

Corporate Medical Policy

Electrostimulation and Electromagnetic Therapy for Wounds

File Name: electrostimulation_and_electromagnetic_therapy_for_wounds
Origination: 02/2010
Last CAP Review: 11/2011
Next CAP Review: 11/2012
Last Review: 11/2011

Description of Procedure or Service

Electrical stimulation refers to the application of electrical current through electrodes placed directly on the skin in close proximity to the wound. Electromagnetic therapy involves the application of electromagnetic fields rather than direct electrical current. Both are proposed as treatments for chronic wounds.

Since the 1950s, investigators have used electrical stimulation as a technique to promote wound healing, based on the theory that electrical stimulation may:

- Increase ATP concentration in the skin
- Increase DNA synthesis
- Attract epithelial cells and fibroblasts to wound sites
- Accelerate the recovery of damaged neural tissue
- Reduce edema
- Increase blood flow
- Inhibit pathogenesis.

Electrical stimulation refers to the application of electrical current through electrodes placed directly on the skin in close proximity to the wound. The types of electrical stimulation and devices can be categorized into 4 groups based on the type of current:

- low intensity direct current (LIDC);
- high voltage pulsed current (HVPC);
- alternating current (AC);
- transcutaneous electrical nerve stimulation (TENS).

Electromagnetic therapy is a related but distinct form of treatment that involves the application of electromagnetic fields rather than direct electrical current. At present, no electrical stimulation or electromagnetic therapy devices have received approval from the U.S. Food and Drug Administration (FDA) specifically for the treatment of wound healing. A number of devices have been cleared for marketing for other indications. Use of these devices for wound healing is an off-label indication.

*****Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.**

Policy

Electrical stimulation or electromagnetic therapy is considered investigational for the treatment of wounds. BCBSNC does not provide coverage for investigational services or procedures.

Electrical stimulation performed by the patient in the home setting is considered investigational for the treatment of wounds. BCBSNC does not provide coverage for investigational services or

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procedures.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Electrostimulation and Electromagnetic Therapy for Chronic Wounds is covered

Not applicable.

When Electrostimulation and Electromagnetic Therapy for Chronic Wounds is not covered

Electrical stimulation using **any** of the following types of electrical stimulation and devices for the treatment of wounds is considered investigational:

- low intensity direct current;
- high-voltage pulsed current;
- alternating current;
- transcutaneous electrical nerve stimulation.

Electrical stimulation performed by the patient in the home setting for the treatment of wounds is considered **investigational**.

Electromagnetic therapy for the treatment of wounds is considered **investigational**.

Policy Guidelines

There is insufficient evidence from large well-designed randomized controlled trials that electrostimulation or electromagnetic stimulation improves health outcomes for wound care patients beyond that provided by standard treatment. Evidence from small RCTs on electrostimulation reports improvements on some intermediate outcomes, such as decrease in wound size and/or the velocity of wound healing. However, these studies have not demonstrated consistent improvements on the more important clinical outcomes of complete healing and the time to complete healing. For electromagnetic therapy, there is a lack of high quality RCTs. Therefore, these treatments are considered investigational for the treatment of wounds.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: E0761, E0769, G0281, G0282, G0295, G0329

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BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.57, 10/6/09.

Senior Medical Director review - 1/6/2010

Medicare Technology Assessments for Electrostimulation for Wounds (CAG-00068N). Retrieved 10/12/11 from <http://www.cms.hhs.gov/mcd/viewtechassess.asp?id=27>

Association for the Advancement of Wound Care (AAWC). Association for the Advancement of Wound Care guideline of pressure ulcer guidelines. Malvern, PA: Retrieved 10/12/11 from www.guideline.gov

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.57, 10/4/2011

Policy Implementation/Update Information

- 2/2/2010 Notification of new policy. Electrical stimulation and electromagnetic therapy for the treatment of wounds is considered **investigational**. Electrical stimulation performed by the patient in the home setting for the treatment of wounds is considered **investigational**. Notification given 2/2/2010. Effective date 5/11/2010. (pmo)
- 6/22/10 Policy Number(s) removed (amw)
- 12/21/10 The word "chronic" was removed from the policy name. Specialty Matched Consultant Advisory Panel review 11/29/10. Policy accepted as written. (adn)
- 12/20/11 Policy Guidelines and References updated. No change to policy statement of coverage criteria. Electrostimulation and electromagnetic therapy are considered investigational for treatment of wounds. Specialty Matched Consultant Advisory Panel review 11/30/11. (adn)

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.