Clinical Policy: Transcranial Magnetic Stimulation for Treatment Resistant Major Depression

Reference Number: IA.CP.BH.200 Coding Implications
Date of Last Revision: 06/26 Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
This clinical policy describes the medical necessity criteria for transcranial magnetic stimulation for treatment resistant major depression within Iowa Total Care health plan.

Transcranial magnetic stimulation (TMS) is a noninvasive brain stimulation technique that uses magnetic fields to activate nerve cells in the brain. Its goal is to target regions involved in mood regulation to reduce the duration and severity of depressive episodes. Repetitive transcranial magnetic stimulation (rTMS) treats major depression by modulating activity in cortical regions and related neural circuits. It involves an alternating electrical current passed through a metal coil placed against the scalp, generating rapidly changing magnetic fields that penetrate through the skull and induce electric currents in the surface cortex.[1,2]

Policy/Criteria
I. It is the policy of Iowa Total Care that requests for initial treatment with repetitive transcranial magnetic stimulation (rTMS) for up to 36 sessions are considered medically necessary when meeting all of the following:
   A. Member/enrollee is 18 years of age or older;
   B. Member/enrollee has a confirmed diagnosis of major depressive disorder (MDD) or persistent depressive disorder (PDD), as outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM V-TR);
   C. Member/enrollee has participated in a full course of evidence-based psychotherapy (such as weekly cognitive behavior therapy and/or interpersonal therapy) during the current depressive episode without significant improvement;
      ***Note**: This therapy should overlap with the antidepressant trials.*
   D. Member/enrollee has demonstrated failure or intolerance to psychopharmacologic agents, as documented by one of the following:
      1. Failure of psychopharmacologic agents, as documented by both of the following:
         a. Lack of clinically significant response during the current depressive episode to four trials of agents from at least two different psychopharmacologic classes;
         b. At least two of the treatment trials were administered as an adequate course of mono- or poly-drug therapy with antidepressants, involving standard therapeutic doses, administered for at least six weeks duration;
      2. Member/enrollee is unable to take antidepressants due to one of the following:
         a. Drug interactions with medically necessary medications;
         b. Inability to tolerate psychopharmacologic agents, as evidenced by documented trials of at least four distinctive agents, each resulting in intolerable side effects during the current episode;
   E. Direct supervision of treatment is provided by a licensed psychiatrist, trained in TMS therapy, except where state scope of practice acts allows for other provider types to supervise;

F. Member/enrollee does not have any of the following contraindications:
   1. Epilepsy, history of seizures or presence of other neurologic diseases that may lower seizure threshold, such as stroke, severe head trauma, or increased intracranial pressure;
   2. Metal implants or devices present in the head or neck, such as cochlear implant, deep brain stimulator, or vagus nerve stimulator;
   3. Substance abuse at the time of treatment, which may lower the seizure threshold;
   4. Metallic hardware of implanted magnetic-sensitive medical device, such as implanted cardioverter-defibrillator, pacemaker, or metal aneurysm clips or coils, at a distance within the electromagnetic field of the discharging coil (less than or equal to 30 cm to the discharging coil);
   5. Tattoos in the head or neck made with ferromagnetic-containing ink;
   6. Known non-adherence with previous treatment for depression;
   7. Acute psychotic disorders in the current depressive episode;
   8. Active suicidal ideation with intent;

G. Planned use of a depression severity standardized rating scale by the TMS provider to monitor response during treatment, with pre-TMS score documented.

II. It is the policy of Iowa Total Care that request for repetitive transcranial magnetic stimulation (rTMS) to treat adolescents between the age of 15-17 will be reviewed by a medical director on a case-to-case basis.

III. It is the policy of Iowa Total Care that requests for *retreatment* with repetitive transcranial magnetic stimulation (rTMS) are considered **medically necessary** when all the following are met:
   A. Criteria for initial treatment continues to be met;
   B. Current major depressive symptoms have worsened by 50% from the prior best response of the PHQ-9 score;
   C. Prior treatment response demonstrated a 50% or greater reduction from baseline depression scores;
   D. There are no contraindications to rTMS as outlined in I.F.

IV. It is the policy of Iowa Total Care that maintenance treatment with repetitive transcranial magnetic stimulation (rTMS) is not medically necessary, as there is insufficient evidence in the published peer-reviewed literature to support it.

V. It is the policy of Iowa Total Care and Centene Advanced Behavioral Health that there is insufficient evidence in the published peer-reviewed literature to support the use of rTMS in any of the following:
   A. Treatment of all or other psychiatric or neurological disorders, including but not limited to the following:
      1. Bipolar disorder;
      2. Obsessive compulsive disorder (OCD);
      3. Anxiety disorders;
      4. Alzheimer's disease;
      5. Substance abuse disorders;
      6. Peripartum depression;
      7. Post traumatic stress disorder (PTSD);
      8. Tourette's syndrome;
      9. Chronic pain syndrome;

10. Eating disorders;
11. Schizophrenia;

B. Treatment in the pediatric population of 18 years of age and younger;
C. Treatment of depression with intermittent theta-burst stimulation (iTBS).

Background

Psychotherapy and pharmacologic treatment are considered first-line interventions for individuals diagnosed with major depressive disorder (MDD). For members/enrollees who do not achieve an adequate response to standard treatment interventions, alternative somatic therapies may be considered, including electroconvulsive therapy (ECT) and repetitive transcranial magnetic stimulation (rTMS). Unlike ECT, rTMS is a non-invasive neuromodulation technique that does not require general anesthesia and does not induce seizure activity. The therapeutic effects of rTMS vary based on stimulation parameters, including waveform, frequency, intensity, cortical target, and treatment duration. When administered under appropriate clinical supervision and in accordance with manufacturer-specific treatment protocols, FDA-cleared TMS devices have demonstrated an acceptable safety and tolerability profile.[1,2]

Repetitive transcranial magnetic stimulation is delivered at frequencies ≥10 Hertz (Hz) and targets the dorsolateral prefrontal cortex (DLPFC), a brain region associated with mood regulation and executive functioning. Additional protocols, including intermittent theta burst stimulation (iTBS) and deep TMS, have also been studied in patients with treatment-resistant depression (TRD). While continuation or maintenance rTMS may be considered for select individuals who previously responded to treatment, evidence supporting routine maintenance therapy remains limited.[3]

On June 3, 2025, Hayes published its annual review evaluating maintenance rTMS for prevention of recurrent depression in adults. The review concluded that the available evidence was of very low quality and insufficient to draw definitive conclusions regarding the effectiveness and safety of rTMS as a maintenance treatment. There are currently no widely accepted clinical practice guidelines or position statements that establish definitive patient selection criteria for maintenance rTMS in the treatment of MDD.[4]

Clinical practice guidelines from the American Psychiatric Association and the Canadian Network for Mood and Anxiety Treatments recognize rTMS as an evidence-based treatment option for adults with treatment-resistant depression who have not responded adequately to antidepressant therapy.[5,6]

In July 2024, the American Psychiatric Association published a position statement regarding TMS administration stating, “TMS is a safe and effective evidence-based medical treatment when administered by TMS-trained psychiatrists for appropriately selected patients.” The APA additionally noted that training in evidence-based TMS therapy and insurance coverage are important to improve access to care.[5]

In April 2024, the American Academy of Child and Adolescent Psychiatry published a review on emerging mental health treatments in adolescents. AACAP reported that although TMS is FDA approved for adolescents ages 15 years and older, additional research is needed to further establish the safety and efficacy of TMS in this population.[7]

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted

CPT® Codes	Description
90867	Therapeutic repetitive transcranial magnetic stimulation (tms) treatment; initial, including cortical mapping, motor threshold determination, delivery, and management
90868	Therapeutic repetitive transcranial magnetic stimulation (tms) treatment; subsequent delivery and management, per session
90869	Therapeutic repetitive transcranial magnetic stimulation (tms) treatment; subsequent motor threshold re-determination with delivery and management

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Policy developed	06/22	
Updated the number of sessions to be approved from 30, then 6 to 36 per committee meeting on 6/29/22.	06/22	
Annual Review. Policy restructured and reformatted. Added Centene Advanced Behavioral Health to policy statements. Changed "Last Review Date" and "Effective Date" in the policy header to "Date of Last Revision," Added statement to me. "It is the policy of Iowa Total Care® that a medical director will review requests for up to 36 sessions of repetitive transcranial magnetic stimulation (rTMS) or up to 36 sessions of Theta Burst Stimulation (TBS), on a case-by-case basis, when meeting all of the following criteria". Deleted the original policy statement II. added to I.D: "1. At least two different trials of pharmacological classes were administered as an adequate course of antidepressants with a recognized standard therapeutic dose of at least six weeks duration during the current depressive episode; 2. The member/enrollee is unable to take antidepressants due to documentation of one of the following…" Added the contraindication list to I.E. Added the following statement to III. "It is the policy of Iowa Total Care that maintenance treatment with rTMS or TBS is not medically necessary, as there is insufficient evidence in the published peer reviewed literature to support it." to replace "It is the policy of Iowa Total Care that TMS maintenance therapy is considered not medically necessary as there is insufficient evidence to support this treatment at the present time." Added IV. A-C." It is the policy of Iowa Total Care that request for retreatment with rTMS or TBS will be reviewed on a case-by-case basis by a Medical Director, informed by of the following…." Updated the background section. Added Coding Implication Section. Added 3 CPT codes to the list: 97104, 97032 and G0295. Removed ICD-10 code chart. Updated references. Added Important Reminder section.	06/23	

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Clarified policy statement III.B to align with the language noted in the IME policy: removed "Current depressive symptoms have worsened to a PHQ-9 severity score > 15 (or other standardized depression severity scale)" and replaced with "Current major depressive symptoms have worsened by 50 percent from the prior best response of the PHQ-9 score"	07/23	07/23
Annual review. Description updated. Added member/enrollee to criteria points I.A and B. Added I.C. to include the accepted FDA approved devices to align with the corporate policy. Background updated. References reviewed and updated	06/24	06/24
Annual review. Description updated. Criteria updated to align with Iowa state guidelines. In policy statement I, changed session limits from "36" to "30 sessions...". Removed FDA label indication listed on former I.C. Added I.C. "failed to respond to...". Removed former I.D. "planned use of depression....". Added I.D.1.a., "current depressive episode to four trials of agents from at least two different psychopharmacologic classes". Added I.D.1.b."At least two of the treatment trials were administered as an adequate course of mono- or poly-drug therapy...". Removed former I.E. "Oversight of treatment...". Reorganized the contraindication list in I.E., removing "less than three months of remission from SUD, severe dementia, cardiovascular disease, known adherence with previous treatment for depression, no acute psychotic disorders, and no active suicidal ideation". Added new policy statement II. "Request for rTMS to treat adolescents...". Added to the list of psychiatric or neurological disorders in V.A. "anxiety, Alzheimer's, peripartum and Tourette's...." Added V.B. "treatment in the pediatric population...". Added V.C. "treatment of depression...". Background updated. References reviewed and updated.	07/25	
Annual review. Removed all references of Centene Advanced Behavioral Health. In policy statement I, changed "30 sessions (typically five days a week for six weeks" to "up to 36 sessions". In I.C. added "participated in a full course of evidence based…", "interpersonal therapy" and "without significant improvement." Added accompanied note to I.C. Added I.E. "Direct supervision of treatment..." Added I.G. "Planned use of a depression severity scale…." Added III.A "Criteria for initial…." Background updated. References reviewed and updated.	06/26	

References

1. Iowa Health and Human Services. https://hhs.iowa.gov/media/9679/download?inline. Published January 16, 2026. Accessed June 20, 2026.
2. Holtzheimer PE. Unipolar depression in adults: Indications, efficacy, and safety of transcranial magnetic stimulus (TMS). UpToDate. https://www.uptodate.com/contents/search. Updated July 21, 2025. Accessed June 20,2026.

3. Holtzheimer PE. Unipolar major depression in adults: Administering transcranial magnetic stimulus (TMS). UpToDate. https://www.uptodate.com/contents/search. Updated July 25,2025. Accessed June 20, 2026.
4. Health Technology Assessment. Maintenance Repetitive Transcranial Magnetic Stimulation for Prevention of Recurrent Depression in Adults. Hayes. https://www.hayesinc.com/. Updated April 21, 2026. Accessed June 20,2026.
5. American Psychiatric Association. Position Statement on Transcranial Magnetic Stimulation (TMS). https://www.psychiatry.org/about-apa/policy-finder/position-statement-on-transcranial-magnetic-stimul. Published July 2024. Accessed June 20, 2026.
6. Lam RW, Kennedy SH, Adams C, et al. Canadian Network for Mood and Anxiety Treatments (CANMAT) 2023 Update on clinical guidelines for management of major depressive disorder in adults. *Can J Psychiatry.* 2024;69(9):641-687. doi:10.1177/07067437241245384.
7. American Academy of Child and Adolescent Psychiatry. Emerging Mental Health Treatments in Adolescents. https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Emerging_Mental_Health_Treatments_Adolescents-141.aspx. Published April 2024. Accessed June 20, 2026.
8. U.S Food and Drug Administration. Device Approvals and Clearances. Website. https://www.fda.gov/medical-devices/products-and-medical-procedures/device-approvals-and-clearances. Accessed June 20, 2026.

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions, and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment, or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care and are solely responsible for the medical advice and treatment of members/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members/enrollees, and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members/enrollees and their representatives agree to be bound by such terms and conditions by providing services to members/enrollees and/or submitting claims for payment for such services.

Note: For Medicaid members/enrollees, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

Note: For Medicare members/enrollees, to ensure consistency with the Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD), all applicable NCDs, LCDs, and Medicare Coverage Articles should be reviewed prior to applying the criteria set forth in this clinical policy. Refer to the CMS website at http://www.cms.gov for additional information.