Policy Name	Transcranial Magnetic Stimulation for Treatment of Major Depression - 2023
Policy Number	20.5.001
Issued By	Chief Medical Officer
Approved By	Corporate Quality Improvement Committee
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Purpose

To provide authorization parameters for Transcranial Magnetic Stimulation (TMS) so that benefits are applied in a consistent and relevant fashion.

This document applies to the use of TMS in Treatment Resistant Depression (TRD). TMS is not a first line treatment of depression, even for those with severe depression.

Background

Transcranial Magnetic Stimulation (TMS) was developed in 1985 and was initially a research tool used to non-invasively probe neurologic function in the cortex. The procedure consists of placing an electromagnetic coil on the scalp. A powerful AC current is passed through the coil. This results in a rapidly fluctuating intense magnetic field, which changes ionic flow in neural tissue located below the coil. The frequency of the fluctuation can also be manipulated. “Fast” TMS is delivered at frequencies of 3 to 20 Hz. By contrast, “slow” TMS is defined as a frequency of less than 1 Hz.

TMS has been explored in migraine, spinal cord injury, tinnitus, mania, anxiety, movement disorders, pain, OCD, auditory hallucinations in schizophrenia and multiple other disorders. The side effects of TMS are local discomfort at the site of the magnetic field, muscle twitching and headaches. If the frequency is too great, seizures may develop.

Definitions

N/A

Scope

This policy applies to all Workforce Members of New Directions involved in clinical services, and Providers that service New Directions’ Members. This policy applies to benefits administered in plan year 2023.

Policy

A. Expectations of Care Delivery
   1. Requests for TMS are submitted on New Directions' TMS Treatment Request Form. The information submitted on the form will provide pertinent clinical information about the patient's past and current treatment history and response. Timelines for receiving information, making determinations, and peer review if needed will follow New Directions' standard benefit determination timeframes.
   2. Training and Requirements
      a. The attending physician is a board-certified psychiatrist with training in the use of TMS in Major Depression.
      b. New Directions will register any clinics or practitioners via documentation of certification, prior to allowing use of this benefit.

B. Treatment
   1. TMS is considered medically necessary when one (1) treatment session per day is given for five (5) consecutive days per week for six (6) consecutive weeks. Immediately following the six (6) (week treatment period, the treatment frequency is tapered, as follows:
      a. Week One (after six-week initial treatment): 3 treatment sessions
      b. Week Two (after six-week initial treatment): 2 treatment sessions
      c. Week Three (after six-week initial treatment): 1 treatment session

C. Initial Authorization Request

Must meet (1), (2) and (3):

1. Transcranial magnetic stimulation of the brain administered with an FDA-approved device meets the definition of medical necessity as a treatment of resistant major depressive disorder when ALL of the following criteria (sections a-d) have been met.
   a. Confirmed diagnosis of severe Major Depressive Disorder WITHOUT Psychosis (International Classification of Disease: ICD-9 codes 296.2x and 296.3X, and ICD -10 codes F32.x and F33.x) with severity documented by one (1) clinically accepted depression rating scale from the Table 1. One (1) test should be chosen and employed during the entire treatment course.

Table 1

Name of test	**Number of items**	**Minimum score for initial Authorization**
Beck Depression Inventory (BDI)	21	>29
Inventory of Depressive Symptomatology Clinician-rated (IDS-C)	30	>36
Quick Inventory of Depressive Symptomatology Self-reported (QIDS-SR)	16	>15
Montgomery-Asberg Depression Rating Scale (MADRS)	10	>34

Patient Health Questionnaire (PHQ9)	9	>19

b. The request is for a member between the ages of 18 and 70.
c. The member is not actively abusing substances (UDS confirmation may be required).
d. The member has any one of the following:
    i. Failure of four (4) trials of psychopharmacologic agents approved by the FDA for treating Major Depressive Disorder and at least two (2) of these trials should use augmentation of the currently prescribed antidepressant. These must include:
        - Medicine trials from at least two (2) different antidepressant classes (for example SSRI, SNRI, TCA, MAI-O, etc.)
        - Two (2) augmentation trials along with a primary antidepressant. Medications for this purpose are limited to FDA approved selected second generation antipsychotics with this indication, and the clinical literature has established other medications: lithium, buspirone, trazodone, mirtazapine, psychostimulants (amphetamines and derivatives) and thyroid supplementation.
    ii. Inability to tolerate a therapeutic dose of medications as evidenced by four (4) trials of psychopharmacologic agents (consistent with C. 1. d. i. above) with documented distinct intolerable side effects.
    iii. Is a candidate for electroconvulsive therapy (ECT), and ECT outcome would not be overall superior to TMS (e.g., in cases with psychosis, acute suicidal risk, catatonia, or life-threating dysfunction in basic life needs, TMS should not be utilized).

2. Standardized depression rating scales should be performed during TMS treatment to monitor progress at a minimal frequency of an initial pre-treatment test which is to occur prior to the six (6) week initial treatment period, followed by testing every two (2) weeks during the six (6) week treatment period and a final test at the last treatment visit. If the rating scales document a lack of meaningful change or worsening of symptom intensity, review by a physician advisor may be indicated.
3. The use of TMS with any of the following is considered not appropriate or necessary:
    a. The member has non-removable metallic objects or implants in his/her head or neck regions.
    b. The member has an active neurologic disorder, including but not limited to encephalopathy, dementia from any cause, Parkinson's Disease, post-stroke syndromes, increased intracranial pressure or bleeding, cerebral aneurysm, A-V malformations, CSF shunts, implants in the CNS or head/neck, etc.
    c. There is evidence of active psychotic symptoms.
    d. The request is for Maintenance TMS Treatment.
    e. The request is for treatment of OCD.
    f. The request is for Intermittent Theta Burst Stimulation (ITBS).
    g. The request is for Magnetic Seizure Therapy (MST), which is using TMS to stimulate the induction of seizures, has been tried as an alternative to the electrical induction of seizures in electroconvulsive therapy (ECT).

h. The request is for Navigated Transcranial Magnetic Stimulation (nTMS) which uses a diagnostic tool to stimulate functional cortical areas at precise anatomical locations to induce measurable responses. This technology is being investigated to map functionally essential motor areas for diagnostic purposes and for treatment planning.
i. The request is for treatment of psychiatric diagnoses found in the DSM-5 other than Treatment Resistant Depression.

D. Retreatment Requests for TMS:
Must meet both (1) and (2):
1. Meets all requirements for initial TMS treatment (above)
2. Repeat acute treatment for relapse of depressive symptoms is considered medically necessary when both (a) and (b) are met:
    a. There is documentation submitted that the member responded to prior treatments, specifically with a 50% or greater improvement in a standard rating scale for depressive symptoms (e.g., PHQ-9, BDI, MADRS, QIDS-SR or IDS-C score).
    b. A minimum of ninety (90) days has elapsed since the termination of the prior TMS treatment course.
        i. If member meets the above relapse criteria, a five (5) days per week treatment course of left dorsolateral prefrontal cortex TMS treatment that lasts for six (6) weeks (total of thirty (30) sessions), followed by a three (3) week taper of three (3) TMS treatment sessions in week 1, two (2) TMS treatment sessions the next week, and one (1) TMS treatment session in the third and final week. Treatment frequency of less than five (5) days per week will be reviewed for medical necessity.
        ii. If the member does not meet the criteria for 50% reduction in rating scale scoring, the request will not be considered medically necessary.

Coding

1. The attending physician is required to personally perform codes 90867 and 90869
2. Code 90868 may be administered by a technician, but this individual is required to have certification in administering TMS
3. If TMS is found to be medically necessary, authorization will be for one unit of 90867, 36 units of 90868, and one unit of 90869
4. Requests for additional units of 90869 should be submitted with detailed clinical rationale

Exceptions

Exceptions to this policy may be granted on a case-by-case basis and must be approved by the Chief Medical Officer, or designee.

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