



MASSACHUSETTS

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Medical Policy

Temporomandibular Joint Disorder

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Policy Number: 035

New Policy Number: 2.01.21 (For Plan internal use only)
NCD/LCD: N/A

Related Policies

- Biofeedback for Chronic Pain, #[210](#)
- Injections for Osteoarthritis, #[427](#)
- Low-Level Laser Therapy, #[522](#)
- Percutaneous Electrical Nerve Stimulation (PENS) and Percutaneous Neuromodulation Therapy (PNT), #[172](#)
- Transcutaneous Electrical Nerve Stimulation (TENS), #[003](#)

Policy

**Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity
Medicare HMO BlueSM and Medicare PPO BlueSM Members**

DIAGNOSTIC PROCEDURES

The following **diagnostic procedures** may be considered **MEDICALLY NECESSARY** in the diagnosis of temporomandibular joint disorder (TMJD):

- Diagnostic x-ray, tomograms, and arthrograms;
- Computed tomography (CT) scan or magnetic resonance imaging (MRI) (in general, CT scans and MRIs are reserved for pre-surgical evaluations);
- Cephalograms* (x-rays of jaws and skull);
- Pantograms* (x-rays of maxilla and mandible).

*Cephalograms and pantograms should be reviewed on an individual basis.

The following **diagnostic procedures** are considered **INVESTIGATIONAL** in the diagnosis of TMJD:

- Electromyography (EMG), including surface EMG;
- Kinesiography;
- Thermography;
- Neuromuscular junction testing;
- Somatosensory testing;

- Transcranial or lateral skull x-rays;
- Intra-oral tracing or gnathic arch tracing (intended to demonstrate deviations in the positioning of the jaws that are associated with TMJ disorder);
- Muscle testing;
- Standard dental radiographic procedures;
- Range of motion measurements;
- Computerized mandibular scan (this measures and records muscle activity related to movement and positioning of the mandible and is intended to detect deviations in occlusion and muscle spasms related to TMJD);
- Ultrasound imaging/sonogram;
- Arthroscopy of the temporomandibular joint (TMJ) for purely diagnostic purposes;
- Joint vibration analysis.

NONSURGICAL TREATMENTS

The following **nonsurgical treatments** may be considered **MEDICALLY NECESSARY** in the treatment of TMJD:

- Intra-oral removable prosthetic devices/appliances (encompassing fabrication, insertion, and adjustment);
- Pharmacologic treatment (such as anti-inflammatory, muscle relaxing, and analgesic medications);
- Physical therapy.¹

The following **nonsurgical treatments** are considered **INVESTIGATIONAL** in the treatment of TMJD:

1. Electrogalvanic stimulation;
2. Iontophoresis;
3. Biofeedback;
4. Ultrasound;
5. Devices promoted to maintain joint range of motion and to develop muscles involved in jaw function,
6. Orthodontic services;
7. Dental restorations/prostheses;
8. Transcutaneous electrical nerve stimulation (TENS);
9. Percutaneous electrical nerve stimulation (PENS);
10. Hyaluronic acid
11. Platelet concentrates.

SURGICAL TREATMENTS

The following **surgical treatments** may be considered **MEDICALLY NECESSARY** in the treatment of TMJD:

- Arthrocentesis;
- Manipulation for reduction of fracture or dislocation of the TMJ;
- Arthroscopic surgery in individuals with objectively demonstrated (by physical examination or imaging) internal derangements (displaced discs) or degenerative joint disease who have failed conservative treatment;
- Open surgical procedures (when TMJD is the result of congenital anomalies, trauma, or disease in individuals who have failed conservative treatment) including, but not limited to, arthroplasties, condylectomies, meniscus or disc plication and disc removal.

Prior Authorization Information

Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	Prior authorization is required .
Commercial PPO	Prior authorization is required .
Medicare HMO BlueSM	Prior authorization is required .
Medicare PPO BlueSM	Prior authorization is required .

Note: Prior authorization is **not** required on CPT codes: 70328, 70330, 70332, 70336, 70350, and 70355.

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
21010	Arthrotomy, temporomandibular joint
21050	Condylectomy, temporomandibular joint (separate procedure)
21060	Meniscectomy, partial or complete, temporomandibular joint
21073	Manipulation of temporomandibular joint(s) (TMJ), therapeutic, requiring an anesthesia service (i.e., general or monitored anesthesia care)
21116	Injection procedure for temporomandibular joint arthrography
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
29800	Arthroscopy, temporomandibular joint, diagnostic, with or without synovial biopsy (separate procedure)
29804	Arthroscopy, temporomandibular joint, surgical
70328	Radiologic examination, temporomandibular joint, open and closed mouth; unilateral
70330	Radiologic examination, temporomandibular joint, open and closed mouth; bilateral
70332	Temporomandibular joint arthrography, radiological supervision and interpretation
70336	Magnetic resonance (e.g., proton) imaging, temporomandibular joint(s)
70350	Cephalogram, orthodontic
70355	Orthopantomogram

ICD-10 Procedure Codes

ICD-10-PCS procedure codes:	Code Description
0NJW0ZZ	Inspection of Facial Bone, Open Approach
0NRR0JZ	Replacement of Right Maxilla with Synthetic Substitute, Open Approach
0NUR0JZ	Supplement Right Maxilla with Synthetic Substitute, Open Approach
0NUS0JZ	Supplement Left Maxilla with Synthetic Substitute, Open Approach

0RBC0ZZ	Excision of Right Temporomandibular Joint, Open Approach
0RBC4ZZ	Excision of Right Temporomandibular Joint, Percutaneous Endoscopic Approach
0RBD0ZZ	Excision of Left Temporomandibular Joint, Open Approach
0RBD4ZZ	Excision of Left Temporomandibular Joint, Percutaneous Endoscopic Approach
0RJC0ZZ	Inspection of Right Temporomandibular Joint, Open Approach
0RJC4ZZ	Inspection of Right Temporomandibular Joint, Percutaneous Endoscopic Approach
0RJD0ZZ	Inspection of Left Temporomandibular Joint, Open Approach
0RJD4ZZ	Inspection of Left Temporomandibular Joint, Percutaneous Endoscopic Approach
0RQC0ZZ	Repair Right Temporomandibular Joint, Open Approach
0RQC4ZZ	Repair Right Temporomandibular Joint, Percutaneous Endoscopic Approach
0RQCXZZ	Repair Right Temporomandibular Joint, External Approach
0RQD0ZZ	Repair Left Temporomandibular Joint, Open Approach
0RQD4ZZ	Repair Left Temporomandibular Joint, Percutaneous Endoscopic Approach
0RQDXZZ	Repair Left Temporomandibular Joint, External Approach
0RRC0JZ	Replacement of Right Temporomandibular Joint with Synthetic Substitute, Open Approach
0RRD0JZ	Replacement of Left Temporomandibular Joint with Synthetic Substitute, Open Approach
0RSC0ZZ	Reposition Right Temporomandibular Joint, Open Approach
0RSCXZZ	Reposition Right Temporomandibular Joint, External Approach
0RSD0ZZ	Reposition Left Temporomandibular Joint, Open Approach
0RSDXZZ	Reposition Left Temporomandibular Joint, External Approach
0RUC0JZ	Supplement Right Temporomandibular Joint with Synthetic Substitute, Open Approach
0RUD0JZ	Supplement Left Temporomandibular Joint with Synthetic Substitute, Open Approach
3E0U33Z	Introduction of Anti-inflammatory into Joints, Percutaneous Approach
3E0U3GC	Introduction of Other Therapeutic Substance into Joints, Percutaneous Approach
BN05ZZZ	Plain Radiography of Facial Bones
BN06ZZZ	Plain Radiography of Mandible
BN070ZZ	Plain Radiography of Right Temporomandibular Joint using High Osmolar Contrast
BN071ZZ	Plain Radiography of Right Temporomandibular Joint using Low Osmolar Contrast
BN07YZZ	Plain Radiography of Right Temporomandibular Joint using Other Contrast
BN07ZZZ	Plain Radiography of Right Temporomandibular Joint
BN080ZZ	Plain Radiography of Left Temporomandibular Joint using High Osmolar Contrast
BN081ZZ	Plain Radiography of Left Temporomandibular Joint using Low Osmolar Contrast
BN08YZZ	Plain Radiography of Left Temporomandibular Joint using Other Contrast
BN08ZZZ	Plain Radiography of Left Temporomandibular Joint
BN090ZZ	Plain Radiography of Bilateral Temporomandibular Joints using High Osmolar Contrast
BN091ZZ	Plain Radiography of Bilateral Temporomandibular Joints using Low Osmolar Contrast
BN09YZZ	Plain Radiography of Bilateral Temporomandibular Joints using Other Contrast
BN09ZZZ	Plain Radiography of Bilateral Temporomandibular Joints
BN0GZZZ	Plain Radiography of Single Tooth
BN0HZZZ	Plain Radiography of Multiple Teeth
BN0JZZZ	Plain Radiography of All Teeth
BN170ZZ	Fluoroscopy of Right Temporomandibular Joint using High Osmolar Contrast
BN171ZZ	Fluoroscopy of Right Temporomandibular Joint using Low Osmolar Contrast
BN17YZZ	Fluoroscopy of Right Temporomandibular Joint using Other Contrast
BN17ZZZ	Fluoroscopy of Right Temporomandibular Joint
BN180ZZ	Fluoroscopy of Left Temporomandibular Joint using High Osmolar Contrast
BN181ZZ	Fluoroscopy of Left Temporomandibular Joint using Low Osmolar Contrast
BN18YZZ	Fluoroscopy of Left Temporomandibular Joint using Other Contrast
BN18ZZZ	Fluoroscopy of Left Temporomandibular Joint

BN190ZZ	Fluoroscopy of Bilateral Temporomandibular Joints using High Osmolar Contrast
BN191ZZ	Fluoroscopy of Bilateral Temporomandibular Joints using Low Osmolar Contrast
BN19YZZ	Fluoroscopy of Bilateral Temporomandibular Joints using Other Contrast
BN19ZZZ	Fluoroscopy of Bilateral Temporomandibular Joints
BN250ZZ	Computerized Tomography (CT Scan) of Facial Bones using High Osmolar Contrast
BN251ZZ	Computerized Tomography (CT Scan) of Facial Bones using Low Osmolar Contrast
BN25YZZ	Computerized Tomography (CT Scan) of Facial Bones using Other Contrast
BN25ZZZ	Computerized Tomography (CT Scan) of Facial Bones
BN260ZZ	Computerized Tomography (CT Scan) of Mandible using High Osmolar Contrast
BN261ZZ	Computerized Tomography (CT Scan) of Mandible using Low Osmolar Contrast
BN26YZZ	Computerized Tomography (CT Scan) of Mandible using Other Contrast
BN26ZZZ	Computerized Tomography (CT Scan) of Mandible
BN290ZZ	Computerized Tomography (CT Scan) of Bilateral Temporomandibular Joints using High Osmolar Contrast
BN291ZZ	Computerized Tomography (CT Scan) of Bilateral Temporomandibular Joints using Low Osmolar Contrast
BN29YZZ	Computerized Tomography (CT Scan) of Bilateral Temporomandibular Joints using Other Contrast
BN29ZZZ	Computerized Tomography (CT Scan) of Bilateral Temporomandibular Joints
BN2F0ZZ	Computerized Tomography (CT Scan) of Temporal Bones using High Osmolar Contrast
BN2F1ZZ	Computerized Tomography (CT Scan) of Temporal Bones using Low Osmolar Contrast
BN2FYZZ	Computerized Tomography (CT Scan) of Temporal Bones using Other Contrast
BN2FZZZ	Computerized Tomography (CT Scan) of Temporal Bones
BN39YZZ	Magnetic Resonance Imaging (MRI) of Bilateral Temporomandibular Joints using Other Contrast
BN39ZZZ	Magnetic Resonance Imaging (MRI) of Bilateral Temporomandibular Joints

Description

Diagnosis of Temporomandibular Joint Disorder

In the clinical setting, temporomandibular joint disorder (TMJD) is often a diagnosis of exclusion and involves physical examination, patient interview, and a review of dental records. Diagnostic testing and radiologic imaging are generally only recommended for individuals with severe and chronic symptoms. Diagnostic criteria for TMJD have been developed and validated for use in both clinical and research settings.^{1,2,3}

Symptoms attributed to TMJD vary and include, but are not limited to, clicking sounds in the jaw; headaches; closing or locking of the jaw due to muscle spasms (trismus) or displaced disc; pain in the ears, neck, arms, and spine; tinnitus; and bruxism (clenching or grinding of the teeth).

Treatment

For many individuals, symptoms of TMJD are short-term and self-limiting. Conservative treatments (eg, eating soft foods, rest, heat, ice, avoiding extreme jaw movements) and anti-inflammatory medication are recommended before considering more invasive and/or permanent therapies (eg, surgery).

Note that low-level laser therapy for TMJD is addressed in policy [#522](#).

Summary

Temporomandibular joint disorder (TMJD) refers to a group of disorders characterized by pain in the temporomandibular joint and surrounding tissues. Initial conservative therapy is generally recommended; there are also a variety of nonsurgical and surgical treatment possibilities for individuals whose symptoms persist.

Summary of Evidence

For individuals who have suspected TMJD who receive ultrasound, surface electromyography, or joint vibration analysis, the evidence includes systematic reviews of diagnostic test studies. Relevant outcomes are test validity and other performance measures. None of the systematic reviews found that these diagnostic techniques accurately identified individuals with TMJD, 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.

For individuals who have a confirmed diagnosis of TMJD who receive intraoral devices or appliances or pharmacologic treatment, the evidence includes randomized controlled trials (RCTs) and systematic reviews of RCTs. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. A systematic review of intraoral appliances (44 studies) and meta-analyses of subsets of these studies found a significant benefit of intraoral appliances compared with control interventions. Several studies, meta-analyses, and systematic reviews exploring the effectiveness of stabilization splints on TMJD pain revealed conflicting results. Overall, the evidence shows that stabilizing splints may improve pain and positively impact depressive and anxiety symptoms. The evidence related to pharmacologic treatment varies because studies, systematic reviews, and meta-analyses lack consistency in evaluating specific agents. Some systematic reviews have found a significant benefit of several pharmacologic treatments (eg, analgesics, muscle relaxants, and anti-inflammatory medications [vs. placebo]), but other studies showed a lack of benefit with agents such as methylprednisolone and botulinum toxin type A. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have a confirmed diagnosis of TMJD who receive acupuncture, biofeedback, transcutaneous electrical nerve stimulation, orthodontic services, or hyaluronic acid, 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.

For individuals who have a confirmed diagnosis of TMJD who receive arthrocentesis or arthroscopy, the evidence includes RCTs, systematic reviews of RCTs, and observational studies. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. One review, which included 3 RCTs, compared arthrocentesis or arthroscopy with nonsurgical interventions for TMJD. 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. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

Policy History

Date	Action
6/2022	Prior authorization information clarified for PPO plans. Effective 6/1/2022.
7/2021	Annual policy review. Investigational policy statement modified to include platelet concentrates. Effective 7/1/2021.
3/2021	Clarified coding information.
10/2020	Clarified coding information.
4/2020	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
1/2020	Investigational statement on acupuncture as non-surgical treatment of TMJD was removed. Effective 1/1/2020.
4/2019	Annual policy review. Description, summary, and references updated. Policy statements unchanged.

11/2018	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
4/2018	Annual policy review. Dysfunction changed to "Disorder" in the policy statement and title. Policy statements otherwise unchanged.
1/2018	Clarified coding information.
3/2017	Annual policy review. New references added
6/2016	Annual policy review. New references added. Gothic in second policy statement corrected to "gnathic." 6/1/2016
5/2016	Clarified coding information.
9/2014	Annual policy review. Prior authorization information clarified.
9/2014	Physical therapy coverage clarified as specified in the subscriber certificate. Effective 9/1/2014.
6/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
1/2014	Annual policy review. New investigational indications described. Effective 1/1/2014.
2/2013	Annual policy review. Changes to policy statements. Effective 2/4/2013.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
3/1/2012	Annual policy review. Changes to policy statements.
6/2011	Reviewed - Medical Policy Group - Orthopedics, Rehabilitation Medicine and Rheumatology. No changes to policy statements.
3/1/2011	Annual policy review. Changes to policy statements.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

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Endnotes

¹ Based on Subscriber Certificate