



# CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all health benefit plans administered by CIGNA Companies including plans formerly administered by Great-West Healthcare, which is now a part of CIGNA.

**Subject Hallux Valgus Surgery  
(Bunionectomy)**

**Effective Date ..... 3/15/2010**  
**Next Review Date ..... 3/15/2012**  
**Coverage Policy Number ..... 0304**

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## Hyperlink to Related Coverage Policies

Foot Care Services  
 Hammer Toe Surgery  
 Lower Limb Orthoses and Therapeutic Shoes  
 Metatarsophalangeal Joint Replacement

### INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar 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 supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, 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/regulations; 3) any relevant collateral source materials including Coverage Policies and; 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. Proprietary information of CIGNA. Copyright ©2011 CIGNA

## Coverage Policy

**CIGNA covers hallux valgus surgery (bunionectomy) as medically necessary when BOTH of the following criteria are met:**

- confirmed diagnosis of hallux valgus associated with at least ONE of the following signs/symptoms attributable to a hallux valgus deformity:
  - difficulty walking
  - significant and persistent pain at first metatarsophalangeal joint
  - ulceration at the first metatarsophalangeal joint
- signs/symptoms are unresponsive to at least six months of conservative treatment\*, including ALL of the following:
  - padding
  - oral analgesics or anti-inflammatory medications
  - appropriate footwear

\*Benefit plans may exclude coverage for the conservative treatment listed above. Please refer to the applicable plan language to determine benefit coverage.

**This Coverage Policy does not address partial or total metatarsophalangeal joint replacement of the hallux. For information on this procedure, refer to the separate CIGNA Coverage Policy on Metatarsophalangeal Joint Replacement.**

**CIGNA does not cover hallux valgus surgery (bunionectomy) for the sole purpose of improving appearance of the foot, because it is considered not medically necessary.**

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## **General Background**

Hallux valgus is the lateral deviation of the great toe towards the midline of the foot. It is usually accompanied by a bunion, which is the inflammation and thickening of the first metatarsal joint of the great toe. The terms bunion and hallux valgus are often used interchangeably. The medial eminence, or bunion, is often the most visible component of a hallux valgus deformity. Hallux valgus is a common disorder, with the incidence is higher in females. Certain anatomical and structural abnormalities may also play a role in development of hallux valgus.

Radiographs will provide information regarding angular measurement on the following two angles, which will assist in defining the severity of the deformity:

- The angle between the first and second metatarsals is the intermetatarsal (IM) angle, and an angle measurement of less than 9° is considered normal.
- The angle between the first metatarsal and the hallux itself is the hallux valgus (HV, HVA, or HA) angle, and an HV angle of less than 15° is considered normal.

Radiographs can also demonstrate an increase in the IM angle, an increase in the HV angle, lateral dislocation of sesamoids, subluxation of the first metatarsal joint, pronation of great toe and evidence of arthritis. They are also used for preoperative surgical planning.

The primary symptom of a bunion is pain, typically located over the medial eminence. Pressure from footwear is the most frequent cause of pain. Associated findings may include ulceration of medial eminence, transfer metatarsalgia, corns, calluses, hammer-toe deformity of second toe, stress fracture of lesser toes, arthritis of first metatarsophalangeal joint, or ingrown toenail. The condition may be asymptomatic even in the presence of significant deformity.

The physical examination should be performed both sitting and standing. The foot should be examined for other conditions, such as pes planus deformity; contracture of Achilles tendon; magnitude of the hallux valgus deformity; measurement of passive and active range of motion of the joint; pain or crepitus with motion of the joint; or presence of hypermobility. Neurovascular status should be assessed, and the lesser toes should be assessed for deformities, as well as the plantar surface of the foot.

Bunions are common in the general adolescent population (Chambers, 2003). A bunion in this population may differ from an adult bunion in that there may be a significant hallux valgus without a large medial bursa and/or bone changes. Initial treatment is dependent on the presenting symptoms. This may include changing shoes, altering the activities or sport and a toe-spreading orthotic. Surgery may be needed, but there is a high level of recurrence in this age group. Surgery should be considered only when all other treatment has failed in individuals who have not reached skeletal maturity since, after surgery. Children may not return to previous level of functioning due to joint stiffness and pain at extremes of motion (Chambers, 2003).

## **Conservative Treatment**

Nonsurgical care is considered the first option for a patient with this deformity and is typically attempted prior to considering surgical intervention. Initial treatment is often self-directed and may include: wider, lower-heeled shoes, bunion pads, ice, over-the-counter analgesics, and nonsteroidal anti-inflammatory medications (NSAIDs). Eliminating friction over the medial eminence can often relieve pain, blistering and bursal inflammation. The first approach should also include evaluation of the patient's footwear and education regarding appropriate footwear (e.g., shoes with low heels and broad toe box; avoidance of shoes with seams or stitching over the medial eminence area; other shoe modifications). Metatarsal pads or foot orthoses may be utilized. Symptomatic relief may be noted by some patients. Physical therapy has been noted to have a limited role in the treatment of hallux valgus.

## **Surgical Treatment**

Goals of surgery should be to relieve pain and to restore normal alignment of the first metatarsal and great toe. Surgical treatment is indicated to relieve signs and symptoms of hallux valgus. Surgery performed for the purpose of improving the appearance of the foot is cosmetic in nature and not medically indicated. The literature documents a vast number of procedures to correct hallux valgus. No one procedure is appropriate for all deformities. The choice of operative procedure depends on the patient's condition, anatomy, degree of deformity, symptoms and radiographic information. All elements of the deformity, including an increased HV angle, increased IM angle, pronation of great enlarged medial eminence and subluxation of the sesamoids, must be corrected. Surgical options include metatarsophalangeal soft tissue construction, osteotomy of the distal or proximal end of the metatarsal, osteotomy of the cuneiform, arthrodesis of the metatarsophalangeal joint and excisional arthroplasty. There are many different names associated with bunionectomy procedures and, in addition, many variations of these procedures. The IM angle and HV angle are cited in the literature as guidelines for decision making, but it is also reported in the literature that there is potential for the measurement of these angles to vary. This should be taken into consideration when utilizing these measurements for treatment decisions.

Contraindications to surgical treatment include:

- an active infection of the foot, unless correction of hallux valgus deformity is necessary for wound management (e.g., nonhealing ulcer over the medial prominence)
- severe vascular insufficiency

The major surgical procedures all include correction of the hallux valgus (i.e., bunion) with or without sesamoidectomy, and the procedures may also include:

- Simple resection of the medial eminence or simple exostectomy for hallux valgus with mild IM angle and HV angle (Silver-type procedure)
- Simple resection of the base of the proximal phalanx with removal of the medial eminence: These procedures involve a distal soft tissue release (i.e., McBride), a resection of the base of the proximal phalanx (i.e., Keller), or a resection of the metatarsal head. (i.e., Mayo).
- Tendon transplant: The major part of this procedure involves tendon transplant(s) (Joplin type procedure).
- Metatarsal osteotomy: This procedure involves a distal metatarsal osteotomy; a complex, biplane, double step-cut osteotomy through the neck of the first metatarsal (i.e., Mitchell, Chevron or Austin type procedures).
- Lapidus type procedure: This procedure is a distal soft tissue rearrangement and a proximal first metatarsal-cuneiform arthrodesis.
- Phalanx osteotomy: This procedure involves removal of a bony wedge from the base of the proximal phalanx to reorient the axis.
- Double osteotomy: Two techniques are included in this procedure. One includes a distal osteotomy of the first metatarsal plus a base osteotomy of the attached proximal phalanx. The second includes a proximal and distal osteotomy of the first metatarsal.

### **Literature Review**

A Cochrane review was conducted for the purpose of identifying and evaluating the evidence from randomized trials of interventions used to correct hallux valgus (Ferrari, et al., 2004). Twenty-one randomized or quasi-randomized trials of both conservative and surgical treatments of hallux valgus were reviewed. The review noted that the methodological quality of the included trials was generally poor and trial sizes were small. Conclusions noted that only a few studies had considered conservative treatment. The evidence for these suggested that orthoses and night splints did not appear to be any more beneficial in improving outcomes than no treatment. It was notable that the number of participants in some trials who remained dissatisfied at follow-up was consistently high (25–33%), even when hallux valgus angle and pain had improved. It was noted that, in the trials reported, there was no evidence that any one type of surgical procedure was superior to another across a range of outcomes. Final outcomes were most frequently measured at one year, with a few trials maintaining follow-up for three years. It was noted in the review that such time scales are minimal, since it is likely that patients will be on their feet for at least another 20–30 years after treatment. The authors noted that future research should include patient-focused outcomes, standardized assessment criteria and longer surveillance periods, in the region of 5–10 years.

A randomized controlled trial compared the effectiveness of surgical and orthotic treatments with no treatment (i.e., control group) for patients with hallux valgus (Torkki, et al., 2001). The patients were assigned to surgery (i.e., Chevron procedure) (n=71), orthoses (n=69), or a one-year waiting list (i.e., no treatment control group) (n=69). At 12 months, the surgical group had significantly better scores for pain and disability, footwear problems and self-reported global foot assessment (p<0.01). Eighty-three percent of surgical patients rated their feet better at one year after surgery, compared to 46% of the orthosis group and 24% of the control group. The study concluded that surgery is an effective treatment for moderate, painful hallux valgus and that orthoses provide short-term symptomatic relief.

### Other Related Conditions

**Bunionette/Tailor's Bunion:** A bunionette or Tailor's bunion is a painful osseous prominence on the lateral aspect of the head of the fifth metatarsal. Pressure over the lateral aspect of the fifth metatarsal due to a tight shoe, or position of the foot, may lead to development of a bunionette. Nonsurgical treatments include debridement of hyperkeratotic lesions, padding, shoe modifications, oral anti-inflammatory medications, anti-inflammatory injectables, corticosteroid or steroid injections, and orthotics. Surgical treatment is considered when nonoperative treatment can no longer control the symptoms. The aim of surgery is to decrease the width of the foot and the prominence of the bunionette. Surgical treatment includes metatarsal osteotomy, excision of all or part of a metatarsal head and/or shaft.

**Other Disorders of the First Metatarsophalangeal (MTP) Joint:** Other disorders of first MTP joint that may be associated with hallux valgus include:

- **Hallux Rigidus:** Also referred to as hallux limitus, this is a progressive disorder of the first MTP joint, characterized by restriction or loss of range of motion of this joint. The alignment usually remains normal, with dorsal changes noted, including dorsal bunion. The procedure to correct this condition is usually a cheilectomy, which involves the resection of hypertrophic bony or osteochondral proliferation along the periphery of the articulation.
- **Hallux Varus:** This displacement of the great toe away from the other toes is not common and is usually acquired. Patients presenting with this condition often have a history of first MTP joint or bunion surgery. This is a painful and often progressive deformity. Surgical treatment is dependent on the degree and complexity of the deformity.
- **Sesamoid Disorders:** The cause may be trauma, or this may be associated with other MTP disorders, and onset may be acute or insidious. Radiographs may indicate fracture of the sesamoid. Treatment is dependent on the severity of the condition and other disease process that is present.

### Summary

A bunion is the inflammation and thickening of the first metatarsal joint of the great toe. This is usually associated with hallux valgus, which is lateral deviation of the great toe towards the midline of the foot. The primary symptom is pain. Review of the literature, including textbooks and review articles indicates that initial treatment should be conservative treatment, with surgical treatment medically necessary when signs/symptoms are unresponsive to conservative treatment.

## Coding/Billing Information

**Note:** This list of codes may not be all-inclusive.

**Covered when medically necessary:**

CPT <sup>®</sup> * Codes	Description
28290	Correction, hallux valgus (bunion), with or without sesamoidectomy; simple exostectomy (eg, Silver type procedure)
28292	Correction, hallux valgus (bunion), with or without sesamoidectomy; Keller,

	McBride, or Mayo type procedure
28294	Correction, hallux valgus (bunion), with or without sesamoidectomy; with tendon transplants (eg, Joplin type procedure)
28296	Correction, hallux valgus (bunion), with or without sesamoidectomy; with metatarsal osteotomy (eg, Mitchell, Chevron, or concentric type procedures)
28297	Correction, hallux valgus (bunion), with or without sesamoidectomy; Lapidus type procedure
28298	Correction, hallux valgus (bunion), with or without sesamoidectomy; by phalanx osteotomy
28299	Correction, hallux valgus (bunion), with or without sesamoidectomy; by double osteotomy

ICD-9-CM Diagnosis Codes	Description
707.15	Ulcer of other part of foot
719.7	Difficulty in walking
727.1	Bunion
729.5	Pain in soft tissues of limb
735.0	Hallux valgus (acquired)

\*Current Procedural Terminology (CPT®) © 2010 American Medical Association: Chicago, IL.

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## Policy History

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<u>Pre-Merger Organizations</u>	<u>Last Review Date</u>	<u>Policy Number</u>	<u>Title</u>
CIGNA HealthCare	3/15/2008	0304	Hallux Valgus Surgery (Bunionectomy)

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