

Temporomandibular Joint (TMJ) Dysfunction: Diagnosis and Treatments



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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 be 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 a temporomandibular joint (TMJ) benefit. 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 benefits for temporomandibular joint (TMJ) as a covered benefit, the following criteria will be utilized to establish **investigational and medical necessity** and determine whether the procedure(s)/treatments is/are eligible for reimbursement under the member's medical health insurance benefits.*

The temporomandibular joint (TMJ) consists of two bilateral synovial joints formed by the mandibular condyles that fit into the glenoid fossa of the temporal bones. The function of the TMJ is unique in that two joints act as a single unit. An articular disc, or meniscus, composed of dense fibrous tissue, separates the condyle from the fossa and is connected by collateral ligaments to the condyle. The collateral ligaments allow rotational movement of the disc on the condyle during opening and closing of the jaw. Six principal skeletal masticatory muscles control TMJ movement and stabilization.

Temporomandibular joint (TMJ) dysfunction is a collective term, which describes clinical problems that involve the function of the masticatory muscles and the jaw joint. TMD has been used to refer to a group of conditions that are often called “TMJ syndrome” by physicians and dentists to describe the pain associated with the head, neck, and jaw. This has resulted in confusion regarding diagnostic and treatment options.

Approximately 15-25% of the population exhibit symptoms of TMJ disorders during their lifetime, with onset typically occurring between 10-40 years of age. Women are affected more often than men (4:1 ratio). Symptoms generally affect only one side, occurring in either side with similar frequency.

There are two distinct categories: masticatory muscle disorders and temporomandibular joint disorders:

- Masticatory muscle problems may result from abnormal parafunctional habits such as bruxism and clenching of teeth in response to stress, referred pain patterns of the cervical spine, and systemic muscle disorders (e.g., dyskinesia, fibromyalgia, myositis). If the abnormal habits exceed the functional capacity of the jaw joint, temporomandibular joint pathology may occur.
- Temporomandibular joint disorders, which may also occur from varied etiologies (e.g., internal derangement, degenerative joint disease, rheumatoid arthritis, mandibular dislocation, neoplasia, ankylosis, condylar hyper- or hypoplasia, condylar osteolysis, fractures).

Typically, the initial presentation can be confusing as both a masticatory element and a joint disorder can coexist

Diagnosis

There is no widely accepted standard test to diagnose TMJ. In most cases, the patient’s history, signs and symptoms, combined with a physical examination of the face and jaw, provide sufficient information to diagnose these disorders. Routine x-rays may be used to identify underlying osteoarthritis or other bony abnormalities of the TMJ. Arthrography, magnetic resonance imaging (MRI) and computed tomography (CT) are generally not indicated, although selected studies may be appropriate for persistent TMJ when clinical examination indicates the presence of internal derangement and surgery is being considered.

Treatment

Noninvasive, reversible therapies are used in the initial treatment of symptomatic TMJ. In many cases, TMJ is self-limiting and often responds to simple measures such as eating soft foods, applying heat or ice, and avoiding extreme jaw movements (e.g., wide yawning, gum chewing). Other conservative treatments may include:

- **Pharmacological pain control:** Nonsteroidal anti-inflammatory drugs (NSAIDs), opiates, muscle relaxants and low-dose antidepressants may be useful for symptom management.
- **Physical therapy:** A variety of modalities may be employed, including active or passive jaw movement, application of heat/ice and vapocoolant spray followed by gentle stretching.
- **Mechanical stretching devices** (see below information)
- **Intra-oral appliances:** The two most common intra-oral appliances are stabilization splints and anterior positioning appliances. Stabilization splints may be used to provide joint stabilization, reduction of pressure within the joint and relaxation of elevator muscles. These appliances should not create major alteration in occlusion, since these changes may be irreversible and lead to other problems. Anterior positioning appliances, also called orthopedic repositioning appliances, are used for acute joint pain, painful crepitus and symptoms associated with acute limitation of motion caused by an anteriorly displaced disc without reduction (closed lock).

Surgery

Surgery is only considered if there is persistent pain and functional limitations in patients with structural anatomic pathology or TMJ intraarticular disorders that do not respond to a reasonable course of nonsurgical interventions.

- **Arthrocentesis:** Is a minimally invasive procedure that involves insertion of one or two needles into the joint (no skin incisions are made). The joint is washed to remove debris and inflammatory byproducts. Some surgeons will also manipulate the joint under anesthesia and/or inject a therapeutic medication in the joint. The procedure is intended to increase range of motion and function and reduce pain.
- **Arthroscopy:** Is a surgical procedure that provides direct visualization of joint function and allows confirmation of intra-articular pathology that cannot be confirmed by other means of evaluation. It is intended to reduce pain and increase mandibular range of motion.
- **Arthrotomy:** Is the most invasive surgical technique used to treat TMJ. Arthrotomy is performed under general anesthesia, usually on an inpatient basis. The following surgical procedures are carried out through arthrotomy:
 - **Disc Surgery:** In cases where the joint problem is in the disc itself, your surgeon may recommend a procedure to reposition (disc plication), remove (discectomy), or replace (disk replacement) the diseased cartilage.
 - **Arthroplasty:** procedure aimed to remove adhesions, bone spurs and other growths in the jaw that are causing joint dysfunction and pain.

- Joint Replacement: The TMJ can be replaced partially or completely. Individuals with end-stage pathology and severe physiologic dysfunction benefit most from partial or total joint replacement.

There is inadequate guidance in the published medical literature regarding patient-selection criteria for these procedures. Invasive surgical treatment to treat temporomandibular joint (TMJ) dysfunction should only be considered when all appropriate conservative treatment has failed and minimally invasive surgery such as arthrocentesis or arthroscopy is not indicated.

Summary of Evidence

For individuals who have suspected temporomandibular joint (TMJ) dysfunction who receive any of the below, the evidence includes systematic reviews of diagnostic test studies. None of the systematic reviews found that these diagnostic techniques accurately identified patients with temporomandibular joint (TMJ) dysfunction, and many of the studies had methodologic limitations. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

- Arthroscopy when performed for diagnostic purposes
- Bruxism device (e.g., GrindCare Measure, GrindCare System)
- Electromyography (EMG)
- Kinesiography
- Joint vibration analysis
- Muscle testing
- Neuromuscular junction testing
- Range of motion measurements
- Standard dental radiographic procedures
- Somatosensory testing
- Sonogram (ultrasonic doppler auscultation)

For individuals who have a confirmed diagnosis of temporomandibular joint (TMJ) dysfunction who receive non-surgical treatment including the below, the evidence includes RCTs, systematic reviews of these RCTs, and observational studies. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The systematic reviews did not find that these technologies reduced pain or improved functional outcomes significantly more than control treatments. Moreover, many individual studies were small and/or had methodologic limitations. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

- Botulinum toxin
- Bruxism monitor
- Ionphoresis
- Mechanical stretching devices
- Neuromuscular Dentistry
- Neuromuscular Re-education

- Platelet concentrations
- Viscosupplementation

For individuals who have a confirmed diagnosis of temporomandibular joint (TMJ) dysfunction who receive surgical treatment arthrocentesis, arthroscopy, or arthrotomy (open surgical procedure) the evidence includes randomized controlled trials (RCTs), systematic reviews of RCTs, and observational studies. One review, which included 3 RCTs, compared arthrocentesis or arthroscopy with nonsurgical interventions for temporomandibular joint (TMJ) dysfunction. Pooled analyses of the RCTs found that arthrocentesis and arthroscopy resulted in superior pain reduction compared with control interventions. A network meta-analysis, which included 36 RCTs, revealed that arthroscopy and arthrocentesis improve pain control and maximum mouth opening. Invasive surgical treatment (arthrotomy) to treat temporomandibular joint (TMJ) dysfunction should only be considered when all appropriate conservative treatment has failed and minimally invasive surgery such as arthrocentesis or arthroscopy is not indicated. Invasive surgical treatment (arthrotomy) to treat temporomandibular joint (TMJ) dysfunction should only be considered when all appropriate conservative treatment has failed and minimally invasive surgery such as arthrocentesis or arthroscopy is not indicated. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

Mechanical Stretching Devices for Limited Jaw Mobility

Limited jaw mobility (mandibular hypomobility) may be related to problems with the jaw joint itself, or surrounding musculature. This condition is also known as "trismus". It may be idiopathic, or due to disease, trauma, or radiological cancer treatment of nearby structures. Loss of range of motion in the temporomandibular joint (TMJ) is one type of temporomandibular dysfunction (TMD). It may result in pain and/or difficulty eating.

Mechanical stretching devices are used to gradually stretch the jaw opening and are intended to increase the range of jaw motion over time or to prevent hypomobility from developing in patients who are at risk of developing mandibular hypomobility. Examples of these mechanical stretching devices include, but are not limited to, the TheraBiteJaw Motion Rehabilitation System (ATOS Medical AB, Horby, Sweden), the OraStretchJaw Motion Rehabilitation System (CranioMandibular Rehab, Inc., Denver, CO, USA), and the Dynasplint Trismus System (Dynasplint Systems, Inc., Severna Park, MD, USA).

The TheraBite Joint Motion Rehabilitation System is a handheld mechanical device used to gradually stretch the jaw opening. It is comprised of padded mouthpieces and a handle with manually controlled scissor-like mechanisms that open the patient's jaw when the mouthpieces are inserted in the mouth. The OraStretch Jaw Motion Rehabilitation System is a handheld device that uses passive motion to stretch the user's jaw and oral/peri-oral connective tissues to treat trismus. The Dynasplint Trismus System is a handheld spring-loaded device that uses low-load, prolonged-duration stretch technology to treat trismus. There is insufficient data published in the peer-reviewed medical literature regarding the effectiveness of mechanical stretching devices in providing rehabilitation for the

treatment of mandibular hypomobility, including those secondary to radiation treatment, compared to traditional treatment methods such as stacked tongue depressors or unassisted mandibular exercises. Furthermore, the few clinical studies that have been done involved small number of patients limiting the generalizability of their results.

For individuals who have a confirmed diagnosis of temporomandibular joint (TMJ) dysfunction who receive surgical treatment arthrocentesis, arthroscopy, or arthrotomy (open surgical procedure) the evidence includes randomized controlled trials (RCTs), systematic reviews of RCTs, and observational studies. One review, which included 3 RCTs, compared arthrocentesis or arthroscopy with nonsurgical interventions for temporomandibular joint (TMJ) dysfunction. Pooled analyses of the RCTs found that arthrocentesis and arthroscopy resulted in superior pain reduction compared with control interventions. A network meta-analysis, which included 36 RCTs, revealed that arthroscopy and arthrocentesis improve pain control and maximum mouth opening. Invasive surgical treatment (arthrotomy) to treat temporomandibular joint (TMJ) dysfunction should only be considered when all appropriate conservative treatment has failed and minimally invasive surgery such as arthrocentesis or arthroscopy is not indicated. Invasive surgical treatment (arthrotomy) to treat temporomandibular joint (TMJ) dysfunction should only be considered when all appropriate conservative treatment has failed and minimally invasive surgery such as arthrocentesis or arthroscopy is not indicated. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

Practice Guidelines and Position Statements

American Association for Dental Research:

A policy statement, reaffirmed in 2015 which included the following:

1. It is recommended that the differential diagnosis of TMDs or related orofacial pain conditions should be based primarily on information obtained from the patient's history, clinical examination, and when indicated TMJ radiology or other imaging procedures. The choice of adjunctive diagnostic procedures should be based upon published, peer-reviewed data showing diagnostic efficacy and safety. However, the consensus of recent scientific literature about currently available technological diagnostic devices for TMDs is that except for various imaging modalities, none of them shows the sensitivity and specificity required to separate normal subjects from TMD patients or to distinguish among TMD subgroups. Currently, standard medical diagnostic or laboratory tests that are used for evaluating similar orthopedic, rheumatological and neurological disorders may also be utilized when indicated with TMD patients. In addition, various standardized and validated psychometric tests may be used to assess the psychosocial dimensions of each patient's TMD problem.
2. It is strongly recommended that, unless there are specific and justifiable indications to the contrary, treatment of TMD patients initially should be based on the use of conservative, reversible and evidence-based therapeutic modalities. Studies of the natural history of many TMDs suggest that they tend to improve or

resolve over time. While no specific therapies have been proven to be uniformly effective, many of the conservative modalities have proven to be at least as effective in providing symptomatic relief as most forms of invasive treatment. Because those modalities do not produce irreversible changes, they present much less risk of producing harm. Professional treatment should be augmented with a home care program, in which patients are taught about their disorder and how to manage their symptoms.

American Academy of Pediatric Dentistry (AAPD)

In 2020, the American Academy of Pediatric Dentistry (AAPD) updated their recommendation for the diagnosis and treatment of TMJ disorders in infants, children, and adolescents. The AAPD advised that every dental history and exam should address TMJ history and assessment. Imaging and specialist referral may be appropriate if signs and symptoms of TMJ disorder are present. Reversible therapies should be considered for children and adolescents with TMJ disorder, and irreversible treatments should be avoided.

American Association for Dental, Oral, and Craniofacial Research (AADOCR)

In a policy statement on TMD in 2015, the AADOCR recommends that, unless there are specific indications otherwise, initial treatment of TMD should be focused on the use of conservative, reversible and evidence-based therapeutic interventions. Conservative modalities present a lower risk of harm, and may be at least as effective in providing symptomatic relief as more invasive treatments

American Association of Oral and Maxillofacial Surgeons (AAOMS)

(2017) The AAOMS Clinical Condition Statements on Temporomandibular Disorders statement lists the following:

- Non-surgical management:
 - Medication (e.g., NSAIDs)
 - Orthotic appliance
 - Physical therapy
- Surgical treatment:
 - Manipulation under anesthesia (e.g., brisement)
 - Arthrocentesis
 - Non-arthroscopic lysis and lavage and manipulation
 - Arthroscopic surgery
 - Diagnostic
 - Operative
 - Open arthroplasty with or without autograft
 - Open arthroplasty with alloplast
 - Disc repair or removal, with or without replacement
 - Coronoidectomy
 - Condylectomy
 - Mandibular Condylotomy
 - Myotomy

- Orthognathic Surgery
- Partial or total joint reconstruction (e.g., autogenous graft, allogeneic graft, and alloplastic implant)
- Favorable therapeutic outcomes:
 - Level of pain that is of little or no concern to the patient
 - Improved jaw function
 - Improved ability to masticate food
 - Functional and stable occlusion
 - In a growing child, continued symmetrical growth of the mandible in proper relationship to the midface
 - Limited period of disability
 - Acceptable clinical appearance
 - Absence of recurrent jaw locking or dislocation
 - Limited progression of the disease

The AAOMS 2017 Parameters of Care: Clinical Practice Guidelines for Oral and Maxillofacial Surgery (Temporomandibular Joint Surgery) state that temporomandibular joint (TMJ) surgery is indicated for the treatment of a wide range of pathologic conditions. The guideline details indications for therapy, therapeutic goals, and specific factors affecting risk, therapeutic parameters, and outcome assessment indices for multiple conditions. The authors' state that surgical intervention for internal derangement arthritic conditions, degenerative joint disease infectious arthritis and ankylosis/restricted jaw motion is indicated only when nonsurgical therapy has been ineffective, and pain and/or dysfunction are moderate to severe.

American Dental Association

(2015) Selected statements from the American Dental Association's practice parameters for temporomandibular disorders, reaffirmed in 2015 are:

- "The key element in the design of this set of parameters for temporomandibular (TM) disorders is the professional judgment of the attending dentist, for a specific patient, at a specific time."
- "Initially the dentist should select the least invasive and most reversible therapy that may ameliorate the patient's pain and/or functional impairment."
- "Any treatment performed should be with the concurrence of the patient and the dentist...."
- "The dentist should evaluate the effectiveness of initial therapy prior to considering more invasive and/or irreversible therapy."
- "The dentist should counsel the patient that TM disorders are often managed, rather than resolved, and that symptoms of TM disorders may persist, change, or recur intermittently."
- "The patient should be informed that the success of treatment is often dependent upon patient compliance with prescribed treatment and recommendations for behavioral modifications. Lack of compliance should be recorded."

- “When articular derangement and/or condylar dislocation has been determined to be the etiology of the patient’s pain and/or functional impairment, manual manipulation of the mandible may be performed by the dentist.
- “Oral orthotics (guards/splints) may be used by the dentist to enhance diagnosis, facilitate treatment or reduce symptoms.
- “The dentist should periodically evaluate oral orthotics (guards/splints) for their effectiveness, appropriateness and possible risks associated with continued use.
- “Before restorative and/or occlusal therapy is performed, the dentist should attempt to reduce, through the use of reversible modalities, the neuromuscular, myofascial and temporomandibular joint symptoms.
- “The dentist may replace teeth, alter tooth morphology and/or position by modifying occluding, articulating, adjacent or approximating surfaces, and by placing or replacing restorations (prostheses) to facilitate treatment.
- “Transitional or provisional restorations (prostheses) may be utilized by the dentist to facilitate treatment.
- “Intracapsular and/or intramuscular injection, and/or arthrocentesis may be performed for diagnostic and/or therapeutic purposes.
- “Orthodontic therapy may be utilized to facilitate treatment.
- “Orthognathic surgery may be performed to facilitate treatment.
- “When internal derangement or pathosis has been determined to be the cause of the patient’s pain and/or functional impairment, arthroscopic

American Society of Temporomandibular Joint Surgeons (ASTMJS) Consensus Clinical Guidelines

(2001 and currently under revision) Nonsurgical treatment should be considered first for all symptomatic patients with this condition. Recommended treatment options include change in diet, nonsteroidal anti-inflammatory drugs, maxillomandibular appliances, physical therapy, and injections of corticosteroids.

National Institute of Dental and Craniofacial Research (NIDCR)

There are several treatments for TMJ disorders. This step-by-step plan from the National Institute of Dental and Craniofacial Research allows you to try simple treatment before moving on to more involved treatment. Even if symptoms become significant and persistent, most people still do not need aggressive types of treatment. The NIDCR also recommends a **“less is often best”** approach in treating TMJ disorders, which includes:

- eating softer foods
- avoiding chewing gum and biting your nails
- modifying the pain with heat or ice packs
- practicing relaxation techniques to control jaw tension, such as meditation or biofeedback.

If necessary, for your symptoms, the following treatments may be advised:

- exercises to strengthen your jaw muscles

- medications prescribed by your dentist, for example, muscle relaxants, analgesics, anti-anxiety drugs or anti-inflammatory medications
- a night guard or bite plate to decrease clenching or grinding of teeth.

Few conclusive studies are available on the safety and effectiveness of TMD treatments. However, the available published peer-reviewed literature indicates that conservative management should be the initial approach. Self-care practices (e.g., eating soft food, learning stress reduction techniques, and practicing jaw exercises), pharmacological therapy (e.g., analgesics and/or nonsteroidal anti-inflammatory drugs [NSAIDs]), physical, or intraoral appliances are all reversible treatments that are considered first-line management. According to the TMJ Association and the NIH, treatments that cause permanent changes in the bite or jaw should be avoided, including crown and bridge work and occlusal adjustment and repositioning splints that permanently change the bite.

TMJ Association (TMJA)

(2012) Surgical treatments are controversial and should be avoided when possible. There have been no long-term clinical trials to study the safety and effectiveness of surgical treatments for TMD, nor are there criteria to identify people who would most likely benefit from surgery.

Replacement of the temporomandibular joint with an artificial implant should be considered a last resort. When used in patients who have had multiple prior jaw surgeries it may improve function, but studies have shown that it generally does not significantly reduce pain. Before undergoing such surgery on the jaw joint, it is extremely important to get other independent opinions and to fully understand the benefits and risks (TMJ Association website)

Regulatory Status

Several devices have received clearance for marketing by the U.S. Food and Drug Administration (FDA) through the 510(k) process. The table below includes some FDA approved devices. *Please note this is not intended to be an all-inclusive list.*

Device	Manufacturer
TMJ Concepts Patient-Fitted TMJ Reconstruction Prosthesis	TMJ Concepts, Camarillo, CA
TMJ Partial Temporomandibular Joint Replacement System	TMJ Implants, Inc., Golden, CO
MJ Fossa-Eminence Prosthesis System	TMJ Implants, Inc., Golden, CO
TMJ Patient Specific Fossa-Eminence Prosthesis System	TMJ Implants, Inc., Golden, CO
Total Temporomandibular Joint (TMJ) Replacement System	(Biomet Microfixation [formerly Walter Lorenz Surgical, Inc.], Jacksonville, FL)

Since 1981, several muscle-monitoring devices have been cleared for marketing by the U.S. Food and Drug Administration (FDA) through the 510(k) process. Some

examples are the K6-I Diagnostic System (Myotronics), the BioEMG III™ (Bio-Research Associates), M-Scan™ (Bio-Research Associates), and the GrindCare Measure (Medotech A/S). These devices aid clinicians in the analysis of joint sound, vibrations, and muscle contractions when diagnosing and evaluating TMJD. FDA product code: KZM.

Devices	Manufacturer	Indication
K6-I Diagnostic System	Myotronics, Inc	Electromyography
BioEMG III™	Bio-Research Associates, Inc	Electromyography, Joint Vibration Recording
GrindCare Measure	Medotech A/S	Electromyography, Nocturnal Bruxism
M-Scan™	Bio-Research Associates	Electromyography
TEETHAN 2.0	BTS S.P.A.	Electromyography
GrindCare System	Sunstar Suisse S.A.	Electromyography, Sleep Bruxism

PRIOR APPROVAL

Not applicable.

POLICY

See Related Medical Policies:

- [02.01.04 Biofeedback](#)
- [02.01.12 Viscosupplementation for Osteoarthritis](#)
- [05.01.02 Neuromuscular Blocking Agents](#)
- [08.01.20 Manipulation Under Anesthesia](#)
- [06.01.16 Thermography and Temperature Gradient Studies](#)

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*For group health plans that offer benefits for temporomandibular joint (TMJ) as a covered benefit, the following criteria will be utilized to establish **investigational and medical necessity** and determine whether the procedure(s)/treatments is/are eligible for reimbursement under the member’s medical health insurance benefits.*

Diagnostic Procedures

The following **diagnostic** procedures are considered **investigational** in the diagnosis of temporomandibular joint (TMJ) dysfunction because evidence is insufficient to determine that the technology results in an improvement in the net health outcome:

- Arthroscopy when performed for diagnostic purposes
- Bruxism device (e.g., GrindCare Measure, GrindCare System)
- Electromyography (EMG) including surface electromyography (sEMG)
- Kinesiography
- Joint vibration analysis
- Muscle testing
- Neuromuscular junction testing
- Range of motion measurements
- Standard dental radiographic procedures
- Somatosensory testing
- Sonogram (ultrasonic doppler auscultation)

Non-Surgical Treatments

The following non-surgical treatments are considered **investigational** for the treatment of temporomandibular joint (TMJ) dysfunction because evidence is insufficient to determine that the technology results in an improvement in the net health outcome:

- Botulinum toxin
- Bruxism monitor
- Ionphoresis
- Mechanical stretching devices
 - TheraBiteJaw Motion Rehabilitation System
 - OraStretchJaw Motion Rehabilitation System
 - Dynasplint Trismus System
- Neuromuscular Dentistry
- Neuromuscular Re-education
- Platelet concentrations
- Viscosupplementation

Surgical Treatments

The following surgical procedures listed below may be considered **medically necessary** for temporomandibular joint (TMJ) disorder when criteria A and B below are met:

- Arthrocentesis; **or**
- Arthroscopic surgery; **or**
- Open surgical procedures (arthrotomy) including the following when the temporomandibular joint (TMJ) disorder is the result of congenital anomalies, disease or trauma:
 - Arthroplasty
 - Condylectomy
 - Modified condylectomy
 - Disc or meniscus plication

- Disc removal

Criteria A and B

- A. Temporomandibular joint internal derangement or other structural joint disorder is documented as evidenced by **BOTH** of the following:
1. Completion of skeletal growth for individuals under age 18 with long bone x-ray or serial cephalometrics showing no change in facial bone relationships over the last 3- to 6- month period (Note: individuals aged 18 and older do not require this documentation); **and**
 2. Computed tomography (CT), magnetic resonance imaging (MRI), or x-ray of the temporomandibular joint document’s joint pathology (for example, arthritis, bone cyst, fracture, meniscal abnormality, or tumors); **and**
- B. Temporomandibular joint pain is due to a maxillary or mandibular skeletal deformity **OR** the individual has a clinically significant functional impairment refractory to at least 6 months of non-surgical treatment that included at least **ONE** of the following:
1. Pharmacologic therapy (that is, analgesics, nonsteroidal anti-inflammatory drugs, muscle relaxants)
 2. Physical therapy
 3. Reversible, removable, intraoral appliances such as removable splints
 4. Therapeutic injections.

Surgical treatments for the treatment of temporomandibular joint (TMJ) disorder not meeting the above criteria and for all other indications are considered **investigational** because evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

**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.

- 20605 Arthrocentesis, aspiration and/or injection, intermediate joint or bursa (e.g., temporomandibular, acromioclavicular, wrist, elbow or ankle, olecranon bursa); without ultrasound guidance
- 20606 Arthrocentesis, aspiration and/or injection, intermediate joint or bursa (e.g., temporomandibular, acromioclavicular, wrist, elbow or ankle, olecranon bursa); with ultrasound guidance, with permanent recording and reporting
- 20999 Unlisted procedure, musculoskeletal system, general

- 21010 Arthrotomy, temporomandibular joint
- 21050 Condylectomy, temporomandibular joint (separate procedure)
- 21060 Meniscectomy, partial or complete, temporomandibular joint
- 21240 Arthroplasty, temporomandibular joint, with or without autograft (includes obtaining graft)
- 21242 Arthroplasty, temporomandibular joint, with allograft
- 21243 Arthroplasty, temporomandibular joint, with prosthetic joint replacement
- 21299 Unlisted craniofacial and maxillofacial procedure
- 29800 Arthroscopy, temporomandibular joint, diagnostic, with or without synovial biopsy (separate procedure)
- 29804 Arthroscopy, temporomandibular joint, surgical
- 70250 Radiologic examination, skull; less than 4 views
- 70260 Radiologic examination, skull; complete, minimum of 4 views
- 70300 Radiologic examination, teeth; single view
- 70310 Radiologic examination, teeth; partial examination, less than full mouth
- 70320 Radiologic examination, teeth; complete, full mouth
- 76499 Unlisted diagnostic radiographic procedure
- 77077 Joint survey, single view, 2 or more joints (specify)
- 95867 Needle electromyography; cranial nerve supplied muscle(s), unilateral
- 95868 Needle electromyography; cranial nerve supplied muscles, bilateral
- 95937 Neuromuscular junction testing (repetitive stimulation, paired stimuli), each nerve, any 1 method
- 95927 Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in the trunk or head
- 95851 Range of motion measurements and report (separate procedure); each extremity (excluding hand) or each trunk section (spine)
- 96002 Dynamic surface electromyography, during walking or other functional activities 1-12 muscles
- 97033 Application of a modality to one or more areas; iontophoresis, each 15 minutes
- 97112 Therapeutic procedure, 1 or more areas, each 15 minutes; neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities
- E1399 Durable medical equipment, miscellaneous
- E1700 Jaw motion rehabilitation system
- E1701 Replacement cushions for jaw motion rehabilitation system, package of 6
- E1702 Replacement measuring scales for jaw motion rehabilitation system, package of 200
- S3900 Surface electromyography (EMG)
- S8948 Application of a modality (requiring constant provider attendance) to one or more areas; low-level laser; each 15 minutes

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POLICY HISTORY

Date	Reason	Action
June 2022	Interim Review	Policy Revised
January 2022	Annual Review	Policy Revised
July 2021	Interim Review	Policy Revised – the content regarding biofeedback for TMJD was moved to medical policy 02.01.04 Biofeedback
January 2021	Annual Review	Policy Revised
January 2020	Annual Review	Policy Revised
January 2019	Annual Review	Policy Revised
January 2018	Annual Review	Policy Revised
January 2017	Annual Review	Policy Revised
January 2016	Annual Review	Policy Revised
January 2015	Annual Review	Policy Revised
February 2014	Annual Review	Policy Revised
May 2013	Annual Review	Policy Revised
May 2012	Annual Review	Policy Renewed
July 2011	Annual Review	Policy Revised

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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