Medical Policy

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

Medical Policy #: 20.11 **Original Effective Date:** 02/22/2012

Status: Retired **Last Review Date:** 11-16-2022

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 20.16 Transcranial Magnetic Stimulation (TMS) for Treatment Resistant Depression **for Commercial**

Coverage Determination

Not a covered benefit for Centennial Care.

Transcranial Magnetic Stimulation (TMS) is covered for Medicare.

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 Medicare. Call: 1-888-923-5757 or 505-923-5757 choose option 5.

For Medicare, PHP follows Repetitive LCD L34998.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. Initial Treatment:

Left Prefrontal rTMS of the brain for use in an adult who meets **all four** of the following criteria:

1. Confirmed diagnosis of severe major depressive disorder (MDD) single or recurrent episode

   AND

2. Meet **one or more** of the following:
   a. Resistance to treatment **(***see definition section below) with psychopharmacologic agents as demonstrated by a lack of a significant response to at least a single trial of psychopharmacologic agents in the current depressive episode;

      or

   b. Unable to tolerate psychopharmacologic agents (*see definition section below) as evidenced by two trials of psychopharmacologic agents from two different agent classes;

      or

   c. Past response to rTMS in a previous depressive episode (see "Retreatment(s)" below for previous response criteria);

      or

d. Past response to ECT in a previous or current episode **or** an inability to tolerate ECT, **or** is a candidate for, but has failed ECT **and** rTMS is considered a less invasive treatment preference.

AND

3. A trial of an evidence-based psychotherapy known to be effective in the treatment of MDD of an adequate frequency and duration with no improvement in depressive symptoms as documented by standardized rating scales that reliably measure depressive symptoms;

   AND

4. The order for treatment (or retreatment) must be written by a psychiatrist (MD or DO), who has examined the patient and reviewed the record. The treatment will be under direct supervision of a qualified physician* (physician present in the area and immediately available, but does not necessarily personally provide the treatment).

Note: Please review the Provider Qualification section of the LCD- L34998 for requirements on qualified physicians and personnel as well as the place of service.

TMS treatment up to 30 sessions over a 6-7 week period followed by 6 treatment sessions for tapering over a 3-week period for those in remission. Further treatment of an episode of depression beyond this, for patients who have not achieved at least a 50% reduction in symptoms will be considered not medically reasonable and necessary.

II. Retreatment(s):

Retreatment(s) may be considered necessary medically for patients who meet **all** of the following:

1. Guidelines must be met for initial treatment and subsequently developed relapse of depressive symptoms as evidenced by a 50% worsening in the prior best response using the same rating scale (e.g., GDS, PHQ-9, BDI, HAM-D, MADRS, QIDS or IDS-SR scores).
2. Patients must have responded to prior treatments as evidenced by a greater than 50% improvement in standard rating scale measurements for depressive symptoms (e.g., GDS, PHQ-9, BDI, HAM-D, MADRS, QIDS or IDS-SR scores).

The number of retreatments is not limited at this time; however, it is subject to retrospective review due to frequent reporting of service.

Definition

***Resistance to treatment** is defined by a failure to achieve a 50% reduction in depressive symptoms, in accordance with objective measures such as Geriatric Depression Scale (GDS), the Personal Health Questionnaire Depression Scale (PHQ-9), the Beck Depression Inventory (BDI), the Montgomery Asberg Depression Rating Scale (MADRS), the Quick Inventory of Depressive Symptomatology (QIDS), the Inventory for Depressive Symptomatology Systems Review (IDS-SR) or Hamilton Rating Scale for Depression (HAM-D), from a pharmacologic trial where the medication is administered at both an adequate dose and for an adequate period of time consistent with accepted standards of care. A dose will be considered adequate when the medication is administered consistent with the FDA label. Where starting dosage is lower than maximum recommended dosage, the dose of any medication will be considered adequate when an initial response failure is followed by titrating the dosage upwards towards the maximum recommended dosage. Where such titration does not occur, the record must document the rationale for the decision not to increase the dose. Duration of therapy will be considered adequate, when a particular medication is administered for a length of time consistent with expectations for expected response times for that medication or class of medications as defined in the medical literature supporting the efficacy of that medication or medication class and by the standard of care.

**Psychopharmacologic agent side effects will be considered intolerable, when those side effects are of a nature where they are not expected to diminish or resolve with continued administration of the drug.

Limitation

1. The treatment must be provided by use of a device approved by the FDA for the purpose of supplying Transcranial Magnetic Stimulation.
2. TMS therapy not ordered by a psychiatrist and furnished under direct supervision of a qualified physician (MD or DO) will be considered not medically reasonable and necessary.
3. The benefits of TMS use must be carefully considered against the risk of potential side effects in patients. The use of TMS in patients with any of the following is considered not medically reasonable:
   a. Seizure disorder **or** any history of seizures (except those induced by ECT or isolated febrile seizures in infancy without subsequent treatment or recurrence) **or** any condition or treatment that may lower the seizure threshold;
      or
   b. Presence of acute or chronic psychotic symptoms or disorders (such as schizophrenia, schizophreniform or schizoaffective disorder) in the current depressive episode;
      or
   c. Neurological conditions that include epilepsy, cerebrovascular disease, dementia, increased intracranial pressure, history of repetitive or severe head trauma, or primary or secondary tumors in the central nervous system;
      or
   d. Presence of an implanted magnetic-sensitive medical device located less than or equal to 30 cm from the TMS magnetic coil or other implanted metal items including, but not limited to a cochlear implant, implanted cardiac

defibrillator (ICD), pacemaker, Vagus nerve stimulator (VNS), or metal aneurysm clips or coils, staples or stents (Dental amalgam fillings are not affected by the magnetic field and are acceptable for use with TMS).

4. All other uses of TMS, including "maintenance therapy", “continuous therapy”, “rescue therapy”, and “extended active therapy” are considered investigational and experimental as they are not supported by controlled clinical trials and they are considered not reasonable and necessary. This non-coverage is extended to any other terminology that may be given to a treatment episode that does not meet the defined requirements noted and defined as initial treatment or retreatment.
5. Retreatment(s) that occur in close temporal proximity to a previous episode of treatment may be considered maintenance therapy or continuous therapy and not reasonable and necessary. It is expected that the time between treatment episodes should allow for assessment, both clinically and by one or more standard rating scales, **to clearly document that the patient responded and then relapsed**. The number of retreatments is not limited at this time. However, frequent reporting of services may trigger focused medical reviews.
6. Routine performance of motor threshold re-determination (CPT 90869) during rTMS therapy will be considered not reasonable and necessary and may invite medical review.
7. 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.
8. 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

Clinical Quality & Utilization Mgmt. Committee: David Yu MD
VP Chief Medical Officer: Clinton White MD
Date Approved: 11/16/2022
Reviewed by:

1. Gray Clarke MD, VP Chief Medical Officer, PHP Centennial Care, Behavioral Health, reviewed on 10-27-2022
2. Paula Hensley, MD, Senior Medical Director for Magellan, reviewed on 10-27-2022.

References

1. LCD, Repetitive Transcranial Magnetic Stimulation (rTMS) in Adults with Treatment Resistant Major Depressive Disorder (L34998), Revision date 09/26/2019, R4. [Cited 10/27/2022]
2. LCA, Billing and Coding: Repetitive Transcranial Magnetic Stimulation (rTMS) in Adults with Treatment Resistant Major Depressive Disorder (A57072), effective date: 09-23-2019. [Cited10/27/2022]
3. Hayes Technology Assessment. Low-Frequency Right Repetitive Transcranial Magnetic Stimulation for Treatment-Resistant Major Depressive Disorder, ARCHIVED Oct 29, 2019, Annual Review: Sep 24, 2018. [Cited 10/27/2022]
4. Hayes, Health Technology Assessment, High-Frequency Left Repetitive Transcranial Magnetic Stimulation for Treatment-Resistant Major Depressive Disorder, Annual Review: Feb 22, 2021, Archived Dec 3, 2021. [Cited

10/27/2022]
5. Hayes, Health Technology Assessment, Transcranial Magnetic Stimulation For The Treatment Of Obsessive-Compulsive Disorder, Annual review Feb 15, 2022. [Cited 10/28/2022]

Publication History

02-22-2012	Original effective date.
01-27-2016	Re-review of topic. Guests included Dr. Gray, Henschen from Magellan and Dr. Rueben Sutter (Private Practice). Meeting was on 11/11/15
05-25-2016	Annual review. Removed ICD-9 and added ICD-10 codes Updated references
03-22-2017:	Re-review at the Technology Assessment Committee on 2-25-17. No change in reviewed information. Coverage continues to remain only for Medicare Advantage members. (This Publication history was updated on 11/18/2020)
07-31-2019	Annual review. Two TMS policies created so there are two different criteria sets, one for Medicare and another for Commercial. This policy content is using Novitas LCD L34998 criteria for Medicare members. For Commercial, see MPM 20.12. No coverage for Centennial currently.
11-18-2020	Annual review. Reviewed on 10-23-20. No change. Policy continues to be managed by Magellan. Medicare members will follow CMS, LCD L34998 (Repetitive Transcranial Magnetic Stimulation (rTMS) in Adults with Treatment Resistant Major Depressive Disorder). Continue non-coverage for Centennial Care. Updated the Publication history for 03-22-17, which was inadvertently left out.
11-17-2021	Annual review. Reviewed by PHP Medical Policy Committee on 11-05-2021. Continue to follow: LCD L34998 and LCA A57072. Continue the PA requirement for CPT codes 90867, 90868 and 90869.
11-16-2022	Annual review. Reviewed by PHP Medical Policy Committee on 10/28/2022. Continue to follow: LCD L34998 and LCA A57072. Continue the PA requirement for CPT codes 90867, 90868 and 90869. 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.

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.