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## **Bone Growth (Osteogenesis) Stimulators (BGS)**

**MP9076**

**Covered Service:** Yes

**Prior Authorization  
Required:** Yes

**Additional  
Information:** Concurrent use of electrical and ultrasound stimulation devices is not eligible for coverage

### **Prevea360 Health Plan Medical Policy:**

#### **Electrical or Electromagnetic Bone Growth Stimulators**

- 1.0 An electrical bone growth stimulator **requires** prior authorization through the Health Services Division and is considered medically necessary for **ANY** of the following clinical situations:
  - 1.1 Treatment of long bone fracture nonunion (excluding those related to malignancy), of the appendicular skeleton (including the bones of the shoulder girdle, upper extremities, pelvis, and lower extremities) when **ALL** of the following are present:
    - 1.1.1 The fracture was acquired secondary to trauma or surgery; **AND**
    - 1.1.2 There is evidence of adequate fracture care (e.g. casting, immobilization, internal fixation); **AND**
    - 1.1.3 At least 90 days have elapsed since the fracture and institution of conventional fracture treatment; **AND**
    - 1.1.4 There is documentation of non-union of the fracture and that fracture healing has ceased for three or more months prior to starting treatment with the bone growth stimulator, as demonstrated by two (2) sets of radiographs separated by a minimum of 90 days (measured from the date of the most recent medical or surgical intervention) **AND**
    - 1.1.5 The fracture gap is one (1) centimeter or less.
  - 1.2 Treatment of failed or high risk spinal fusion (all regions of the spine) when **ANY** of the following criteria are met:
    - 1.2.1 Failed fusion when a minimum of six (6) months has elapsed since the last surgery
    - 1.2.2 Bone growth stimulator is being used as adjunctive treatment with fusion surgery on higher risk member with a mature skeleton and **ALL** of the following criteria are met:

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- 1.2.2.1 Member has risk factors for fusion failure as indicated by **ANY** of the following: diabetes, obesity (BMI equal to or greater than 30), osteoporosis, current tobacco use, continuous oral corticosteroid use for greater than six (6) months, renal disease; **AND**
- 1.2.2.2 Fusion is at high risk of failure, as indicated by **ANY** of the following:
  - 1.2.2.2.1. History of previous failed fusion
  - 1.2.2.2.2. Surgery will fuse multiple levels with three (3) or more vertebrae involving (2) or more vertebral spaces (e.g. C2-C4, L3-L5, L4-S1, etc)
  - 1.2.2.2.3. Grade II or worse spondylolisthesis is noted.
- 2.0 The use of electrical bone growth stimulation is considered experimental and investigational and therefore not medically necessary for **ANY** of the following, including but not limited to:
  - 2.1.1 Long bones with fresh fractures
  - 2.1.2 Nonunion of appendicular bones other than long bones
  - 2.1.3 Delayed union of long bone fractures when criteria of 1.1 are not met
  - 2.1.4 Biologically inert nonunion better suited to bone grafting
  - 2.1.5 Scaphoid fractures (all types: e.g. nonunion, acute/fresh, delayed union)

### **Ultrasonic Bone Growth Simulators**

- 3.0 Ultrasonic bone growth stimulation **requires** prior authorization through the Health Services Division and is considered medically necessary for **ANY** of the following clinical situations:
  - 3.1 Acute fracture when **ALL** of the following criteria are met:
    - 3.1.1 Fresh fracture of the tibia in a skeletally mature member; **AND**
    - 3.1.2 Orthopedic closed management with or without reduction; **AND**
    - 3.1.3 Fracture less than seven (7) days old; **AND**
    - 3.1.4 Fracture gap is less than or equal to 1 cm; **AND**
    - 3.1.5 None of the following contraindications are present:
      - 3.1.5.1 Fracture that is pathological or associated with malignancy
      - 3.1.5.2 Fracture is unstable, or requires surgical intervention or internal or external fixation
      - 3.1.5.3 Postreduction displacement greater than 50 percent or postreduction angulation or malalignment

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3.1.5.4 Presence of pacemaker or implantable defibrillator

3.2 Non-union fracture (including scaphoid) when **ALL** of the following criteria are met:

3.2.1 Fracture does not involve the skull or vertebrae, and is not tumor related;  
**AND**

3.2.2 The fracture was acquired secondary to trauma or surgery (including tibial osteotomy); **AND**

3.2.3 There is evidence of adequate fracture care (e.g. casting, immobilization, internal fixation); **AND**

3.2.4 The fracture gap is less than or equal to 1 centimeter

3.2.5 There is documentation of non-union of the fracture and that fracture healing has ceased for three or more months prior to starting treatment with the bone growth stimulator, as demonstrated by two (2) sets of radiographs separated by a minimum of 90 days (measured from the date of the most recent medical or surgical intervention)

4.0 The use of ultrasonic osteogenesis stimulator is considered experimental and investigational and therefore not medically necessary for **ANY** of the following, including but not limited to:

4.1 Delayed union fractures

4.2 Non-union fractures of the skull, vertebrae, and those that are tumor-related

4.3 Fresh non-tibial fractures

4.4 Scaphoid fractures when criteria of 3.2 are not met

4.5 Treatment of fresh fracture of the radius is considered not medically necessary

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