

UPMC Health Plan POLICY AND PROCEDURE MANUAL

POLICY NUMBER: PAY.030
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SUBJECT: Invasive Bone Growth Stimulators (BGS)
INDEX TITLE: Medical Management
ORIGINAL DATE: 9-11-07

This policy applies to the following lines of business: (Check those that apply.)

Commercial:			
HMO ()	POS ()	PPO ()	OOA/DOC ()
Fully Insured ()	Self-funded/ASO ()	HSA ()	All (X)
Medicare Select ()	Medicare Supplement ()		
DPW-MA:			
Health Choices ()	Voluntary ()		All (X)
CMS-MA:			
HMO (X)	PPO (X)	Specialty Needs Plan (X)	Part D ()
		PFFS (X)	All ()
PID-CHIP:			
Free ()	Sub ()		All (X)

I. POLICY

It is the policy of UPMC Health Plan to authorize payment for invasive bone growth stimulators when medically necessary and covered under the member's benefit plan.

II. DEFINITIONS

N/A

III. PURPOSE

The purpose of this policy is to outline indications for appropriate coverage of Invasive Bone Growth Stimulators (BGS).

IV. SCOPE

This policy applies to various UPMC Health Plan departments as indicated by the Benefit and Reimbursement Committee. These include but are not limited to: Medical Management, Benefit Configuration and Claims departments.

V. PROCEDURE

A. Medical Description / Background

Electrical bone growth stimulation (EBGS) is the technique of promoting bone growth in fractures that are difficult to heal by applying a low electrical current to the fracture. Bone growth stimulation is used when satisfactory healing is not occurring naturally or when the pace of healing is too slow as documented by serial x-rays. This situation results in a condition known as “fracture non-union”, which occurs more frequently in adults, in severe or complex fractures and in those who smoke. The most recent Food and Drug Administration (FDA) labeling states that a non-union is considered to be established when the fracture site shows no visibly progressive signs of healing after three (3) months.

Bone growth stimulators may be invasive or non-invasive.

Invasive Bone Stimulators- electrical stimulation is provided directly at the fracture site either by implantation of a coiled cathode wire into the fracture site and connected to an implanted power pack or through percutaneously placed cathodes connected to an external power pack.

Long Bone- A long bone is limited to a clavicle, humerus, radius, ulna, femur, tibia, fibula, metacarpal, or metatarsal.

Nonunion of Long Bone Fractures, for invasive devices, is considered to exist:

- Only after three (3) or more months have elapsed without healing of the fracture; OR
- When serial radiographs have confirmed that fracture healing has ceased for three (3) or more months prior to starting treatment with the electrical osteogenic stimulator. Serial radiographs must include a minimum of two (2) sets of radiographs, each including multiple views of the fracture site, separated by a minimum of 90 days.

B. Indications

Invasive (Implantable) Bone Growth Stimulation is considered medically necessary in the treatment of any of the following conditions:

1. Nonunion of long bone fractures;
OR
2. As an adjunct to spinal fusion surgery for members at high risk of pseudarthrosis due to previously failed spinal fusion at the same site. This includes those members with the following conditions:

- One or more previously failed spinal fusions;
- Grade II or worse spondylolisthesis;
- Fusion to be performed at 3 or more vertebrae (e.g., L3-L5, L4-S1, etc.); and
- Disease process or condition which interferes with the healing process (i.e. diabetes, renal disease, alcoholism, morbid obesity or smoking).

NOTE: Periodic radiographic monitoring at three (3) month intervals is required to document continued effectiveness of treatment.

C. Limitations

D. Variations

N/A

E. References

1. ECRI. Electrical Bone Growth Stimulation for the Spine and Lower Leg [Technology Assessment Report-ARCHIVED]. 1993 ECRI .
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