BlueCross BlueShield Federal Employee Program.

FEP Medical Policy Manual

FEP 2.01.21 Temporomandibular Joint Disorder

Effective Policy Date: July 1, 2023

Original Policy Date: December 2012

Related Policies:

1.01.09 - Transcutaneous Electrical Nerve Stimulation
2.01.26 - Prolotherapy
2.01.56 - Low Level Laser Therapy
7.01.29 - Percutaneous Electrical Nerve Stimulation and Percutaneous Neuromodulation Therapy

Temporomandibular Joint Disorder

Description

Description

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 patients whose symptoms persist.

OBJECTIVE

The objective of this evidence review is to evaluate whether diagnostic testing and therapeutic interventions improve the net health outcome for individuals with temporomandibular joint disorder.

POLICY STATEMENT

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 presurgical 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; intraoral tracing or gnathic arch tracing (intended to demonstrate deviations in the positioning of the jaw that are associated with TMJD);
- Muscle testing;
- Standard dental radiographic procedures;
- Range-of-motion measurements;
- Computerized mandibular scan (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:

- Intraoral removable prosthetic devices or appliances (encompassing fabrication, insertion, adjustment);
- Pharmacologic treatment (eg, anti-inflammatory, muscle relaxing, analgesic medications).

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

- Electrogalvanic stimulation;
- Iontophoresis;
- Ultrasound;

- Devices promoted to maintain joint range of motion and to develop muscles involved in jaw function;
- Orthodontic services;
- Dental restorations/prostheses;
- Transcutaneous electrical nerve stimulation;
- Percutaneous electrical nerve stimulation;
- Acupuncture;
- Hyaluronic acid;
- Platelet concentrates;
- Dextrose prolotherapy.

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 results from 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.

POLICY GUIDELINES

None

BENEFIT APPLICATION

Experimental or investigational procedures, treatments, drugs, or devices are not covered (See General Exclusion Section of brochure).

Plans may want to review their contract language on the diagnosis and treatment of temporomandibular joint disorder (TMJD) to ensure that the language is consistent with the Plan"s medical policy on TMJD. Some contracts may exclude coverage for TMJD.

Dental contracts frequently exclude the diagnosis and treatment of TMJD. Services excluded may include, but are not limited to, orthodontics, equilibration of the teeth, dental radiographs, and dental prosthesis, whether performed by a dentist or a physician. Other Plans may limit TMJD diagnosis and treatment only to the dental portion of the contract.

Denial of the investigational procedure is applicable for contracts or certificates of coverage that maintain an exclusion for investigational services.

Claims may be received for psychiatric or psychological visits in relation to TMJD, because this condition may be psychosomatic in origin, resulting from tension or stress. Bruxism is a common symptom of tension, which may lead to symptoms suggestive of TMJD.

Plans should determine whether contract limitations for physical therapy are applicable to temporomandibular joint treatment.

Prognathism (protruding jaw), micrognathism (small lower jaw), or apertognathism (open bite) may be associated with TMJD in some people. Plans should review contracts to ensure coverage or exclusion of coverage, as well as medical-dental coverage in individual cases.

Claims may be received for the treatment of TMJD with, but not limited to, the following diagnoses and symptoms:

- Cranial-cervical syndrome
- Myofascial pain/dysfunction syndrome
- Asymmetrical motor neuropathy
- Cervicalgia
- Localized myospasm
- Cephalgia
- Musculoskeletal dysfunction
- Neural entrapment
- Myalgia/myositis.

FDA 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 K7x Evaluation 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 IIITM	Bio-Research Associates, Inc	Feb 2009	K082927	Electromyography, Joint Vibration Recording
GrindCare Measure	Medotech A/S	Apr 2012	K113677	Electromyography, Nocturnal Bruxism
M-ScanTM	Bio-Research Associates	Jul 2013	K130158	Electromyography
TEETHAN 2.0	BTS S.P.A.	Dec 2016	K161716	Electromyography
GrindCare System	Sunstar Suisse S.A.	Sep 2017	K163448	Electromyography, Sleep Bruxism
Nox Sleep System	Nox Medical	Nov 2019	K192469	Electromyography, Sleep Bruxism

FDA product code: KZM.

RATIONALE

Summary of Evidence

For individuals with suspected temporomandibular joint disorder (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 patients 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 with 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 with a confirmed diagnosis of TMJD who receive acupuncture, biofeedback, transcutaneous electric 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 with 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. A third meta-analysis (N=8 RCTs) demonstrated superior pain reduction, but no difference in maximum mouth opening, with arthrocentesis compared to conservative therapies. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

SUPPLEMENTAL INFORMATION

Practice Guidelines and Position Statements

Guidelines or position statements will be considered for inclusion in 'Supplemental Information if they were issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

American Association for Dental, Oral, and Craniofacial Research

In 2010 (reaffirmed in 2015), the American Association for Dental Research (now the American Association for Dental, Oral, and Craniofacial Research) policy statement recommended the following for the diagnosis and treatment of temporomandibular joint disorders (TMJDs)[46,]:

"It is recommended that the differential diagnosis of TMDs [temporomandibular disorders] or related orofacial pain conditions should be based primarily on information obtained from the patient"s history, clinical examination, and when indicated, TMJ [temporomandibular joint] 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....”

"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....”

American Society of Temporomandibular Joint Surgeons

In 2001, the American Society of Temporomandibular Joint Surgeons issued consensus clinical guidelines focused on TMJDs associated with internal derangement and osteoarthritis. [47,] For diagnosis of this type of TMJD, a detailed history and, when indicated, a general physical examination was recommended. Imaging of the temporomandibular and associated structures was also recommended. Options for basic radiography to provide information on temporal bone and condylar morphology included the use of plain films, panoramic films, and tomograms. Also recommended was imaging of the disc and associated soft tissue with magnetic resonance imaging or arthrography. Other diagnostic procedures indicated included computed tomography, magnetic resonance imaging (MRI), arthrography (for selected cases) and isotope bone scans.

Nonsurgical treatment was recommended as first-line therapy for all symptomatic patients with this condition. Recommended treatment options included a change in diet, nonsteroidal anti-inflammatory drugs, maxillomandibular appliances, physical therapy, injections of corticosteroids or botulinum toxin, and behavior modification. If adequate symptom relief did not occur within 2 to 3 weeks, surgical consultation was advised. The guideline stated the following surgical procedures were considered accepted and effective for patients with TMJDs associated with internal derangement or osteoarthritis:

- Arthrocentesis
- Arthroscopy
- Condylotomy
- Arthrotomy (prosthetic joint replacement may be indicated in selected patients who have severe joint degeneration, destruction, or ankylosis)
- Coronoidotomy/coronoidectomy
- Styloidectomy.

U.S. Preventive Services Task Force Recommendations

Not applicable.

Medicare National Coverage

There is no national coverage determination. In the absence of a national coverage determination, coverage decisions are left to the discretion of local Medicare carriers.

REFERENCES

1. Schiffman E, Ohrbach R, Truelove E, et al. Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) for Clinical and Research Applications: recommendations of the International RDC/TMD Consortium Network* and Orofacial Pain Special Interest Group†. J Oral Facial Pain Headache. 2014; 28(1): 6-27. PMID 24482784
2. Ohrbach R, Turner JA, Sherman JJ, et al. The Research Diagnostic Criteria for Temporomandibular Disorders. IV: evaluation of psychometric properties of the Axis II measures. J Orofac Pain. 2010; 24(1): 48-62. PMID 20213031
3. Schiffman E, Ohrbach R. Executive summary of the Diagnostic Criteria for Temporomandibular Disorders for clinical and research applications. J Am Dent Assoc. Jun 2016; 147(6): 438-45. PMID 26922248
4. Almeida FT, Pacheco-Pereira C, Flores-Mir C, et al. Diagnostic ultrasound assessment of temporomandibular joints: a systematic review and meta-analysis. Dentomaxillofac Radiol. Feb 2019; 48(2): 20180144. PMID 30285469
5. Manfredini D, Guarda-Nardini L. Ultrasonography of the temporomandibular joint: a literature review. Int J Oral Maxillofac Surg. Dec 2009; 38(12): 1229-36. PMID 19700262
6. Klasser GD, Okeson JP. The clinical usefulness of surface electromyography in the diagnosis and treatment of temporomandibular disorders. J Am Dent Assoc. Jun 2006; 137(6): 763-71. PMID 16803805
7. Sharma S, Crow HC, McCall WD, et al. Systematic review of reliability and diagnostic validity of joint vibration analysis for diagnosis of temporomandibular disorders. J Orofac Pain. 2013; 27(1): 51-60. PMID 23424720
8. List T, Axelsson S. Management of TMD: evidence from systematic reviews and meta-analyses. J Oral Rehabil. May 2010; 37(6): 430-51. PMID 20438615
9. Fricton J, Look JO, Wright E, et al. Systematic review and meta-analysis of randomized controlled trials evaluating intraoral orthopedic appliances for temporomandibular disorders. J Orofac Pain. 2010; 24(3): 237-54. PMID 20664825
10. Ivorra-Carbonell L, Montiel-Company JM, Almerich-Silla JM, et al. Impact of functional mandibular advancement appliances on the temporomandibular joint - a systematic review. Med Oral Patol Oral Cir Bucal. Sep 01 2016; 21(5): e565-72. PMID 27475694

11. Randhawa K, Bohay R, Ct P, et al. The Effectiveness of Noninvasive Interventions for Temporomandibular Disorders: A Systematic Review by the Ontario Protocol for Traffic Injury Management (OPTIMa) Collaboration. Clin J Pain. Mar 2016; 32(3): 260-78. PMID 25924094
12. Ebrahim S, Montoya L, Busse JW, et al. The effectiveness of splint therapy in patients with temporomandibular disorders: a systematic review and meta-analysis. J Am Dent Assoc. Aug 2012; 143(8): 847-57. PMID 22855899
13. Zhang C, Wu JY, Deng DL, et al. Efficacy of splint therapy for the management of temporomandibular disorders: a meta-analysis. Oncotarget. Dec 20 2016; 7(51): 84043-84053. PMID 27823980
14. Riley P, Glenny AM, Worthington HV, et al. Oral splints for temporomandibular disorder or bruxism: a systematic review. Br Dent J. Feb 2020; 228(3): 191-197. PMID 32060462
15. Al-Moraissi EA, Farea R, Qasem KA, et al. Effectiveness of occlusal splint therapy in the management of temporomandibular disorders: network meta-analysis of randomized controlled trials. Int J Oral Maxillofac Surg. Aug 2020; 49(8): 1042-1056. PMID 31982236
16. Zhang L, Xu L, Wu D, et al. Effectiveness of exercise therapy versus occlusal splint therapy for the treatment of painful temporomandibular disorders: a systematic review and meta-analysis. Ann Palliat Med. Jun 2021; 10(6): 6122-6132. PMID 33977737
17. Alajbeg IZ, Vrbanović E, Lapić I, et al. Effect of occlusal splint on oxidative stress markers and psychological aspects of chronic temporomandibular pain: a randomized controlled trial. Sci Rep. Jul 03 2020; 10(1): 10981. PMID 32620810
18. Melo RA, de Resende CMBM, Rgo CRF, et al. Conservative therapies to treat pain and anxiety associated with temporomandibular disorders: a randomized clinical trial. Int Dent J. Aug 2020; 70(4): 245-253. PMID 32153038
19. Ram HK, Shah DN. Comparative evaluation of occlusal splint therapy and muscle energy technique in the management of temporomandibular disorders: A randomized controlled clinical trial. J Indian Prosthodont Soc. 2021; 21(4): 356-365. PMID 34810363
20. Tonlorenzi D, Brunelli M, Conti M, et al. An observational study of the effects of using an high oral splint on pain control. Arch Ital Biol. Sep 30 2019; 157(2-3): 66-75. PMID 31821530
21. Hggman-Henrikson B, Alstergren P, Davidson T, et al. Pharmacological treatment of oro-facial pain - health technology assessment including a systematic review with network meta-analysis. J Oral Rehabil. Oct 2017; 44(10): 800-826. PMID 28884860
22. Mena M, Dalbah L, Levi L, et al. Efficacy of topical interventions for temporomandibular disorders compared to placebo or control therapy: a systematic review with meta-analysis. J Dent Anesth Pain Med. Dec 2020; 20(6): 337-356. PMID 33409363
23. Machado D, Martimbianco ALC, Bussadori SK, et al. Botulinum Toxin Type A for Painful Temporomandibular Disorders: Systematic Review and Meta-Analysis. J Pain. 2020; 21(3-4): 281-293. PMID 31513934
24. Isacsson G, Schumann M, Nohlert E, et al. Pain relief following a single-dose intra-articular injection of methylprednisolone in the temporomandibular joint arthralgia-A multicentre randomised controlled trial. J Oral Rehabil. Jan 2019; 46(1): 5-13. PMID 30240024
25. Tchivileva IE, Hadgraft H, Lim PF, et al. Efficacy and safety of propranolol for treatment of temporomandibular disorder pain: a randomized, placebo-controlled clinical trial. Pain. Aug 2020; 161(8): 1755-1767. PMID 32701836
26. Jung A, Shin BC, Lee MS, et al. Acupuncture for treating temporomandibular joint disorders: a systematic review and meta-analysis of randomized, sham-controlled trials. J Dent. May 2011; 39(5): 341-50. PMID 21354460
27. Liu GF, Gao Z, Liu ZN, et al. Effects of Warm Needle Acupuncture on Temporomandibular Joint Disorders: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Evid Based Complement Alternat Med. 2021; 2021: 6868625. PMID 34873409
28. Manfredini D, Piccotti F, Guarda-Nardini L. Hyaluronic acid in the treatment of TMJ disorders: a systematic review of the literature. Cranio. Jul 2010; 28(3): 166-76. PMID 20806734
29. Machado E, Bonotto D, Cunali PA. Intra-articular injections with corticosteroids and sodium hyaluronate for treating temporomandibular joint disorders: a systematic review. Dental Press J Orthod. 2013; 18(5): 128-33. PMID 24352399
30. Goiato MC, da Silva EV, de Medeiros RA, et al. Are intra-articular injections of hyaluronic acid effective for the treatment of temporomandibular disorders? A systematic review. Int J Oral Maxillofac Surg. Dec 2016; 45(12): 1531-1537. PMID 27374020
31. Liu Y, Wu J, Fei W, et al. Is There a Difference in Intra-Articular Injections of Corticosteroids, Hyaluronate, or Placebo for Temporomandibular Osteoarthritis?. J Oral Maxillofac Surg. Mar 2018; 76(3): 504-514. PMID 29182905
32. Al-Hamed FS, Hijazi A, Gao Q, et al. Platelet Concentrate Treatments for Temporomandibular Disorders: A Systematic Review and Meta-analysis. JDR Clin Trans Res. Apr 2021; 6(2): 174-183. PMID 32464073
33. Sousa BM, Lpez-Valverde N, Lpez-Valverde A, et al. Different Treatments in Patients with Temporomandibular Joint Disorders: A Comparative Randomized Study. Medicina (Kaunas). Mar 05 2020; 56(3). PMID 32151101
34. Goke Kutuk S, Gke G, Arslan M, et al. Clinical and Radiological Comparison of Effects of Platelet-Rich Plasma, Hyaluronic Acid, and Corticosteroid Injections on Temporomandibular Joint Osteoarthritis. J Craniofac Surg. Jun 2019; 30(4): 1144-1148. PMID 31166260
35. Gorrela H, Prameela J, Srinivas G, et al. Efficacy of Temporomandibular Joint Arthrocentesis with Sodium Hyaluronate in the Management of Temporomandibular Joint Disorders: A Prospective Randomized Control Trial. J Maxillofac Oral Surg. Dec 2017; 16(4): 479-484. PMID 29038631
36. Manfredini D, Rancitelli D, Ferronato G, et al. Arthrocentesis with or without additional drugs in temporomandibular joint inflammatory-degenerative disease: comparison of six treatment protocols*. J Oral Rehabil. Apr 2012; 39(4): 245-51. PMID 21999138
37. Bjrnland T, Gjaerum AA, Mystad A. Osteoarthritis of the temporomandibular joint: an evaluation of the effects and complications of corticosteroid injection compared with injection with sodium hyaluronate. J Oral Rehabil. Aug 2007; 34(8): 583-9. PMID 17650168
38. Bertolami CN, Gay T, Clark GT, et al. Use of sodium hyaluronate in treating temporomandibular joint disorders: a randomized, double-blind, placebo-controlled clinical trial. J Oral Maxillofac Surg. Mar 1993; 51(3): 232-42. PMID 8445463
39. Sit RW, Reeves KD, Zhong CC, et al. Efficacy of hypertonic dextrose injection (prolotherapy) in temporomandibular joint dysfunction: a systematic review and meta-analysis. Sci Rep. Jul 19 2021; 11(1): 14638. PMID 34282199
40. Haggag MA, Al-Belasy FA, Said Ahmed WM. Dextrose prolotherapy for pain and dysfunction of the TMJ reducible disc displacement: A randomized, double-blind clinical study. J Craniomaxillofac Surg. May 2022; 50(5): 426-431. PMID 35501215

41. Vos LM, Huddleston Slater JJ, Stegenga B. Lavage therapy versus nonsurgical therapy for the treatment of arthralgia of the temporomandibular joint: a systematic review of randomized controlled trials. J Orofac Pain. 2013; 27(2): 171-9. PMID 23630689
42. Al-Moraissi EA, Wolford LM, Ellis E, et al. The hierarchy of different treatments for arthrogenous temporomandibular disorders: A network meta-analysis of randomized clinical trials. J Craniomaxillofac Surg. Jan 2020; 48(1): 9-23. PMID 31870713
43. Hu Y, Liu S, Fang F. Arthrocentesis vs conservative therapy for the management of TMJ disorders: A systematic review and meta-analysis. J Stomatol Oral Maxillofac Surg. Sep 07 2022. PMID 36084892
44. Castao-Joaqui OG, Cano-Snchez J, Campo-Trapero J, et al. TMJ arthroscopy with hyaluronic acid: A 12-month randomized clinical trial. Oral Dis. Mar 2021; 27(2): 301-311. PMID 32609918
45. Hossameldin RH, McCain JP. Outcomes of office-based temporomandibular joint arthroscopy: a 5-year retrospective study. Int J Oral Maxillofac Surg. Jan 2018; 47(1): 90-97. PMID 28751180
46. American Association for Dental, Oral, and Craniofacial Research (AADOCR). Science Policy: Temporomandibular disorders (TMD). 1996 (revised 2010, reaffirmed 2015); https://www.iadr.org/science-policy/temporomandibular-disorders-tmd. Accessed December 19, 2022.
47. American Society of Temporomandibular Joint Surgeons. Guidelines for diagnosis and management of disorders involving the temporomandibular joint and related musculoskeletal structures. Cranio. Jan 2003; 21(1): 68-76. PMID 12555934

POLICY HISTORY - THIS POLICY WAS APPROVED BY THE FEP® PHARMACY AND MEDICAL POLICY COMMITTEE ACCORDING TO THE HISTORY BELOW:

Date	Action	Description
December 2012	New policy	
September 2013	Replace policy	Policy updated with literature review. References 4,7,13, and 18 added; others renumbered or removed. Joint vibration analysis added as not medically necessary diagnostic procedure. Low-level laser therapy removed from policy because of overlap with policy 2.01.56, low- level laser policy. In the statement on medically necessary treatments, intra-oral reversible prosthetic devices changed to intraoral removable prosthetic devices for clarification only.
September 2014	Replace policy	Policy updated with literature review; references 12 and 15-16 added. Policy statements unchanged
September 2015	Replace policy	Policy updated with literature review through June 1, 2015; no references added. Bullet point on biofeedback removed from investigational statement on nonsurgical treatments
June 2016	Replace policy	Policy updated with literature review through December 18, 2015; no references added. Policy statements unchanged
June 2018	Archive policy	Policy updated with literature review through December 11, 2017; references 15 and 24- 25 added; reference 33 updated. "Dysfunction, changed to "Disorder, in the policy statement and title. Policy statements otherwise unchanged except use of joint vibration analysis for the purpose of diagnosis of TMJD corrected from "not medically necessary, to "investigational,
June 2019	Reactivate policy	Policy reactivated to support prior approval requirement of FEP Blue Focus. Policy updated with literature review through December 6, 2018; reference 36 added. Policy statements unchanged.
June 2020	Replace policy	Policy updated with literature review through December 9, 2019; references added. Policy statements unchanged.
June 2021	Replace policy	Policy updated with literature review through January 8, 2021; references added. Investigational policy statement modified to include platelet concentrates.
June 2022	Replace policy	Policy updated with literature review through December 20, 2021; references added. Investigational policy statement modified to include dextrose prolotherapy.
June 2023	Replace policy	Policy updated with literature review through December 19, 2022; references added. Minor editorial refinements to policy statements; intent unchanged.