Cigna Medical Coverage Policies – Musculoskeletal Electrical and Low Frequency US Bone Growth Stimulation Spine

Effective July 1, 2025

Instructions for use

The following coverage policy applies to health benefit plans administered by Cigna. Coverage policies are intended to provide guidance in interpreting certain standard Cigna benefit plans and are used by medical directors and other health care professionals in making medical necessity and other coverage determinations. Please note the terms of a customer's particular benefit plan document may differ significantly from the standard benefit plans upon which these coverage policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a coverage policy.

In the event of a conflict, a customer's benefit plan document always supersedes the information in the coverage policy. In the absence of federal or state coverage mandates, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of:

1. The terms of the applicable benefit plan document in effect on the date of service
2. Any applicable laws and regulations
3. Any relevant collateral source materials including coverage policies
4. The specific facts of the particular situation

Coverage policies relate exclusively to the administration of health benefit plans. Coverage policies are not recommendations for treatment and should never be used as treatment guidelines.

This evidence-based medical coverage policy has been developed by eviCore, Inc. Some information in this coverage policy may not apply to all benefit plans administered by Cigna.

CMM-615: Electrical and Low Frequency Ultrasound Bone Growth Stimulation (Spine)

400 Buckwalter Place Boulevard, Bluffton, SC 29910 (800) 918-8924 www.EviCore.com

CMM-615.1: General Guidelines

Application of Guideline

- The determination of medical necessity for the performance of electrical bone growth stimulation is always made on a case-by-case basis.
- For additional timing and documentation requirements, see **CMM-600.1: Prior Authorization Requirements**.
- For the purposes of this guideline, the following timeframes apply:
  - Invasive electrical bone growth stimulation refers to electrical bone growth stimulation inserted at the time of the surgery
  - Non-invasive electrical bone growth stimulation refers to electrical bone growth stimulation applied beginning at any time from the time of surgery until up to six (6) months after surgery for fusions at risk of failure and after six (6) months after surgery for fusions that have failed.
  - **Criteria exception**: See below for timeframe exceptions related to **Urgent/Emergent Conditions/Indications**

Urgent/Emergent Indications/Conditions

- The presence of urgent/emergent indications/conditions warrants definitive surgical treatment. **Imaging findings noted in the applicable procedure section(s) are required**.
  - The above timeframes for invasive and non-invasive electrical bone growth stimulation are not applicable to confirmed urgent/emergent indications/conditions for spine fusion surgery. See the Urgent/Emergent Indications/Conditions section of the applicable General Guidelines:
    - For anterior cervical fusion, see **CMM-601.1: General Guidelines**
    - For posterior cervical fusion, see **CMM-604.1 General Guidelines**
    - For lumbar fusion, see **CMM-609.1: General Guidelines**
    - For thoracic or thoracolumbar fusion, see **CMM-614.1: General Guidelines**

CMM-615.2: Indications

Associated with an Approved Spinal Fusion Surgery

Invasive **or** non-invasive electrical bone growth stimulation is considered **medically necessary** when **ALL** of the following criteria are met:

- Performed for an associated approved spinal fusion surgery
- The individual is high risk for pseudarthrosis within the first six (6) months after surgery as evidenced by the presence of **ANY** of the following risk factors for fusion failure:
  - Alcohol Use Disorder (AUD)
  - Body mass index (BMI) >30
  - Diabetes, renal disease, or other metabolic diseases when bone healing is likely to be compromised
  - Glucocorticoid dependent
  - Meyerding Grade III or worse spondylolisthesis
  - Multi-level spinal fusion including three (3) or more vertebrae
  - Nutritional deficiency/malnutrition
  - One or more previously failed spinal fusion(s)
  - Osteoporosis or osteopenia (T-score of < -1.0) on a recent (within one year) DEXA
  - Severe anemia
  - Smoking history
  - Immunocompromised status

Treatment for Individuals with Failed Spinal Fusion

Non-invasive electrical bone growth stimulation is considered **medically necessary** as a treatment for individuals with failed spinal fusion when **BOTH** of the following criteria are met:

- A minimum of six (6) months has passed since the date of the original spinal fusion
- Serial plain X-rays or appropriate imaging studies confirm there is no evidence of progression of healing/consolidation of the spinal fusion for three (3) months during the later portion of the six (6) month post-fusion surgery period.

CMM-615.3: Non-Indications

Not Medically Necessary

- Invasive and non-invasive electrical bone growth stimulation performed without meeting the criteria in the **General Guidelines** (when applicable for urgent/emergent conditions) **and** the criteria in the applicable **Indications** section are considered **not medically necessary**.
- Invasive and non-invasive electrical bone growth stimulation are considered **not medically necessary** for **ALL** of the following:
  - Acute or chronic lumbar spondylolysis (pars interarticularis defect) with or without spondylolisthesis
  - Failed cervical or lumbar disc arthroplasty
  - Spinal malignancy
  - As non-surgical treatment of an established pseudoarthrosis

Experimental, Investigational, or Unproven (EIU)

- Semi-invasive electrical bone growth stimulation and low-intensity ultrasound stimulation are considered **experimental, investigational, or unproven (EIU)** for **ANY** spinal indication due to a lack of sufficient evidence of their effectiveness.

Codes (CMM-615)

The inclusion of any code in this table does not imply that the code is under management or requires prior authorization. Refer to the applicable health plan for management details. Prior authorization of a code listed in this table is not a guarantee of payment. The Certificate of Coverage or Evidence of Coverage policy outlines the terms and conditions of the member's health insurance policy.

Code	Code Description/Definition
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)
E0748	Osteogenesis stimulator; electrical, noninvasive, spinal applications
E0749	Osteogenesis stimulator; electrical, surgically implanted
E0760	Osteogenesis stimulator; low intensity ultrasound, non-invasive

References (CMM-615)

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