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Clinical Practice Guideline: Partial Excision of Tibia or Fibula Bone

3 Date of Implementation: August 20, 2015

5 **Product:** 

Specialty

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## 8 GUIDELINES

9 American Specialty Health – Specialty (ASH) does not require prior authorization for

10 procedures consisting of CPT® Code 27640 and CPT® Code 27641 provided that they are

11 used for the treatment of the following conditions:

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# ICD-10 Codes That Support Medical Necessity

ICD-10 Code	ICD-10 Code Description
M86.061 - M86.069,	Acute hematogenous, other acute, and subacute
M86.161 - M86.169,	osteomyelitis; tibia and fibula
M86.261 - M86.269	
M86.361 - M86.369,	Chronic multifocal, chronic with draining sinus,
M86.461 - M86.469,	other chronic hematogenous, and other chronic
M86.561 - M86.569,	osteomyelitis; tibia and fibula
M86.661 - M86.669	
M86.8X6	Other osteomyelitis, lower leg
M86.9	Osteomyelitis, unspecified
M90.861 - M90.869	Osteopathy in diseases classified elsewhere, lower
	leg

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15 For diagnosis of other disorders of bone and cartilage (other disorders of continuity of bone,

16 disorder of continuity of bone, skeletal fluorosis, other specified disorders of bone density 17 and structure, other disorders of bone development and growth, hypertrophy of bone

17 and structure, other disorders of bone development and growth, hypertrophy of bone,

osteolysis, relapsing polychondritis, chondrolysis, other specified disorders of bone, andother specified disorders of cartilage):

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# 21 ICD\_10 Codes That Support Other Diagnoses

ICD-10 Code	ICD-10 Code Description
M84.861 - M84.869	Other disorders of continuity of bone, tibia and
	fibula
M84.871 - M84.879	Other disorders of continuity of bone, ankle and foot
M84.88, M84.9	Other disorders of continuity of bone, other site -
	Disorder of continuity of bone, unspecified
M85.161 - M85.169	Skeletal fluorosis, lower leg
M85.171 - M85.179	Skeletal fluorosis, ankle and foot

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ICD-10 Code	ICD-10 Code Description
M85.18 - M85.19	Skeletal fluorosis, other site and multiple sites
M85.861 - M85.869	Other specified disorders of bone density and
	structure, lower leg
M85.871 - M85.879	Other specified disorders of bone density and
	structure, ankle and foot
M85.88 - M85.89	Other specified disorders of bone density and
	structure, other site and multiple sites
M89.261 - M89.269	Other disorders of bone development and growth,
	tibia and fibula
M89.271 - M89.279	Other disorders of bone development and growth,
	ankle and foot
M89.28 - M89.29	Other disorders of bone development and growth,
	other site and multiple sites
M89.361 - M89.369	Hypertrophy of bone, tibia and fibula
M89.371 - M89.379	Hypertrophy of bone, ankle and foot
M89.38 - M89.39	Hypertrophy of bone, other site and multiple sites
M89.561 - M89.569	Osteolysis, lower leg
M89.571 - M89.579	Osteolysis, ankle and foot
M89.58 - M89.59	Osteolysis, other site and multiple sites
M89.8X6 - M89.8X9	Other specified disorders of bone; multiple sites,
	lower leg, ankle and foot, and other site
M94.1	Relapsing polychondritis
M94.8X0,	Other specified disorders of cartilage; multiple sites,
M94.8X6 - M94.8X9	lower leg, ankle and foot, other site, and unspecified
	sites

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2 Must have tried at least 3 of the following and failed:

- Immobilization;
- Rest;
  - Use of nonsteroidal anti-inflammatory drugs (NSAIDs);
- Modifying footwear;
- Orthotics;
- Physical therapy;
- Padding.

### 1 Partial Excision CPT® Codes

CPT® Code	CPT® Code Description
27640	Partial excision (craterization, saucerization or
	diaphysectomy), bone (e.g., osteomyelitis); tibia
27641	Partial excision (craterization, saucerization, or
	diaphysectomy), bone (e.g., osteomyelitis); fibula

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## 3 BACKGROUND

4 CPT® codes 27640 and 27641 refer to partial excision of bone of the tibia and fibula. These 5 codes describe some specific types of excisions such as craterization or saucerization 6 (excavation of tissue to form a shallow depression, performed in wound treatment to 7 facilitate drainage from infected areas), sequestrectomy (a piece of necrotic bone that is 8 surgically removed) or diaphysectomy (partial or complete removal of the shaft of a long 9 bone) and may be used for medical conditions such as osteomyelitis or bossing.

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11 Bones may provide a harbor for microorganisms that produce biofilms, allowing them to attach resiliently to biologic and implanted surfaces while remaining insusceptible to host 12 defenses. Osteomyelitis can arise secondary to hematogenous spread or from a contiguous 13 source of infection. Contiguous spread of infection can be caused by surgery, particularly 14 the placement of prostheses or hardware, and trauma, or other foreign body introduction. 15 Osteomyelitis can also arise secondary to vascular insufficiency, commonly from a soft 16 tissue infection in patients with diabetes mellitus. In the hematogenous form, a single 17 pathogen is usually isolated, with the most common organism being Staphylococcus 18 *aureus*. In contrast, osteomyelitis secondary to contiguous spread or direct inoculation is 19 usually caused by multiple organisms. 20

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Diagnosis is based on clinical examination, tissue cultures, laboratory studies, and imaging. 22 A definitive diagnosis of osteomyelitis may be obtained with microbiological identification 23 of the pathogen in bone, through a bone biopsy. Symptoms of chronic osteomyelitis are 24 not always obvious and may include low-grade fever and chronic pain. Common imaging 25 26 techniques for detecting osteomyelitis include plain radiography, computed tomography, and magnetic resonance imaging. The classic signs on plain radiographs include periosteal 27 reaction and osteopenia. As the infection progresses, radiographic signs are soft tissue 28 swelling, solid periostitis, lysis and lucencies, surrounding sclerosis, and sinus tracts. 29

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The current literature describing the treatment of osteomyelitis of the tibia and fibula is limited to case studies and empirical evidence. Typical management of osteomyelitis requires a multidisciplinary approach involving surgical debridement and reconstruction followed by antibiotic therapy. For osteomyelitis of the tibia and fibula, sequestrectomy and resection of scarred and infected bone and soft tissue may be appropriate to eradicate infection and achieve a viable vascular environment (Santanelli di Pompeo et al., 2021; Sierink et al., 2012).

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#### **1 PRACTITIONER SCOPE AND TRAINING**

Practitioners should practice only in the areas in which they are competent based on their education, training and experience. Levels of education, experience, and proficiency may vary among individual practitioners. It is ethically and legally incumbent on a practitioner to determine if they have the knowledge and skills necessary to perform such services and whether the services are within their scope of practice.

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8 It is best practice for the practitioner to appropriately render services to a member only if 9 they are trained, equally skilled, and adequately competent to deliver a service compared 10 to others trained to perform the same procedure. If the service would be most competently 11 delivered by another health care practitioner who has more skill and training, it would be 12 best practice to refer the member to the more expert practitioner.

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Best practice can be defined as a clinical, scientific, or professional technique, method, or process that is typically evidence-based and consensus driven and is recognized by a majority of professionals in a particular field as more effective at delivering a particular outcome than any other practice (Joint Commission International Accreditation Standards for Hospitals, 2020).

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Depending on the practitioner's scope of practice, training, and experience, a member's condition and/or symptoms during examination or the course of treatment may indicate the need for referral to another practitioner or even emergency care. In such cases it is prudent for the practitioner to refer the member for appropriate co-management (e.g., to their primary care physician) or if immediate emergency care is warranted, to contact 911 as appropriate. See the *Managing Medical Emergencies (CPG 159 – S)* clinical practice guideline for information.

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