Nonspinal Bone Growth Stimulation

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Approved By:	Highmark Health Options – Market Leadership
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Products:	Medicaid
Application:	All participating hospitals and providers
Page Number(s):	1 of 3

Disclaimer

Highmark Health Options medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.

POLICY STATEMENT

Highmark Health Options may provide coverage under the medical-surgical benefits of the Company's Medicaid products for medically necessary benefits.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

The qualifications of the policy will meet the standards of the National Committee for Quality Assurance (NCQA) and the Delaware Department of Health and Social Services (DHSS) and all applicable state and federal regulations.

DEFINITIONS

Highmark Health Options (HHO) – Managed care organization serving vulnerable populations that have complex needs and qualify for Medicaid. Highmark Health Options members include individuals and families with low income, expecting mothers, children, and people with disabilities. Members pay nothing to very little for their health coverage. Highmark Health Options currently services Delaware Medicaid: Delaware Healthy Children Program (DHCP) and Diamond State Health Plan Plus members.

Bone growth stimulation – Bone growth stimulation is also known as osteogenesis stimulation and is used when the body's healing process fails to heal bone injuries. The bone growth stimulation device stimulates the natural healing process of the bone by sending low-level pulses of electromagnetic energy to the injury site.

POLICY POSITION

Prior authorization is required.

Both invasive and noninvasive non spinal electrical bone growth stimulation are eligible for payment in the treatment of a nonunited fracture. A nonunited fracture is defined as a fracture that has not healed within a minimum of three (3) months of the original fracture.

Noninvasive, nonspinal electrical bone growth stimulation may be considered medically necessary as a treatment of fracture nonunion or congenital pseudoarthrosis in the appendicular skeleton (the appendicular skeleton includes the bones of the shoulder girdle, upper extremities, pelvis, and lower extremities). The diagnosis of fracture nonunion must meet ALL of the following criteria:

- At least three (3) months have passed since the date of the fracture; and
- Serial radiographs have confirmed that no progressive signs of healing have occurred; and
- The fracture gap is one (1) centimeter or less; and
- The individual can be adequately immobilized and is of an age likely to comply with non-weight bearing for fractures of the pelvis and lower extremities.

Nonspinal electrical bone growth stimulation (EBGS) will be denied as not medically necessary if the above criteria is not met.

When the doctor reports electrical stimulation, the claim should be processed under the appropriate code for electrical stimulation. Use of the device is included in the doctor's global allowance for the electrical stimulation (i.e., no separate payment can be made for the device).

However, if the individual employs the stimulator at home, rental or purchase of the device may be eligible for payment. In this instance, any charges reported by the doctor for electrical stimulation should be denied as not medically necessary.

ELIGIBLE PROCEDURE CODES

CPT Codes	Description
20974	Electrical stimulation to aid bone healing; noninvasive (nonoperative).
20975	Electrical stimulation to aid bone healing; invasive.
E0747	Osteogenesis stimulator, electrical, noninvasive, other than spinal applications.

ELIGIBLE DIAGNOSIS CODES

M84.30XK	M84.311K	M84.312K	M84.319K	M84.321K
M84.322K	M84.329K	M84.331K	M84.332K	M84.333K
M84.334K	M84.339K	M84.341K	M84.342K	M84.343K
M84.344K	M84.345K	M84.346K	M84.350K	M84.351K
M84.352K	M84.353K	M84.359K	M84.361K	M84.362K
M84.363K				

References

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Buza JA, 3rd, Einhorn T. Bone healing in 2016. Clin Cases Miner Bone Metab. 2016;13(2):101- 105.

Aleem IS, Aleem I, Evaniew N, et al. Efficacy of electrical stimulators for bone healing: A metaanalysis of randomized sham-controlled trials. Sci Rep. 2016; 6:31724.

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Hayes, Inc. Hayes Health Technology Assessment. Electrical bone growth stimulation, invasive. Lansdale, PA: Hayes, Inc.; 07/21/2016.

Hayes, Inc. Hayes Health Technology Assessment. Noninvasive electrical bone growth stimulators for spinal fusion or foot and ankle indications. Lansdale, PA: Hayes, Inc.; 09/22/2016.

Aleem IS, Aleem I, Evaniew N, Busse JW, et al. Efficacy of electrical stimulators for bone healing: A meta-analysis of randomized sham-controlled trials. Sci Rep. 2016; 6:31724.

Murray HB, Pethica BA. A follow-up study of the in-practice results of pulsed electromagnetic field therapy in the management of nonunion fractures. Orthop Res Rev. 2016; 8:67-72.

POLICY UPDATE HISTORY

10/08/2021	Approved in medical policy committee
08/24/2022	Annual review; approved in medical policy committee
09/13/2022	Approved in QI-UM
10/10/2022	Approved in Governance