Subject: Osteogenic Bone Growth Stimulator

Medical Policy #: 15.2

Original Effective Date: 10/04/2002

Status: Reviewed

Last Review Date: 05/24/2023

Disclaimer

Refer to the member's specific benefit plan and Schedule of Benefits to determine coverage. This may not be a benefit on all plans or the plan may have broader or more limited benefits than those listed in this Medical Policy.

Description

Electrical stimulation to augment bone repair can be attained either invasively or non-invasively. Invasive devices provide electrical stimulation directly at the fracture site either through percutaneously placed cathodes or by implantation of a coiled cathode wire into the fracture site. The power pack for the latter device is implanted into soft tissue near the fracture site and subcutaneously connected to the cathode, creating a self-contained system with no external components. The power supply for the former device is externally placed and the leads connected to the inserted cathodes. With the non-invasive device, opposing pads, wired to an external power supply, are placed over the cast. An electromagnetic field is created between the pads at the fracture site.

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. The ultrasonic osteogenic stimulators are not to be used concurrently with other non-invasive osteogenic devices.

Definition

A long bone is limited to the site of the clavicle, humerus, radius, ulna, femur, tibia, fibula, metacarpal, or metatarsal.
A multilevel spinal fusion is one which involves 3 or more vertebrae (e.g., L3-L5, L4-S1, etc.).

Coverage Determination

Prior Authorization is required. Logon to Pres Online to submit a request: https://ds.phs.org/preslogin/index.jsp.

Prior Authorization will be required for E0747, E0748 and E0760.

PHP follows the Local Coverage Determination (LCD) and National Coverage Determination (NCD) **for Commercial, Medicare and Medicaid** based on the following.

A. **Noninvasive Stimulator Devices**– PHP follows Osteogenesis Stimulators, (LCD L33796/LCA A52513) **or** Osteogenesis Stimulators NCD (150.2).

B. **Noninvasive or Invasive (Implantable) Stimulator:** PHP follows Osteogenic Stimulators, NCD (150.2). Invasive devices provide electrical stimulation directly at the fracture site either through percutaneously placed cathodes or by implantation of a coiled cathode wire into the fracture site.

C. **Ultrasonic Osteogenic Stimulators:** PHP follows Osteogenic Stimulator, (LCD L33796/LCA A52513) **or** Osteogenic Stimulator, NCD (150.2).

Exclusions – Non-Covered Indications

- Nonunion fractures of the skull, vertebrae and those that are tumor-related.
- Ultrasonic osteogenic stimulators for acute fractures and delayed unions
- Ultrasonic osteogenic stimulators may not be used concurrently with other non-invasive osteogenic devices.

Coding

The coding listed in this medical policy is for reference only. Covered and non-covered codes are within this list.

Codes	CPT/HCPCS description for Osteogenic Stimulators
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

Codes	CPT/HCPCS description for Osteogenic Stimulators
E0747	Osteogenesis stimulator, electrical, non-invasive, other than spinal
E0748	Osteogenesis stimulator, electrical, non-invasive, spinal applications
E0749	Osteogenesis stimulator, electrical, surgically implanted
E0760	Osteogenesis stimulator, low intensity ultrasound, non-invasive
A4559	Coupling gel or paste, for use with ultrasound device, per oz

Reviewed by / Approval Signatures

Clinical Quality & Utilization Mgmt. Committee: Gray Clarke MD
Senior Medical Director: David Yu MD
Medical Director: Ana Maria Rael
Date Approved: 05/24/2023

References

1. CMS, NCD for Osteogenic Stimulators (150.2), Version 2, last reviewed June 2005, Assessed 04/17/2023.
2. CMS Manual System, Pub 100-04 Medicare Claims Processing, Transmittal 597, Change Request 3836, Date: June 24, 2005. [Cited 04/17/2023]
3. CGS, JC DME, LCD L33796 Osteogenesis Stimulators, Revision Number R5 & R6, revision effective date: 01/01/2020 related LCA (A52513), Revision date 001/01/2023, R8. Assessed 04/17/2023

Publication History

01-23-2019	Correction, detail of Publication was left out: Osteogenic Bone Growth Stimulator, MPM 15.1 were split into two separate policies. This MPM 15.2 criteria is for Medicare and Medicaid and follows the LCD & NCD combined. It was approved by CQUMC on 01-23-2019.
05-20-2020	Annual review. Reviewed by PHP Medical Policy Committee to have only one policy which will follow LCD/NCD for all product lines on 04/08/2020. As a result, MPM 15.1 (which followed MCG A-0565 & A-0414) has been retired. There has been no change in coverage for revision #R5 and R6 of the LCD L33796 and NCD 150.2 remains unchanged since June 2005. On 05/07/20, PHP Medical Policy Committee agreed PA for E0747, E0748, E0749 and E0760.
05-26-2021	Annual review. Reviewed by PHP Medical Policy Committee on 05/14/2021. No change to LCD/NCD. Continue to follow LCD/NCD for all LOB. Continue PA for E0747, E0748, E0760. Surgically implanted (E0749) will be removed from the PA grid, there is no utilization.
05-25-2022	Annual review. Reviewed by PHP Medical Policy Committee on 05-06-2022. Continue to follow CGS Osteogenesis (LCD L33796/LCA A52513) and (NCD 150.2) for noninvasive stimulator devices and ultrasound osteogenic stimulators and continue to follow NCD (150.2) for invasive implantable stimulator. The coverage determination guidelines were removed from policy and reformatted to only include the LCD/NCD weblinks. Continue PA for E0747, E0748, E0760 and continue no PA requirement for 20974, 20975, 20979 and E0749.
05-24-2023	Annual review. Reviewed by PHP Medical Policy Committee on 04/19/2023. No change. Continue to follow LCD (L33796) and NCD (150.2). Continue PA for E0747, E0748, E0760 and continue no PA requirement for 20974, 20975, 20979 and E0749.

This Medical Policy is intended to represent clinical guidelines describing medical appropriateness and is developed to assist Presbyterian Health Plan and Presbyterian Insurance Company, Inc. (Presbyterian) Health Services staff and Presbyterian medical directors in determination of coverage. The Medical Policy is not a treatment guide and should not be used as such.

For those instances where a member does not meet the criteria described in these guidelines, additional information supporting medical necessity is welcome and may be utilized by the medical director in reviewing the case. Please note that all Presbyterian Medical Policies are available online at: ***Click here for Medical Policies***

Web links:
At any time during your visit to this policy and find the source material web links has been updated, retired or superseded, PHP is not responsible for the continued viability of websites listed in this policy.

When PHP follows a particular guideline such as LCDs, NCDs, MCG, NCCN etc., for the purposes of determining coverage; it is expected providers maintain or have access to appropriate documentation when requested to support coverage. See the References section to view the source materials used to develop this resource document.