JOHNS HOPKINS HEALTHCARE

Medical Policy: High-Frequency Pulsed Electromagnetic Stimulation for Healing Chronic Wounds
Department: Health Services
Lines of Business: EHP, USFHP, PPMCO, ADVANTAGE MD

JOHNS HOPKINS HEALTHCARE

ACTION:
☐ New Policy
☐ Revising Policy Number
☐ Superseding Policy Number
☒ Archiving Policy Number: CMS08.04
☐ Retiring Policy Number

Effective Date: 03/15/2012
Review Dates: 05/29/12, 09/05/14, 12/02/16

Johns Hopkins HealthCare LLC (JHHC) provides a full spectrum of health care products and services for Employer Health Programs, Priority Partners, Advantage MD, and US Family Health Plan. Each line of business possesses its own unique contract and guidelines which, for benefit and payment purposes, should be consulted to know what benefits are available for reimbursement. Specific contract benefits, guidelines or policies supersede the information outlined in this policy.

ACTIVE AND ARCHIVED

This document has been archived as of 09/05/2014 and is no longer scheduled for review for either one or more of the following reasons:

1. This document is either primarily administrative in nature AND/OR
2. It addresses operational issues only AND/OR
3. It is mandated by statute or regulation AND/OR
4. It is unlikely that further published literature would change the determination

ARCHIVED POLICIES REMAIN ACTIVE FOR THE PURPOSE OF MEDICAL NECESSITY DETERMINATION

SCOPE:

This policy addresses the use of high-frequency pulsed electrical stimulation for healing chronic wounds.

POLICY:

For Advantage MD, see Medicare Coverage Database:
National Coverage Determination (NCD) for Electrical Stimulation (ES) and Electromagnetic Therapy for the Treatment of Wounds (270.1)

I. Unless specific benefits are provided under the member’s contract, JHHC considers High-Frequency Pulsed Electrical Stimulation for Healing Chronic Wounds experimental and investigational for all other indications, as it does not meet Technology Evaluation Criteria (TEC) #2-5.
BACKGROUND:

Pulsed Electromagnetic Fields (PEMF) require an electric current to produce its pulsating (time-varying) magnetic field (Micozzi, 2010). The coil that produces the magnetic field is stationary. Regardless of how the wave forms are transmitted through the coil, the ensuing magnetic flux lines appear in space in exactly the same manner as the flux lines appear from a permanent magnet (Micozzi, 2010). The magnetic field penetrates biological tissues without modification and the induced electric fields are produced at the right angles to the flux lines. The ensuing current flow is determined by the tissue’s electrical properties (impedance) and will determine the final spatial dosimetry. PEMF devices are typically 5-30G at the target tissue with varying specific shapes and amplitudes of fields (Weintraub, 2008).

In a Cochrane review on electrotherapy for neck pain, it was noted that the evidence of PEMF as a treatment option for neck pain is of very low quality. The authors stated that they cannot make any definite statements on the efficacy and clinical usefulness of electrotherapy modalities for neck pain (Kroeling et al, 2009).

In addition, another Cochrane review of a study examining the effectiveness of pulsed electrical stimulation in treating patients with osteoarthritis concluded, “That this therapy may provide significant improvements for knee arthritis, but further studies are needed to confirm whether the statistically significant findings shown in these studies result in important health benefits.”

A randomized, double-blind, placebo-controlled, parallel study, examined if repetitive and cumulative exposure to low-frequency PEMF targeting painful feet can reduce neuropathic pain (NP) (Weintraub, 2008). Weintraub concluded that in this study, “That judging the efficacy effects of static magnets therapeutic effects for various clinical conditions remains challenging, particularly because the dosimetry has not been documented on static magnetotherapy.”

There is a consensus in literature that the rehabilitation of knee osteoarthritis using PEMF has little value in the overall management of degenerative joint disease of the knee. Evidence suggests PEMF does not significantly reduce the pain of knee osteoarthritis.

In a systematic review on wound management, the study concluded that there is generally insufficient reliable evidence to draw conclusions about the contribution of laser therapy, therapeutic ultrasound, electro-therapy and electromagnetic therapy to chronic wound healing and it was also concluded that there is currently no reliable evidence of benefit of electromagnetic therapy in the healing of leg ulcers (Cullum, 2001).

The Centers for Medicare & Medicaid (CMS) has a National Coverage Determination (NCD) policy and approves PEMF for limited use in wound healing. As of 2016, this NCD is limited to chronic stage III or stage IV pressure ulcers, arterial ulcers, diabetic ulcers and venous stasis ulcers.
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CODING INFORMATION:

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Note: The following CPT/HCPCS codes are included below for informational purposes. Inclusion or exclusion of a CPT/HCPCS code(s) below does not signify or imply member coverage or provider reimbursement. The member’s specific benefit plan determines coverage and referral requirements. All inpatient admissions require pre-authorization.

NOT COVERED FOR THIS INDICATION

Compliance with the provision in this policy may be monitored and addressed through post payment data analysis and/or medical review audits

<table>
<thead>
<tr>
<th>Employer Health Programs (EHP) <strong>See Specific Summary Plan Description (SPD)</strong></th>
<th>Priority Partners (PPMCO) refer to COMAR guidelines and PPMCO SPD then apply policy criteria</th>
<th>US Family Health Plan (USFHP), TRICARE Medical Policy supersedes JHHC Medical Policy. If there is no Policy in TRICARE, apply the Medical Policy Criteria</th>
<th>Advantage MD, LCD and NCD Medical Policy supersedes JHHC Medical Policy. If there is no LCD or NCD, apply the Medical Policy Criteria</th>
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<tr>
<th>HCPCS CODES</th>
<th>DESCRIPTION</th>
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<tr>
<td>E0761</td>
<td>Nonthermal pulsed high frequency radiowaves, high peak power electromagnetic energy treatment device</td>
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<tr>
<td>E0769</td>
<td>Electrical stimulation or electromagnetic wound treatment device, not otherwise classified</td>
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<tr>
<td>G0295</td>
<td>Electromagnetic therapy, to one or more areas, for wound care other than described in G0329 or for other uses</td>
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<tr>
<td>G0329</td>
<td>Electromagnetic therapy, to one or more areas for chronic stage III and stage IV pressure ulcers, arterial ulcers, diabetic ulcers and venous stasis ulcers not demonstrating measurable signs of healing after 30 days of conventional care as part of a therapy plan of care.</td>
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ICD10 CODES ARE FOR INFORMATIONAL PURPOSES ONLY

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<tr>
<th>ICD-10 CODES</th>
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<td>Multiple Codes</td>
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### REVENUE CODES

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<th>REVENUE CODE</th>
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<tr>
<td>0271</td>
<td>Medical/Surgical Supplies and Devices-Nonsterile Supply; Hospital; outpatient</td>
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<tr>
<td>0420</td>
<td>Physical Therapy-General; Hospital; outpatient</td>
</tr>
<tr>
<td>0430</td>
<td>Occupational Therapy-General; Hospital; outpatient</td>
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### REFERENCE STATEMENT:

Analyses of the scientific and clinical references cited below were conducted and utilized by the Johns Hopkins HealthCare LLC (JHHC) Medical Policy Team during the development and implementation of this medical policy. Per NCQA standards, the Medical Policy Team will continue to monitor and review any newly published clinical evidence and adjust the references below accordingly if deemed necessary.

### REFERENCES:


