Effective 6/18/2025

Area Medical Policy

Lines Of Business BMS, CHIP, Self-Funded

Transcranial Magnetic Stimulation (TMS)

PURPOSE:

The purpose of this policy is to outline coverage for Transcranial Magnetic Stimulation for the treatment of major depressive disorder (MDD) with specific details on coverage indications, limitations and/or medical necessity.

POLICY:

This policy outlines medical necessity criteria for Transcranial Magnetic Stimulation (TMS)

Applicable CPT Codes:

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

PROCEDURE:

The Health Plan Behavioral Health Unit will review all requests for Transcranial Magnetic Stimulation

(TMS). The reviewer will request clinical documentation to ensure all aspects of medical necessity outlined in this policy are met.

TMS will be approved for 20 sessions over a period of 4 weeks, with an additional 6 tapering sessions (twice a week for 3 weeks). If the patient has a significant improvement of the depression of 25% at the end of 20 sessions (compared to the baseline pre-TMS treatment objective clinical depression rating scale), the patient would be approved for an additional 10 sessions over a period of two weeks, with an additional 6 tapering sessions (twice a week for 3 weeks). The total sessions will not exceed 36 and the total treatment time frame will not exceed 12 weeks.

Criteria

- This Clinical Policy Bulletin addresses transcranial magnetic stimulation and cranial electrical stimulation.

A. Medical Necessity

The Health Plan considers transcranial magnetic stimulation (TMS) in a health care provider's office medically necessary when the following criteria are met:

1. Administered by an FDA cleared device and utilized in accordance with the Food and Drug Administration (FDA) labeled indications; *and*
2. The member is age 15 years or older; *and*

   The member has a confirmed diagnosis by a psychiatrist of severe major depressive disorder (single or recurrent episode) without psychosis documented by standardized rating scales that reliably measure depressive symptoms (e.g., Beck Depression Scale [BDI], Hamilton Depression Rating Scale [HDRS], Montgomery-Asberg Depression Rating Scale [MADRS], etc.); severity of depression should be measured during the current depressive episode at baseline with a validated depression rating scale, and changes from baseline with TMS treatment should be assessed using the same depression rating scale though the entire treatment course; *and*
4. The member has no contraindications to TMS (refer to contraindications below); *and*
5. The member has experienced inadequate response with *both* of the following during the current depressive episode occurring within the past 5 years: **Note**: For purposes of this policy, the current depressive episode begins with the most recent onset of acute symptoms.

   a. Two antidepressants from at least 2 different classes having different mechanisms of action (see Appendix) at the maximally tolerated labeled dose, each used for at least 8 weeks (to qualify as an adequate antidepressant drug trial, the individual's dose during the failed trials should have been at or above the minimal

effective therapeutic dose for that antidepressant); *and*

b. Augmentation therapy along with the primary antidepressant used for at least 8 weeks (see Appendix); if the augmenting agent is an antidepressant, the augmenting agent must be from a different class than the primary antidepressant. The augmenting agent should have been at or above the minimal effective therapeutic dose (which is typically the minimal labeled dose); *and*

6. Treatment consists of a maximum of 30 sessions (5 days a week for 6 weeks) plus 6 tapering sessions (6 sessions over three weeks). **Notes**: Treatments beyond 36 sessions (e.g., 30 treatment sessions followed by 6 tapering sessions) may be reviewed for medical necessity. There is a lack of evidence of the effectiveness of additional sessions beyond 36 to treat "late responders", to solidify response, or to attain remission. There is a lack of evidence that persons who fail to respond or become refractory to one brand of repetitive transcranial magnetic stimulation (rTMS) device will respond to another brand of rTMS or deep TMS (dTMS) device; *and*
7. The TMS treatment is delivered by a device that is approved or cleared by the FDA for the treatment of major depressive disorder. Note: 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*
8. The order for treatment (or retreatment) will be written by a psychiatrist (MD or DO) or behavioral health nurse practioner who will examine the patient and review the record and determine that TMS is indicated for use in a particular patient. In addition to patient selection, the psychiatrist should oversee initial patient motor threshold determinations, mapping and treatment parameter definitions and overall TMS treatment course planning for each patient. The psychiatrist must certify that the treatment will be given under direct supervision of this physician (i.e., the physician will be in the area and will be immediately available for each treatment). If the psychiatrist is not performing the daily TMS treatment sessions, then the psychiatrist should assign properly trained personnel who may perform the daily treatment sessions. The psychiatrist is also responsible for the evaluation of the patient during the course of their TMS Therapy treatment; *and*
9. The TMS operator will be a clinical professional who is conducting TMS Therapy under the supervision of a physician, nurse practitioner or physician assistant who is at the facility at the time of treatment. The TMS operator should possess sufficient clinical expertise to monitor the patient during the conduct of a TMS treatment session. The operator must be able to observe the patient's physical status for the potential occurrence of adverse events, and make routine adjustments as required and consistent with product labeling, or determine circumstances under which treatment interruption or treatment termination should be

considered. The TMS operator should be present in the treatment room with the patient at all times. The operator must be qualified to monitor the patient for seizure activity and to provide seizure management care.

The Health Plan considers TMS not medically necessary and experimental, investigational, or unproven in persons with *any* of the following contraindications to TMS because the safety and effectiveness in person with these contraindications has not been established:

1. Persons with abuse of substances with known abuse potential during the last 90 days; *or*
2. The member is suicidal; *or*
3. The member has a metal implant in or around the head (eg, aneurysm coil or clip, metal plate, ocular implant, stent); *or*
4. The member has neurological conditions (eg, cerebrovascular disease, dementia, history of repetitive or severe head trauma, increased intracranial pressure or primary or secondary tumors in the central nervous system); *or*
5. There is presence of implanted devices, (eg, cardiac pacemaker or defibrillator, cochlear implant, deep brain stimulator, implantable infusion pump, spinal cord stimulator, vagus nerve stimulator, etc.); *or*
6. If the member has severe cardiovascular disease, he has been evaluated and cleared for TMS treatment by a cardiologist.

The Health Plan considers TMS re-treatment medically necessary for persons with depression relapse who meet *all* of the following criteria:

1. The member meets initiation criteria above; *and*
2. The member has relapsed following TMS despite other treatment approaches (e.g., psychotherapy, pharmacotherapy), as appropriate; *and*
3. The member had previously had at least a 50% reduction in depressive symptoms with TMS, as documented by standardized rating scales that reliably measure depressive symptoms (e.g., Beck Depression Scale [BDI], Hamilton Depression Rating Scale [HDRS], Montgomery-Asberg Depression Rating Scale [MADRS], etc.), and this improvement was maintained for at least two months after the prior TMS treatment course; repeat TMS treatment within 60 days following the termination of the prior TMS course is considered not medically necessary.

The Health Plan considers one TMS re-mapping during a course of TMS for depression medically necessary. Additional courses of re-mapping are considered medically necessary if the member is not responding to ensure the most accurate treatment location, or if there is concern that motor threshold may have changed (for example, because of a change in medication). **Note**: Re-mapping does not increase the medically necessary number of TMS sessions, as treatment is provided during

remapping.

B. Experimental, Investigational, or Unproven

The Health Plan considers the following procedures experimental, investigational, or unproven because the effectiveness of these approaches has not been established:

1. Accelerated, repetitive, MRI-guided theta-burst stimulation, including but not limited to the Stanford Accelerated Intelligent Neuromodulation Therapy (SAINT), for the treatment of depression and other psychiatric/ neurologic disorders
2. Adjunctive use of ketamine with transcranial magnetic stimulation (TMS)
3. Combined TMS and electroencephalography (EEG) for evaluation of unconscious state (e.g., medication-induced unconscious state, minimally conscious state, and unresponsive wakefulness syndrome)
4. Delivery of TMS using a non-standard protocol with increased hertz under sedation
5. Navigated TMS for motor function mapping and/or treatment planning of neurological diseases/disorders (e.g., amyotrophic lateral sclerosis, epilepsy, and resection of brain tumors)
6. TMS maintenance therapy (i.e., treatment outside of the established 30 treatment sessions over 6 weeks plus six tapering sessions over 3 weeks)
7. TMS for the following conditions because its value and effectiveness has not been established (not an all-inclusive list):
    - Alzheimer's disease
    - Amyotrophic lateral sclerosis
    - Anxiety disorders
    - Auditory verbal hallucinations
    - Bipolar disorder
    - Blepharospasm
    - Bulimia nervosa
    - Cerebellar ataxia (including spinocerebellar ataxia type 3)
    - Cerebral palsy
    - Chronic pain including neuropathic pain (e.g., orofacial pain, and central post-stroke pain)
    - Communication and swallowing disorders (e.g., aphasia (including post-stroke aphasia), dysarthria, dysphagia (including post-stroke dysphagia), and linguistic deficits)
    - Complex regional pain syndrome

- Concussion
- Differential diagnosis of Alzheimer disease from frontotemporal dementia
- Executive function deficits
- Epilepsy (including status epilepticus)
- Congenital hemiparesis
- Dyslexia
- Dystonia
- Fibromyalgia
- Functional neurological disorder
- Gambling disorder
- Insomnia
- Levodopa-induced dyskinesia
- Major depressive disorder with psychosis
- Migraine
- Mood disorders
- Multiple sclerosis
- Neurodevelopmental disorders (e.g., attention deficit/ hyperactivity disorder, autism spectrum disorder, and tic disorders)
- Neuropathic pain associated with spinal cord injury
- Obsessive-compulsive disorder
- Panic disorder
- Parkinson disease
- Peri-partum depression
- Phantom limb pain
- Phantom pain associated with spinal cord injury
- Post-traumatic stress disorder
- Psychosis
- Restless legs syndrome
- Schizo-affective disorder
- Schizophrenia
- Smell and taste dysfunction (e.g., phantosmia and phantageusia)
- Somatic symptom disorder (somatization disorder)

- Spasticity
- Stroke treatment (e.g., motor impairment, post-stroke hemiplegia, and post-stroke spasticity)
- Substance addiction (substance use disorders)
- Tourette syndrome (see CPB 0480 - Tourette's Syndrome)
- Tinnitus
- Traumatic brain injury
- Visual hallucinations after stroke.

8. Cranial electrical stimulation (also known as cerebral electrotherapy, craniofacial electrostimulation, electric cerebral stimulation, electrosleep, electrotherapeutic sleep, transcerebral electrotherapy, transcranial electrotherapy, as well as the Fisher Wallace stimulator (formerly known as the Liss Body Stimulator) for any indication (not an all-inclusive list):
    - Alcoholism
    - Alzheimer's disease
    - Anxiety
    - Autism
    - Chemical dependency
    - Chronic pain
    - Dementia
    - Depression
    - Disorders of consciousness
    - Dyslexia
    - Headaches
    - Fibromyalgia
    - Insomnia
    - Mood and sleep disturbances
    - Neuropathic pain
    - Parkinson disease
    - Phantom pain associated with spinal cord injury
    - Progressive supranuclear palsy
    - Restless legs syndrome
    - Stroke treatment (e.g., motor impairment, post-stroke aphasia, and post-stroke hemiplegia)
    - Traumatic brain injury

- Visual rehabilitation

References:

Centers for Medicare and Medicaid Services(CMS). Transcranial Magnetic Stimulation, Local Coverage Department (LCD) L33398.

https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=33398

Original Effective Date
For services performed on or after 10/01/2015

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West Virginia Bureau of Medical Services, Acentra Health

Transcranial Magnetic Stimulation

Date Implemented: 04/01/2024

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Disclaimer

This policy is intended to serve as a guideline only and does not constitute medical advice, any guarantee of payment, plan pre-authorization, an explanation of benefits, or a contract. This policy is intended to address medical necessity guidelines that are suitable for most individuals. Each individual's unique clinical situation may warrant individual consideration based on medical records. Individual claims may be affected by other factors, including but not necessarily limited to state and federal laws and regulations, legislative mandates, provider contract terms, and THP's professional judgment. Reimbursement for any services shall be subject to member benefits and eligibility on the date of service, medical necessity, adherence to plan policies and procedures, claims editing logic, provider contractual agreement, and applicable referral, authorization, notification, and utilization management guidelines. Unless otherwise noted within the policy, THP's policies apply to both participating and non-participating providers and facilities. THP reserves the right to review and revise these policies periodically as it deems necessary in its discretion, and it is subject to change or termination at any time by THP. THP has full and final discretionary authority for its interpretation and application. Accordingly, THP may use reasonable discretion in interpreting and applying this policy to health care services provided in any particular

All Revision Dates

2/28/2025