TRANSCRANIAL MAGNETIC STIMULATION

Policy Number: BEHAVIORAL 025.8 T2
Effective Date:  March 1, 2016

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The services described in Oxford policies are subject to the terms, conditions and limitations of the Member's contract or certificate. Unless otherwise stated, Oxford policies do not apply to Medicare Advantage enrollees. Oxford reserves the right, in its sole discretion, to modify policies as necessary without prior written notice unless otherwise required by Oxford's administrative procedures or applicable state law. The term Oxford includes Oxford Health Plans, LLC and all of its subsidiaries as appropriate for these policies.

Certain policies may not be applicable to Self-Funded Members and certain insured products. Refer to the Member's plan of benefits or Certificate of Coverage to determine whether coverage is provided or if there are any exclusions or benefit limitations applicable to any of these policies. If there is a difference between any policy and the Member's plan of benefits or Certificate of Coverage, the plan of benefits or Certificate of Coverage will govern.

BENEFIT CONSIDERATIONS

Essential Health Benefits for Individual and Small Group:
For plan years beginning on or after January 1, 2014, the Affordable Care Act of 2010 (ACA) requires fully insured non-grandfathered individual and small group plans (inside and outside of Exchanges) to provide coverage for ten categories of Essential Health Benefits (“EHBs”). Large group plans (both self-funded and fully insured), and small group ASO plans, are not subject to the requirement to offer coverage for EHBs. However, if such plans choose to provide coverage for benefits which are deemed EHBs (such as maternity benefits), the ACA requires all dollar limits on those benefits to be removed on all Grandfathered and Non-Grandfathered plans. The determination of which benefits constitute EHBs is made on a state by state basis. As such, when using this guideline, it is important to refer to the member specific benefit document to determine benefit coverage.

APPLICABLE LINES OF BUSINESS/PRODUCTS

This policy applies to Oxford Commercial plan membership.
NON-COVERAGE RATIONALE

Transcranial magnetic stimulation is unproven and not medically necessary for treating all conditions including the following:

- Chronic neuropathic pain
- Dystonia
- Epilepsy
- Headaches
- Parkinson's disease
- Stroke
- Tinnitus

For behavioral disorders, refer to the Optum Behavioral Solutions Coverage Determination Guideline titled Transcranial Magnetic Stimulation (TMS) at Optum Provider Express > Clinical Resources > Guidelines/Policies/Manuals > Coverage Determination Guidelines.

Some studies have examined the use of transcranial magnetic stimulation for treating disorders such as pain, dystonia, epilepsy, headaches, Parkinson’s disease, stroke, and tinnitus. However, because of limited studies and small sample size there is insufficient data to conclude that transcranial magnetic stimulation is beneficial for treating these conditions.

Navigated transcranial magnetic stimulation (nTMS) is unproven and not medically necessary for treatment planning or for diagnosing motor neuron diseases or neurological disorders.

There is limited information from the peer-reviewed published medical literature to conclude that navigated transcranial magnetic stimulation is an effective clinical diagnostic test. Most published studies involve a small number of patients. Randomized controlled trials with large populations are needed to evaluate how this test can reduce clinical diagnostic uncertainty or impact treatment planning.

APPLICABLE CODES

The Current Procedural Terminology (CPT®) codes and Healthcare Common Procedure Coding System (HCPCS) codes listed in this policy are for reference purposes only. Listing of a service code in this policy does not imply that the service described by this code is a covered or non-covered health service. Coverage is determined by the member specific benefit document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claims payment. Other policies and guidelines may apply. This list of codes may not be all inclusive.

Non-Reimbursable CPT Codes

<table>
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<th>CPT® Code</th>
<th>Description</th>
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<tr>
<td>0310T</td>
<td>Motor function mapping using non-invasive navigated transcranial magnetic stimulation (nTMS) for therapeutic treatment planning, upper and lower extremity</td>
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<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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CPT® is a registered trademark of the American Medical Association.

Coding Clarification:
Transcranial magnetic stimulation is unproven and not medically necessary for all medical (i.e. non-behavioral) diagnoses.
DESCRIPTION OF SERVICES

Single-pulse transcranial magnetic stimulation (TMS) was originally introduced in 1985 as a noninvasive and safe way to stimulate the cerebral cortex. Activation of the motor cortex by transcranial magnetic stimulation produces contralateral muscular-evoked potentials (MEPs), thus providing a valuable tool for functional mapping of the motor cortex. Technological advances introduced generators capable of producing rapid, repetitive pulses of magnetic stimulation. The magnetic field pulses pass unimpeded through the hair, skin, and skull and into the brain where they induce an electrical current to flow inside the brain without seizures or need for anesthesia. The amount of electricity created is very small and cannot be felt by the patient, but the electric charges cause the neurons to become active and are thought to lead to the release of neurotransmitters such as serotonin, norepinephrine and dopamine. Repetitive TMS is also currently under investigation as a treatment for several disorders originating in the cerebral cortex including pain, dystonia, epilepsy, headaches, Parkinson's disease, stroke, and tinnitus. TMS is delivered by various available devices, and treatment has been tested using a variety of protocols, including high frequency delivered over the left dorsolateral prefrontal cortex, low frequency delivered over the right or left dorsolateral prefrontal cortex, bi-lateral delivery, and deep TMS in which deeper prefrontal regions are stimulated.

Navigated transcranial magnetic stimulation (nTMS) is being studied as 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.

CLINICAL EVIDENCE

Therapeutic Transcranial Magnetic Stimulation

Freitas et al. (2011) performed a systematic search of studies using noninvasive stimulation in Alzheimer's disease (AD). The authors concluded that TMS/tDCS can induce acute and short-duration beneficial effects on cognitive function, but the therapeutic clinical significance in AD is unclear. According to the authors, TMS/tDCS may have therapeutic utility in AD, though the evidence is still very preliminary and cautious interpretation is warranted.

In a systematic review and meta-analysis, Chou et al. (2015) evaluated the repetitive transcranial magnetic stimulation (rTMS) effects on motor dysfunction in patients with Parkinson's disease (PD). Eligible studies included sham-controlled, randomized clinical trials of rTMS intervention for motor dysfunction in patients with PD. Relevant measures were extracted independently by 2 investigators. Standardized mean differences (SMDs) were calculated with random-effects models. Twenty studies with a total of 470 patients were included. Random-effects analysis revealed a pooled SMD of 0.46, indicating an overall medium effect size favoring active rTMS over sham rTMS in the reduction of motor symptoms. Subgroup analysis showed that the effect sizes estimated from high-frequency rTMS targeting the primary motor cortex and low-frequency rTMS applied over other frontal regions were significant. Using the Grading of Recommendations, Assessment, Development, and Evaluation criteria, the authors characterized the quality of evidence presented in this meta-analysis as moderate quality. The authors concluded that the pooled evidence suggests that rTMS improves motor symptoms for patients with PD. According to the authors, one of the limitations of this meta-analysis was that the results could be constrained by the unclear risk of bias on certain domains owing to incomplete data in a few studies. In addition, several uncontrolled variables, such as medication use, disease stage, side of onset, side of rTMS stimulation, age, and sex, existed and may have confounded the results of the analysis.

Soleimani et al. (2015) conducted a systematic literature review and meta-analysis on the effect of repetitive transcranial magnetic stimulation (rTMS) compared with sham in chronic tinnitus patients. For the meta-analysis weighted mean differences (and standard deviations) of Tinnitus Questionnaire (TQ) and Tinnitus Handicap Inventory (THI) scores were determined. Therapeutic success was defined as difference of at least 7 points in the THI score between baseline and the
Transcranial Magnetic Stimulation: Clinical Policy (Effective 03/01/2016)

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Ren et al. (2014) performed a meta-analysis of studies that explored the effects of low-frequency rTMS on aphasia in stroke patients. Seven eligible studies involving 160 stroke patients were identified to be included in the meta-analysis. A significant effect size of 1.26 was found for the language outcome severity of impairment (95% CI = 0.80 to 1.71) without heterogeneity (I² = 0%, P = 0.44). The effect size did not change significantly even when any one trial was eliminated. None of the patients from the 7 included articles reported adverse effects from rTMS. The authors concluded that low frequency rTMS with a 90% resting motor threshold that targets the triangular part of the right inferior frontal gyrus has a positive effect on language recovery in patients with aphasia following stroke. According to the authors, further well-designed studies with larger populations are required to determine the effect duration and long-term impact of rTMS in aphasia treatment.

Lüdemann-Podubecká et al. (2015) conducted a systematic review of the treatment effects of repetitive transcranial magnetic stimulation (rTMS) in promoting motor recovery of the affected upper limb after stroke. Thirty-seven trials were included in the analysis. The selected studies involved a total of 871 stroke subjects. According to the authors, rTMS enhances motor recovery of the affected hand after stroke; however, the data that is available is too limited to support its routine use.

In a Cochrane review, Hao et al. (2013) assessed the efficacy and safety of rTMS for improving function in people with stroke. The review included 19 trials involving a total of 588 participants. Two heterogenous trials with a total of 183 participants showed that rTMS treatment was not associated with a significant increase in the Barthel Index score. Four trials with a total of 73 participants were not found to have a statistically significant effect on motor function. The authors concluded that current evidence does not support the routine use of rTMS for the treatment of stroke. According to the authors, further trials with larger sample sizes are needed to determine a suitable rTMS protocol and the long-term functional outcome.

Hsu et al. (2011) preformed a meta-analysis to evaluate the antiepileptic efficacy of low frequency repetitive transcranial magnetic stimulation (rTMS) in medically intractable epilepsy. Eleven articles were identified, with a total of 164 participants. The authors concluded that low frequency rTMS has a favorable effect on seizure reduction, particularly evident in patients with neocortical epilepsy or cortical dysplasia. These findings require confirmation in larger studies.

In a Cochrane review, Fang et al. (2013) evaluated the clinical efficacy and safety of rTMS for treating amyotrophic lateral sclerosis (ALS). Three randomized, placebo-controlled trials with a total of 50 participants were included in the review. All the trials were of poor methodological quality and were insufficiently homogeneous to allow the pooling of results. The authors concluded that there is currently insufficient evidence to draw conclusions about the efficacy and safety of rTMS in the treatment of ALS.

Lipton et al. (2010) assessed the efficacy and safety of a new portable single-pulse transcranial magnetic stimulation (sTMS) device for acute treatment of migraine with aura in a randomized, double-blind, parallel-group, two-phase, sham-controlled. A total of 201 individuals were randomly allocated by computer to either sham stimulation (n=99) or sTMS (n=102). Participants were instructed to treat up to three attacks over 3 months while experiencing aura. Thirty-seven patients did not treat a migraine attack and were excluded from outcome analyses. 164 patients treated at least one attack with sTMS (n=82) or sham stimulation (n=82; modified intention-to-treat analysis set). According to the investigators, early treatment of migraine with aura by sTMS resulted in increased freedom from pain at 2 hours compared with sham stimulation, and absence of pain was sustained 24 hours and 48 hours after treatment. The authors stated that TMS could be a promising acute treatment for some patients with migraine with aura. The study was funded by Neuralieve, manufacturer of the sTMS device. This conflict of interest limits the conclusions that can be drawn from this study.

Zanjani et al. (2015) examined the effects of repetitive transcranial magnetic stimulation (rTMS) targeting the primary motor cortex (M1) in the treatment of motor signs in Parkinson's disease (PD). Studies meeting inclusion criteria were analyzed using meta-analytic techniques and the
Unified Parkinson's Disease Rating Scale (UPDRS) sections II and III were used as outcome measures. Compared with sham rTMS, active rTMS targeting the M1 significantly improved UPDRS III scores at the short-term follow-up. When the long-term follow-up UPDRS III scores were compared with baseline scores, the standardized effect size between active and sham rTMS did not reach significance. No significant improvement in the UPDRS II was found. According to the authors, rTMS over the M1 may improve motor signs. The authors stated that further studies are needed to provide a definite conclusion.

Several randomized controlled trial and comparative studies with small patient populations suggest that TMS treatment may improve conditions such as the following:

- Stroke (Zheng et al., 2015, n=108; Khedr et al., 2010, n=48; Kim et al., 2010, n=18; Emara et al., 2010, n=60; Wang et al., 2012, n=24; Avenanti et al., 2012, n=30; Chieffo et al., 2014, n=10; Kim et al., 2014, n=32)
- Alzheimer's disease (Eliasova et al., 2014, n=10; Ahmed et al., 2012, n=45; Rabey et al., 2013, n=15)
- Aphasic stroke (Tsai et al., 2014, n=56; Barwood et al. 2011, n=12; Khedr et al., 2014, n=30)
- Cigarette consumption, dependence and craving (Dinur-Klein et al., 2014, n=115)
- Dysphagia in hemispheric stroke (Khedr et al., 2009, n=22)
- Epilepsy (Sun et al. 2012, n=60)
- Fibromyalgia (Short et al., 2011, n=20; Mhalla et al., 2011, n=30; Lee et al. 2013, n=15; Boyer et al. 2014, n=38)
- Focal hand dystonia (Borich et al., 2009, n=15)
- Headaches (Rocha et al. 2015, n=19; Misra et al., 2013, n=50)
- Multiple sclerosis (Mori et al. 2009, n=20)
- Neuropathic pain (Andre-Obadia, 2008, n=28; Onesti et al. 2013, n=23)
- Parkinson's disease (Gonzalez-Garcia et al., 2011, n=10; Maruo et al., 2013, n=21)
- Paretic hand after stroke (Takeuchi et al., 2009, n=30; Gillick et al., 2014, n=19)
- Spinal cord injury spasticity (Kumru et al., 2013, n=17)
- Tinnitus (Marcondes et al. 2010, n=20; Chung et al. 2012, n=22)

However, the limited data from these studies do not allow definitive conclusion regarding the possible benefits of TMS. Many of these studies were feasibility studies with methodological limitations including small patient populations and short-term follow-up. The findings of these studies need to be validated by randomized trials with larger patient numbers and long-term follow-up.

Other randomized trials have found that TMS may be not be as effective as or superior to placebo or that TMS has no significant effect on symptoms for various conditions (de Oliveira et al., 2014; Benninger et al., 2012; Seniow et al., 2012; Shirota et al., 2013; Piccirillo et al., 2011; Benninger et al., 2011; Kang BS et al., 2009; Langguth et al., 2012; Plewnia et al., 2012; Wrigley et al., 2013; Conforto et al., 2014).

According to the National Institute for Health and Care Excellence (NICE) Guideline for transcranial magnetic stimulation for treating and preventing migraine (2014), evidence on the efficacy of TMS for the treatment of migraine is limited in quantity and for the prevention of migraine is limited in both quality and quantity. Evidence on its safety in the short and medium term is adequate but there is uncertainty about the safety of long-term or frequent use of TMS. Therefore, according to NICE, this procedure should only be used with special arrangements for clinical governance, consent and audit or research.

In an Agency for Healthcare Research and Quality (AHRQ) Comparative Effectiveness Review for the evaluation and treatment of tinnitus, the evidence was rated as insufficient for repetitive transcranial magnetic stimulation (Pichora-Fuller et al., 2013).

**Professional Societies**

**European Headache Federation:** In a position statement for neuromodulation of chronic headaches, the European Headache Federation states that application of the noninvasive rTMS
in chronic headaches is not yet evidence based, given the poor amount of controlled data (Martelletti et al. 2013).

**American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS):** In a clinical practice guideline for tinnitus, the American Academy of Otolaryngology-Head and Neck Surgery Foundation (AAO-HNSF) Guideline Development Panel indicated that clinicians should not recommend TMS for the treatment of patients with persistent, bothersome tinnitus (Tunkel et al., 2014).

**Diagnostic Transcranial Magnetic Stimulation**

Takahashi et al. (2013) conducted a systematic review to evaluate spatial accuracy and clinical usefulness of navigated transcranial magnetic stimulation (nTMS) in brain tumor surgery in or near the motor cortex. A total of 11 studies that evaluated nTMS prior to surgery in adults were included in the review. Quality criteria consisted of documentation of the influence of nTMS brain mapping on clinical decision making in a standardized prospective manner and/or performance of intraoperative direct electrical stimulation (DES) and comparison with nTMS results. Cross-observational assessment of nTMS accuracy was established by calculating a weighted mean distance between nTMS and DES. All studies reviewed concluded that nTMS correlated well with the "gold standard" of DES. The mean distance between motor cortex identified on nTMS and DES by using the mean distance in 81 patients described in 6 quantitatively evaluated studies was 6.18 mm. The nTMS results changed the surgical strategy based on anatomical imaging alone in 25.3% of all patients, based on the data obtained in 87 patients in 2 studies. The authors conclude that the nTMS technique spatially correlates well with the gold standard of DES. Its functional information benefits surgical decision making and changes the treatment strategy in one-fourth of cases. The studies include in the review were limited by small sample sizes.

**Primary Studies Not Included in the Systematic Review**

Sollmann et al. (2015) enrolled 25 patients with language eloquently located brain lesions undergoing preoperative rTMS language mapping (GROUP 1), with the mapping results not being available for the surgeon, and matched those patients with 25 subjects who also underwent preoperative rTMS (GROUP 2), but the mapping results were taken into account during tumor resection. Additionally, cortical language maps were generated by analyzing preoperative rTMS and intraoperative direct cortical stimulation (DCS) data. Mean anterior-posterior craniotomy extents and overall craniotomy sizes were significantly smaller for the patients in GROUP 2. Postoperative language deficits were found significantly more frequently for the patients in GROUP 1, although the preoperative language status did not differ between groups. Additionally, there was a trend towards fewer unexpected tumor residuals, shorter surgery duration, less peri- or postoperative complications, shorter inpatient stay, and higher postoperative Karnofsky performance status scale for the patients in GROUP 2. According to the authors, this study provides a first hint that the clinical course of patients suffering from brain tumors might be improved by preoperative rTMS language mapping. However, a significant difference between both groups was only found for craniotomy extents and postoperative deficits, but not for other clinical parameters, which only showed a trend toward better results in GROUP 2. The authors indicated that multicenter trials with larger sample sizes are needed to further investigate the distinct impact of rTMS language mapping on the clinical course of brain tumor patients.

Krieg et al. (2015) prospectively enrolled 70 patients with supratentorial motor eloquently located high-grade glioma (HGG) undergoing preoperative nTMS and matched these patients with 70 HGG patients who did not undergo preoperative nTMS. On average, the overall size of the craniotomy was significantly smaller for nTMS patients when compared to the non-nTMS group. Furthermore, residual tumor tissue (nTMS: 34.3%; non-nTMS: 54.3%) and unexpected tumor residuals (nTMS: 15.7%; non-nTMS: 32.9%) were less frequent in nTMS patients. Regarding the further clinical course, median inpatient stay was 12 days for the nTMS and 14 days for the non-nTMS group. Sixty percent of patients of the nTMS group and 54.3% of patients of the non-nTMS group were eligible for postoperative chemotherapy, while 67.1% of nTMS patients and 48.6% of non-nTMS patients received radiotherapy. Moreover, 3, 6, and 9 months survival was significantly better in the nTMS group. The authors concluded that with the limitations of this study in mind,
the data show that HGG patients might benefit from preoperative nTMS mapping. The lack of randomization was regarded by the authors as the major limitation of this study.

Frey et al. (2014) evaluated whether the use of navigated transcranial magnetic stimulation (nTMS) had an impact on treatment and outcome in patients with brain tumors in motor eloquent locations. The study included 250 consecutive patients and compared their functional and oncological outcomes to a matched pre-nTMS control group (n = 115). Navigated transcranial magnetic stimulation mapping results disproved suspected involvement of primary motor cortex in 25.1% of cases, expanded surgical indication in 14.8%, and led to planning of more extensive resection in 35.2% of cases and more restrictive resection in 3.5%. In comparison with the control group, the rate of gross total resections increased significantly from 42% to 59%. Progression-free-survival for low grade glioma was significantly better in the nTMS group at 22.4 months than in control group at 15.4 months. Integration of nTMS led to a nonsignificant change of postoperative deficits from 8.5% in the control group to 6.1% in the nTMS group. The authors concluded that TMS provides crucial data for preoperative planning and surgical resection of tumors involving essential motor areas. According to the authors, expanding surgical indications and extent of resection based on nTMS enables more patients to undergo surgery and might lead to better neurological outcomes and higher survival rates in brain tumor patients. The findings of this study need to be validated with a randomized trial comparing navigated transcranial magnetic stimulation with the gold standard of direct cortical stimulation intraoperative mapping.

In a prospective trial, Krieg et al. (2014) compared patients with motor eloquently located supratentorial lesions investigated with or without preoperative nTMS in terms of clinical outcome parameters. The trial included 100 patients with supratentorial lesions located in motor eloquent areas that was investigated by preoperative nTMS (2010-2013) and matched with a control of 100 patients who were operated on without nTMS data (2006-2010) by a matched pair analysis. Patients in the nTMS group showed a significantly lower rate of residual tumor on postoperative MRI. Twelve percent of patients in the nTMS and 1% of patients in the non-nTMS group improved while 75% and 81% of the nTMS and non-nTMS groups, respectively, remained unchanged and 13% and 18% of patients in the nTMS and non-nTMS groups, respectively, deteriorated in postoperative motor function on long-term follow-up. Moreover, the nTMS group showed smaller craniotomies. The authors concluded that this study increases the level of evidence for preoperative motor mapping by nTMS for rolandic lesions. The authors identify a need for a randomized trial comparing the gold standard of intraoperative mapping with navigated transcranial magnetic brain stimulation.

Picht et al. (2013) conducted a cohort study that compared the safety and effectiveness of preoperative nTMS with direct cortical stimulation (DCS) mapping during awake surgery for the identification of language areas in patients with left-sided cerebral lesions. Twenty patients with tumors in or close to left-sided language eloquent regions were examined by repetitive nTMS before surgery. During awake surgery, language-eloquent cortex was identified by DCS. nTMS results were compared for accuracy and reliability with regard to DCS by projecting both results into the cortical parcellation system. Presurgical nTMS maps showed an overall sensitivity of 90.2%, specificity of 23.8%, positive predictive value of 35.6%, and negative predictive value of 83.9% compared with DCS. For the anatomic Broca's area, the corresponding values were a sensitivity of 100%, specificity of 13.0%, positive predictive value of 56.5%, and negative predictive value of 100%, respectively. The authors concluded that good overall correlation between repetitive nTMS and DCS was observed. According to the authors, noninvasive inhibition mapping with nTMS is evolving as a valuable tool for preoperative mapping of language areas. The low specificity in posterior language areas in the current study necessitates further research to refine the methodology.

There is limited information from the peer-reviewed published medical literature to conclude that navigated transcranial magnetic stimulation is an effective clinical diagnostic test. Randomized controlled studies with large populations are needed to evaluate how this test can reduce clinical diagnostic uncertainty or impact treatment planning.
On December 13, 2013, the Cerena™ Transcranial Magnetic Stimulator (TMS) (eNeura Therapeutics®) received FDA approval through the de novo premarket review pathway, a regulatory pathway for low- to moderate-risk medical devices that are not substantially equivalent to an already legally marketed device. According to the FDA documents, the Cerena Transcranial Magnetic Stimulator is indicated for the acute treatment of pain associated with migraine headache with aura. See the following Websites for more information:
http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm378608.htm
http://www.accessdata.fda.gov/cdrh_docs/reviews/K130556.pdf

In 2009, the FDA approved the Navigated Brain Stimulation System (NBS) System for use in pre-surgical planning for patients undergoing brain surgery. The NBS uses transcranial magnetic stimulation (TMS) guided by standard MR-image data, a non-invasive direct technique for functional mapping of the motor cortex. See the following Website for more information:

Additional Products
Neuralieve TMS device

REFERENCES

The foregoing Oxford policy has been adapted from an existing UnitedHealthcare national policy that was researched, developed and approved by UnitedHealthcare Medical Technology Assessment Committee. [2016T0536H]


**POLICY HISTORY/REVISION INFORMATION**

<table>
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<th>Date</th>
<th>Action/Description</th>
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| 03/01/2016 | • Updated reference links to related policies  
• Updated non-coverage rationale; modified language pertaining to coverage guidelines for treatment of behavioral disorders:  
  o Added reference link to the Optum Behavioral Solutions Coverage Determination Guideline titled *Transcranial Magnetic Stimulation (TMS)*  
  o Removed reference link to the Optum Behavioral Solutions Technology Assessments titled *NeuroStar Transcranial Magnetic Stimulation Therapy for Major Depression* and *Brainsway Deep TMS for Major Depression*  
• Updated supporting information to reflect the most current clinical evidence, FDA information and references  
• Archived previous policy version BEHAVIORAL 025.7 T2 |