IEHP UM Subcommittee Authorization Guidelines

Compression Garments

I. Policy:

Individually fitted prescription graded compression stockings, inflatable compression garments, and non-elastic compression garments are considered medically necessary for Members according to the following criteria:

A. The CEAP system is composed of Clinical signs and symptoms, Etiology, Anatomic venous location and Pathophysiologic classification. Treatment of any chronic venous disorders classified as CEAP categories C2-C6 using the CEAP classification system recommended by The Society for Vascular Surgery and the American Venous Forum (Appendix A) or symptomatic as defined below are considered medically necessary:
   1. C2: Varicose veins [excludes C1 venous disorders i.e. telangiectasias (spider veins), reticular veins, and malleolar flares]
   2. C3: Edema without skin changes
   3. C4: Skin changes ascribed to venous disease
      a. C4a: Pigmentation or eczema
      b. C4b: Lipodermatosclerosis or atrophie blanche
   4. C5: Skin changes as defined above with healed ulceration
   5. C6: Skin changes as defined above with active ulceration
   6. S: Symptomatic, including ache, pain, tightness, skin irritation, heaviness, and muscle cramps, and other complaints attributable to venous dysfunction

B. Edema
   1. Accompanying paraplegia, quadriplegia, etc.
   2. Following surgery, fracture, burns, or other trauma
   3. Severe edema in pregnancy

C. Lymphedema

D. Reduce hypertrophic scarring and joint contractures following burn injury

E. Post-sclerotherapy (only pressure gradient compression stockings are considered medically necessary for this indication)

F. Prevention of thrombosis in immobilized persons (e.g. immobilization due to surgery, trauma, general debilitation, etc.).

G. Post-thrombotic syndrome (post-phlebitic syndrome).
H. Superficial thrombophlebitis
I. Negative pressure wound therapy
J. Postural hypotension.

II. Medicare Patients

Compression garments are covered as a benefit as a surgical dressing post-operatively.

III. Recommended Pressures

A. Mild edema, leg fatigue, or CEAP C3-4 disease due to primary valvular reflux: 20-30 mmHg
B. CEAP 1-4 disease related to prior deep vein thrombosis: 30-40 mmHg
C. CEAP categories C3-C6: minimum of 35 mmHg compression
D. Lymphedema: minimum 40 mmHg
E. There is insufficient high quality evident to determine whether knee length graded compression garments differ in their effectiveness for DVT risk reduction

IV. Specific Garments

A. Individually fitted prescription graded compression stockings
   1. This policy applies only to pre-made or custom-made pressure gradient support stockings (e.g., Jobst, Jurzo, FarrowWrap, Medieven, Tribute, SigVarus, Venes, etc.) that have a pressure of 18 mm Hg or more, that require a physician’s prescription, and that require measurements for fitting. Pre-made stockings are not the same as over-the-counter stockings.
   2. Stockings purchased over the counter without a prescription, and / or which have a pressure of less than 18 mm Hg (e.g., elastic stockings, surgical leggings, anti-embolism stockings (Ted hose) or pressure leotards) are not considered medically necessary because these supplies are not primarily medical in nature and because they have not been proven effective in preventing thromboembolism.
   3. Silver impregnated compression stockings are not considered medically necessary because there is insufficient evident that they are superior to standard compression stockings.
B. Inflatable Compression Garments
   Inflatable compression garments (e.g. Flowtron Compression Garment, Jobst Pneumatic Compressor, etc.) require a pump, which is also covered by this policy.
C. Non-elastic Compression Garments
   Non-elastic compression garments (e.g. CircAid, ArmAssist and LegAssist, ReidSleeve, Optiflow, ReadyWrap etc.) use adjustable Velcro or buckle straps instead of elastic to provide static compression of the leg. Indications for use are the same as those of pressure gradient support stockings with the exception of post-sclerotherapy, which should only be treated with pressure gradient compression stockings.
V. **Length of Treatment**
   
   If compression therapy is effective, it should be continued as long as it is helpful. Treatment failure is defined as persistent pain, swelling, itching, burning, or other symptoms associated with venous insufficiency.

VI. **Replacements**
   
   Replacements are considered medically necessary when the compression garment cannot be repaired or when required due to a change in the Member’s physical condition. For pressure gradient support stockings, replacements are indicated when elasticity is lost and no more than three (3) per six (6) months (or six (6) in six (6) months if bilateral) are considered medically necessary for wear. IEHP recommends dispensing at least two (2) stockings (or 4 (four) if bilateral) at each request.

VII. **Contraindications**
   
   Compression garments are contraindicated for Members with severe peripheral arterial disease, septic phlebitis, or cellulitis of the area to be treated with compression garments. Compression garments for the legs are considered experimental and investigational for routine DVT risk reduction after an acute stroke. Abdominal compression garments for the management of truncal edema are considered experimental and investigational and therefore are not covered.

VIII. **CMS Medicare/Medi-Cal Criteria Abstracts**

   A. **Medicare National Coverage Determination: Ch 1, Part 4, Section 280.1 – Durable Medical Equipment Reference List**
      
      The medical equipment reference list does not cover reusable elastic stockings: “Elastic Stockings - Deny - non-reusable supply; not rental-type items (§1861(n) of the Act). (See §270.5 of this manual.)”

   B. **Medicare National Coverage Determination: Ch 1, Part 4, Section 270.5 – Porcine Skin and Gradient Pressure Dressings**
      
      The National Coverage Determination considers gradient pressure dressings to be: “Jobst elasticized heavy duty dressings used to reduce hypertrophic scarring and joint contractures following burn injury. They are covered when used for that purpose.”

   C. **CMS Program Memorandum Transmittal AB-03-090**
      
      This program memorandum states: “The accepted standard of care for the treatment of venous stasis ulcers includes the use of sustained limb compression. In the past, gradient compression stockings have not been covered for this purpose. Effective for items furnished on or after October 1, 2003, gradient compression stockings that serve
a therapeutic or protective function and that are needed to secure a primary dressing may be covered as surgical dressings when the requirements in the implementation section of this Program Memorandum (PM) have been met."

D. **Medi-Cal Provider Manual: Allied Health, Orthotics and Prosthetics (OAP), Orthotics and Prosthetic Appliances (ortho)**

The Medi-Cal Provider Manual does not cover:

1. “Pre-manufactured and off-the-shelf pantyhose-type, elastic support stockings.” Instead, “Custom-made elastic gradient compression stockings (HCPCS code A6549) are reimbursable with authorization when medically necessary to treat symptomatic venous insufficiency or lymphedema in the lower extremities. Code A6549 is billed ‘By Report’.”

2. The provider manual also states that “HCPCS code A6545 (gradient compression wrap, non-elastic, below knee, 30 – 50 mm Hg, each) is reimbursable with authorization. It has a frequency limit of three in six months (six in six months if bilateral).”

3. Providers billing for elastic gradient compression stockings must have a written prescription from a licensed practitioner for the item(s). A generic prescription for “elastic support stockings” is not acceptable.

IX. **Professional Society Guidelines**

A. **The Society for Vascular Surgery (SVS) and the American Venous Forum (AVF) Clinical Practice Guidelines**

1. Compression
   a. In a patient with a venous leg ulcer, the Committee recommends compression therapy over no compression therapy to increase venous leg ulcer healing rate. [Grade - 1; Level of Evidence - A]
   b. In a patient with a healed venous leg ulcer, the Committee suggests compression therapy to decrease the risk of ulcer recurrence. [Grade - 2; Level of Evidence - B]
   c. The Committee suggests the use of multicomponent compression bandage over single-component bandages for the treatment of venous leg ulcers. [Grade - 2; Level of Evidence - B]

2. Primary Prevention
   a. In patients with clinical CEAP C3-4 disease due to primary valvular reflux, the Committee recommends compression, 20 to 30 mm Hg, knee or thigh high. [Grade - 2; Level of Evidence - C]
   b. In patients with clinical CEAP C1-4 disease related to prior deep venous thrombosis (DVT), the Committee recommends compression, 30 to 40 mm Hg, knee or thigh high. [Grade - 1; Level of Evidence - B]
3. Grading of Recommendations Assessment, Development and Evaluation (GRADE) Recommendations Based on Level of Evidence
   a. Grade 1: Strong recommendation
   b. Grade 2: Weak recommendation
   c. Level of Evidence A: High-quality evidence
   d. Level of Evidence B: Moderate-quality evidence
   e. Level of Evidence C: Low-quality or very-low-quality evidence

X. Background

A. Venous Insufficiency in the Lower Extremeties
   Lower extremity venous insufficiency describes a condition in which blood that should return from the legs to the trunk instead flows retrograde back into the legs. This condition may be caused by deep venous insufficiency (the deep vein valves have been damaged due to deep vein thrombosis, which decreases hydrostatic venous pressure) or superficial venous incompetence (superficial valves have failed, leading to dilation of the superficial veins which allows backflow to occur), or both. Superficial venous incompetence is the more common cause of lower extremity venous insufficiency, and may be caused by direct injury, congenital condition, or pregnancy. Over time, venous insufficiency can cause pain, swelling, skin changes, and tissue breakdown. Untreated, it also puts patients at higher risk for superficial thrombophlebitis and deep vein thrombosis. (Feied et al.)

B. Gradient Elastic Compression Stockings
   Gradient elastic compression stockings are considered a mainstay of treatment for chronic venous insufficiency. Treatment goals of stocking use include symptom control, restoration of ability to walk, and prevention and/or healing of ulcers. (Nicoloff et al.) Compression stockings are believed to work by increasing the pressure in subdermal tissues, reducing leakage of fluid out of blood vessels, and increasing fluid absorption by blood and lymphatic vessels. They also physically restrict the size superficial veins can expand to, preventing edema and expediting return of blood to the heart. These stockings are tightest at the ankle, and gradually decrease in pressure as they extend up the leg.
### Literature Reporting Patient-Oriented Outcomes:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Device Used</th>
<th>Patient Characteristics</th>
<th>Findings/Conclusions</th>
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<tbody>
<tr>
<td>Benigni et al. 2003</td>
<td>Class 1 (10-15 mm Hg at ankle) compression stockings vs. reference control stockings</td>
<td>125 patients with early chronic venous disease</td>
<td>The compression stockings resulted in a significant improvement in pain and quality of life compared to control.</td>
</tr>
<tr>
<td>Motykie et al. 2000</td>
<td>Graduated compression stockings</td>
<td>112 patients with chronic venous insufficiency</td>
<td>“A statistically significant improvement (p&lt;0.001) was reported in patient severity scores for lower extremity swelling, pain, skin discoloration, activity tolerance, depression, and sleeping problems after 1 and 16 months of treatment with compression stockings.”</td>
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<tr>
<td>O’Meara et al. 2012</td>
<td>Compression for venous leg ulcers</td>
<td>Cochrane review of 48 randomized controlled trials (RCTs) involving 4321 participants with venous ulcers</td>
<td>Compression increases ulcer healing rates compared with no compression. Multi-component systems are more effective than single-component systems. Multi-component systems containing an elastic bandage appear to be more effective than those composed mainly of inelastic constituents.</td>
</tr>
<tr>
<td>Sachdeva et al. 2014</td>
<td>Graduated compression stockings (GCS) for prevention of deep vein thrombosis (DVT) during a hospital stay</td>
<td>Cochrane review of 19 RCTs involving 1681 hospitalized patients, mostly post-operative</td>
<td>“GCS are effective in diminishing the risk of DVT in hospitalized patients, with strong evidence favoring their use in general and orthopaedic surgery. However, evidence for their effectiveness in medical patients is limited to one trial.”</td>
</tr>
<tr>
<td>Sajid et al. 2012</td>
<td>Knee length (KL) and thigh length (TL) graded compression stockings (GCS)</td>
<td>Cochrane review of 3 RCTs involving 496 patients undergoing surgery</td>
<td>“There is insufficient high quality evidence to determine whether or not KL and TL GCS differ in their effectiveness in terms of reducing the incidence of deep vein thrombosis (DVT) in hospitalized patients.”</td>
</tr>
</tbody>
</table>
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Revised:

May 10, 2017
October 16, 2017

Bibliography:


13. Jones, RH, Carek, P, Management of Varicose Veins:  
   J.M. Mills, & K. Collins (Eds), UpToDate. Available from 
   https://www.uptodate.com/contents/classification-of-lower-extremity-chronic-venous- 
   disorders#H6
15. Motykie GD, Caprini JA, Arcelus JJ, Reyna JJ, Overom E, Mokhtee D. Evaluation of 
   Therapeutic Compression Stockings in the Treatment of Chronic Venous Insufficiency. 
   length graduated compression stockings for prevention of deep vein thrombosis in 
   postoperative surgical patients. The Cochrane Library.
   stockings for prevention of deep vein thrombosis. The Cochrane Library.
19. Trayes, KP, Suddiford JS, Pickle S, Tully, AS. Edema: Diagnosis and Management: 
   http://www.aafp.org/afp/2013/0715/p102.html

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has reached these conclusions based upon a review of currently available clinical information (including clinical 
outcome studies in the peer-reviewed published medical literature, regulatory status of the technology, evidence-
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CEAP CLASSIFICATION FOR CHRONIC VENOUS DISORDERS

CEAP classification for chronic venous disorders

<table>
<thead>
<tr>
<th>Clinical Classification</th>
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<tbody>
<tr>
<td>C0</td>
<td>No visible or palpable signs of venous disease</td>
</tr>
<tr>
<td>C1</td>
<td>Telangiectasias, reticular veins, malleolar flares</td>
</tr>
<tr>
<td>C2</td>
<td>Varicose veins</td>
</tr>
<tr>
<td>C3</td>
<td>Edema without skin changes</td>
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<tr>
<td>C4</td>
<td>Skin changes ascribed to venous disease (eg, pigmentation, venous eczema, lipodermatosclerosis)</td>
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<tr>
<td>C4a</td>
<td>Pigmentation or eczema</td>
</tr>
<tr>
<td>C4b</td>
<td>Lipodermatosclerosis or atrophie blanche</td>
</tr>
<tr>
<td>C5</td>
<td>Skin changes as defined above with healed ulceration</td>
</tr>
<tr>
<td>C6</td>
<td>Skin changes as defined above with active ulceration</td>
</tr>
<tr>
<td>S</td>
<td>Symptomatic, including ache, pain, tightness, skin irritation, heaviness, and muscle cramps, and other complaints attributable to venous dysfunction</td>
</tr>
<tr>
<td>A</td>
<td>Asymptomatic</td>
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<thead>
<tr>
<th>Etiologic Classification</th>
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<tbody>
<tr>
<td>Ec</td>
<td>Congenital</td>
</tr>
<tr>
<td>Ep</td>
<td>Primary</td>
</tr>
<tr>
<td>Es</td>
<td>Secondary (post-thrombotic)</td>
</tr>
<tr>
<td>En</td>
<td>No venous cause identified</td>
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<table>
<thead>
<tr>
<th>Anatomic Classification</th>
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<tbody>
<tr>
<td>As</td>
<td>Superficial veins</td>
</tr>
<tr>
<td>Ap</td>
<td>Perforator veins</td>
</tr>
<tr>
<td>Ad</td>
<td>Deep veins</td>
</tr>
<tr>
<td>An</td>
<td>No venous location identified</td>
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<thead>
<tr>
<th>Pathophysiologic Classification</th>
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<tbody>
<tr>
<td>Pr</td>
<td>Reflux</td>
</tr>
<tr>
<td>Po</td>
<td>Obstruction</td>
</tr>
<tr>
<td>Pr,o</td>
<td>Reflux and obstruction</td>
</tr>
<tr>
<td>Pn</td>
<td>No venous pathophysiology identifiable</td>
</tr>
</tbody>
</table>

Limbs in higher categories have more severe signs of chronic venous disease and may have some or all of the findings defining a less severe clinical category. Each limb is further characterized as asymptomatic (A), for example, C0-6,A, or symptomatic (S), for example, C0-6,S. Symptoms that may be associated with telangiectatic, reticular, or varicose veins include lower extremity aching, pain, and skin irritation. Therapy may alter the clinical category of chronic venous disease. Limbs should therefore be reclassified after any form of medical or surgical treatment.