Behavioral Health Policy
Repetitive Transcranial Magnetic Stimulation (rTMS)

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Policy Number: 297
BCBSA Reference Number: NA
NCD/LCD: Local Coverage Determination (LCD): Transcranial Magnetic Stimulation (L33398)

Related Policies
- Outpatient Psychotherapy, #423

Policy
Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Deep rTMS or rTMS may be considered MEDICALLY NECESSARY for use in an adult with a diagnosis of Major Depressive Disorder (Single Episode or Recurrent) who meets one of the following three clinical criteria:
- Has resistance to treatment as evidenced by a lack of clinically significant response to 4 complete trials of psychopharmacologic agents from at least two different agent classes. (A trial shall be considered complete if there is an adequate therapeutic dose and duration of not less than four weeks per medication.)
  And
  Has completed 12 sessions of psychotherapy in conjunction with any one or more of the pharmacologic trials noted above OR
- Has demonstrated Inability to tolerate 4 distinct psychopharmacologic agents with specific side effects which are clearly documented OR
- Has a history of a clinically significant response to rTMS in a prior major depressive episode as evidenced by a greater than 50% response in standard rating scales for depression.

Deep rTMS or rTMS is INVESTIGATIONAL and NOT MEDICALLY NECESSARY for Major Depressive Disorder (MDD) when the previous criteria are not met, and for all other psychiatric disorders or behavioral health diagnoses.

Maintenance therapy of rTMS to prevent recurrence or relapse of MDD as this usage is considered INVESTIGATIONAL.

rTMS is delivered by a Food and Drug Administration (FDA) cleared device according to specified treatment parameters, up to a total of 30 sessions in up to seven weeks) with up to 6 taper treatments to
be administered in the 3 weeks following the course of 30 treatments. The clinical impact of rTMS must be measured using the PHQ-9 with administrations of the instrument prior to beginning treatment, at least once in the course of treatment, and at the conclusion of treatment.

The following represent contraindications to the use for rTMS:
- Seizure Disorder (Except Isolated febrile seizures of infancy without recurrence)
- Psychosis, either acute or chronic (e.g. Major Depression with Psychotic Features, Schizoaffective Disorder, Schizophrenia)
- Presence of a metal or conductive device in their head or body that is contraindicated with rTMS. For example, metals that are within 30 cm of the magnetic coil and include but are not limited to cochlear implant, metal aneurysm clips, bullet fragments, pacemakers, implanted cardioverter defibrillator (ICD), Vagus Nerve Stimulator (VNS).

**Medicare HMO BlueSM and Medicare PPO BlueSM Members**

**Indications:**
Transcranial magnetic stimulation (TMS) is considered medically necessary in adults who have a confirmed diagnosis of major depressive disorder (MDD), single or recurrent episode and meet the following criteria:
- Resistance to treatment as evidenced by a lack of a clinically significant response to four (4) trials of psychopharmacologic agents in the current depressive episode;
  - Two different agent classes, at or above the minimum effective dose and duration and includes trials of at least two (2) evidence-based augmentation therapies; or
- Inability to tolerate psychopharmacologic agents as evidenced by four (4) trials of psychopharmacologic agents with distinct side effects; or
- History of response to TMS in a previous depressive episode; or
- History of response to electroconvulsive therapy (ECT) in a previous or current MDD episode, or inability to tolerate ECT, and TMS is considered a less invasive treatment option; and
- A trial of an evidence-based psychotherapy known to be effective in the treatment of MDD of an adequate frequency and duration without significant improvement in depressive symptoms as documented by standardized rating scales that reliably measure depressive symptoms; and
- The TMS treatment is delivered by a device that is FDA-approved or –cleared for the treatment of MDD in a safe and effective manner. TMS treatment should generally follow the protocol and parameters specified in the manufacturer’s user manual, with modifications only as supported by the published scientific evidence base; and
- The order for treatment (or retreatment) is written by a physician (MD or DO) who has examined the patient and reviewed the record. The physician must have experience in administering TMS therapy and the treatment must be given under direct supervision of this physician, i.e., he or she must be in the area and be immediately available.

**Limitations:**
The benefits of TMS use must be carefully considered against the risk of potential side effect in patients with any of the following:
- Seizure disorder or any history of seizure (except those induced by ECT or isolated febrile seizures in infancy or childhood without subsequent treatment or recurrence). Additional consideration should be given for individuals on medications which may lower the seizure threshold or with conditions rendering the patient more prone to seizures, such as alcoholism;
- Presence of vagus nerve stimulators leads in the carotid sheath;
- Presence of an implanted medical device located <30 cm from the TMS magnetic coil, including but not limited to pacemakers, implanted defibrillators, or vagus nerve stimulators.

TMS is not considered reasonable and necessary for any of the following:
- Presence of psychotic symptoms in the current depressive episode;
- Acute or chronic psychotic disorder such as schizophrenia, schizophreniform disorder, or schizoaffective disorder;
- 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;
- Persons with conductive, ferromagnetic or other magnetic-sensitive metals implanted in their head which are non-removable and within 30 cm of the TMS magnetic coil. Examples include cochlear implants, implanted electrodes/stimulators, aneurysm clips or coils stents, and bullet fragments. (Dental amalgam fillings are not affected by the magnetic field and are acceptable for use with TMS.)
- Maintenance therapy is not currently supported by evidence from clinical trials and therefore, is considered not reasonable and necessary.
- All other conditions not included in the above list of “Indications.”

Local Coverage Determination (LCD): Transcranial Magnetic Stimulation (L33398)
https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=33398&ContrlId=310&ver=4&ContrVer=1&CntntrSelected=310*1&Cntntr=310&name=National+Government+Services%2c+Inc.+(National+Government+Services%2c+Inc.+14212%2c+A+and+B+and+HHH+MAC%2c+J%2c+%40+K))&LCntntr=310*1&DocType=Active&bc=AgACAAQAAAAA%3d%3d&

Authorization Information
Commercial Members: Managed Care (HMO and POS)
Prior authorization is required.
- For an initial course of treatment, documentation must be submitted that demonstrates how the patient meets the medical necessity requirements. In addition, the patient’s pre-treatment status as measured with one of the accepted depression scales must be submitted.
- For a repeat course of treatment, documentation must be submitted that demonstrates how the patient meets the medical necessity requirements, as well as the patient’s pre-treatment status measured with one of the accepted depression scales AND pre- and post-treatment status for the prior course of treatment.

Commercial Members: PPO, and Indemnity
Prior authorization is NOT required.

Medicare Members: HMO BlueSM
Prior authorization is required.
- For an initial course of treatment, documentation must be submitted that demonstrates how the patient meets the medical necessity requirements. In addition, the patient’s pre-treatment status as measured with one of the accepted depression scales must be submitted.
- For a repeat course of treatment, documentation must be submitted that demonstrates how the patient meets the medical necessity requirements, as well as the patient’s pre-treatment status measured with one of the accepted depression scales AND pre- and post-treatment status for the prior course of treatment.

Medicare Members: PPO BlueSM
Prior authorization is NOT required.

CPT Codes / HCPCS Codes / ICD Codes
Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.
Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

<table>
<thead>
<tr>
<th>CPT codes:</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>90867</td>
<td>Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; initial, including cortical mapping, motor threshold determination, delivery and management</td>
</tr>
<tr>
<td>90868</td>
<td>Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; subsequent delivery and management, per session</td>
</tr>
<tr>
<td>90869</td>
<td>Therapeutic repetitive transcranial magnetic stimulation (TMS) treatment; subsequent motor threshold re-determination with delivery and management</td>
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</tbody>
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The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT codes above if medical necessity criteria are met:

ICD-9-CM Diagnosis Codes

<table>
<thead>
<tr>
<th>ICD-9-CM diagnosis codes:</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>296.23</td>
<td>Major depressive affective disorder single episode severe degree without psychotic features</td>
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<tr>
<td>296.33</td>
<td>Major depressive affective disorder recurrent episode severe degree without psychotic features</td>
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ICD-10 Diagnosis Codes

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<thead>
<tr>
<th>ICD-10-CM Diagnosis codes:</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>F32.2</td>
<td>Major depressive disorder, single episode, severe without psychotic features</td>
</tr>
<tr>
<td>F33.2</td>
<td>Major depressive disorder, recurrent severe without psychotic features</td>
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Description
Repetitive Transcranial Magnetic Stimulation (rTMS) is a procedure that involves placing a magnetic coil over the exterior of the head, most commonly in the left prefrontal cortex area. Magnetic current is passed through the coil which induces electrical activity in the brain. A course of treatment typically takes 4 to 7 weeks. rTMS is an outpatient procedure, does not cause convulsions and does not require anesthesia.

Summary
The literature on rTMS for treatment-resistant depression is the most developed and includes a number of double-blind randomized sham-controlled short-term trials. BCBSMA will cover rTMS treatment that meets the above clinical criteria with an FDA cleared device and with a psychiatrist trained in its use. There is no longitudinal evidence regarding the effect of rTMS.
## Policy History

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>5/2015</td>
<td>New medical necessary indications described (coverage for deep rTMS added). Effective 5/1/2015.</td>
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<tr>
<td>12/2014</td>
<td>New investigational indications described (non-coverage for deep rTMS added). Effective 12/1/2014.</td>
</tr>
<tr>
<td>5/2014</td>
<td>Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.</td>
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## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

- Medical Policy Terms of Use
- Managed Care Guidelines
- Indemnity/PPO Guidelines
- Clinical Exception Process
- Medical Technology Assessment Guidelines

## References


32. Non Pharmacologic Interventions for Treatment Resistant Depression in Adults, Comparative Effectiveness Review Number 33, Agency for Health Care Research and Quality, September, 2011.
Endnotes

1 Based on expert opinion