Important note
Even though this policy may indicate that a particular service or supply may be considered covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. You need to consult the Evidence of Coverage to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and your plan of benefits, the provisions of your benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, Federal mandates will apply to all plans. With respect to Senior Care members, this policy will apply unless Medicare policies extend coverage beyond this Medical Policy & Criteria Statement. Senior Care policies will only apply to benefits paid for under Medicare rules, and not to any other health benefit plan benefits. CMS's Coverage Issues Manual can be found on the CMS website.

SERVICE: Treatment of Varicose Veins of the Lower Extremities

PRIOR AUTHORIZATION: Required.

POLICY:

Treatment for symptomatic chronic venous insufficiency or varicose veins, in the absence of bleeding, phlebitis or skin necrosis, may be covered as medically necessary with:

1. A documented 3-month trial of conservative therapy including graduated compression stockings with a minimum of 15-20 mmHg pressure, weight reduction to BMI <35, therapeutic leg elevation, and an exercise program of calf muscle pumping activity with compression of the involved veins, which results in limited alteration/improvement of symptoms or findings without satisfactory endpoint, AND

2. Duplex venous studies of the involved lower extremity(ies), mapping size and course of the greater and lesser saphenous vein and prominent tributaries and demonstrating the:
   a. Presence and patency of the deep venous system.
   b. Absence of deep venous thrombosis, and
   c. Documented incompetence (reflux > 500 msec) of the valves of the saphenous, perforator or deep venous systems consistent with the patient's symptoms and findings.

Treatment of varicose veins and venous stasis sequella of the lower extremities ARE covered as medically necessary when etiologic for one or more of the following conditions:

- Hemorrhage from ruptured or ulcerated superficial varix requiring medical or surgical intervention and/or compensation for blood loss anemia or documented aneurysmal formation with skin and vein wall fusion.
- Recurrent superficial phlebitis in dilated incompetent veins or clusters.
- Progressive skin and soft tissue changes which include darkening and lichenification, inflammatory cellulitis and dermatitis, skin and fat necrosis and/or ulceration at the site of documented chronic venous distention with valvular incompetence.
  
  Note: Lower extremity edema without skin compromise is NOT considered a medically necessary indication for treatment of varicosities or venous valvular incompetence.
- Symptomatic irregular and protrusive saphenous veins with documented diameters of > 9.6 mm, or prominent protrusive clusters or tributaries of the greater or lesser saphenous veins, or clusters overlying perforator veins superficial to the muscle compartment fascia with a diameter >4.9 mm, which are refractory to a 3 month trial of conservative therapy and graduated compression stockings and with symptoms consistent with venous hypertension.
Treatment modalities:

- **Sclerotherapy** with injectable liquid or foam and compression is considered medically necessary for treatment of small to medium-sized veins (3-6 mm in diameter) for persons who meet medical necessity criteria for varicose vein obliteration described above.
  - Sclerotherapy, with or without sono guidance, is NOT considered effective for large veins greater than 6 mm diameter or the main saphenous veins.
  - Sclerotherapy has NOT been shown to be effective for treatment of persons with reflux at the saphofemoral junction or saphopopliteal junction.
  
  Note: Additional claims for Doppler ultrasound or duplex scans used for guidance or monitoring during sclerotherapy is not separately reimbursable. Subsequent ultrasound will be denied as not medically necessary.

- **Surgical ligation and excision (stripping)** may be covered as part of a combination with sclerotherapy for ligation of the saphofemoral junction or the saphopopliteal junction, in addition to treatment of large varicose veins or clusters not amenable to sclerotherapy or endovenous obliteration techniques.

- **Ambulatory or stab phlebectomy** is considered medically necessary for treatment of persons who meet medical necessity criteria for treatment of veins greater than 6 mm in diameter or in whom symptoms and functional impairment are attributable only to the secondary venous clusters and in whom sclerotherapy or endovenous occlusion techniques are not feasible.

- **Endovenous radiofrequency and laser ablation occlusion therapy (ERFA) (EVLT)** are minimally invasive alternatives to ligation and stripping. Multiple System devices are FDA approved for endovascular coagulation and closure of large veins in the lower extremities including the saphenous veins at the saphofemoral and saphopopliteal junctional regions. To be covered, the system/device used must be FDA approved for the specific vein obliteration planned. To be considered for coverage of these procedures, **ALL** of the following criteria must be met:
  
  1. Patient's anatomy is amenable to laser or radiofrequency catheter with the absence of tortuosity that would impair catheter passage and distance separation from skin as to preclude thermal injury. Unless documented by the supplier of the RFA or LA device, maximal vein diameter may not exceed 20mm as there is insufficient data to suggest that devices presently marketed for this purpose are effective for occlusion of veins above this diameter.
  
  2. Non-Aneurysmal Saphenous vein or portion of vein at risk of rupture, hemorrhage or adjacent skin injury. Large veins adjacent to aneurysm formation (fusion of skin and vein wall) are optimal candidates for ERFA or EVLT in that adjacent aneurysm and preclude further need for treatment.
  
  3. Maximal vein diameter is clinically appropriate for catheter or sheath employed.
  
  4. No planned treatment of incompetent valves or risk of direct injury to perforator veins of the calf that may induce thrombus propagation into the deep vein system.
  
  5. Absence of clinically significant or symptomatic peripheral arterial disease.
ERFA and EVLT have not been established as medically safe or effective and are not FDA approved for perforator or short vein ligation. Therefore, ERFA and EVLT are NOT COVERED for perforator vein ligation or ablation.

**Subfascial perforator vein ligation (Linton Procedure)** may be medically necessary for the treatment of patients who meet medical necessity criteria for varicose vein surgical treatment and have persistent or recurrent ulceration demonstrated to be secondary to chronic perforator vein incompetence as the cause of the overlying skin necrosis and ulceration, when conservative management including at least 3 months of compressive or multilayer dressings have failed to show reduction of ulcer size and re-epithelization.

Prerequisite sonographic or duplex mapping should document the individual incompetent perforator vein(s) underlying the chronic ulcerative region in the offending vein's expected anatomic location, in addition to superficial and/or deep venous valvular incompetence.

**Subfascial ligation of perforator vein(s)** may be performed by open incision or endoscopically (SEPS), dictated by the location and number of perforator veins to be treated, and in consideration of the overlying open wound.

Subfascial ligation of perforator veins (Linton Procedure) or SEPS for the treatment of post-thrombotic syndrome or varicose veins is considered investigational/experimental because its effectiveness has not been demonstrated and is, therefore, NOT COVERED for treatment of post-thrombotic syndrome.

**EXCLUSIONS:**
1. Ablative therapy for the treatment of lower extremity varicosities in the absence of symptoms or evidence of more severe disease. Such treatment would be considered cosmetic and not a covered benefit.
2. The treatment of spider veins, telangiectasias, reticular veins, and other superficial vascular anomalies unless associated with hemorrhage, as this would be considered cosmetic and not a covered benefit (including photothermal sclerosis or Vasculight and transdermal laser therapy).
3. Mechanochemical ablation is considered experimental, investigational and unproven
4. Ultrasound guidance to deliver sclerotherapy.
5. Any treatment not meeting the criteria above.
6. Additional fees for a particular treatment technology are not reimbursable.
7. SEPS for the treatment of post-thrombotic syndrome as effectiveness has not been established.
8. More than 20 sclerotherapy injections per leg, per session.
9. More than 3 sclerotherapy injections per vessel.
10. More than 3 sclerotherapy sessions per leg.

**OVERVIEW:** Varicose veins of the lower extremity are superficial veins that become dilated, elongated, and tortuous; and which may or may not cause symptoms or problems. They are caused by elevated pressure in the leg’s venous system as a result of incompetent venous valves (reflux), obstruction, and/or inadequate muscle pumping function. The severity of disease usually correlates with the degree of reflux demonstrated by duplex ultrasound examination of the lower extremity venous system.
Varicose veins are often asymptomatic and of no concern to patients except for appearance. However, they may cause pain, itching, swelling, skin changes, ulceration, infection, and superficial thrombophlebitis. The treatment of varicose veins may be considered medically necessary in the presence of symptoms or signs of more significant disease, but would not be covered for cosmetic (appearance) indications.

The initial management of patients with symptomatic varicosities includes elevation of the lower extremity, gradient compression stockings, exercise, and weight reduction. If symptoms are not improved after 3-6 months of conservative therapy, then ablative therapy may be indicated. Ablative therapy includes ligation and stripping (surgical removal), phlebectomy (surgical removal), endovenous thermal ablation (laser or radiofrequency treatment thorough a catheter), and sclerotherapy (chemical treatment). Sclerotherapy is used primarily in the treatment of telangiectasias, reticular veins, and small varicose veins, which are most often considered cosmetic in nature.

No randomized controlled trial results were identified using mechanochemical ablation. Several prospective series were found, but the conclusion is typically that additional studies are needed. NICE affirmed the safety and efficacy of this therapy but also recommends that longer-term followup data be collected.

CODES:

Important note:
CODES: Due to the wide range of applicable diagnosis codes and potential changes to codes, an inclusive list may not be presented, but the following codes may apply. Inclusion of a code in this section does not guarantee that it will be reimbursed, and patient must meet the criteria set forth in the policy language.

<table>
<thead>
<tr>
<th>CPT Codes:</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>36468</td>
<td>Single or multiple injections of sclerosing solutions</td>
</tr>
<tr>
<td>36470</td>
<td>Injection of sclerosing solution; single vein</td>
</tr>
<tr>
<td>36471</td>
<td>……..; multiple veins, same leg</td>
</tr>
<tr>
<td>36473</td>
<td>Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, mechanochemical</td>
</tr>
<tr>
<td>36474</td>
<td>Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, mechanochemical; subsequent vein</td>
</tr>
<tr>
<td>36475</td>
<td>Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; first vein treated</td>
</tr>
<tr>
<td>36476</td>
<td>……..: second and subsequent veins treated in a single extremity, each through separate access sites (List separately in addition to code for primary procedure)</td>
</tr>
<tr>
<td>36478</td>
<td>Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, laser; first vein treated</td>
</tr>
<tr>
<td>36479</td>
<td>……..; second and subsequent veins treated in a single extremity, each through separate access sites (List separately in addition to code for primary procedure)</td>
</tr>
<tr>
<td>37500</td>
<td>Vascular endoscopy, surgical, with ligation of perforator veins, subfascial (SEPS)</td>
</tr>
<tr>
<td>37700</td>
<td>Ligation and division of long saphenous vein at saphenofemoral junction, or distal interruptions</td>
</tr>
<tr>
<td>37718</td>
<td>Ligation, division, and stripping, short saphenous vein</td>
</tr>
<tr>
<td>37722</td>
<td>Ligation, division, and stripping, long (greater) saphenous veins from saphenofemoral junction to knee or below</td>
</tr>
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</table>
### Varicose Veins of the Lower Extremities

**Policy Number:** 023  
**Effective Date:** 08/01/2017  
**Last Review:** 05/16/2017  
**Next Review Date:** 05/16/2018

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>37735</td>
<td>Ligation and division and complete stripping of long or short saphenous veins with radical excision of ulcer and skin graft and/or interruption of communicating veins of lower leg, with excision of deep fascia</td>
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<tr>
<td>37760</td>
<td>Ligation of perforator veins, subfascial, radical (Linton type), including skin graft</td>
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<tr>
<td>36473</td>
<td>Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, mechanochemical; first vein treated</td>
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<tr>
<td>36474</td>
<td>Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, mechanochemical; subsequent vein</td>
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<tr>
<td>37761</td>
<td>Ligation of perforator vein(s), subfascial, open, including ultrasound guidance</td>
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<tr>
<td>37765</td>
<td>Stab phlebectomy of varicose veins, one extremity; 10-20 stab incisions</td>
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<tr>
<td>37766</td>
<td>......; more than 20 incisions</td>
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<tr>
<td>37780</td>
<td>Ligation and division of short saphenous vein at saphenopopliteal junction (separate procedure)</td>
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<tr>
<td>37785</td>
<td>Ligation, division, and or excision of varicose vein cluster(s), one leg</td>
</tr>
</tbody>
</table>

**CPT Not Covered:**  
36468 Single or multiple injections of sclerosing solutions, spider veins (telangiectasia); limb or trunk

**HCPCS Not Covered:**  
S2202 Echosclerotherapy

**ICD10 codes:**  
I83.00 – I83.89 and I83.001 - I83.899

**ICD10 Not covered:**  
I83.9 – I83.93

### CMS:

There is no NCD for varicose veins. There is an LCD, L34924 (Novitias Solutions) dated 1/1/2017 titled “Treatment of Varicose Veins and Venous Stasis Disease of The Lower Extremities.” The LCD coverage criteria have been incorporated into this policy.

### POLICY HISTORY:

<table>
<thead>
<tr>
<th>Status</th>
<th>Date</th>
<th>Action</th>
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<tr>
<td>New</td>
<td>12/1/2010</td>
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<tr>
<td>Reviewed</td>
<td>11/1/2011</td>
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<td>Reviewed</td>
<td>10/25/2012</td>
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<td>10/3/2013</td>
<td>ICD10 added, Hayes reviewed, LCD reviewed.</td>
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<td>2/14/2014</td>
<td>Updated</td>
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<tr>
<td>Reviewed</td>
<td>2/12/2015</td>
<td>Incorporated LCD update</td>
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<td>Reviewed</td>
<td>2/04/2016</td>
<td>No changes.</td>
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<tr>
<td>Reviewed</td>
<td>4/7/2016</td>
<td>Minor updates based on new LCD.</td>
</tr>
<tr>
<td>Reviewed</td>
<td>1/31/2017</td>
<td>LCD updated. Literature reviewed. No material change</td>
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<tr>
<td>Updated</td>
<td>5/15/2017</td>
<td>Excluded coverage for mechano-chemical technique.</td>
</tr>
</tbody>
</table>

### REFERENCES:

The following scientific references were utilized in the formulation of this medical policy. SWHP will continue to review clinical evidence related to this policy and may modify it at a later date based upon the evolution of the published clinical evidence. Should additional scientific studies become available and they are not included in the...
list, please forward the reference(s) to SWHP so the information can be reviewed by the Medical Coverage Policy Committee (MCPC) and the Quality Improvement Committee (QIC) to determine if a modification of the policy is in order.


2. Systematic Review and Meta-analysis of surgical interventions versus conservative therapy for venous Ulcers. Karen F. Mauck, MD, MS; Noor Asi, MD; Chaitanya Undavalli, MBBS; Tarig A. Elaiyah, MBBS; Mohammed Nabhan, MD; Osama Altayar, MD; Mohamed Bassam Sonbol, MD; Larry J. Prokop, MLS; Mohammad Hassan Murad, MD, J Vasc Surg 2014;60:60S-70S. Accessed at: http://www.jvascscurg.org/article/S0741-5214(14)00889-1/pdf


