Clinical Policy: Osteogenic Stimulation

Reference Number: WA.CP.MP.194
Date of Last Review: 08/25
Effective Date: 10/01/25

Coding Implications
Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description

Electrical osteogenic stimulation (bone growth stimulation) can be performed invasively or non-invasively. Invasive osteogenic stimulators provide electrical stimulation directly to the non-healing fracture or bone fusion site through percutaneously placed cathodes or by implantation of a coiled cathode wire. Noninvasive osteogenic stimulators deliver an electrical current to the fracture site via capacitive coupling (CC), pulsed electromagnetic field (PEMF), or combined magnetic field technology (CMFT) through treatment coils that are placed externally around the fracture.[1] An ultrasonic osteogenic stimulator is a noninvasive device that emits low intensity, pulsed ultrasound. The device is applied to the surface of the skin at the fracture site and ultrasound waves are emitted via a conductive coupling gel to stimulate fracture healing.[2]

This policy outlines separately the medical necessity criteria for electrical and ultrasonic osteogenic stimulators to enhance the bone healing process.

Policy/Criteria

I. It is the policy of Coordinated Care of Washington, Inc. and Coordinated Care Corporation, in accordance with the Health Care Authority's Health Technology Assessment and Health Care Authority Billing Guidelines, that *invasive and non-invasive* bone growth stimulators for *non-spinal bone*s are considered **medically necessary** when one of the following is met:
- A. Non-union of a long bone fracture (includes clavicle, humerus, phalanx, radius, ulna, femur, tibia, fibula, metacarpal and metatarsal) where three months have elapsed since the date of injury without healing,
- B. Failed fusion of a joint where a minimum of nine months has elapsed since the last surgery,
- C. Diagnosis of congential pseudarthorsis (non-invasive, only).

II. It is the policy of Coordinated Care of Washington, Inc. and Coordinated Care Corporation, in accordance with the Health Care Authority's Health Technology Assessment and Health Care Authority Billing Guidelines, that *invasive and non-invasive* bone growth stimulators for *spinal bones* are considered **medically necessary** when prescribed by a neurologist, orthopedic surgeon or neurosurgeon and one of the following is met:
- A. Failed spinal fusion where a minimum of nine months has elapsed since the last surgery,
- B. Post-op from a multilevel spinal fusion surgery,
- C. Post-op from spinal fusion surgery with history of a previously failed spinal fusion.

III. It is the policy of Coordinated Care of Washington, Inc. and Coordinated Care Corporation, in accordance with the Health Care Authority's Health Technology Assessment and Health

Care Authority Billing Guidelines, that *ultrasonic non-invasive bone growth stimulator* is **medically necessary** when both of the following are met:

A. Non-union confirmed by two radiographs minimum of 90 days apart,
B. Physician statement of no clinical evidence of fracture healing.

IV. It is the policy of Coordinated Care of Washington, Inc. and Coordinated Care Corporation, that *ultrasonic osteogenesis stimulators* are **not medically necessary** for the following indications:

A. Used with other noninvasive osteogenic stimulators;
B. Avascular necrosis of the femoral head;
C. Stress fractures;
D. Fractures in which the gap exceeds one cm;
E. Fresh fractures in locations other than distal radius, tibial diaphysis, 5th metatarsal (Jones fracture only) or scaphoid;
F. Fresh tibial diaphyseal or tibial and fibular fractures treated with closed reduction and intramedullary nailing and no risk factors for poor or prolonged healing;
G. Preoperative use for fractures that require surgical intervention, or internal or external fixation (i.e., use of ultrasonic bone growth stimulators for fractures in the preoperative period would not be medically necessary);
H. Tibial stress fractures.

V. It is the policy of Coordinated Care of Washington, Inc., that osteogenic devices are **not medically necessary** for nonunion fractures of the skull, vertebrae, or those that are tumor-related.

Background
This policy is based on Washington State Health Care Authority (HCA) Health Technology Assessment (HTA) and Health Care Authority Billing Guidelines.

Coding Implications
This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2024, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT® Codes	Description
20974	Electrical stimulation to aid bone healing; noninvasive (nonoperative)
20975	Electrical stimulation to aid bone healing; invasive (operative)
20979	Low intensity ultrasound stimulation to aid bone healing, noninvasive (nonoperative)

HCPCS ®* Codes	Description
E0747	Osteogenesis stimulator; electrical, noninvasive, other than spinal applications
E0748	Osteogenesis stimulator; electrical, noninvasive, spinal applications
E0749	Osteogenesis stimulator; electrical, surgically implanted
E0760	Osteogenesis stimulator, low intensity ultrasound, noninvasive

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Policy developed.	08/24	09/24
Added new section IV. Corrected typos. References reviewed and updated. Added "Coordinated Care Corporation".	06/25	08/25

References

1. Hayes. Center for Evidence-based Policy, Oregon Health & Science University. *Bone Growth Stimulators*. Washington Health Technology Assessment. July 31, 2009.
2. Washington State Health Care Authority. *Physician-related Services/Health Care Billing Guide*. Physician-Related Services/Health Care Professional Services billing guide Revision effective July 1, 2025.

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or

regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members/enrollees. This clinical policy is not intended to recommend treatment for members/enrollees. Members/Enrollees should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

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Note: For Medicaid members/enrollees, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.