

POLICY TITLE	TEMPOROMANDIBULAR JOINT DISORDER			
POLICY NUMBER	MP 2.062			
Effective Date:	9/1/2023			

POLICY RATIONALE DISCLAIMER POLICY HISTORY PRODUCT VARIATIONS DEFINITIONS CODING INFORMATION DESCRIPTION/BACKGROUND BENEFIT VARIATIONS REFERENCES

### I. POLICY

#### **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;
- 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 TMJD. 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 TMJD);
- 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 non-surgical treatments may be considered **medically necessary** in the treatment of TMJD:

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



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

- Electrogalvanic stimulation;
- Iontophoresis;
- Biofeedback;
- Ultrasound;
- Devices to maintain joint 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

The following surgical treatments may be considered **medically necessary** in the treatment of TMJD dysfunction:

- Arthrocentesis;
- Manipulation for reduction of fracture or dislocation of the TMJ;
- Arthroscopic surgery in patients 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 patients who have failed conservative treatment) including, but not limited to, arthroplasties, condylectomies; meniscus or disc plication and disc removal.

#### Cross-references:

Botox

Viscosupplements

- MP 1.097 Low Level Laser Therapy
- **MP 1.101** Orthognathic Surgery
- MP 2.061 Prolotherapy
- MP 2.064 Biofeedback and Neurofeedback Therapy
- MP 4.039 Orthopedic applications of platelet rich plasma
- MP 6.020 Transcutaneous Electrical Nerve Stimulation
- MP 6.050 Percutaneous Electrical Nerve Stimulation and Percutaneous Neuromodulation Therapy



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## MEDICAL POLICY

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#### **II. PRODUCT VARIATIONS**

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 Joint Disorder

TMJD, also known as temporomandibular joint syndrome, refers to a cluster of problems associated with the temporomandibular joint and musculoskeletal structures. The etiology of TMJD remains unclear and is believed to be multifactorial. TMJD is divided into two main categories: articular disorders (e.g., ankylosis, congenital or developmental disorders, disc derangement disorders, fractures, inflammatory disorders, osteoarthritis, and joint dislocation) and masticatory muscle disorders (e.g., myofascial pain, myofibrotic contracture, myospasm, and neoplasia).

### Diagnosis

In the clinical setting, 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 patients with severe and chronic symptoms. Diagnostic criteria for TMJD 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 TMJD. The AAOMS does not support use of muscle evoked potential studies and sonography for the diagnosis of TMJ.

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).



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### Treatment

For many patients, symptoms of TMJD 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 TMJD.

Note that low-level laser therapy for TMJD is addressed in evidence review MP 1.097.

### **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.

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 <sup>™</sup>	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

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



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### IV. RATIONALE

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### 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 accuracy, test validity, and other performance measures. None of the systematic reviews found that these diagnostic techniques accurately identify patients with TMJD 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 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 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 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.

For individuals with a confirmed diagnosis of TMJD who receive acupuncture, biofeedback, 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 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 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.

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#### V. DEFINITIONS

**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.

**TINNITUS** is a subjective ringing, buzzing, or hissing sound in the ear. For some patients, this causes only minor irritation; for others, it is disabling.

### VI. BENEFIT VARIATIONS

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

Capital Blue Cross's 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

**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.



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

Procedu	re Codes							
A4595	D0210	D0386	D0370	D5934	D5935	D7872	D8690	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
90901	93740	95851	95927	95937	97014	97032	97033	97035

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

Procedu	re 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
21116	21240	21242	21243	21480	21485	21490	29804	64400
70100	70110	70328	70330	70332	70350	70355	76100	

ICD-10-CM Diagnosis Codes	Description
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



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	_ack of posterior occlusal support				
M26.59 0	Other dentofacial functional abnormalities				
M26.601 F	Right temporomandibular joint disorder, unspecified				
M26.602 L	_eft temporomandibular joint disorder, unspecified				
M26.603 E	Bilateral temporomandibular joint disorder, unspecified				
M26.609 l	Jnspecified temporomandibular joint disorder, unspecified side				
M26.611 A	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 A	Arthralgia of right temporomandibular joint				
M26.622	Arthralgia of left temporomandibular joint				
M26.623	Arthralgia of bilateral temporomandibular joint				
M26.629 A	Arthralgia of temporomandibular joint, unspecified side				
M26.631 A	Articular disc disorder of right temporomandibular joint				
M26.632 A	Articular disc disorder of left temporomandibular joint				
M26.633	Articular disc disorder of bilateral temporomandibular joint				
M26.639 A	Articular disc disorder of temporomandibular joint, unspecified side				
M26.641 A	Arthritis of Temporomandibular Joint				
M26.642 A	Arthritis of Left Temporomandibular Joint				
M26.643 A	Arthritis of Bilateral Temporomandibular Joint				
M26.649 A	Arthritis of Unspecified Temporomandibular Joint				
M26.651 A	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 0	Other specified disorders of temporomandibular joint				
M79.11 N	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				
	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	CAC 11/30/2004
MI 2.002	CAC 09/13/2005
	CAC 11/29/2005
	CAC 01/30/2007
	CAC 03/25/2008
	CAC 05/26/2009
	<b>CAC 11/30/2010</b> Added acupuncture as investigational. Revised policy statement for physical medicine and TENS from medically necessary to investigational
	(consistent with BCBSA) Adopt BCBSA.
	CAC 04/24/2012 Consensus review. No changes, references updated.
	<b>CAC 10/30/2012</b> Minor revision. Low-level laser therapy and hyaluronic acid added as investigational non-surgical treatments for treatment of TMJ. References updated. Codes reviewed 10/1/12
	<b>CAC 11/26/2013</b> Consensus review. Joint vibration analysis added as an investigational diagnostic procedure. In the statement on medically necessary treatments, intra-oral reversible prosthetic devices changed to intra-oral removable
	prosthetic devices for clarification only. FEP variation revised to refer to the FEP manual. Rationale added.
	CAC 11/25/2014 Consensus review. No change to policy statements. References and rationale updated. Coding reviewed and updated 11/12/14
	07/01/2015- S8262 removed from policy as a deleted code.
	CAC 01/26/2016 Minor revision. Bullet point on physical therapy removed from
	investigational statement on nonsurgical treatments. Rationale and reference
	updated. Medicare variation removed. Coding reviewed.
	06/06/2016 Coding updated
	Admin Update 11/09/2016 Variation Reformatting
	Admin Update 01/01/2017 New diagnosis codes added effective 10/1/2016. New codes J7320, J7322 added and end dated code Q9980 removed effective 1/1/17.
	CAC 05/23/2017 Minor revision. Policy statement revisions are as follows:
	<ul> <li>Ultrasound imaging/sonogram added to the list of diagnostic procedures considered investigational in the diagnosis of TMJ dysfunction (2<sup>nd</sup> policy statement 11<sup>th</sup> bullet).</li> </ul>
	<ul> <li>Therapacer 2000 removed as an example of a device used to maintain joint ROM and develop jaw muscle function (4<sup>th</sup> policy statement 5<sup>th</sup> bullet).</li> <li>Investigational statement added after the 4<sup>th</sup> policy statement.</li> </ul>
	Medicare variation to LCD 33823 added. Cross References, Description/Background, Regulatory Status, Rationale and Reference sections updated. Coding Reviewed.
	Admin Update 01/01/2018: Updated J7321 and J7328 descriptions effective 1/1/18. Medicare variations removed from Commercial Policies.



POLICY TITLE	TEMPOROMANDIBULAR JOINT DISORDER
POLICY NUMBER MP 2.062	

Admin Update 03/13/2018 Coding reviewed and updated.
10/01/2018 Admin Update: New ICD-10 code added effective 10/1/18
03/05/2019 Consensus review. No change to policy statements. Background and
references updated. Rationale condensed.
03/18/2020 Consensus review. No change to policy statement. References
updated. Coding reviewed.
08/31/2020 Admin Update. New ICD 10 codes M26.652, M26.653 and M26.659
added.
09/1/2020 Admin 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 Updates: 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 Admin update. D0322 removed from policy and managed under
dental benefits.

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