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Clinical Appropriateness Guidelines

Cardiovascular

Appropriate Use Criteria: Treatment of Varicose Veins and Superficial Venous Insufficiency

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Description and Application of the Guidelines

The Carelon Clinical Appropriateness Guidelines (hereinafter “the Carelon Clinical Appropriateness Guidelines” or the “Guidelines”) are designed to assist providers in making the most appropriate treatment decision for a specific clinical condition for an individual. The Guidelines establish objective and evidence-based criteria for medical necessity determinations, where possible, that can be used in support of the following:

- To establish criteria for when services are medically necessary
- To assist the practitioner as an educational tool
- To encourage standardization of medical practice patterns
- To curtail the performance of inappropriate and/or duplicate services
- To address patient safety concerns
- To enhance the quality of health care
- To promote the most efficient and cost-effective use of services

The Carelon guideline development process complies with applicable accreditation and legal standards, including the requirement that the Guidelines be developed with involvement from appropriate providers with current clinical expertise relevant to the Guidelines under review and be based on the most up-to-date clinical principles and best practices. Resources reviewed include widely used treatment guidelines, randomized controlled trials or prospective cohort studies, and large systematic reviews or meta-analyses. Carelon reviews all of its Guidelines at least annually.

Carelon makes its Guidelines publicly available on its website. Copies of the Guidelines are also available upon oral or written request. Additional details, such as summaries of evidence, a list of the sources of evidence, and an explanation of the rationale that supports the adoption of the Guidelines, are included in each guideline document.

Although the Guidelines are publicly available, Carelon considers the Guidelines to be important, proprietary information of Carelon, which cannot be sold, assigned, leased, licensed, reproduced or distributed without the written consent of Carelon. Use of the Guidelines by any external AI entity without the express written permission of Carelon is prohibited.

Carelon applies objective and evidence-based criteria, and takes individual circumstances and the local delivery system into account when determining the medical appropriateness of health care services. The Carelon Guidelines are just guidelines for the provision of specialty health services. These criteria are designed to guide both providers and reviewers to the most appropriate services based on a patient’s unique circumstances. In all cases, clinical judgment consistent with the standards of good medical practice should be used when applying the Guidelines. Guideline determinations are made based on the information provided at the time of the request. It is expected that medical necessity decisions may change as new information is provided or based on unique aspects of the patient’s condition. The treating clinician has final authority and responsibility for treatment decisions regarding the care of the patient and for justifying and demonstrating the existence of medical necessity for the requested service. The Guidelines are not a substitute for the experience and judgment of a physician or other health care professionals. Any clinician seeking to apply or consult the Guidelines is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient’s care or treatment.

The Guidelines do not address coverage, benefit or other plan specific issues. Applicable federal and state coverage mandates take precedence over these clinical guidelines, and in the case of reviews for Medicare Advantage Plans, the Guidelines are only applied where there are not fully established CMS criteria. If requested by a health plan, Carelon will review requests based on health plan medical policy/guidelines in lieu of the Carelon Guidelines. Pharmaceuticals, radiotracers, or medical devices used in any of the diagnostic or therapeutic interventions listed in the Guidelines must be FDA approved or conditionally approved for the intended use. However, use of an FDA-approved or conditionally approved product does not constitute medical necessity or guarantee reimbursement by the respective health plan.

The Guidelines may also be used by the health plan or by Carelon for purposes of provider education, or to review the medical necessity of services by any provider who has been notified of the need for medical necessity review, due to billing practices or claims that are not consistent with other providers in terms of frequency or some other manner.

General Clinical Guideline

Clinical Appropriateness Framework

Critical to any finding of clinical appropriateness under the guidelines for a specific diagnostic or therapeutic intervention are the following elements:

- Prior to any intervention, it is essential that the clinician confirm the diagnosis or establish its pretest likelihood based on a complete evaluation of the patient. This includes a history and physical examination and, where applicable, a review of relevant laboratory studies, diagnostic testing, and response to prior therapeutic intervention.
- The anticipated benefit of the recommended intervention is likely to outweigh any potential harms, including from delay or decreased access to services that may result (net benefit).
- Widely used treatment guidelines and/or current clinical literature and/or standards of medical practice should support that the recommended intervention offers the greatest net benefit among competing alternatives.
- There exists a reasonable likelihood that the intervention will change management and/or lead to an improved outcome for the patient.

Providers may be required to submit clinical documentation in support of a request for services. Such documentation must a) accurately reflect the clinical situation at the time of the requested service, and b) sufficiently document the ordering provider's clinical intent.

If these elements are not established with respect to a given request, the determination of appropriateness will most likely require a peer-to-peer conversation to understand the individual and unique facts that would justify a finding of clinical appropriateness. During the peer-to-peer conversation, factors such as patient acuity and setting of service may also be taken into account to the extent permitted by law.

Simultaneous Ordering of Multiple Diagnostic or Therapeutic Interventions

Requests for multiple diagnostic or therapeutic interventions at the same time will often require a peer-to-peer conversation to understand the individual circumstances that support the medical necessity of performing all interventions simultaneously. This is based on the fact that appropriateness of additional intervention is often dependent on the outcome of the initial intervention.

Additionally, either of the following may apply:

- Current literature and/or standards of medical practice support that one of the requested diagnostic or therapeutic interventions is more appropriate in the clinical situation presented; or
- One of the diagnostic or therapeutic interventions requested is more likely to improve patient outcomes based on current literature and/or standards of medical practice.

Repeat Diagnostic Intervention

In general, repeated testing of the same anatomic location for the same indication should be limited to evaluation following an intervention, or when there is a change in clinical status such that additional testing is required to determine next steps in management. At times, it may be necessary to repeat a test using different techniques or protocols to clarify a finding or result of the original study.

Repeated testing for the same indication using the same or similar technology may be subject to additional review or require peer-to-peer conversation in the following scenarios:

- Repeated diagnostic testing at the same facility due to technical issues

- Repeated diagnostic testing requested at a different facility due to provider preference or quality concerns
- Repeated diagnostic testing of the same anatomic area based on persistent symptoms with no clinical change, treatment, or intervention since the previous study
- Repeated diagnostic testing of the same anatomic area by different providers for the same member over a short period of time

Repeat Therapeutic Intervention

In general, repeated therapeutic intervention in the same anatomic area is considered appropriate when the prior intervention proved effective or beneficial and the expected duration of relief has lapsed. A repeat intervention requested prior to the expected duration of relief is not appropriate unless it can be confirmed that the prior intervention was never administered. Requests for on-going services may depend on completion of previously authorized services in situations where a patient's response to authorized services is relevant to a determination of clinical appropriateness.

Treatment of Varicose Veins and Superficial Venous Insufficiency

Clinical Indications

The following section includes indications for which treatment of varicose veins and venous insufficiency is considered medically necessary, along with prerequisite information and supporting evidence where available. Indications, diagnoses, or procedures not specifically addressed are considered not medically necessary.

Treatment of truncal veins

Includes treatment of reflux in the great saphenous, small saphenous, anterior saphenous (anterior accessory saphenous) and posterior accessory saphenous veins.

Thermal ablation

Includes endovenous laser ablation (EVLT) and radiofrequency ablation (RFA).

Thermal ablation of the truncal veins is considered medically necessary when **ALL** of the following criteria are met:

- Patient has symptoms* which interfere with vocation or lifestyle
- There is axial reflux** greater than 500 msec in the truncal vein to be treated, documented by duplex ultrasound
- The saphenous vein to be treated has not been treated with thermal or non-thermal ablation in the last 3 months.

Notes:

**These symptoms include painful varicose veins, heaviness, itching, burning, leg pain not attributable to other causes, leg swelling not attributable to other causes, venous stasis skin changes, superficial phlebitis, bleeding, and ulceration. Reticular veins and telangectasias alone are not an indication for treatment.*

***Axial reflux of the great saphenous vein is defined as uninterrupted retrograde venous flow from the groin to the upper calf. Axial reflux of the small saphenous vein is defined as retrograde flow from the knee to the ankle. Axial reflux in the anterior accessory saphenous vein and in the posterior accessory saphenous vein is defined as retrograde flow between two measurements, at least 5 cm apart. Note that this does not require SFJ reflux.*

Rationale

Evidence-based clinical practice guidelines recommend treatment of truncal veins for patients with CEAP stage C2 and above. This does not include patients with C0 (no visible venous disease) or C1 (telangectasias or reticular veins).[1]

Society for Vascular Surgery clinical practice guidelines recommend compression therapy for primary treatment if the patient will be undergoing conservative treatment due to other comorbidities or patient preference. However, these clinical practice guidelines recommend against a trial of compression prior to intervention, stating “no evidence is available to support a trial of 3 months of compression therapy before offering surgical or endovenous intervention for most patients.”[2] Additionally, evidence-based guidelines from the American College of Radiology note that “few data demonstrate correlation with quality of life (QoL) improvement with routine use of compression alone.”[3] As a result, a prerequisite for a trial of compression stockings prior to definitive treatment was not included in this guideline.

Non-thermal ablation

Includes cyanoacrylate ablation (CAA), ultrasound guided foam sclerotherapy (UGFS) using physician-compounded foam or microfoam, or mechanochemical ablation (MOCA).

Non-thermal ablation of the truncal veins is considered medically necessary when **ALL** of the following criteria are met:

- Patient has symptoms* which interfere with vocation or lifestyle
- There is axial reflux** greater than 500 msec in the truncal vein to be treated, documented by duplex ultrasound
- The saphenous vein to be treated has not been treated with thermal or non-thermal ablation in the last 3 months.
- The patient cannot undergo thermal ablation for treatment of this vein for **ANY** of the following reasons:
    - Intolerance to tumescent anesthesia
    - Partially occluded vein
    - Tortuous vein
    - Superficial vein
    - Short vein length

Notes:

**These symptoms include painful varicose veins, heaviness, itching, burning, leg pain not attributable to other causes, leg swelling not attributable to other causes, venous stasis skin changes, superficial phlebitis, bleeding, and ulceration. Reticular veins and telangectasias alone are not an indication for treatment.*

***Axial reflux of the great saphenous vein is defined as uninterrupted retrograde venous flow from the groin to the upper calf. Axial reflux of the small saphenous vein is defined as retrograde flow from the knee to the ankle. Axial reflux in the anterior accessory saphenous vein and in the posterior accessory saphenous vein is defined as retrograde flow between two measurements, at least 5 cm apart. Note that this does not require SFJ reflux.*

Rationale

Evidence-based guidelines state that, for patients undergoing treatment of great saphenous vein incompetence, “endovenous thermal ablation is recommended as first choice treatment, in preference to high ligation/stripping and ultrasound-guided foam sclerotherapy.” These guidelines also state “For patients with great saphenous vein incompetence requiring treatment, cyanoacrylate adhesive closure should be considered when a non-thermal non-tumescent technique is preferred” and “For patients with great saphenous vein incompetence requiring treatment, mechanochemical ablation may be considered when a non-thermal non-tumescent technique is preferred.”[1]

Surgical treatment of Truncal Veins

Includes high ligation with or without stripping of the great, small and anterior saphenous veins

Surgical treatment of truncal veins is medically necessary when **ALL** of the following criteria are met:

- The patient has symptoms* which interfere with vocation or lifestyle
- There is axial reflux** greater than 500 msec in the truncal vein to be treated, documented by duplex ultrasound
- The patient cannot undergo thermal ablation for treatment of this vein for **ANY** of the following reasons:
    - Partially occluded vein
    - Tortuous vein
    - Superficial vein

- Aneurysmal vein
- Short vein length
- Recurrent reflux

Notes:

**These symptoms include painful varicose veins, heaviness, itching, burning, leg pain not attributable to other causes, leg swelling not attributable to other causes, venous stasis skin changes, superficial phlebitis, bleeding, and ulceration. Reticular veins and telangectasias alone are not an indication for treatment.*

***Axial reflux of the great saphenous vein is defined as uninterrupted retrograde venous flow from the groin to the upper calf. Axial reflux of the small saphenous vein is defined as retrograde flow from the knee to the ankle. Axial reflux in the anterior accessory saphenous vein and in the posterior accessory saphenous vein is defined as retrograde flow between two measurements, at least 5 cm apart. Note that this does not require SFJ reflux.*

Rationale

Evidence-based guidelines state that, for patients undergoing treatment of great saphenous vein incompetence, "endovenous thermal ablation is recommended as first choice treatment, in preference to high ligation/stripping and ultrasound-guided foam sclerotherapy." They further recommend that "high ligation/stripping should be considered if endovenous thermal ablation options are not available."[1]

Treatment of perforator veins

Includes ultrasound guided foam sclerotherapy, EVLT, RFA.

Treatment of perforator veins is medically necessary when **ALL** of the following criteria are met:

- Patient has a healed or active venous ulcer
- The perforator to be treated meets **ALL** of the following criteria:
  - The perforator to be treated is underlying the area of ulceration
  - There is outward flow of > 500 msec in the perforator to be treated on duplex ultrasound.
  - The perforator vein diameter is > 3.5 mm
- Significant truncal vein reflux**, when present in the same leg and affecting the area of ulceration is being treated at the same treatment session, or has been previously treated with no significant residual reflux in the treated truncal vein on Duplex ultrasound.

Rationale

A 2023 evidence-based guideline defines "pathologic" perforating veins as those with an outward flow duration of 500 msec or greater and a diameter on ultrasound of 3.5 mm or greater.[2]

An evidence-based guideline from the Society for Vascular Surgery and the American Venous Forum suggests that, in patients with isolated pathologic perforator veins (defined as an outward flow of >500 msec duration and a diameter of >3.5 mm) and a healed or active venous leg ulcer, ablation of the perforating veins be performed in addition to compression therapy. This guideline also recommends that, in patients with combined superficial and perforator venous reflux, ablation of both the incompetent superficial veins and the perforator veins be performed. Perforator treatment may be performed simultaneously with treatment of axial reflux or staged to follow axial reflux correction if perforator incompetence is persistent.[4]

Treatment of tributary and varicose veins

Includes liquid sclerotherapy, foam sclerotherapy, ultrasound guided foam sclerotherapy (UGFS), and phlebectomy.

Treatment of tributary and varicose veins is medically necessary when **ALL** of the following criteria are met:

- Patient has symptoms* which interfere with vocation or lifestyle
- Veins to be treated are > 3 mm in diameter

- Significant truncal vein reflux**, when present in the same leg and leading to the varicosities, will be treated at the same treatment session OR has been previously treated more than 3 months prior and Duplex shows no significant residual reflux in the treated truncal veins.

Notes:

**These symptoms include painful varicose veins, heaviness, leg swelling not attributable to other causes, itching, burning, venous stasis skin changes, superficial phlebitis, bleeding, and ulceration. Reticular veins and telangectasias alone are not an indication for treatment.*

Rationale

Evidence-based guidelines from the Society for Vascular Surgery, American Venous Forum, and Lymphatic Society recommend use of the 2020 CEAP classification system, in which varicose veins are defined as dilated subcutaneous tributaries 3mm or greater in diameter. Reticular veins (less than 3mm in diameter) and telangiectasias (less than 1mm in size) fall within CEAP Class C1, for which routine intervention is generally considered cosmetic.

These guidelines also state: “For treatment of symptomatic varicose tributaries, we recommend miniphlebectomy or ultrasound guided sclerotherapy using physician-compounded foam (PCF) or polidocanol endovenous microfoam (PEM)” and “For patients with symptomatic varicose tributaries, treatment of the tributaries should be performed even if the superficial trunks are competent.” In addition, these guidelines state: “For patients with symptomatic reflux in the major superficial venous trunks and associated varicosities undergoing initial ablation alone, we recommend follow-up for > 3 months to assess the need for staged phlebectomy or ultrasound- guided sclerotherapy for persistent or recurrent symptoms. Longer follow-up is recommended for those with recurrence or more advanced CEAP class.”[2]

References

1. De Maeseneer MG, Kakkos SK, Aherne T, et al. Editor's Choice - European Society for Vascular Surgery (ESVS) 2022 Clinical Practice Guidelines on the Management of Chronic Venous Disease of the Lower Limbs. Eur J Vasc Endovasc Surg. 2022;63(2):184-267. PMID 35027279
2. Gloviczki P, Lawrence PF, Wasan SM, et al. The 2022 Society for Vascular Surgery, American Venous Forum, and American Vein and Lymphatic Society clinical practice guidelines for the management of varicose veins of the lower extremities. Part I. Duplex scanning and treatment of superficial truncal reflux: endorsed by the Society for Vascular Medicine and the International Union of Phlebology. J Vasc Surg Venous Lymphat Disord. 2023;11(2):231-61.e6. PMID 36326210
3. Rochon PJ, Reghunathan A, Kapoor BS, et al. ACR Appropriateness Criteria lower extremity chronic venous disease. J Am Coll Radiol. 2023;20(11s):S481-s500. PMID 38040466
4. O'Donnell TF, Jr., Passman MA, Marston WA, et al. Management of venous leg ulcers: clinical practice guidelines of the Society for Vascular Surgery and the American Venous Forum. J Vasc Surg. 2014;60(2 Suppl):3s-59s. PMID 24974070
5. Gloviczki P, Lawrence PF, Wasan SM, et al. The 2023 Society for Vascular Surgery, American Venous Forum, and American Vein and Lymphatic Society clinical practice guidelines for the management of varicose veins of the lower extremities. Part II: endorsed by the Society of Interventional Radiology and the Society for Vascular Medicine. J Vasc Surg Venous Lymphat Disord. 2024;12(1):101670. PMID 37652254

Codes

The following code list is not meant to be all-inclusive. Authorization requirements will vary by health plan. Please consult the applicable health plan for guidance on specific procedure codes.

Specific CPT codes for services should be used when available. Nonspecific or not otherwise classified codes may be subject to additional documentation requirements and review.

CPT/HCPCS

36465	Injection of non-compounded foam sclerosant with ultrasound compression maneuvers to guide dispersion of the injectate, inclusive of all imaging guidance and monitoring; single incompetent extremity truncal vein (eg, great saphenous vein, accessory saphenous vein)
36466	Injection of non-compounded foam sclerosant with ultrasound compression maneuvers to guide dispersion of the injectate, inclusive of all imaging guidance and monitoring; multiple incompetent truncal veins (eg, great saphenous vein, accessory saphenous vein), same leg
36468	Injection(s) of sclerosant for spider veins (telangiectasia), limb or trunk
36470	Injection of sclerosant; single incompetent vein (other than telangiectasia)
36471	Injection of sclerosant; multiple incompetent veins (other than telangiectasia), same leg
S2202	Echosclerotherapy
36473	Endovenous ablation therapy of incompetent
36474	Endovenous ablation therapy of incompetent
36475	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; first vein treated
36476	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; subsequent vein(s) treated in a single extremity, each through separate access sites (List separately in addition to code for primary procedure)
36478	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, laser; first vein treated
36479	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, laser; subsequent vein(s) treated in a single extremity, each through separate access sites (List separately in addition to code for primary procedure)
36482	Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging guidance and monitoring, percutaneous; first vein treated
36483	Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging guidance and monitoring, percutaneous; subsequent vein(s) treated in a single extremity, each through separate access sites (List separately in addition to code for primary procedure)
0524T	Endovenous catheter directed chemical ablation with balloon isolation of incompetent extremity vein, open or percutaneous, including all vascular access, catheter manipulation, diagnostic imaging, imaging guidance and monitoring
37700	Ligation and division of long saphenous vein at saphenofemoral junction, or distal interruptions
37718	Ligation, division, and stripping, short saphenous vein
37722	Ligation, division, and stripping, long (greater) saphenous veins from saphenofemoral junction to knee or below
37735	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
37765	Stab phlebectomy of varicose veins, one extremity; 10-20 stab incisions
37766	Stab phlebectomy of varicose veins, one extremity; more than 20 incisions
37780	Ligation and division of short saphenous vein at saphenopopliteal junction (separate procedure)
37785	Ligation, division, and/or excision of varicose vein cluster(s), one leg

ICD-10 Diagnosis

Refer to the ICD-10 CM manual

History

Status	Review Date	Effective Date	Action
Created	04/21/2025, 01/30/2025	01/10/2026	Independent Multispecialty Physician Panel (IMPP) review. Original effective date.