Transcranial magnetic stimulation (TMS) is a noninvasive method of delivering electrical stimulation to the brain. A magnetic field is delivered through the skull where it induces electric currents that affect neuronal function. In contrast to electroconvulsive therapy, TMS does not require anesthesia and does not induce a convulsion. Repetitive TMS (rTMS) has been investigated as a treatment of depression and other psychiatric/neurologic brain disorders, including alcohol dependence, Alzheimer's disease, neuropathic pain, obsessive-compulsive disorder (OCD), post-partum depression, depression associated with Parkinson’s disease, Tourette’s syndrome, schizophrenia, migraine, spinal cord injury, fibromyalgia and tinnitus.
TRANSCRANIAL MAGNETIC STIMULATION OF THE BRAIN (cont.)

Criteria:

For transcranial magnetic stimulation used in intraoperative monitoring of motor evoked potentials, see BCBSAZ Medical Coverage Guideline, “Sensory Evoked Potentials”.

- Transcranial magnetic stimulation of the brain for all indications is considered experimental or investigational based upon:
  1. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
  2. Insufficient evidence to support improvement of the net health outcome, and
  3. Insufficient evidence to support improvement of the net health outcome as much as, or more than, established alternatives.

These indications include, but are not limited to:

- Alcohol dependence
- Alzheimer’s disease
- Depression
- Fibromyalgia
- Migraine headache
- Neuropathic pain
- Obsessive-compulsive disorder (OCD)
- Spinal cord injury
- Schizophrenia
- Tinnitus
- Tourette’s syndrome

Resources:


TRANSCRANIAL MAGNETIC STIMULATION OF THE BRAIN (cont.)

Resources: (cont.)


TRANSCRANIAL MAGNETIC STIMULATION OF THE BRAIN (cont.)

Resources: (cont.)


TRANSCRANIAL MAGNETIC STIMULATION OF THE BRAIN (cont.)

Resources: (cont.)


27. TEC Clearinghouse News. Transcranial Magnetic Stimulation Device. 02/02/2007


FDA 510K Summary for NeuroStar® TMS System:

- FDA-approved indication: Treatment of Major Depressive Disorder in adult patients who have failed to achieve satisfactory improvement from one prior antidepressant medication at or above the minimal effective dose and duration in the current episode. (Classified in class II with establishment of special controls.)