MEDICAL POLICY

POLICY TITLE	**TEMPOROMANDIBULAR DISORDER**
POLICY NUMBER	**MP 2.062**

CLINICAL BENEFIT	☐ MINIMIZE SAFETY RISK OR CONCERN. ☒ MINIMIZE HARMFUL OR INEFFECTIVE INTERVENTIONS. ☐ ASSURE APPROPRIATE LEVEL OF CARE. ☐ ASSURE APPROPRIATE DURATION OF SERVICE FOR INTERVENTIONS. ☒ ASSURE THAT RECOMMENDED MEDICAL PREREQUISITES HAVE BEEN MET. ☐ ASSURE APPROPRIATE SITE OF TREATMENT OR SERVICE.
Effective Date:	**2/1/2025**

I. POLICY

Diagnostic Procedures

The following diagnostic procedures may be considered **medically necessary** in the diagnosis of temporomandibular disorder (TMD):

- Diagnostic X-ray tomograms, and arthrograms;
- Cephalograms (X-rays of the jaw and skull);
- Pantograms (X-rays of maxilla and mandible).

The following diagnostic procedures are considered **investigational** in the diagnosis of TMD. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with these tests.

- Electromyography (EMG), including surface EMG;
- Kinseiography;
- 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 TMD);
- 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 TMD);
- Ultrasound imaging/sonogram;
- Arthroscopy of the temporomandibular joint (TMJ) for purely diagnostic purposes;
- Joint vibration analysis.

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Nonsurgical Treatments
The following non-surgical treatments may be considered **medically necessary** in the treatment of TMD if a 4-week course conservative treatment (life-style modification and/or anti-inflammatory medication) is ineffective:

- Biofeedback
- Intra-oral removable occlusal devices/appliances (encompassing fabrication, insertion, and adjustment)

The following non-surgical treatments are considered **investigational** in the treatment of TMD. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with these procedures:

- Electrogalvanic stimulation;
- Iontophoresis;
- Ultrasound;
- Devices to maintain range of motion and to develop muscles involved in jaw function;
- Orthodontic services;
- Dental restorations/prostheses;
- Transcutaneous electrical nerve stimulation (TENS);
- Percutaneous electrical nerve stimulation (PENS);
- Low-level laser therapy;
- Hyaluronic acid.
- Platelet concentrates
- Dextrose prolotherapy

Surgical Treatments
For individuals with non-traumatic temporomandibular disorder who have failed to respond to 6 months of supervised nonsurgical interventions, the following surgical treatments may be considered **medically necessary**:

- 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 or degenerative joint disease;
- Open surgical procedures (including, but not limited to, arthroplasties, condylectomies; meniscus or disc plication and disc removal.)

Note: Nonsurgical intervention includes an intra-oral removable occlusal device/appliance unless there is clear documentation that bruxism and jaw-clenching are not contributing factors.

Cross-references:
MP 1.101 Orthognathic Surgery
MP 2.061 Prolotherapy
MP 2.064 Biofeedback and Neurofeedback Therapy
MP 6.020 Transcutaneous Electrical Nerve Stimulation
MP 6.050 Percutaneous Electrical Nerve Stimulation and Percutaneous Neuromodulation Therapy

II. PRODUCT VARIATIONS

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This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations as discussed in Section VI. Please see additional information below.

FEP PPO - Refer to FEP Medical Policy Manual. The FEP Medical Policy manual can be found at: https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies

All plans – Refer to the member's Certificate of Coverage for variations of coverage for services related to TMJD.

III. DESCRIPTION/BACKGROUND

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Temporomandibular Disorder

Temporomandibular disorder (TMD) is a collective term that describes clinical problems involving the function of the masticatory muscles and the jaw joint. TMD has been used to refer to a group of conditions that often are called "TMJ syndrome" by physicians and dentists to describe the pain associated with the head, neck, and jaw. 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 (e.g., internal derangement, degenerative joint disease, rheumatoid arthritis, mandibular dislocation, ankyloses, hyper or hypoplasia, condylar osteolysis, fractures) may also occur from varied etiologies. Typically, the initial presentation can be confusing as both a masticatory element and a joint disorder can coexist.

Symptoms attributed to TMD 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).

Diagnosis

In the clinical setting, TMD 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 patients with severe and chronic symptoms. Diagnostic criteria for TMD have been developed and validated for use in both clinical and research settings. The American Society of Temporomandibular Joint Surgeons, and the American Association of Oral and Maxillofacial Surgeons support the use of history and physical, as well as imaging studies such as X-ray, CT, and MRI in the diagnosis of TMD. The

AAOMS does not support use of muscle evoked potential studies and sonography for the diagnosis of TMD.

Treatment
For many patients, symptoms of TMD are short-term and self-limiting. Conservative treatments (e.g., eating soft foods, rest, heat, ice, avoiding extreme jaw movements) and anti-inflammatory medication are recommended before considering more invasive and/or permanent therapies (e.g., surgery). Societal guidance supports use of medications, orthotic appliance, and physical therapy. The AAOMS lists ultrasound, and iontophoresis as possible treatments during a physical therapy course, however there is a lack of evidence to support these modalities. Similarly, there is little evidence to support electrotherapy and low-level laser therapy. Ultimately, treating underlying conditions provides a greater chance of success in the management of TMD. Surgical treatment of TMD as recommended by AAOMS includes manipulation, arthrocentesis, arthroscopy, open arthroplasty, disc repair or removal, coronoidectomy, condylectomy, mandibular condylotomy, orthognathic surgery, and partial or total joint reconstruction.

Note: Low-level laser therapy for TMD is addressed in evidence review **MP 1.097** Botulinum Toxin as a treatment for TMD is addressed in Capital policy titled **Botox.**

Regulatory Status
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.

Table 1. Muscle-Monitoring Devices Cleared by the U.S. Food and Drug Administration

Devices	Manufacturer	Date Cleared	510(k) No.	Indication
K7x Evaluation System	Myotronics, Inc.	Nov 2000	K003287	Electromyography
BioEMG III™	Bio-Research Associates, Inc.	Feb 2009	K082927	Electromyography, Joint Vibration Recording
M-Scan™	Bio-Research Associates	Jul 2013	K130158	Electromyography
GrindCare Measure	Medotech A/S	Apr 2012	K113677	Electromyography, Nocturnal Bruxism
TEETHAN 2.0	BTS S.P.A.	Dec 2016	K161716	Electromyography
GrindCare System	Sunstar Suisse S.A.	Sep 2017	K163448	Electromyography, Sleep Bruxism

IV. RATIONALE

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For individuals who have suspected TMD who receive ultrasound, surface electromyography, or joint vibration analysis, the evidence includes systematic reviews of diagnostic test studies. Relevant outcomes are test accuracy, test validity, and other performance measures. None of the systematic reviews found that these diagnostic techniques accurately identify patients with TMD and many of the included studies had methodologic limitations. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have a confirmed diagnosis of TMD 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 have 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 (e.g., 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 a meaningful improvement in the net health outcome.

A Cochrane review showed that use of cognitive behavioral therapy and biofeedback was effective in both short-term and long-term pain management for individuals with symptomatic TMD when compared to usual management. A 2023 meta-analysis of 153 trials compared therapies for chronic pain from TMD and cognitive behavioral therapy with biofeedback were amongst the 3 most effective treatments. The evidence for biofeedback as a treatment for TMD is sufficient to determine a meaningful improvement in net health outcomes.

For individuals with a confirmed diagnosis of TMD who receive acupuncture, transcutaneous electrical nerve stimulation, orthodontic services, hyaluronic acid, platelet concentrates, or dextrose prolotherapy, 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 TMD, 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 TMD. Pooled analyses of the RCTs found that arthrocentesis and arthroscopy resulted in superior pain reduction than 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 a meaningful improvement in the net health outcome.

V. DEFINITIONS

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ANOMALY refers to a deviation from normal.

BRUXISM involves activation of the masticatory muscles, resulting in tooth clenching and teeth grinding. Although often asymptomatic, frequent bruxism can become clinically significant when it interferes with sleep or results in tooth wear or jaw discomfort.

CONGENITAL refers to something, which is present at birth.

VI. BENEFIT VARIATIONS

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The existence of this medical policy does not mean that this service is a covered benefit under the member's health benefit plan. Benefit determinations should be based in all cases on the applicable health benefit plan language. Medical policies do not constitute a description of benefits. A member's health benefit plan governs which services are covered, which are excluded, which are subject to benefit limits, and which require preauthorization. There are different benefit plan designs in each product administered by Capital Blue Cross. Members and providers should consult the member's health benefit plan for information or contact Capital Blue Cross for benefit information.

VII. DISCLAIMER

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Capital Blue Cross' medical policies are developed to assist in administering a member's benefits, do not constitute medical advice and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member's benefit information, the benefit information will govern. If a provider or a member has a question concerning the application of this medical policy to a specific member's plan of benefits, please contact Capital Blue Cross' Provider Services or Member Services. Capital Blue Cross considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

VIII. CODING INFORMATION

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Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Investigational; therefore, not covered for the diagnosis and treatment of TMJD

Procedure Codes								
A4595	D0210	D0370	D0386	D5934	D5935	D7872	D8999	E0720
E0730	E0746	E1700	E1701	E1702	J7318	J7320	J7321	J7322
J7323	J7324	J7325	J7326	J7327	J7328	J7329	J7331	J7332
M0076	P9020	S3900	S8948	0232T	29800	64450	64999	93740
95851	95927	95937	97014	97032	97033	97035		

Covered when medically necessary for the diagnosis and treatment of TMJD:

Procedure Codes								
D0320	D0321	D0330	D0340	D0368	D0384	D7810	D7820	D7840
D7850	D7852	D7854	D7856	D7858	D7860	D7865	D7870	D7874
D7876	D7880	D7881	20605	20606	21010	21050	21060	21070
21073	21116	21240	21242	21243	21480	21485	21490	29804
64400	70100	70110	70328	70330	70332	70350	70355	76100
90901								

ICD-10-CM Diagnosis Codes	Description
G47.63	Bruxism
M26.00	Unspecified anomaly of jaw size
M26.01	Maxillary hyperplasia
M26.02	Maxillary hypoplasia
M26.03	Mandibular hyperplasia
M26.04	Mandibular hypoplasia
M26.05	Macrogenia
M26.06	Microgenia
M26.07	Excessive tuberosity of jaw
M26.09	Other specified anomalies of jaw size
M26.10	Unspecified anomaly of jaw-cranial base relationship
M26.11	Maxillary asymmetry
M26.12	Other jaw asymmetry
M26.19	Other specified anomalies of jaw-cranial base relationship
M26.50	Dentofacial functional abnormalities, unspecified
M26.51	Abnormal jaw closure
M26.52	Limited mandibular range of motion
M26.53	Deviation in opening and closing of the mandible

M26.54	Insufficient anterior guidance
M26.55	Centric occlusion maximum intercuspation discrepancy
M26.56	Non-working side interference
M26.57	Lack of posterior occlusal support
M26.59	Other dentofacial functional abnormalities
M26.601	Right temporomandibular joint disorder, unspecified
M26.602	Left temporomandibular joint disorder, unspecified
M26.603	Bilateral temporomandibular joint disorder, unspecified
M26.609	Unspecified temporomandibular joint disorder, unspecified side
M26.611	Adhesions and ankylosis of right temporomandibular joint
M26.612	Adhesions and ankylosis of left temporomandibular joint
M26.613	Adhesions and ankylosis of bilateral temporomandibular joint
M26.619	Adhesions and ankylosis of temporomandibular joint, unspecified side
M26.621	Arthralgia of right temporomandibular joint
M26.622	Arthralgia of left temporomandibular joint
M26.623	Arthralgia of bilateral temporomandibular joint
M26.629	Arthralgia of temporomandibular joint, unspecified side
M26.631	Articular disc disorder of right temporomandibular joint
M26.632	Articular disc disorder of left temporomandibular joint
M26.633	Articular disc disorder of bilateral temporomandibular joint
M26.639	Articular disc disorder of temporomandibular joint, unspecified side
M26.641	Arthritis of Temporomandibular Joint
M26.642	Arthritis of Left Temporomandibular Joint
M26.643	Arthritis of Bilateral Temporomandibular Joint
M26.649	Arthritis of Unspecified Temporomandibular Joint
M26.651	Arthropathy of Right Temporomandibular Joint
M26.652	Arthropathy of Left Temporomandibular Joint
M26.653	Arthropathy of Bilateral Temporomandibular Joint
M26.659	Arthropathy of Unspecified Temporomandibular Joint
M26.69	Other specified disorders of temporomandibular joint
M79.11	Myalgia of mastication muscle
S03.01XA	Dislocation of jaw, right side, initial encounter
S03.01XD	Dislocation of jaw, right side, subsequent encounter
S03.01XS	Dislocation of jaw, right side, sequela
S03.02XA	Dislocation of jaw, left side, initial encounter
S03.02XD	Dislocation of jaw, left side, subsequent encounter
S03.02XS	Dislocation of jaw, left side, sequela
S03.03XA	Dislocation of jaw, bilateral, initial encounter

S03.03XD	Dislocation of jaw, bilateral, subsequent encounter
S03.03XS	Dislocation of jaw, bilateral, sequela

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X. POLICY HISTORY

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MP 2.062	**03/18/2020 Consensus Review**. No change to policy statement. References updated. Coding reviewed.
	08/31/2020 Administrative Update. New ICD 10 codes M26.652, M26.653 and M26.659 added.
	09/01/2020 Administrative Update. New ICD 10 codes M26.64, M26.641, M26.642, M26.643, M26.649, M26.65, M26.651 added.
	03/12/2021 Administrative Update. Revised HCPC code J7321. Effective 4/1/2021
	07/29/2021 Minor Review. Added platelet concentrates to the list of investigational treatments. "Dysfunction" changed to "disorder" in the policy statement and title**.** Removed CT and MRI (managed by NIA), acupuncture (managed by benefits), and pharmacological treatments (managed by pharmacy or medical injectable policy). Coding updated: removed 70336, 70486, 70487, 70488, 97810, 97811, 97813, 97814; added J7318, J7329, J7331, J7332, P9020, 0232T as investigational; removed M26.65. References updated.
	05/03/2022 Minor Review. Added dextrose prolotherapy as INV. Added procedure code M0076. Removed deleted procedure code D8690. Cross-reference added. Description/Background updated. Reference added. Product Variations updated.
	03/13/2023 Consensus Review. Added Botox to cross references. Updated background, definitions, and references.
	07/06/2023 Administrative Update. D0322 removed from policy and managed under dental benefits.

MEDICAL POLICY

POLICY TITLE	TEMPOROMANDIBULAR DISORDER
POLICY NUMBER	MP 2.062

	03/08/2024 Minor Review. Title changed to Temporomandibular Disorder. Updated statement regarding intraoral occlusal appliances. Previously specified "prosthetic". Biofeedback now MN, CPT 90901 now MN. Specific timeframes for nonsurgical and surgical intervention added. New ICD10. Updated background. New references.
	10/19/2024 Administrative Update. CPT 21073 added to policy as MN

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