Abstract Purpose:
Network Health Plan/Network Health Insurance Corporation/Network Health Administrative Services, LLC’s (NHP/NHIC/NHAS) Utilization Management (UM) department, applies review guidelines for determinations involving medical necessity of Varicose Vein Treatments. NHIC follows Medicare’s National/Local (Wisconsin area) Coverage Determinations for its Medicare Advantage membership. This medical policy applies to NHP/NHAS commercial lines of business.

Policy Detail:
Refer to the appropriate Certificate of Coverage, Evidence of Coverage, Summary Plan Description, Individual and Family Plan or State of Wisconsin It's Your Choice Reference Guide to determine eligibility and coverage because Employer Group/Plan Sponsor and government contracts may vary.

Procedure Detail:
I. Description:
A. Varicose veins are the result of venous insufficiency from valve incompetence or reflux when blood tends to flow backward across a faulty valve instead of forward. The result is increased pressure and vein dilation. Symptoms of significantly incompetent vessels/veins of the lower extremities include but are not limited to:
   i. Stasis ulcer of the lower leg, or
   ii. Stasis dermatitis, or
   iii. Refractory dependent edema, or
   iv. Significant pain and swelling that interferes with activities of daily living (ADLs), or
   v. Recurrent episodes of superficial phlebitis, or
   vi. Bleeding associated with diseased vessels/veins of the lower extremities

B. A variety of varicose vein procedures are widely used and available. This policy addresses the following as accepted forms of treating incompetent lower extremity veins:
   - **Sclerotherapy** - involves the injection of a sclerosing agent directly into a vein, often under ultrasound guidance.
   - **Stab Phlebectomy** - also known as microphlebectomy, stab or hook avulsion. Stab phlebectomy is comprised of making multiple small incisions over targeted varicosities. Stab phlebectomy is performed on superficial varicose veins below the saphenofemoral junction and/or saphenopopliteal junction (ie, tributary veins, not the great saphenous vein or small saphenous vein).
   - **Endovenous laser ablation (EVLA)** - this is a method of treating varicose veins without surgery. Instead of tying and/or and removing the abnormal veins, they are heated by a laser. A wire is passed through a needle and up the vein. A catheter is passed over the wire, up the vein and the wire removed. A laser fiber is passed up the catheter so its tip lies at the highest point to be heated (usually in the groin crease). An anesthetic solution is injected around the vein from several tiny needle pricks. The laser destroys the vein walls and the body naturally absorbs the dead tissue.
Radiofrequency ablation (RFA)- is a technique which uses heat to damage tissue and form scar tissue; the scar tissue closes the vein. This technique uses radiofrequency energy (instead of laser energy) to heat up and damage the wall inside a vein. This closes off a varicose vein in the lower extremity. To facilitate this treatment the vein needs to be as tightly wrapped around the catheter as possible; therefore, compression is applied during the procedure and at least one week following the procedure.

Mechanochemical ablation (MOCA)- this technique is performed in a similar manner to thermal ablation (EVTA), however, no heat is used. It is an alternative procedure to thermal ablation or for when a thermal procedure is not possible due to the vein's proximity to a nerve. A special rotating catheter is advanced into the vein, damaging the vessel prior the injecting the sclerosant agent, resulting in the varicose vein being closed.

Polidocanol microfoam (PEM)- PEM is the use of injecting a sclerosing agent (usually liquid or foam) to treat small, symptomatic varicose veins in the lower legs. This technique can also be used to treat incompetent great saphenous veins, accessory saphenous veins, and visible symptomatic varicose veins above and below the knees. PEM is typically used in combination with compression therapy.

Cyanoacrylate adhesive embolization (CAE)- CAE is a new, non-ablative procedure and is the only non-sclerosant treatment for symptomatic venous incompetence/reflux. It is unique in that is does not require post-procedure compression. An adhesive is injected and works like “super glue”, bonding to the walls of the vein and ultimately closing the incompetent veins.

II. Medical Indications/Criteria

A. The vein treatment technique best suited for everyone depends on their personal clinical and anatomical circumstance. Treatments for symptomatic varicose vein tributaries are compressive sclerotherapy or stab phlebectomy (microphlebectomy).

i. Sclerotherapy and Stab Phlebectomy procedures: Network Health considers sclerotherapy and/or microphlebectomy medically necessary for treatment of symptomatic varicose veins, vein tributaries when:
   i. Veins measure greater than 4 mm in diameter (confirmed by ultrasound within the last 6 months) AND
   ii. Saphenous reflux is not present or has already successfully treated, AND
   iii. The individual remains symptomatic despite a six-week trial of conservative treatments. Conservative treatments include, but are not limited to:
      1. Daily exercise OR
      2. Weight reduction OR
      3. Periodic elevation of legs AND
      4. Use of graduated compression stockings AND
   iv. The individual does not have a contraindicated condition, including but not limited to:
      1. Deep venous thrombosis on duplex ultrasound or other imaging test
      2. Lymphedema or severe peripheral edema in region of procedure
      3. Advanced peripheral arterial disease
      4. Known allergy to the sclerosing agent
      5. Pregnancy
      6. Local or systemic infection AND
   v. The individual’s symptoms for needing vein treatment are documented and available within the patient’s medical record prior to performing any procedure, including any inability to tolerate prescription gradient compression stockings and the reason of such intolerance.
B. **Endovenous ablation therapies**: each endovenous ablation technique has its advantages and disadvantages. The vein treatment technique best suited for everyone depends on their personal clinical and anatomical circumstance. Endovenous techniques have replaced saphenous vein stripping and ligation in many scenarios.

1. **Thermal tumescent techniques (thermal energy)**: Network Health considers radiofrequency ablation (RFA) and Endovenous laser ablation (EVLA) procedures medically necessary when:
   i. Doppler or duplex ultrasound has confirmed significant lower extremity vein incompetence/reflux with retrograde flow of 0.5 seconds duration or greater AND
   ii. No evidence of deep vein thrombosis AND
   iii. The individual remains symptomatic despite a six-week trial of conservative treatments. Conservative treatments include, but are not limited to:
      1. Daily exercise OR
      2. Weight reduction OR
      3. Periodic elevation of legs AND
      4. Use of graduated compression stockings AND
   iv. The individual’s symptoms for needing any vein treatment are documented and available within the patient’s medical record prior to performing any procedure, including any inability to tolerate prescription gradient compression stockings and the reason of such intolerance.

2. **Non-thermal tumescent techniques**: Network Health considers polidocanol microfoam (PEM), mechanochemical ablation (MOCA) and cyanoacrylate adhesive embolization (CAE) medically necessary when:
   i. Doppler or duplex ultrasound has confirmed significant lower extremity vein incompetence/reflux with retrograde flow of 0.5 seconds duration or greater, AND
   ii. No evidence of deep vein thrombosis AND
   iii. The incompetent veins are no larger than 12mm in diameter, AND
   iv. The individual remains symptomatic despite a six-week trial of conservative treatments. Conservative treatments include, but are not limited to:
      1. Daily exercise OR
      2. Weight reduction OR
      3. Periodic elevation of legs AND
      4. Use of graduated compression stockings AND
   v. There is no evidence of vein thrombosis or tuberosity, which would impair catheter advancement (except PEM), AND
   vi. The individual’s symptoms for needing vein treatment are documented and available within the patient’s medical record prior to performing any procedure, including any inability to tolerate prescription gradient compression stockings and the reason of such intolerance.

III. **Coverage**:
   A. NHP/NHAS may extend coverage for varicose vein treatments for the techniques listed above when the criteria above are met.
   B. NHIC follows CMS National Coverage Determinations (NCD) and Local Coverage Determinations (LCD) for application to its Medicare Advantage membership. Please refer to the applicable CMS guideline found at [www.cms.gov](http://www.cms.gov).

IV. **Limitations/Exclusions**:
   A. Network Health considers varicose vein treatment not medically necessary for any other indication not meeting the criteria outlined above.
   B. Vein procedures for cosmetic reasons are excluded from coverage by Network Health.
C. Treatment of asymptomatic veins is considered not medically necessary by Network Health.
D. The following interventional treatments are not considered medically necessary and not covered by Network Health:
   a. Coil embolization,
   b. Surgery, endovenous ablation or sclerotherapy on varicose veins that develop during pregnancy (as this tends to resolve or improve after pregnancy),
   c. Reinjection following recanalization or failure of vein closure without recurrent symptoms,
   d. Endovenous ablation therapy for patients with several distal arterial occlusive diseases, destruction of deep venous system and/or an allergy to sclerosant,
   e. Vein treatments for individuals in a hypercoagulable state.
   f. Network Health considers no more than three (3) sclerotherapy sessions per leg over a 12-month timeframe medically necessary.

V. References:
   MCG 23rd Edition Guidelines, Stab Phlebectomy A-0735 (AC)
   MCG 23rd Edition Guidelines, Sclerotherapy, Leg Veins A-0170 (AC)
   MCG 23rd Edition Guidelines, Saphenous Vein Stripping A-0172 (AC)
   MCG 23rd Edition Guidelines, Saphenous Vein Ablation, Radiofrequency A-0174 (AC)
   MCG 23rd Edition Guidelines, Saphenous Vein Ablation, Laser A-0425 (AC)
   MCG 23rd Edition Guidelines, Graduated Compression Stockings A-0336 (AC)
   CMS, Local Coverage Determination (LCD) for Varicose Veins of the Lower Extremity, Treatment of (L33575)

Regulatory Citations:
UM 2

Related Policies:
None

Related Documents:
CMS, Local Coverage Determination (LCD) for Varicose Veins of the Lower Extremity, Treatment of (L33575)

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Disclaimer:
Contract language as well as state and federal laws take precedence over any medical policy. Network Health coverage documents (i.e. Certificate of Coverage, Evidence of Coverage, Summary Plan Descriptions) outline contractual terms of the applicable benefit plan for each line of business and will
be considered first in determining eligibility. Not all Network Health coverage documents are the same. Coverage may differ. Our Medicare membership follows applicable Centers for Medicare and Medicaid Services (CMS) coverage statements including National Coverage Determinations (NCD) and Local Coverage Determinations (LCD). Please refer to the CMS website at www.cms.gov.

Network Health reserves the right to review and update our medical policies on occasion as medical technologies are constantly evolving. The documentation of any brand name of a test, product and/or procedure in a medical policy is in no way an endorsement of that product; it is for reference only. Network Health’s medical policies are for guidance and not intended to prevent the judgment of the reviewing medical director(s) nor dictate to health care providers how to practice medicine.