MEDICAL POLICY STATEMENT
Marketplace

Policy Name & Number	Date Effective
Transcranial Magnetic Stimulation for Treatment of Depression-MP-MM-1339	11/01/2023-09/30/2024
Policy Type	
MEDICAL	

Medical Policy Statement prepared by CareSource and its affiliates are derived from literature based on and supported by clinical guidelines, nationally recognized utilization and technology assessment guidelines, other medical management industry standards, and published MCO clinical policy guidelines. Medically necessary services include, but are not limited to, those health care services or supplies that are proper and necessary for the diagnosis or treatment of disease, illness, or injury and without which the patient can be expected to suffer prolonged, increased or new morbidity, impairment of function, dysfunction of a body organ or part, or significant pain and discomfort. These services meet the standards of good medical practice in the local area, are the lowest cost alternative, and are not provided mainly for the convenience of the member or provider. Medically necessary services also include those services defined in any Evidence of Coverage documents, Medical Policy Statements, Provider Manuals, Member Handbooks, and/or other policies and procedures.

Medical Policy Statements prepared by CareSource and its affiliates do not ensure an authorization or payment of services. Please refer to the plan contract (often referred to as the Evidence of Coverage) for the service(s) referenced in the Medical Policy Statement. If there is a conflict between the Medical Policy Statement and the plan contract (i.e., Evidence of Coverage), then the plan contract (i.e., Evidence of Coverage) will be the controlling document used to make the determination. According to the rules of Mental Health Parity Addiction Equity Act (MHPAEA), coverage for the diagnosis and treatment of a behavioral health disorder will not be subject to any limitations that are less favorable than the limitations that apply to medical conditions as covered under this policy.

This policy applies to the following Marketplace(s):				
☒ **Georgia**	☒ **Indiana**	☒ **Kentucky**	☒ **Ohio**	☒ **West Virginia**

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A. Subject

Transcranial Magnetic Stimulation for Treatment of Depression

B. Background

Transcranial magnetic stimulation (TMS) was originally introduced in 1985 as a noninvasive treatment modality for treatment-resistant Major Depressive Disorder (MDD) by sending brief, repetitive pulses of magnetic energy to the scalp via a large electromagnetic coil, generating a low level of electrical stimulation. These magnetic fields pass through the skull and induce electrical currents that depolarize neurons in a focal area of the surface cortex. The magnetic field generated by this type of stimulation is very small and cannot be felt by the patient but is strong enough to flow into the brain without inducing seizures or creating a need for anesthesia.

TMS is generally an outpatient procedure with conscious patients and sessions that vary between 30 to 40 minutes. It can be delivered as a single pulse or as a series of pulses. Despite variability in the number of pulses delivered per session and the number of sessions per patient, research indicates that typical courses of TMS consist of treatment up to 5 days a week for up to 6 weeks. A tapering schedule is used to end treatment.

C. Definitions

- **Acute (Index) Course of Treatment** - The initial series of treatment given to relieve acute symptoms of the disorder.
- **Adequate Trial of an Antidepressant Drug** - Taking a drug for at least 4 weeks at or near the maximum dose for the specific antidepressant as approved by the Food and Drug Administration (FDA), or documentation exists that higher doses were not tolerated when the dose is less than the FDA-approved maximum.
- **Continuation TMS** - A course of treatment beginning after the acute/index course lasting up to 6 months and designed to prevent worsening of symptoms and continue treatment for a depressive episode that has not yet remitted.
- **Depression Rating Scale** - Scales standardized for national use that reliably assess the range of symptoms, both type and magnitude, most commonly observed in adults with MDD. Listed below are examples of commonly used scales:
  - Beck Depression Inventory (BDI)
  - Geriatric Depression Scale (GDS)
  - Hamilton Depression Rating Scale (HAM-D)
  - Patient Health Questionnaire-9 (PHQ-9)
  - Quick Inventory of Depressive Symptomatology (QIDS)
- **Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR)** - The standard language by which clinicians, researchers, and public health officials in the United States communicate about mental disorders and subsequent criteria and classification.
- **Maintenance TMS** - Regularly scheduled TMS sessions on a weekly, biweekly, or monthly basis used to prevent relapse of depressive symptoms.
  - **Major Depressive Disorder (MDD)** - Discrete episodes of at least 2 weeks duration involving changes in affect, cognition, and neurovegetative functions

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and inter-episode remission evidenced by a combination of 5 or more symptoms that must include either depressed mood or anhedonia representing a change from previous functioning.

- **Medication Side Effects** - Unexpected effects that cause significant distress, inhibit daily function, have the potential to worsen health, or are life threatening.
- **Remission** - The absence of significant signs or symptoms of a major depressive episode during the previous 2 months.

D. Policy

I. A review of medical necessity is required for initial and continuation courses of TMS.

II. TMS is considered medically necessary when **all** the following criteria are met:

A. 18 years of age or older.

B. Confirmed diagnosis of MDD, single or recurrent, with a current severe episode as evidenced by a recent score on a standardized depression rating scale and at least **one** of the following:

1. Resistance to treatment, as evidenced by a lack of a clinically significant response during a current or previous depressive episode **and** adequate trials of 4 antidepressant agents, including at least 2 different agent classes at or near the maximum effective dose and duration for each class approved by the FDA.
2. Inability to tolerate a therapeutic dose of medications, as evidenced by documentation via medical records of 4 trials of antidepressant agents with distinct side effects.
3. History of response to TMS in a previous depressive episode, as evidenced by a greater than 50% improvement on a standardized depression rating scale.
4. Currently receiving, or is a candidate for and has declined, electroconvulsive therapy (ECT) with TMS considered a less invasive treatment option.

C. Completion of a trial of evidence-based psychotherapy for MDD with appropriate frequency and duration without significant improvement for 12 weeks, alone or combined with psychopharmacologic agents.

D. None of the following conditions or contraindications are present:

1. epilepsy or history of seizure or presence of other neurologic disease that may lower seizure threshold (e.g., cerebrovascular accident, severe head trauma, increased intracranial pressure)
2. acute or chronic psychotic symptoms or disorders (e.g., schizophrenia, schizophreniform, schizoaffective disorder)
3. cochlear implant, deep brain stimulator, or vagus nerve stimulator
4. current use of substances that may significantly lower seizure threshold, such as alcohol or stimulants
5. metallic hardware or implanted magnetic-sensitive medical device (e.g., implanted cardioverter-defibrillator, pacemaker, metal aneurysm clips or coils) at a distance within the electromagnetic field of the discharging coil (e.g., less than or equal to 30 cm to the discharging coil).

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6. unstable medical disorder

III. Additional treatment courses of TMS are considered medically necessary when **all** the following have been met:
   A. 30 days since last session of TMS
   B. a history of response to TMS in a previous depressive episode, as evidenced by a greater than 50% improvement on a standardized depression rating scale
   C. medical necessity is met per Section II above

IV. Maintenance treatment with TMS is not considered medically necessary. There is not sufficient evidence to support maintenance treatment. Additional research is needed to assess net benefit versus harm for patients.

V. Additional criteria:
   A. Transcranial magnetic stimulation must be administered by an FDA-cleared device for the treatment of MDD in a safe and effective manner according to the manufacturer's user manual and specified stimulation parameters.
   B. A treatment course should not exceed 5 days a week for 6 weeks (total of 30 sessions), followed by a 3-week taper of 3 treatments in 1 week, 2 treatments the next week, and 1 treatment in the last week.
   C. TMS can be ordered by and performed under direction of a neurologist, licensed psychiatrist, or psychiatric nurse practitioner who has examined the member, reviewed the record when it is within scope of practice, and has experience in administering TMS therapy within scope of practice.

E. State-Specific Information
NA

F. Conditions of Coverage
NA

G. Related Policies/Rules
Medical Necessity Determinations

H. Review/Revision History

	DATE	ACTION
Date Issued	07/12/2018	
Date Revised	08/31/2022	Annual review. Combined individual policies (GA 0861, IN 0237, KY 0239, OH 0235, WV 0240).
	10/25/2022	Added IA MP. Evote received 12/8/22.
	01/19/2023	Changed title for clarity. Removed IA.
	08/02/2023	Annual review. Updated references. Approved at Committee.
Date Effective	11/01/2023	
Date Archived	09/30/2024	This Policy is no longer active and has been archived. Please note that there could be other Policies that may have some of the same rules incorporated and CareSource reserves the right to follow CMS/State/NCCI guidelines without a formal documented Policy.

The MEDICAL Policy Statement detailed above has received due consideration as defined in the MEDICAL Policy Statement Policy and is approved.

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I. References

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revised*. American Psychiatric Association; 2022.
2. Holtzheimer PE. Unipolar major depression: administering transcranial magnetic stimulation (TMS). UpToDate. Updated February 02, 2023. Accessed July 11, 2023. www.uptodate.com
3. Holtzheimer PE. Unipolar depression in adults: indications, efficacy, and safety of transcranial magnetic stimulation (TMS). UpToDate. Updated February 15, 2023. Accessed July 11, 2023. www.uptodate.com
4. Jarrett R, Vittengl J. Unipolar depression in adults: continuation and maintenance treatment. UpToDate. Updated September 15, 2022. Accessed July 11, 2023. www.uptodate.com
5. Transcranial Magnetic Stimulation (B-801-T). 27th edition MCG. Updated February 1, 2023. Accessed July 11, 2023. www.careweb.careguidelines.com
6. National Institute of Mental Health. *Brain Stimulation Therapies*. National Institutes of Health; 2023. NIH publication 0925-0648. Accessed July 11, 2023. www.nimh.nih.gov
7. Perera T, George MS, Grammer G, et al. The Clinical TMS Society consensus review and treatment recommendations for TMS therapy for major depressive disorder. *Brain Stimul*. 2016;9(3):336-346. doi:10.1016/j.brs.2016.03.010
8. Thase M, Connolly R. Unipolar depression in adults: choosing treatment for resistant depression. UpToDate. Updated January 12, 2023. Accessed July 11, 2023. www.uptodate.com

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