

**Policy: MP183**

**Section: Medical Benefit Policy**

**Subject: Cranial Electrotherapy Stimulation**

### **I. Policy:** Cranial Electrotherapy Stimulation

### **II. Purpose/Objective:**

To provide a policy of coverage regarding Cranial Electrotherapy Stimulation

### **III. Responsibility:**

- A. Medical Directors
- B. Medical Management

### **IV. Required Definitions**

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

### **V. Additional Definitions**

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

### **Medicaid Business Segment**

Medical Necessity shall mean a service or benefit that is compensable under the Medical Assistance Program and if it meets any one of the following standards:

- (i) The service or benefit will, or is reasonably expected to, prevent the onset of an illness, condition or disability.
- (ii) The service or benefit will, or is reasonably expected to, reduce or ameliorate the physical, mental or development effects of an illness, condition, injury or disability.
- (iii) The service or benefit will assist the Member to achieve or maintain maximum functional capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for members of the same age.

**DESCRIPTION:** Cranial Electrotherapy Stimulation has been proposed as a treatment for anxiety, depression and insomnia as well as many other conditions such as fibromyalgia and substance abuse. Also known as transcranial electrical stimulation, cranial transcutaneous electrical nerve stimulation, and neuroelectric therapy, it is hypothesized that this device uses low levels of electrical current to stimulate the hypothalamic area of the brain causing the synthesis and release various neurotransmitters. Generally, these devices are small in size and easy to transport. Each treatment is thought to control symptoms for up to 24 hours.

The Alpha-Stim CES, provides pulsed, low-intensity current via clip electrodes that attach to the earlobes. Other devices place the electrodes on the eyelids, frontal scalp, mastoid processes, or behind the ears. The P-Stim™, is a single-use electrical stimulator for auricular acupuncture points that is worn behind the ear via a self-adhesive electrode patch.

**EXCLUSIONS:** The Plan does NOT provide coverage for Cranial Electrotherapy Stimulation of the brain as a treatment for any indication including but not limited to the treatment of anxiety, stress related conditions, depression, headache, substance abuse and cognitive dysfunction because it is considered experimental, investigational or unproven. Although the device is FDA approved, there is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of this treatment on health outcomes when compared to established treatments or technologies.

The Plan does NOT provide coverage for at home neuro-stimulation therapy (i.e. Fisher Wallace Stimulator) for any indication because it is considered experimental, investigational or unproven. Although the device is FDA approved, there is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of this treatment on health outcomes when compared to established treatments or technologies.

The Plan does NOT provide coverage for transcutaneous supraorbital nerve stimulation (t-SNS), neuromodulation or external trigeminal nerve stimulation (e-TNS), with the Cefaly Prevent, Cefaly Acute, and Cefaly Dual.) for any indication because it is considered experimental, investigational or unproven. There is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of this treatment on health outcomes when compared to established treatments or technologies.

The Plan does NOT provide coverage for the use of auricular electrostimulation, including but not limited to the BRIDGE and the Drug Relief® Devices for opioid withdrawal, P-stim, E-Pulse, or ANSiStim devices for any indication because it is considered experimental, investigational or unproven. There is insufficient evidence in the peer-reviewed published medical literature to establish the effectiveness of this treatment on health outcomes when compared to established treatments or technologies.

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven services is outlined in **MP 15 – Experimental, Investigational or Unproven Services or Treatment**

**CODING ASSOCIATED WITH:** Cranial Electrotherapy Stimulation

***The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at [www.cms.gov](http://www.cms.gov) or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements***

S8930 Electrical stimulation of auricular acupuncture points; each 15 minutes of personal one-on-one contact with the patient.

E1399 Durable Medical Equipment, Miscellaneous

K1002 Cranial electrotherapy stimulation (CES) system, includes all supplies and accessories, any type

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

#### **LINE OF BUSINESS:**

**Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supersede this policy. For PA Medicaid Business segment, this policy applies as written.**

#### **REFERENCES:**

ECRI HTAIS Hotline (ONLINE) Cranial Electrotherapy Stimulation (CES) for Anxiety, Depression and Insomnia. February 6, 2006. Accessed June 19, 2006.

American Psychiatric Association (APA) Practice Guidelines for the treatment of patients with major depressive disorder, 2<sup>nd</sup> edition. Accessed June 19, 2006.

Scherder E., Knol D, van Somerson E, Deijen JB, Binnekade R, Tilders F, Sergeant J. Effects of low-frequency cranial electrostimulation on the rest-activity rhythm and salivary cortisol in Alzheimer's Disease. *Neururehabil Neural Repair* 2003;17:101-108.

Philip P, Demotes-mainard J, Bourgeois M, Vincent JD. Efficiency of transcranial electrostimulation on anxiety and insomnia symptoms during a wash out period in depressed patients. A double-blind study. *Biol Psychiatry*. 1991 Mar 1; 29(5):451-6.

Pickworth WB, Fant RV, Butschky, Goffman AI, Henningfield JE. Evaluation of cranial electrostimulation therapy on short-term smoking cessation. *Biol Psychiatry*. 1998 Mar 15;43(6):468-9.

Capel ID, Dorrell HM, et al. The amelioration of the suffering associated with spinal cord injury with subperception transcranial electrical stimulation. *Spinal Cord*. 2003 Feb;41(2):109-17.

Bystritsky A, Kerwin L and Feusner J. A pilot study of cranial electrotherapy stimulation for generalized anxiety disorder. *J Clin Psychiatry*, March 2008 ; 69(3) :412-417.

O'Connell NE, Wand BM, et. Al. Non-invasive brain stimulation techniques for chronic pain. *Cochrane Database Syst Rev*, 2010 Sep 8;(9)

Barclay TH, Barclay RD. A clinical trial of cranial electrotherapy stimulation for anxiety and comorbid depression. *J Affect Disord*. Aug 2014;164:171-177.

Roh HT, So WY. Cranial electrotherapy stimulation affects mood state but not levels of peripheral neurotrophic factors or hypothalamic- pituitary-adrenal axis regulation. *Technol Health Care*. Nov 18 2016.

Lyon D, Kelly D, Walter J, et al. Randomized sham controlled trial of cranial microcurrent stimulation for symptoms of depression, anxiety, pain, fatigue and sleep disturbances in women receiving chemotherapy for early-stage breast cancer. *Springerplus*. 2015;4:369.

Miranda A, Taca A. Neuromodulation with percutaneous electrical nerve field stimulation is associated with reduction in signs and symptoms of opioid withdrawal: a multisite, retrospective assessment. *Am J Drug Alcohol Abuse*. 2018;44(1):56-63.

This policy will be revised as necessary and reviewed no less than annually.

**Devised:** 06/20/06

**Revised:** 8/15 (revised description); 7/19 (add exclusions)

**Reviewed:** 09/07, 9/08, 9/09, 9/10, 8/11, 8/12, 8/13, 8/14; 7/16, 7/17, 6/18, 7/20

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.