Pneumatic Compression Devices

LOB(s):	State(s):
☒ *Commercial* ☒ *Medicare*	☒ *Idaho* ☒ *Montana* ☒ *Oregon* ☒ *Washington* ☐ *Other:*
☒ *Medicaid*	☒ *Oregon*

Enterprise Policy

PacificSource is committed to assessing and applying current regulatory standards, widely-used treatment guidelines, and evidenced-based clinical literature when developing clinical criteria for coverage determination. Each policy contains a list of sources (references) that serves as the summary of evidence used in the development and adoption of the criteria. The evidence was considered to ensure the criteria provide clinical benefits that promote patient safety and/or access to appropriate care. Each clinical policy is reviewed, updated as needed, and readopted, at least annually, to reflect changes in regulation, new evidence, and advancements in healthcare.

Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determinations are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.

Background

Pneumatic compression devices consist of an inflatable garment for the arm or leg and an electrical pneumatic pump that fills the garment with compressed air. The garment is intermittently inflated and deflated with cycle times and pressures that vary between devices. Coverage for *home use* of pneumatic compression devices is available within the following three diagnostic categories: Chronic venous insufficiency (CVI), lymphedema, and prevention of deep venous thrombosis (DVT).

Criteria

Commercial

Prior authorization is required

I. Chronic Venous Insufficiency with Venous Stasis Ulcers

PacificSource considers Pneumatic Compression Devices for the treatment of Chronic Venous Insufficiency of the lower extremities medically necessary when **ALL** of the following criteria is met:

A. Pharmacologic anticoagulation is contraindicated (e.g., Gastrointestinal bleed)

B. One or more venous stasis ulcer(s) which have failed to heal after a six-month trial of conservative therapy that included compression bandages or garments and exercise/elevation of the affected limb

C. Documentation of venous statis ulcer location and measurements are required before beginning compression device treatment.

Note: Initial approval is **3 (three) months rental** of compressor and sleeves (appliance) for diagnosis of Chronic Venous Insufficiency with venous status ulcers. Continued authorization with conversion to **purchase** requires documentation of efficacy and patient compliance.

II. Lymphedema

PacificSource considers Pneumatic Compression Devices for the treatment of lymphedema medically necessary when **BOTH** of the following criteria are met:

A. Four-week trial of conservative therapy that included compression bandage system or garment, exercise, and elevation of the limb

B. Treating physician determines that there has been no significant improvement or significant symptoms remain after the four-week trial

Note initial approval is **3 (three) months rental** of compressor and sleeves (appliances) for diagnosis of lymphedema. Continues authorization with conversion to **purchase** requires documentation of efficacy and patient compliance.

III. Prevention of Deep Venous Thrombosis

PacificSource considers intermittent Pneumatic Compression Devices with extremity pump medically necessary when **ALL** of the following criteria is met:

A. Orders for strict bed rest **OR** a medical or neurological condition preventing ambulation

B. No deep venous thrombosis

C. No lower extremity arterial disease

D. No skin disease of extremity

E. No untreated cellulitis

Note: Initial approval is **1 (one) month rental** of compressor and sleeves (appliance) for diagnosis of Deep Venous Thrombosis prevention. Continued authorization with conversion to **purchase** requires documentation of efficacy and patient compliance.

Medicaid

PacificSource Community Solutions follows OARs: 410-120-1200, 410-141-3820, 410-141-3825; and Excluded Service Guideline E2 of the Oregon Health Plan (OHP) Prioritized List of Health Services for Pneumatic Compression Devices (E0650-E0673 and E0676). OHP considers there to be insufficient evidence of effectiveness for these devices.

For coverage of Pneumatic Compression Devices not specified in Excluded Service Guideline E2 of the OHP Prioritized List of Health Services, PacificSource Community Solutions follows OARs 410-141-3820, 410-141-3825,, and National Coverage Determination (NCD) 280.6 for coverage.

PacificSource follows the “Early and Periodic Screening, Diagnostic, and Treatment (EPSDT)” criteria for members under 21 and Young Adults with Special Health Care Needs (YSHCN).

Medicare

PacificSource Medicare follows National Coverage Determination (NCD) 280.6.

Experimental/Investigational/Unproven

PacificSource considers the use of a pneumatic compression device to treat arterial insufficiency with exception of application during surgical intervention to be experimental, investigational, or unproven.

Coding Information

The following list of codes are for informational purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

HCPCS codes (for segmented and non-segmented devices for full arm or leg or half leg):

E0650 Pneumatic compressor, nonsegmental home model

E0651 Pneumatic compressor, segmental home model without calibrated gradient pressure

E0652 Pneumatic compressor, segmental home model with calibrated gradient pressure

E0655 Nonsegmental pneumatic appliance for use with pneumatic compressor, half arm

E0656 Segmental pneumatic appliance for use with pneumatic compressor, trunk

E0657 Segmental pneumatic appliance for use with pneumatic compressor, chest

E0660 Nonsegmental pneumatic appliance for use with pneumatic compressor, full leg

E0665 Nonsegmental pneumatic appliance for use with pneumatic compressor, full arm

E0666 Nonsegmental pneumatic appliance for use with pneumatic compressor, half leg

E0667 Segmental pneumatic appliance for use with pneumatic compressor, full leg

E0668 Segmental pneumatic appliance for use with pneumatic compressor, full arm

E0669 Segmental pneumatic appliance for use with pneumatic compressor, half leg

E0670 Segmental pneumatic appliance for use with pneumatic compressor, integrated, 2 full legs, trunk

E0671 Segmental gradient pressure pneumatic appliance, full leg

E0672 Segmental gradient pressure pneumatic appliance, full arm

E0673 Segmental gradient pressure pneumatic appliance, half leg

E0675 Pneumatic compression device, high pressure, rapid inflation/deflation cycle, for arterial insufficiency (unilateral or bilateral system)

E0676 Intermittent limb compression device (includes all accessories), not otherwise specified

Definitions

Chronic Venous Insufficiency (CVI) – obstruction or reflux of blood flow in the veins caused by abnormalities of the venous wall and valves.

Lymphedema - the swelling of subcutaneous tissues due to the accumulation of excessive fluid in the lymph system.

Peripheral Artery Occlusive Disease occurs when blood flow to the legs is reduced due to atherosclerosis, thrombus formation or embolization.

References

Andriessen, A., Apelqvist, J., Mosti, G., Partsch, H., Gonska, C., & Abel, M. (2017). Compression therapy for venous leg ulcers: risk factors for adverse events and complications, contraindications - a review of present guidelines. Journal of the European Academy of Dermatology and Venereology : JEADV, 31(9), 1562–1568. https://doi.org/10.1111/jdv.14390

Fife, C. E., Davey, S., Maus, E. A., Guilliod, R., & Mayrovitz, H. N. (2012). A randomized controlled trial comparing two types of pneumatic compression for breast cancer-related lymphedema treatment in the home. Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer, 20(12), 3279–3286. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3480585/pdf/520_2012_Article_1455.pdf

Geerts, W. H., Bergqvist, D., Pineo, G. F., Heit, J. A., Samama, C. M., Lassen, M. R., & Colwell, C. W. (2008). Prevention of venous thromboembolism: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). Chest, 133(6 Suppl), 381S–453S. https://pubmed.ncbi.nlm.nih.gov/18574271/

Hayes Knowledge Center. (January 27, 2003). Health Technology Assessment: Pneumatic Compression for Prevention of Deep Vein Thrombosis Following Knee Surgery.

Kim, D. S., Won, Y. H., & Ko, M. H. (2022). Comparison of intermittent pneumatic compression device and compression stockings for workers with leg edema and pain after prolonged standing: a prospective crossover clinical trial. BMC musculoskeletal disorders, 23(1), 1007. https://doi.org/10.1186/s12891-022-05975-6

Nelson, E. A., Hillman, A., & Thomas, K. (2014). Intermittent pneumatic compression for treating venous leg ulcers. The Cochrane database of systematic reviews, (5), CD001899. https://www.cochrane.org/CD001899/WOUNDS_intermittent-pneumatic-compression-for-treating-venous-leg-ulcers

Oregon Administrative Rules (OARs). Oregon Health Authority. Health Systems: Medical Assistance Programs – Chapter 410 https://secure.sos.state.or.us/oard/displayChapterRules.action?selectedChapter=87

Oregon. The Health Evidence Review Commission (HERC). Prioritized List of Health Services https://www.oregon.gov/oha/HSD/OHP/Pages/Prioritized-List.aspx

Rabe, E., Partsch, H., Morrison, N., Meissner, M. H., Mosti, G., Lattimer, C. R., Carpentier, P. H., Gaillard, S., Jünger, M., Urbanek, T., Hafner, J., Patel, M., Wu, S., Caprini, J., Lurie, F., & Hirsch, T. (2020). Risks and contraindications of medical compression treatment - A critical reappraisal. An international consensus statement. Phlebology, 35(7), 447–460. https://doi.org/10.1177/0268355520909066

Won, Y. H., Ko, M. H., & Kim, D. H. (2021). Intermittent pneumatic compression for prolonged standing workers with leg edema and pain. Medicine, 100(28), e26639. https://doi.org/10.1097/MD.0000000000026639

Appendix

Policy Number:

Effective: 7/1/2020 **Next review:** 8/1/2026

Policy type: Enterprise

Author(s):

Depts.: Health Services

Applicable regulation(s): OARs 410-120-1200, 410-141-3820, 410-141-3825, 410-151-0000 through 0003;National Coverage Determination (NCD) 280.6.

Commercial OPs: 7/2025

Government OPs: 7/2025