Subject: Transcranial Magnetic Stimulation (TMS) for Treatment Resistant Depression for Commercial

Medical Policy #: 20.16 **Original Effective Date:** 07/31/2019

Status: Reviewed **Last Review Date:** 12/13/2023

Disclaimer

Refer to the member's specific benefit plan and Schedule of Benefits to determine coverage. This may not be a benefit on all plans or the plan may have broader or more limited benefits than those listed in this Medical Policy.

Description

Transcranial magnetic stimulation (TMS) is a noninvasive treatment that uses pulsed magnetic fields to induce an electric current in a localized region of the cerebral cortex. An electromagnetic coil placed on the scalp induces focal current in the brain that temporarily modulates cerebral cortical function. Capacitor discharge provides electrical current in alternating on/off pulses. Stimulation parameters may be adjusted to alter the excitability of the targeted structures in specific cortical regions. Repetitive TMS (rTMS) has been investigated as treatment for pharmacoresistant depression.

TMS parameters include cranial location, stimulation frequency, duration, and intensity. TMS is delivered in outpatient settings without anesthesia or analgesia. Typically for the treatment of depression, the coil is located over the left prefrontal cortex. The rTMS is performed daily Monday through Friday (weekdays) for 30 treatments preferably over 6 weeks, but not to exceed 7 weeks duration. There is no need for anesthesia or analgesia and there are no restrictions about activities before or after treatment (e.g. driving, working, operating heavy machinery).

When used as an antidepressant therapy, TMS produces a clinical benefit without the systemic side effects attendant with standard oral medications. TMS does not have adverse effects on cognition. Unlike electroconvulsive therapy (ECT), rTMS does not induce amnesia or seizures.

Other related policy:

See MPM 20.11 Transcranial Magnetic Stimulation (TMS) for Treatment Resistant Depression **for Medicare.**

Coverage Determination

Not a covered benefit for Centennial Care.

Transcranial Magnetic Stimulation (TMS) is covered for Commercial.

Prior Authorization is required. Logon to Pres Online to submit a request: https://ds.phs.org/preslogin/index.jsp. Behavioral Health Prior Authorization and Benefit Certification requests is required for Commercial. Call: 1-888-923-5757 or 505-923-5757 choose option 5.

Policy includes the following:

I - Severity of Need
II - Intensity and Quality of Service
III - Criteria for Continued Treatment:

PHP follows **Magellan Healthcare**, Transcranial Magnetic Stimulation Treatment-Commercial. TMS is considered reasonable and necessary for patients diagnosed with severe Major Depression (single or recurrent episode) as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

I. Severity of Need

Criteria (**A, B, C, D, E, F, G, H, I, J** and **K)** must be met to satisfy the criteria for severity of need:

A. The clinical evaluation indicates that the adult patient has a confirmed DSM·5 diagnosis of major depressive disorder, severe (single or recurrent episode) that, by accepted medical standards, can be expected to improve significantly through medically necessary and appropriate TMS treatment. Severity must be documented with the use of a standardized instrument listed in section (I. B). The treating psychiatrist must demonstrate that the patient's symptoms are treatment resistant to both a course of psychotherapy and a course of medication management, based on the definitions in section (D and E.1).

B. Resistance to treatment is defined by a failure to achieve a 50% reduction in depressive symptoms as demonstrated by objective measures in one of the following standardized instruments after an adequate trial of both evidence-based

psychotherapy as outlined in (I.D) and antidepressant therapy as outlined in section (E.1 & E.2):

a. The Personal Health Questionnaire Depression Scale (PHQ-9)
b. The Beck Depression Inventory (BDI)
c. The Montgomery-Asberg Depression Rating Scale (MADRS)
d. Geriatric Depression Scale (GDS)
e. The Quick Inventory of Depressive Symptomatology (QIDS)
f. The Hamilton Rating Scale for Depression (HAM·D)
g. The Inventory for Depressive Symptomatology systems Review (IDS-SR)

C. TMS will be used only for adults 18 years or older who are not pregnant.

D. An evidence-based psychotherapy for depression was attempted of an adequate frequency and duration without significant improvement in depressive symptoms as documented by standardized rating scales that reliably measure depressive symptoms. See section (I.B) for a listing of generally recognized standardized instruments for depression evaluation. At least one trial of evidence-based psychotherapy comprised of at least 15 sessions over a 4-8-week period is considered an adequate trial of psychotherapy.

E. One or more of the following:
1. The patient has demonstrated medication treatment resistance during the current depressive episode as evidenced by lack of a clinically significant response to at least four (4) failed trials of psychopharmacologic agents in the current depressive episode, at or above the minimum effective dose as reported in the Physicians' Desk Reference, current edition, for a period of at least 4 to 8 weeks;

   or
2. The patient has demonstrated an inability to tolerate psychopharmacologic agents as evidenced by two (2) trials of psychopharmacologic agents from at least two different agent classes, with distinct side effects;

   or
3. The patient has a history of good response to TMS during an earlier episode of the treatment-resistant major depressive disorder as evidenced by a greater than 50% improvement in a standard rating scale for depressive symptoms (e.g. PHQ-9, BDI, MADRS, GDS, QIDS, HAM-D, IDS-SR);
4. A history of response to ECT in a previous or current episode or an inability to tolerate ECT.

F. The patient is medically stable and the patient's status and/or comorbid medical conditions are not contraindications for TMS.

G. **All** the following:
1. There is a clinical contraindication for electroconvulsive therapy (ECT) or the patient refuses ECT;

   and
2. The patient has access to a suitable environment and professional and/or social supports after recovery from the procedure;

   and
3. The patient can be reasonably expected to comply with post-procedure recommendations.

H. TMS is not considered reasonable and necessary for any of the following (all must be absent):
1. Presence of psychotic symptoms in the current depressive episode.
2. Acute or chronic psychotic disorder such as schizophrenia, schizophreniform disorder, or schizoaffective disorder.
3. Neurologic conditions that include epilepsy, cerebrovascular disease, dementia, increased intracranial pressure, having a history of repetitive or severe head trauma or with primary or secondary tumors in the central nervous system.
4. Persons with conductive, ferromagnetic or other magnetic-sensitive materials implanted in their head which are non-removable and within 30cm of the TMS magnetic coil. Examples include cochlear implants, implanted electrodes/stimulators, aneurysm clips, coils or stents, and bullet fragments.
5. Presence of vagus nerve stimulator leads in the carotid sheath.

I. TMS will not be used for maintenance therapy, continuous therapy, rescue therapy or extended active therapy. These therapies are not currently supported by evidence from clinical trials and therefore is considered not reasonable and necessary.

J. Retreatment that occurs in close temporal proximity to a previous episode of treatment may be considered maintenance or continuous therapy and is not reasonable and necessary. The time between treatment episodes should allow for assessment clinically and by one of the aforementioned rating scales to clearly document that the patient responded and then relapsed, typically ninety (90) days since the last TMS session.

K. The patient and/or a legal guardian is/are able to understand the purpose, risks and benefits of TMS, and provide(s) consent.

II. Intensity and Quality of Service

Criteria (**A, B, C, D, E, F, G, H** and **I**) must be met to satisfy the criteria for intensity and quality of service:

A. There is documentation of a clinical evaluation performed by a physician who is appropriately trained to provide TMS, to include:
   a. A psychiatric history, including past response to antidepressant medication(s) and/or TMS and/or ECT, mental status and current functioning;
      and
   b. A medical history and examination when clinically indicated.

B. The order for treatment or retreatment is written by a physician (MD or DO) who has examined the patient and reviewed the medical record. The treatment shall be given under direct supervision of this physician, i.e., he or she must be in the area and immediately available. The physician will assess the patient at each treatment, and be present in the area, but not necessarily provide the treatment. The attending physician must monitor and document the patient's clinical progress during treatment. The attending physician must use evidence-based, validated depression monitoring scales such as the Geriatric Depression Scale (GDS), the Personal Health Questionnaire Depression Scale (PHQ-9), the Beck Depression Scale (BDI), the Hamilton Rating Scale for Depression (HAM-D), the Montgomery Asberg Depression Rating Scale (MADRS), the Quick Inventory of Depressive Symptomatology (QIDS) , the Inventory for Depressive Symptomatology Systems Review (IDS-SR), to monitor treatment response and the achievement of remission of symptoms.

C. The physician utilizing this technique must have completed a psychiatric residency program accredited by the Accreditation Council for Graduate Medical Education (ACGME) or the American Osteopathic Association (AOA) or the Royal College of Physicians and Surgeons of Canada (RCPSC); Board certification in psychiatry by the American Board of Psychiatry and Neurology is preferred. The physician must have completed a university-based course in TMS, or the course approved by the device manufacturer.

D. An attendant/individual trained in basic life support, the management of complications such as seizures, in addition to training in the application of the TMS apparatus, must be present at all times with the patient while the treatment is applied.

E. The attending physician provides personal supervision for the initial motor threshold determinations, treatment parameter definition and TMS treatment course planning and documentation supportive of the level of supervision. The patient has either the attending physician or the attendant physically present at all times during the TMS session.

F. During subsequent delivery and management of TMS sessions, the attending physician must meet face to face with the patient when there is a change in the patient's mental status and/or other significant change in clinical status.

G. Access to emergency equipment, including cardiac defibrillator and suction, is readily available while the patient is receiving TMS.

H. The treatment must be provided by use of a device approved or cleared by the FDA for the purpose of supplying transcranial magnetic stimulation for this indication.

I. When clinically indicated, the patient is released in the care of a responsible adult who can monitor and provide supportive care as needed.

III. Criteria for Continued Treatment:

All of the following (**A, B, C, D, E, F**, and **G**) must be met to satisfy the criteria for continued treatment:

A. Despite reasonable therapeutic efforts, clinical findings indicate at least one or more of the following:
   a. The persistence of problems that meet the TMS treatment Severity of Need criteria as outlined in (**I.)** above;
      or
   b. The emergence of additional problems that meet the TMS treatment Severity of Need criteria as outlined in (**I.)** above;
      or
   c. Attempts to discharge to a less-intensive treatment will or can be reasonably expected, based on patient history and/or clinical findings, to result in an exacerbation of the patient's condition and/or status. Subjective opinions without objective clinical information or evidence are NOT sufficient to meet severity of need based on justifying the expectation that there would be a decompensation.

B. TMS is reasonable and necessary for up to thirty (30) visits over a seven (7) week period, followed by six (6) tapered treatments. The number of treatments will be evaluated against patient response and the published evidence-based literature. If medically necessary and appropriate for a member additional sessions will be authorized.

C. Retreatment may be considered for patients who met the guidelines for initial treatment and subsequently developed relapse of depressive symptoms if the patient responded to prior treatments as evidenced by a greater than 50 percent improvement in standard rating scale measurements for depressive symptoms or if there was a relapse after remission (e.g., GDS, PHQ-9, BDI, HAM-D, MADRS, QIDS, IDS-SR or CHI). Retreatment that occurs in close temporal proximity to a previous episode of treatment may be considered maintenance or continuous therapy and is not reasonable and necessary. The time between treatment episodes should allow for assessment clinically and by one of the aforementioned rating scales to clearly document that the patient responded and then relapsed, typically ninety (90) days

since last TMS session.

D. If the patient meets the relapse criteria, up to thirty (30) visits for the acute phase treatment followed by an additional six (6) visits for tapering is considered reasonable and necessary. The number of treatments will be evaluated against patient response and the published evidence-based literature. If medically necessary and appropriate for a member additional session will be authorized.

E. The current or revised treatment plan can be reasonably expected to bring about significant improvement in the problems meeting criterion IIIA, and this is documented in progress notes, written and signed by the provider.

F. All applicable elements in Admission-Intensity and Quality of Service Criteria are applied as related to assessment and treatment, if clinically relevant and appropriate.

Exclusion:
TMS is considered investigational as a treatment of all other psychiatric and neurologic disorders, including but not limited to any of the following: bipolar disorder; migraine headaches, obsessive-compulsive disorder; schizophrenia.

Please see addition exclusion by visiting Magellan Healthcare, Transcranial Magnetic Stimulation Treatment-Commercial.

Coding

The coding listed in this medical policy is for reference only. Covered and non-covered codes are within this list.

CPT Codes	Description
90867	Therapeutic repetitive transcranial magnetic stimulation (TMS); treatment, **initial**, including cortical mapping, motor threshold determination, delivery and management. (Report only once for the initial planning)
90868	Therapeutic repetitive transcranial magnetic stimulation (TMS); **subsequent** delivery and management, per session.
90869	Therapeutic repetitive transcranial magnetic stimulation treatment; subsequent motor threshold re-determination with delivery and management

ICD-10 Codes	Description
F32.2	Major depressive disorder, single episode, severe without psychotic features
F33.2	Major depressive d/o, recurrent severe without psychotic features

Reviewed by / Approval Signatures

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Date Approved: 12/13/2023
Reviewed by:
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2. Anjali Yeolekar-Dasari, Medicaid Behavioral Health Medical Directory

References

1. Magellan Healthcare, Transcranial Magnetic Stimulation Treatment-Commercial. [Cited 10-25-2023]
2. MCG, 27th Edition Health Behavior Health Care, Transcranial Magnetic Stimulation, ORG: B-801-T (BHG), Last Update: 9/21/2023. [Cited 10-23-2023]
3. Hayes Technology Brief, Low-Frequency Right Repetitive Transcranial Magnetic Stimulation for Treatment-Resistant Major Depressive Disorder, ARCHIVED Oct 28, 2019 Annual Review: Sep 24, 2018. [Cited 10-25-2023]
4. Hayes Technology Brief, High-Frequency Left Repetitive Transcranial Magnetic Stimulation for Treatment-Resistant Major Depressive Disorder, Annual Review: Feb 22-2021, ARCHIVED Dec 3, 2021. [Cited 10/25/2023]
5. Hayes, Health Technology Assessment, Transcranial Magnetic Stimulation For The Treatment Of Obsessive-Compulsive Disorder, Annual review Feb 15, 2022. [Cited 10/25/2023]

Publication History

07-31-2019	Two TMS policies created so there are two different criteria sets, one for Medicare and another for Commercial. This policy content is using Magellan criteria for Commercial members. For Medicare see MPM 20.11. No coverage for Centennial currently.
11-18-2020	Annual review. Reviewed on 10-23-20. No change. Policy continues to be managed by Magellan, for criteria and PA, for Commercial members. Continue non-coverage for Centennial Care.
11-17-2021	Annual review. Reviewed by PHP Medical Policy Committee on 11/05/2021. Continue to follow Magellan for commercial and Medicaid. Continue the PA requirements for CPT codes 90867, 90868, 90869 and 90870 on the Behavioral Health Prior Auth grid.
11-16-22	Annual review. Reviewed by PHP Medical Policy Committee on 10/28/2022. Continue to follow Magellan for commercial and Medicaid. Continue the PA requirements for CPT codes 90867, 90868, 90869 and 90870 on the Behavioral Health Prior Auth grid. As of this review Obsessive Compulsive Disorder is still considered non-covered. TMS for Medicaid is not a covered benefit and will be configured as non-covered.
12-13-2023	Annual review. Reviewed by PHP Medical Policy Committee on 10/25/2023. Continue to follow Magellan for commercial and Medicaid. Continue the PA requirements for CPT codes 90867, 90868, 90869 and 90870. Configuration correction across all platforms (HRP & CES) for CPT codes 90867, 90868 and 90869 for (1) Medicaid, reconfig as *non-covered* rather than *investigational*; (2) Commercial and Medicare, reconfig to follow LCD (L34998) and LCA (A57072) to map ICD-10 (F32.2 and F33.2) to 90867, 90868 and 90869 effective 10/26/2023. Continue CY 2022 config as non-covered for codes (90867 and 90868) for Medicaid.

This Medical Policy is intended to represent clinical guidelines describing medical appropriateness and is developed to assist Presbyterian Health Plan and Presbyterian Insurance Company, Inc. (Presbyterian) Health Services staff and Presbyterian medical directors in determination of coverage. The Medical Policy is not a treatment guide and should not be used as such.

For those instances where a member does not meet the criteria described in these guidelines, additional information supporting medical necessity is welcome and may be utilized by the medical director in reviewing the case. Please note that all Presbyterian Medical Policies are available online at: ***Click here for Medical Policies***

Web links:

At any time during your visit to this policy and find the source material web links has been updated, retired or superseded, PHP is not responsible for the continued viability of websites listed in this policy.

When PHP follows a particular guideline such as LCDs, NCDs, MCG, NCCN etc., for the purposes of determining coverage; it is expected providers maintain or have access to appropriate documentation when requested to support coverage. See the References section to view the source materials used to develop this resource document.