



CLINICAL GUIDELINES

CMM-615: Electrical and Low Frequency US Bone Growth Stimulation Spine Guidelines

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EviCore
By **EVERNORTH**

EviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. Requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist and/or individual's Primary Care Physician (PCP) may provide additional insight.

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

CMM-615.1: General Guidelines**CMM-615.2: Indications****CMM-615.3: Non-Indications****Procedure (CPT®) Codes (CMM-615)****References (CMM-615)**

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 6 months after surgery for fusions at risk of failure and after 6 months after surgery for fusions that have failed.
 - ◆ **Criteria exception:** Please 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 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 6 months has passed since the date of the original fusion surgery
- Serial plain X-rays or appropriate imaging studies confirm there is no evidence of progression of healing/consolidation of the spinal fusion for 3 months during the later portion of the 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 is 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 pseudarthrosis

Experimental, Investigational, or Unproven (EIU)

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

Procedure (CPT®) Codes (CMM-615)

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required.	
CPT®	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)
HCPCS Codes	Code Description/Definition
E0748	Osteogenesis stimulator; electrical, noninvasive, spinal applications
E0749	Osteogenesis stimulator; electrical, surgically implanted
E0760	Osteogenesis stimulator; low intensity ultrasound, non-invasive
This list may not be all-inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.	

References (CMM-615)

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