of the lower first molar, but posterior to it. The lower front teeth are more prominent than the upper front teeth. Quite often, this situation involves an overdeveloped lower jaw and/or an undersized or short upper jaw.

Jaw Deformities

Jaw deformities include abnormalities of jaw-to-jaw size and shape and may include excessive or deficient bone-to-bone or bone-to-soft-tissue relationships. Deformities may be present in any of the three planes: horizontal, vertical, or transverse, or a combination of these.

The American Association of Oral and Maxillofacial Surgeons (AAOMS) classified dentofacial deformities as mid-face or mandibular as follows:

- Skeletal deformities of the mid-face
 - Maxillary hyperplasia
 - Maxillary hypoplasia
 - Cleft deformities
 - Other mid-face deformities, including nasal, zygomatic, orbital, ethmoidal, frontal, or other cranial bones
- Skeletal deformities of the mandible
 - Mandibular hyperplasia

- Mandibular hypoplasia
- Mandibular asymmetry
- Condylar abnormalities, including hypoplasia, hyperplasia, neoplasia, ankylosis, post-traumatic conditional and agenesis (failure of development during embryonic growth and development)

The AAOMS criteria for orthognathic surgery include the following: Given the relationship between facial skeletal deformities and masticatory dysfunction as well as the limitations of non-surgical therapies to correct these discrepancies, the measurement of these discrepancies must consider dental compensations relating to the malocclusion and underlying skeletal deformity.

- A. Anteroposterior discrepancies: established norm = 2 mm
 1. Maxillary/mandibular incisor relationship
 - a. Horizontal overjet of +5mm or more
 - b. Horizontal overjet of zero to a negative value
 2. Maxillary/mandibular anteroposterior molar relationship discrepancy of 4mm or more (norm 0 to 1mm)
 3. These values represent two or more standard deviation from published norms

Overjet is the horizontal overlap of the maxillary central incisors over the mandibular central incisors. It is how much the upper front teeth protrude forward in relation to the lower front teeth. The normal overjet is considered 2-3 mm.

- B. Vertical discrepancies
 1. Presence of a vertical facial skeletal deformity, which is two or more standard deviations from published norms for accepted skeletal landmarks
 2. Open bite
 - a. No vertical overlap of anterior teeth
 - b. Unilateral or bilateral posterior open bite greater than 2mm
 3. Deep overbite with impingement or irritation of buccal or lingual soft tissues of the opposing arch
 4. Super-eruption of a dentoalveolar segment due to lack of occlusion

Overbite is the vertical overlap of the maxillary central incisors over the mandibular central incisors. It is how much the upper front teeth cover the lower front teeth in a vertical dimension. The normal overbite is considered 2-3 mm, or approximately 20-30% of the height of the mandibular incisors.

- C. Transverse discrepancies
 1. Presence of a transverse skeletal discrepancy, which is two or more standard deviations from published norms

2. 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.

D. Asymmetries

1. Anteroposterior, transverse, or lateral asymmetries greater than 3mm with concomitant occlusal asymmetry

The relationship between facial skeletal abnormalities and malocclusion is generally accepted. A strong correlation has been established between the state of a patient's occlusion and chewing efficiency, bite forces, and restricted mandibular excursions. Other signs of dysfunction related to facial skeletal abnormalities, such as obstructive sleep apnea, may also be present. Orthognathic surgery may be performed to improve function by correcting the underlying skeletal deformity when dental/orthodontic treatment alone is precluded due to the severity of deformities and related impairment.

Several syndromes produce congenital deformities of the facial skeleton, most notably Apert's and Crouzon's syndromes, both of which involve maxillary and midface retrusion with Class III dental occlusion. Orthognathic surgery has been shown to improve respiration, occlusion, and speech in individuals with these conditions.

Up to 26 percent of individuals who undergo cleft lip and/or palate repair in childhood develop maxillary hypoplasia that requires orthognathic surgery due to Class III malocclusions and speech deficits. Causes include tight scar tissue resulting from previous surgical procedures, the mechanical molding action of the muscles, and the presence of a pharyngeal flap. The LeFort I osteotomy is typically used to correct maxillary hypoplasia. However, in cases where a combination of mandibular prognathism and maxillary hypoplasia occurs, mandibular setback may be required along with maxillary advancement. Surgical repair should be delayed until the individual reaches skeletal maturity. In cases where speech articulation is adversely affected because of severe skeletal malocclusions, improvement has been reported after orthognathic surgery.

The etiology of other significant dentofacial anomalies that may require surgical correction is variable. Trauma to the mature facial skeleton can displace the normal elements and require repositioning osteotomies if, initially, there was an improper reduction. In the developing facial skeleton, traumatic events can disturb normal subsequent growth. Additionally, neoplastic growth and surgical resection may cause significant acquired dentofacial anomalies that may also result in functional impairment.

Obstructive Sleep Apnea

Obstructive sleep apnea (OSA) can be a result of maxillary and mandibular deficiencies when associated with narrowed posterior airway space (PAS) and lowered air volume. Studies have demonstrated positive changes on polysomnography and decreases in apnea indices after maxillomandibular advancement in individuals with maxillary and/or mandibular deficiencies. In fact, surgery results in reduction of apnea/hypopnea indices

similar to that attained by continuous positive airway pressure (CPAP). However, surgery is indicated only for individuals with maxillary and/or mandibular deficiencies that are surgically correctable who have failed conservative therapies for moderate to severe OSA.

Temporomandibular Joint Disorder

Temporomandibular joint disorder (TMD), also referred to as temporomandibular joint syndrome (TMJS) or craniomandibular disorder (CMD), is an all-inclusive term used to describe disorders of the muscles of mastication often referred to as myofascial pain dysfunction (MPD) and true image-validated abnormalities of the joint. TMD is a heterogeneous grouping without a standard etiology; it is identified by common signs and symptoms that include complaints of pain in the face or jaw area, headaches, earaches, dizziness, masticatory musculature hypertrophy, limited mouth opening, closed or open lock of the TMJ, abnormal occlusal wear, and clicking or popping sounds in the joint.

Because of the lack of understanding regarding the etiology and course of the condition, many types of professional providers may see patients with TMD. Therefore, treatment approaches are frequently dependent on the specialty of the treating practitioner.

TMD is characterized by pain in the TMJ or its adjacent tissues, functional limitations of the mandible, or clicking in the TMJ during motion. TMJ disorders are common and often self-limiting, with up to 75% of adults having at least one sign of joint dysfunction.

The American Society of Temporomandibular Joint Surgeons notes that TMD is a collective term that encompasses all problems related to the TMJ and its related musculoskeletal structures. Disc displacement frequently is a result of an internal derangement in addition to a co-existing osteoarthritis or degenerative joint disease, which is the most common cause of persistent TMJ pain and joint dysfunction requiring a surgical intervention.

In a select population of individuals who are refractory to medical therapy, have clinically significant pain localized to the TMJ, and have evidence of mandibular malfunction, surgery may be indicated.

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. Although sometimes performed for cosmetic purposes, orthognathic surgery is generally considered to be medically necessary when performed to treat a significant abnormality that is causing considerable functional impairment. Functional impairments include:

- Persistent inability to masticate and swallow food adequately when other causes such as neurological or metabolic diseases have been ruled out by physical exam and/or appropriate diagnostic testing.
- Malnutrition, significant weight loss, or failure to thrive.
- Speech and articulation disorders directly related to jaw deformity, as determined by a speech and language pathologist.
- Myofascial pain that has persisted for at least 4 months despite conservative treatment.

Patients with bone or soft tissue deficiency of the face may require distraction osteogenesis. In this procedure, a distraction device is applied to the bone, and a controlled fracture is created and gradually separated, allowing new bone formation in the distracted segments. This allows the facial bone and adjacent soft tissue to elongate.

Other Procedures

Procedures such as rhinoplasty, genioplasty or mentoplasty, malar augmentation (cheek implants), augmentation of mandibular angle or body (performed to add prominence and balance to the face) or rhytidectomy may be performed in conjunction with orthognathic surgery. Procedures performed with the primary purpose of improving physical appearance or to treat psychological symptomatology or psychosocial complaints are cosmetic in nature and not a covered benefit.

Summary of Evidence

Orthognathic surgery is performed to correct abnormalities of the mandible, maxilla, or both. There is convincing evidence of the relationship between facial skeletal abnormalities and malocclusions, including Class II, Class III, asymmetry, and open bite deformities. A strong correlation has been demonstrated between the state of the individual's occlusion and his or her chewing efficiency, bite forces, and restricted mandibular excursions. Orthognathic surgery has resulted in significant improvement in skeletal deformities that contribute to chewing, breathing, and swallowing dysfunction and where the severity of the deformity cannot be corrected through dental therapeutics or orthodontics. Studies have shown that individuals with skeletal malocclusions suffer from a variety of functional impairments, including diminished bite forces, restricted mandibular excursions, and abnormal chewing patterns. The evidence in the peer-reviewed literature to support this conclusion includes non-randomized controlled trials and case series studies. The evidence is sufficient to determine that the technology results in a meaningful improvement in net health outcomes.

For syndromes that produce congenital deformities of the facial skeleton (cleft deformities; Apert syndrome; Crouzon syndrome; Hemifacial microsomia; Pfeiffer syndrome; Pierre Robin syndrome; Treacher Collins syndrome) associated with functional impairments, orthognathic surgery has been shown to improve respiration, occlusion, and speech in individuals with these conditions. The evidence is sufficient to determine that the technology results in a meaningful improvement in net health outcomes.

Obstructive sleep apnea syndrome (OSAS) when associated with narrowed posterior airway space (PAS) and lowered air volume, studies have demonstrated positive changes on polysomnography and decreases in apnea indices after maxillomandibular advancement in individuals with maxillary and/or mandibular deficiencies. In fact, surgery results in reduction of apnea/hypopnea indices similar to that attained by continuous positive airway pressure (CPAP). The evidence is sufficient to determine that the technology results in a meaningful improvement in net health outcomes in those individuals with maxillary and/or mandibular deficiencies that are surgically correctable who have failed conservative therapies for moderate to severe OSA.

In a select population of individuals who are refractory to medical therapy, have clinically significant pain localized to the TMJ, and have evidence of mandibular malfunction, surgery may be indicated. The evidence is sufficient to determine that the technology results in a meaningful improvement in net health outcomes for those individuals with TMJ meeting the medical necessity criteria below (see Policy section below).

Although orthognathic surgery is performed for correction of facial deformities and improvement in function, an improved appearance can also result. The provision of aesthetically pleasing features and improved psychosocial function comprise a large part of the body of literature available on orthognathic surgery. The psychosocial aspects of orthognathic surgery have been investigated for changes brought about by surgery. Most of the research relies on patient satisfaction questionnaires and is, therefore, challenged by low response rates and recall bias. Improvement in psychosocial functioning is included in the statement of Criteria for Orthognathic Surgery issued by the American Association of Oral and Maxillofacial Surgeons. However, cosmetic services are those provided to improve an individual's physical appearance, from which no significant improvement in physiologic function can be expected. Emotional and/or psychological improvement alone does not constitute improvement in physiologic function. Services that are **COSMETIC** are a contract benefit exclusion and not eligible for reimbursement consideration, *see also medical policy Cosmetic and Reconstructive Services 10.01.02*.

Practice Guideline and Position Statements

American Association of Oral and Maxillofacial Surgeons (AAOMS)

In 2020, the American Association of Oral and Maxillofacial Surgeons (AAOMS) issued an updated guideline regarding criteria for orthognathic surgery.

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. 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 function through correction of the underlying skeletal deformity.

Consequential outcomes of treatment: As direct effect of the resultant skeletal movements, changes in the soft-tissue drape overlying the facial skeleton may be realized. The soft tissue changes are inherent to the procedure and must be considered in the surgical work-up and are not considered the primary goal of surgery.

There is a direct relationship between facial skeletal abnormalities, malocclusions, and masticatory function for example:

1. Class II and Class III dental arch relationships
2. Transverse arch discrepancies
3. Bolton discrepancy
4. Vertical maxillary excess
5. Maxillary and mandibular asymmetry
6. Apertognathias

Scientific studies have shown that many patients with skeletal deformities suffer from a variety of functional impairments including, but not limited to, malocclusions, diminished bite forces, restricted mandibular excursions, swallowing difficulties, qualitative and quantitative speech disorders, abnormal chewing patterns and temporomandibular disorders. While the etiology of facial skeletal deficiencies is multifactorial, it is known that patients with these deformities have pathologic alteration in their muscle fibers when compared to those with normal facial skeletons. Electromyography further demonstrates significant differences between these two groups of patients. Clinical experience and the literature have demonstrated that, when indicated, orthognathic surgery leads to improvement in a spectrum of functional impairments. The medical appropriateness of these procedures is well-documented in the world literature.

Classification

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 follows:

Congenital anomalies (for example)

1. Cleft lip and palate
2. Dentofacial skeletal deformities: mandibular hyper or hypoplasia, maxillary hyper or hypoplasia, apertognathia, facial asymmetry, maxillary, and mandibular transverse discrepancies
3. Craniofacial microsomia
4. Dysmorphic syndromes, such as Noonan and Treacher Collins
5. Pierre Robin sequence

6. Chromosomal anomalies, including 22q11.2 deletion syndrome

Acquired anomalies

1. Traumatic facial skeletal injuries
2. Cysts and tumors of the jaws
3. Obstructive sleep apnea
4. Temporomandibular joint disorders resulting in skeletal malocclusion
5. Rheumatoid arthritis
6. Degenerative arthritis
7. Condylar atrophy
8. Growth disturbances
9. Condylar hyperplasia

Indications

Given the relationship between facial skeletal deformities and masticatory dysfunction as well as the limitations of non-surgical therapies to correct these discrepancies, the measurement of these discrepancies must consider dental compensations relating to the malocclusion and underlying skeletal deformity. Orthognathic surgery may be indicated and considered medically appropriate in the following circumstances:

- E. Anteroposterior discrepancies: established norm = 2 mm
 4. Maxillary/mandibular incisor relationship
 - c. Horizontal overjet of +5mm or more
 - d. Horizontal overjet of zero to a negative value
 5. Maxillary/mandibular anteroposterior molar relationship discrepancy of 4mm or more (norm 0 to 1mm)
 6. These values represent two or more standard deviation from published norms

Overjet is the horizontal overlap of the maxillary central incisors over the mandibular central incisors. It is how much the upper front teeth protrude forward in relation to the lower front teeth. The normal overjet is considered 2-3 mm.

- F. Vertical discrepancies
 1. Presence of a vertical facial skeletal deformity, which is two or more standard deviations from published norms for accepted skeletal landmarks
 2. Open bite
 - a. No vertical overlap of anterior teeth
 - b. Unilateral or bilateral posterior open bite greater than 2mm
 3. Deep overbite with impingement or irritation of buccal or lingual soft tissues of the opposing arch
 4. Supraeruption of a dentoalveolar segment due to lack of occlusion

Overbite is the vertical overlap of the maxillary central incisors over the mandibular central incisors. It is how much the upper front teeth cover the lower front teeth in a

vertical dimension. The normal overbite is considered 2-3 mm, or approximately 20-30% of the height of the mandibular incisors.

G. Transverse discrepancies

3. Presence of a transverse skeletal discrepancy, which is two or more standard deviations from published norms
4. 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.

H. Asymmetries

2. 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. In addition to the above conditions, orthognathic surgery may be indicated in cases where there are specific documented signs of dysfunction.

Facial Skeletal Discrepancies Associated with Documented Sleep Apnea, Airway Defects and Soft-Tissue Discrepancies

Breathing patterns, craniofacial growth and skeletal alteration are known to be closely related. Intervention with orthopedic and/or surgical means on selected patients has been shown to decrease airway resistance and improve breathing. For example, studies demonstrate that patients with vertical hyperplasia of the maxilla have an associated increase in nasal resistance, as do patients with maxillary hypoplasia with or without clefts. Following orthognathic surgery, such patients routinely demonstrate decreases in airway resistance and improved respiration.

Obstructive sleep apnea (OSA) is a specific type of respiratory dysfunction. Defined as periodic cessation of breathing during sleep, patients with OSA may have such associated findings as hypertension and cardiac arrhythmias. While this condition is multifactorial, a significant number of patients with obstructive sleep apnea have underlying facial skeletal deformities and benefit from orthognathic surgery.

Prior to surgical treatment, such patients should be properly evaluated to determine the cause and site of their disorder with appropriate non-surgical treatment attempted when indicated.

Facial Skeletal Discrepancies Associated and Extrinsic Anomalies

Congenital and extrinsic abnormalities give rise to the full spectrum of deformities that affect the facial skeleton. They potentially have a profound effect on the patient's self-image, masticatory function, nutritional intake, speech articulation and socialization. Often, they are compounded by a host of medical comorbidities. It is essential to address many of these conditions through a medical home or team approach of which the craniofacial surgeon is a key participant. Addressing the craniofacial deformities

frequently requires multiple surgical procedures from shortly after birth into adulthood. Without these required procedures, the patient is destined to a less-than-optimal quality of life.

For example, patients with cleft lip and palate may undergo surgical correction of the lip as an infant followed by closure of the palate as a young child. As the patient continues to grow and mature, the jaw-size discrepancy can become worse, negatively impacting form and function. Orthognathic surgery will correct the jaw growth deformity and allow for much-improved function.

Facial Skeletal Discrepancies Associated with Documented Speech Impairments

Abnormal jaw relationships affect many of the structures involved in the production of speech, including the position of the lips, tongue, and soft palate. Studies demonstrate that altered speech production may be associated with facial skeletal deformities, the most common impairment of which is a distortion within the sibilant sound class. Such studies also demonstrate the beneficial effects of orthognathic surgery on speech production, documenting improvement in a high percentage of patients after the correction of abnormal jaw relationships. In the age of information, the ability to accurately communicate with an articulate speech pattern is of great importance.

Prior to surgery, speech evaluation should be obtained to demonstrate the nature of the problem and to determine if improvement can be expected.

Facial Skeletal Discrepancies Associated with Documented Temporomandibular Joint Pathology

It is generally accepted that temporomandibular joint (TMJ) dysfunction may have a variety of causes. In some patients, skeletal malocclusion and TMJ dysfunction may be correlated. While some types of malocclusions have been more commonly implicated, a variety of deformities have been reported to be associated with TMJ symptoms. The rationale for proceeding with surgery to correct skeletal-dental deformities is based on common reports of significant improvement in joint and muscle symptoms after a variety of orthognathic procedures. The literature reports that approximately 80 percent of patients show improvement of preoperative symptoms after orthognathic surgery. Prior to performing an orthognathic procedure on such patients, non-surgical therapies should be attempted, including those procedures and treatments that mimic the effects of occlusal alteration.

PRIOR APPROVAL

Prior Approval is Required

POLICY

See the following related medical policies

- [10.01.02 Cosmetic and Reconstructive Services](#)
- [02.01.21 Temporomandibular Joint \(TMJ\) Dysfunction: Diagnosis and Treatment](#)

Note: Some group health plans may not have benefits to cover orthognathic surgery and/or temporomandibular joint disorder (TMJ/TMD). Please refer to the member's benefit booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore, member benefit language should be reviewed before applying the terms of this medical policy.

*For group health plans that offer orthognathic surgery and/or temporomandibular joint disorder (TMJ/TMD) as a covered benefit, the following criteria will be utilized to establish **medical necessity** and determine whether the procedure(s) is/are eligible for reimbursement under the member's medical health insurance benefits:*

Orthognathic surgery may be considered **reconstructive and medically necessary** for each of the following clinical indications when the guidelines listed below are met. Elements must be met under one of the following A, B, C, D, E:

A. Part of the treatment plan to restore proper function after one of the following:

- Accidental injury (facial skeletal injuries)
- Trauma (traumatic injury – facial skeletal injuries)
- Post-surgical resection for neoplastic growths (tumor) or cysts of the jaw
- Infection of the jaw (osteonecrosis); **OR**

B. Correction of significant congenital skeletal deformity including but not limited to the following:

- Cleft lip/palate deformity
- Apert syndrome
- Crouzon syndrome
- Hemifacial microsomia (HFM)
- Pfeiffer syndrome
- Pierre Robin syndrome
- Treacher Collins syndrome); **OR**

C. Malocclusion that contributes to refractory temporomandibular joint (TMJ) syndrome symptoms meeting ALL the following criteria:

1. Signs and symptoms are present for at least 4 months. At least one sign and one symptom of TMJ disorder **must** be present:
 - a. **Symptoms** must include at least one of the following:

- Painful chewing related to TMJ; **or**
 - Frequent and significant headaches related to TMJ; **or**
 - Significant and persistent joint and/or muscle tenderness of the jaw; **AND**
- b. **Clinical signs** must include at least one of the following and must be accompanied by x-rays, cephalometric diagrams and photos which support measurements:
- Class III or IV internal derangement of the temporomandibular joint (TMJ); **or**
 - Restricted range of motion, including at least one of the following:
 - Interincisal opening < 30 mm; **or**
 - Lateral excursive movement <4 mm; **or**
 - Protrusive excursive movement < 4mm; **or**
 - Significant malocclusion or dental misalignment characterized by one or more of the following:
 - Mandibular excess of at least 3mm and skeletal maturation which must be documented by either of the following:
 - Closure of the epiphyses at the wrist of radiography; **or**
 - No change in mandibular or facial growth on serial cephalometric radiographs over 6 months; **or**
 - Maxillary deficiency a reverse overjet (ROJ) of at least 3mm; **or**
 - In maxillary excess or mandibular deficiency an overjet (OJ) of at least 6mm; **or**
 - Open bite (OB) of at least 4mm or deep bite (DB) of at least 7mm; **and**

Note: For the following four conditions (ROJ, OJ, OB, DB) the measurement should be calculated without assuming the final result of the preoperative orthodontics or splinting.

2. Symptoms are unresponsive to conservative measures for ≥ 4 months, including **ALL** the following:
- Elimination of aggravating factors (e.g., gum chewing, chewing hard or tough foods); **and**
 - Use of anti-inflammatory medications (NSAIDs), tricyclic antidepressants and/or muscle relaxant medications unless contraindicated for ≥ 6 weeks; **and**
 - Treatment with orthodontic and/or splint therapy (*Note: in many cases orthodontic treatment alone cannot correct the abnormality. When it has been determined in advance by cephalometrics and clinical examination that no amount of orthodontic manipulation will achieve satisfactory results, then a failed course of orthodontic therapy will not*

be required for approval for surgery. Likewise, some patients (large open bite patients) cannot tolerate splints as this actually aggravate the problem), OR

D. The presence of significant masticatory dysfunction or malocclusion as evidenced by any of the following facial skeletal deformity measurements developed by the American Association of Oral and Maxillofacial Surgeons (AAOMS) and the facial skeletal deformity cannot be adequately corrected by dental treatment alone (including orthodontics):

1. Anteroposterior discrepancies (according to the AAOMS these values represent two or more standard deviations from published norms):
 - a. Maxillary/mandibular incisor relationship (established norm = 2 mm)
 - Horizontal overjet of 5 mm or more; or
 - Horizontal overjet of zero to a negative value; **or**
 - b. Maxillary/mandibular anteroposterior molar relationship discrepancy of 4 mm or more (norm = zero to 1 mm)

Note: Overjet is the horizontal overlap of the maxillary central incisors over the mandibular central incisors. It is how much the upper front teeth protrude forward in relation to the lower front teeth.

2. Vertical discrepancies:
 - a. Presence of a vertical facial skeletal deformity which is two or more standard deviations from the published norms for acceptable skeletal landmarks; **or**
 - b. Open bite
 - No vertical overlap of anterior teeth
 - Unilateral or bilateral posterior open bite greater than 2 mm; **or**
 - c. Deep overbite with impingement or irritation of buccal or lingual soft tissues of the opposing arch; **or**
 - d. Supraeruption of a dentoalveolar segment due to lack of occlusion creating a dysfunction not amendable to conventional prosthetics

Note: Overbite is the vertical overlap of the maxillary central incisors over the mandibular central incisors. It is how much the upper front teeth cover the lower front teeth in a vertical dimension.

3. Transverse discrepancies
 - 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
 - a. Anteroposterior, transverse, or lateral asymmetries greater than 3mm with concomitant occlusal asymmetry; **AND**
- The individual must have one or more of the following documented functional impairments/deficits:
 1. Difficulty with swallowing or chewing
 - a. 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/or**
 - b. Significant intraoral trauma while chewing related to malocclusion (information should be supplied which indicates the severity and duration of the trauma and the extent of the interruption to daily activities. This may include recurrent damage to the soft tissues of the mouth during mastication, lower incisors injuring the soft tissue of the palate, cheek biting, lip biting, impingement, or irritation of buccal or lingual soft tissues of the opposing arch); **and**
 - c. Other causes of swallowing, choking, or chewing problems have been ruled out through physical exam and/or appropriate diagnostic studies including but not limited to allergies (diagnostic studies, therapeutic trial of antihistamine and/or decongestant), neurologic or metabolic diseases, or hypothyroidism (if enlarged tongue or thyroid gland on clinical exam); **and**
 - d. Symptoms must be documented in the medical record and must persist for at least 4 months; **and/or**
 2. Malnutrition, significant weight loss, or failure to thrive secondary to facial skeletal deformity; **and/or**
 3. Speech abnormalities
 - a. Documented speech abnormality that impairs the patient's ability to communicate and is determined by a speech pathologist or therapist to be related to the facial skeletal deformity and the speech deficit cannot be resolved by speech therapy, **OR**

E. Treatment of documented moderate to severe obstructive sleep apnea (OSA): Maxillofacial surgery, including mandibular-maxillary advancement (MMA), may be considered **medically necessary** in patients with mandibular and maxillary deformities contributing to airway dysfunction when **ALL** the following are met:

- a. Diagnosis of moderate to severe sleep apnea (OSA)*, which has been validated by polysomnography; **and**

- b. The individual meets criteria for initiation of CPAP or Bi-PAP but has failed CPAP or Bi-PAP trial or is intolerant to CPAP or Bi-PAP; **and**
- c. Failure of non-surgical treatments (e.g., weight loss, sleep posture repositioning, oral appliances); **and**
- d. Expectation that orthognathic surgery will decrease airway resistance and improve breathing.

**Moderate to severe sleep apnea is generally defined as an apnea-hypopnea index (AHI) or respiratory distress index (RDI) greater than or equal to 15 events per hour (AHI of 15-30), or an AHI greater than five and less than or equal to 14 events per hour with additional symptoms (e.g., excessive daytime sleepiness, insomnia, mood disorders, hypertension). Individuals with severe OSA have greater than 30 events recorded per hour of sleep (AHI of more than 30).*

Orthognathic surgery is considered **not medically necessary** including but not limited to the following indications:

- Not meeting the above criteria.
- Where significant risk of recurrence of symptoms or structural abnormalities exist.
- Correction of distortions within the sibilant sound class or other distortions of speech quality (e.g., hyper-nasal or hypo-nasal speech).
- Restoration of non-functional occlusion and other deformities which can be adequately corrected by dental treatment alone (including orthodontics).

Cosmetic and Not a Contract Benefit

*Services that are **COSMETIC** are a contract benefit exclusion and not eligible for reimbursement consideration, see also medical policy Cosmetic and Reconstructive Services 10.01.02.*

Wellmark considers orthognathic surgery **COSMETIC** and therefore not a contract benefit when performed primarily to improve the patient's physical appearance that would be considered within normal human anatomic variation.

Certain procedures performed in conjunction with orthognathic surgery are considered **COSMETIC** and therefore not a contract benefit (excluded from coverage) when they are performed primarily to enhance or otherwise alter physical appearance in the absence of a documented functional impairment. Those procedures include, but are not limited to the following:

- Rhinoplasty
- Genioplasty or mentoplasty
- Malar augmentation (cheek implants)
- Augmentation of mandibular angle or body (performed to add prominence and balance to the face)

- Rhytidectomy

Policy Guidelines

Required Documentation

Documentation supporting the medical necessity criteria described in the policy must be included in the prior authorization to appropriately evaluate the medical necessity for the requested orthognathic surgery procedure, of the following information will be required:

- Medical history and physical examination; **and**
- Description of the abnormality in mandibular and/or maxillary facial skeletal structure including the standard deviation from the norm; **and**
- Documentation of the functional impairment(s)/deficit(s) that is a result of the mandibular and/or maxillary facial skeletal deformity and previous medical management of the functional impairment(s)/deficit(s); **and**
- Detailed history of any non-surgical/conservative therapies; **and**
- Diagnostic polysomnography results for obstructive sleep apnea (OSA) (if applicable); **and**
- Appropriate clinical studies/tests including cephalometric radiographs and diagrams with standard computer - generated measurements and analysis of the physical and/or physiological abnormality that confirms its presence and the degree to which it is causing impairment. When applicable radiologic film interpretations including AP radiograph and panoramic radiography. *Include a concise summary of how the patient's facial skeletal deformities and malocclusions when applicable meet the anatomical requirements listed in the medical necessity criteria in addition to detailed information regarding related functional impairment(s)/deficit(s) due to the anatomic abnormalities;* **and**
- High quality color photograph(s) of the individual's occlusion (frontal/full face and lateral): all photographs must be labeled with the date taken and the patient's name and member ID number on the photograph(s). *Note: Submission of the high-quality color photograph(s) are required and PA requests for these procedure(s) will not be reviewed if no photographs are included in the documentation;* **and**
- Treating physician's plan of care including surgical treatment objectives, which must include the expected outcome for the improvement of the functional impairment(s)/deficit(s); **and**
- The list of procedures to be performed along with the appropriate CPT and HCPCS codes. *Note: If this will be a staged procedure include dates of service for each procedure and when completing the prior approval for the orthognathic surgery prior approve all stages of the procedure with the initial prior approval request.*

When deemed medically necessary it may be appropriate for orthognathic surgery to be provided in staged procedures, and surgical interventions may consist of different surgical procedures performed on different dates of service:

Phase 1: Treatment planning

Preoperative treatment planning includes a photographic analysis and a complete orthognathic work-up involving cephalometric and panorex radiographs, dental impressions, and models. This is done by the pediatric dentist/orthodontist in coordination with the maxillofacial surgeon. All findings are analyzed, and computer-simulated surgery is performed to simulate the surgery and predict the results prior to performing the procedure. Additionally, the maxillofacial surgeon does pre-surgery computer analysis to simulate surgical results, thereby facilitating proper planning of the case.

Phase 2: Pre-surgical orthodontics

This phase involves alignment of the teeth into a stable relationship with the underlying jaw, which prepares the dental arches for the surgical repositioning. Phase 2 usually takes the longest (may take 9 to 18 months depending on the patient's age, cooperation, and other factors). At this phase, the abnormal bite (malocclusion) may become more noticeable. After the pre-surgical orthodontic phase of the treatment has been completed, a new set of dental records will be obtained which may include a cephalometric film, a panoramic film, new models of the teeth in the upper and lower jaws and a cone beam computed tomography. This information will aid the maxillofacial surgeon in finalizing the surgical movements as well as creating a surgical splint, which will serve as a guide for proper intraoperative jaw positioning.

Phase 3: Surgery

Surgery is scheduled when the pre-surgical orthodontic phase is completed. Braces used to align teeth prior to surgery are left in place during the surgical procedure. They help in stabilizing the teeth and jaws after surgery. The operation may involve one or both jaws (maxilla and/or mandible).

Phase 4: Post-surgical orthodontics

The orthodontist will usually begin the post-surgical phase of orthodontic treatment 4-6 weeks after surgery. Orthodontic treatment is continued to achieve final alignment of the teeth and to retain them in their new position. Fixed or removable retainers may be required following removal of orthodontics.

The presence of malocclusion alone does not qualify for surgical consideration without a demonstrated functional impairment. Although orthognathic surgery may be advisable from a dental standpoint for malocclusion or other jaw asymmetry, there must be documentation based on the medical records that:

- Malocclusion is affecting the patient's physical health (not just dental health);
and

- Is not and has not been amendable to other standard and less invasive forms of treatment. Prior treatment must be appropriate for the physical condition and must be documented in the medical records by the treating provider.

Definitions

Accidental Injury: An injury independent of disease or bodily infirmity or any other cause, that happens by chance and requires immediate medical attention.

Anomaly: Deviation from normal.

Anteroposterior: From front to back.

Asymmetry: The lack of balance or symmetry.

Cephalometric: A scientific measurement of the head.

Cephalometrics: The interpretation of lateral skull x-rays taken under standardized conditions. Two of the more popular methods of analysis used in orthodontology are the Steiner analysis and the McNamara analysis.

Class I occlusion: 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: Occurs when the mandibular teeth are distal or behind the normal relationship with the maxillary teeth. This can be due to a deficiency of the lower jaw or an excess of the upper jaw, and therefore, presents two types:

1. Division I: is when the mandibular arch is behind the upper jaw with a consequential protrusion of the upper front teeth.
2. Division II: exists when the mandibular teeth are behind the upper teeth, with a retrusion of the maxillary front teeth. Both malocclusions have a tendency toward a deep bite because of the uncontrolled migration of the lower front teeth upwards. Commonly referred to as an overbite.

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. Commonly referred to as an under bite.

Congenital Anomaly (i.e., Birth Defect): A physical developmental defect that is present at the time of birth or is identified within the first twelve months of the birth.

The World Health Organization (WHO) defines Congenital Anomalies as the following: Congenital anomalies are also known as birth defects, congenital disorders, or congenital

malformation. Congenital anomalies can be defined as structural or functional anomalies that occur during intrauterine life and can be identified prenatally, at birth or sometimes may only be detected later in infancy.

Cosmetic Services (Not Covered): Cosmetic services supplies, or drugs if provided primarily to improve physical appearance. A service, supply or drug that results in an incidental improvement in appearance may be covered if it is provided primarily to restore function lost or impaired as the result of an illness, accidental injury, or a birth defect. Treatment for any complications resulting from a noncovered cosmetic procedure are also not covered.

The American Society of Plastic Surgeons defines Cosmetic Procedures as the following: Cosmetic plastic surgery includes surgical and nonsurgical procedures that enhance and reshape structures of the body to improve appearance and confidence.

Dentoalveolar: Relating to a tooth and the part of the alveolar bone that immediately surrounds it.

Functional Impairment: A functional impairment causes deviation from the normal function of a tissue or organ. This results in a significantly limited, impaired, or delayed capacity to move, coordinate actions or perform physical activities and is exhibited by difficulties in one or more of the following areas: physical and motor tasks; independent movement; performing basic life functions (e.g., eating, bathing, dressing).

Genioplasty: Plastic surgery of the chin.

Malformation: An abnormal shape or structure.

Malocclusion: Imperfect contact with the mandibular and maxillary teeth.

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

Mastication (masticatory function): Biting and grinding food in the mouth so it becomes soft enough to swallow.

Masticatory dysfunction: Is an umbrella term that refers to condition in which normal mastication/masticatory function is compromised due to structural factors or functional factors (e.g., weaker biting force or poorer masticatory performance).

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.

McNamara analysis: One of the most popular methods of cephalometric analyses. It combines the anterior reference plane with a description of the length of the individual's jaw and the relationship between them.

Mentoplasty: Reshapes the chin with an implant made of alloplastic material.

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

Orthodontics: The division of dentistry dealing with the prevention and correction of abnormally positioned or aligned teeth.

Panoramic radiograph: Radiograph of the maxilla and mandible extending from the left to right glenoid fossa. An x-ray image of a curved body surface, such as the upper and lower jaws, on a single film.

Reconstructive Surgery: Reconstructive surgery primarily intended to restore function lost or impaired as a result of an illness, injury or birth defect (even if there is incidental improvement in physical appearance) including breast reconstructive surgery following mastectomy. Breast reconstructive surgery includes the following:

- Reconstruction of the breast on which the mastectomy has been performed.
- Surgery and reconstruction of the other breast to produce a symmetrical appearance.
- Prostheses.

The American Society of Plastic Surgeons defines Reconstructive Procedures as the following: Reconstructive surgery is performed to treat structures of the body affected aesthetically or functionally by congenital defects, developmental abnormalities, trauma, infection, tumors, or disease. Reconstructive surgery is generally done to improve function and ability but may also be performed to achieve a more typical appearance of the affected structure.

Skeletal discrepancies: An orthodontic term used to describe the nature of a malocclusion as being a malrelationship of the bony base rather than merely of the teeth; often assessed via cephalometrics.

Steiner analysis: One of the most used cephalometric analysis methods. Utilizes the SNA angle to assess the anteroposterior position of the maxilla in regard to the cranial base. Steiner's Analysis follows the belief that the most important measurements in his analysis were the ANB angle, which is formed by the difference between SNA and SNB angles.

Super-eruption: The occurrence of a tooth continuing to grow out of the gum if the opposing tooth in the opposite jaw is missing.

Temporomandibular Joint Disorder (TMD): Conditions affecting the jaw joints and surrounding muscles and ligaments. It can be caused by trauma, an improper bite, arthritis, or wear and tear.

Tomogram: An image of a tissue section produced by tomography.

Tomography: Imaging by sections or sectioning, through the use of any kind of penetrating wave.

Traumatic Injury (Trauma): Refers to physical injuries of sudden onset and severity which require immediate medical attention. (Examples of traumatic injuries include but are not limited to traumatic brain injury; spinal cord injury; spine fractures; amputation (traumatic); facial trauma; acoustic trauma; crush injury; concussion; broken bone; jaw (broken or dislocated); skull fracture; cuts and puncture wounds; collapsed lung; myocardial contusion; burns; electrical injury; hypovolemic shock; subarachnoid hemorrhage; subdural hematoma).

PROCEDURE CODES AND BILLING GUIDELINES

To report provider services, use appropriate CPT* codes, Alpha Numeric (HCPCS level 2) codes, Revenue codes, and/or ICD diagnosis codes.

The following list codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Coverage Determination Guidelines may apply.

- 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
- 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)
- D7940 Osteoplasty – for orthognathic deformities
- D7941 Osteotomy – mandibular rami
- D7943 Osteotomy – mandibular rami with bone graft; includes obtaining the graft
- D7944 Osteotomy – segmented or subapical
- D7945 Osteotomy – body of mandible
- D7946 LeFort I (maxilla – total)
- D7947 LeFort I (maxilla – segmented)
- D7948 LeFort II or LeFort III (osteoplasty of facial bones of midface hypoplasia or retrusion) without bone graft
- D7949 LeFort II or LeFort III – with bone graft

SELECTED REFERENCES

- American Association of Oral and Maxillofacial Surgeons (AAOMS) Criteria for Orthognathic Surgery. 2020 Also available at <https://www.aaoms.org>
- American Association of Oral and Maxillofacial Surgeons (AAOMS). Parameters of Care. Clinical Practice Guidelines for Oral and Maxillofacial Surgery. 2017. Also available at <https://www.aaoms.org>

- Aurora RN, Casey KR, Kristo D, et. al. Practice Parameters for the Surgical Modifications of the Upper Airway for Obstructive Sleep Apnea in Adults. American Academy of Sleep Medicine. Sleep Vol. 33, No. 10 2010
- Clinical Practice Guideline for Diagnostic Testing for Adult Obstructive Sleep Apnea: An American Academy of Sleep Medicine Clinical Practice Guideline. Journal of Clinical Sleep Medicine Vol. 13, No. 3, 2017

POLICY HISTORY

Date	Reason	Action
August 2022		New Medical Policy Created

New information or technology that would be relevant for Wellmark to consider when this policy is next reviewed may be submitted to:

Wellmark Blue Cross and Blue Shield
 Medical Policy Analyst
 PO Box 9232
 Des Moines, IA 50306-9232

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