MedStar Family Choice		
ADMINISTRATIVE POLICY AND PROCEDURE		
Policy #:	**1420**	
Subject:	**Pneumatic Compression Devices for Chronic Venous Insufficiency**	
Section:	**Medical Non-Pharmacy Protocols**	
Initial Effective Date:	**07/01/2017**	
Revision Effective Date(s):	**07/18, 07/19, 07/20, 07/21, 07/22, 07/23, 07/24, 07/26**	
Historical Revision Date(s):		
Review Effective Date(s):	**7/25**	
Historical Review Date(s):	**07/17**	
Responsible Parties:	**Medical Director**	
Responsible Department(s):	**Clinical Operations**	
Regulatory References:	**NCD 280.6**	
Approved:	**AVP Clinical Operations**	**Chief Medical Officer**

Purpose: **It is the purpose of this policy to define the conditions under which pneumatic compression devices will be authorized.**

Scope: **MedStar Family Choice, Maryland**

Policy: **It is the policy of MedStar Family Choice to provide pneumatic compression devices when it is medically necessary as outlined in the criteria below.**

Background:

MedStar Family Choice will require prior authorization for pneumatic compression devices.

1. Requests for pneumatic compression devices should be forwarded along with supporting clinical information in accordance with the MedStar Family Choice Prior Authorization Policy.

A. Medical Description/Background:

Chronic venous insufficiency (CVI) is a term used to describe patients with chronic venous disease who display more advanced clinical signs, e.g., significant edema, skin changes, or ulceration. Initial conservative management is recommended for most patients with chronic venous disease. This includes leg elevation, exercise, and static compression therapy (i.e., compression hosiery or bandages). Select patients may need dy namic compression therapy (i.e., intermittent pneumatic compression).

Pneumatic compression pumps are proposed as a treatment option for some patients with chronic venous insufficiency with venous stasis ulcers that have failed conservative measures. A variety of pumps are available. They can be single chamber (non-segmented) or multi-chamber (segmented) and have varying design and complexity. Pneumatic compression devices consist of an inflatable garment for an arm, leg, trunk or chest 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 devic es.

There are three main types of pumps:

1. Single chamber (non-segmented) non-programmable compressor (pump) consists of a single outflow port on the compressor. The pressurized air from this single outflow port can be transmitted to an appliance (garment) that consists of a single segment or multiple segments. The parts of the garment inflate and deflate based o n pressure and cycle times specified by the pump.

2. Multi-chamber (segmented) non-programmable pumps consist of multiple outflow ports on the pump. The pressurized air from each of the outflow ports is transmitted to corresponding segments on the appliance (garment). The segments of the garment are inflated sequentially and have a fixed pressure in each compartment. They either have the same pressure in each compartment or a pressure gradient, but they do not include the ability to manually adjust the pressure in individual compartments.

3. Multi-chamber (segmented) programmable pumps are like the above pumps except that it is possible to make manual adjustments in the pressure on at least three outflow ports. This allows an individually determined pressure to be delivered t o a corresponding garment segment.

Policy Statement

Pneumatic compression devices (PCDs) are considered medically necessary in the home setting for:

- Lymphedema
- Chronic venous insufficiency (CVI) with venous stasis ulcers

Devices must be prescribed by a physician and used with appropriate clinical oversight.

Device Description and Classification

1. Non-Segmented Pneumatic Compressor (E0650)

- Single outflow port
- Delivers uniform pressure to one or more garment segments
- Pressure cycles are controlled by the compressor

Compatible appliances:
E0655, E0660, E0665, E0666, E0671, E0672, E0673

Note: Number of garment segments does not change HCPCS classification.

2. Segmental Gradient Appliances (E0671–E0673)

- Used with E0650 devices
- Provide gradient pressure through garment/tubing design (not the pump)

3. Segmented Pneumatic Compressors

a. Without Calibrated Gradient Pressure (E0651)

- Multiple ports, but pressure is:
  - Uniform or
  - Pre-set gradient
- No independent pressure control per segment

Compatible appliances:
E0667, E0668, E0669

b. With Calibrated Gradient Pressure (E0652)

- Multiple ports with manual adjustment of pressure in ≥3 segments
- Each segment receives individualized pressure

Compatible appliances:
E0656, E0657, E0658, E0659, E0667, E0668, E0669, E0670

Important:
Gradient created by sleeves/tubing alone does not qualify as calibrated gradient pressure.

Coverage Criteria

1. Lymphedema

All must be met:

- Confirmed diagnosis
- ≥4-week conservative therapy trial including:
  - Compression garments/bandaging
  - Exercise
  - Elevation
- Persistent symptoms or no meaningful improvement

2. Chronic Venous Insufficiency (CVI) with Venous Stasis Ulcers

All must be met:

- Diagnosis of Chronic Venous Insufficiency
- One or more venous stasis ulcers
- ≥6-months conservative therapy including:
  - Compression therapy
  - Wound care
  - Exercise
  - Elevation
- Failure of ulcer healing after ≥6-months conservative therapy

Clinical Use Clarification

Pneumatic compression is medically necessary when:

- Compression therapy has
  - Failed, or
  - Is not tolerated, or

- Cannot be applied
- AND patient has:
- Refractory edema or
- Lymphatic obstruction or
- Non-healing ulcers

General Medical Necessity Requirements

Documentation must include:

- Diagnosis and prognosis
- Objective findings (e.g., limb measurements, ulcer size)
- Severity
- Prior treatments and outcomes
- Clinical rationale for device selection (including type of compressor)

Physician Oversight Requirements

Must include:

- Evaluation confirming need
- Training on device use
- Treatment plan (pressure, duration, frequency)
- Ongoing monitoring

Initial Treatment Response

Must show:

- Clinical improvement
- Tolerance of therapy
- Ability to safely use device

Advanced Device Criteria (E0652)

Covered only if:

- Standard devices (E0650/E0651) are ineffective, and
- Patient requires individualized pressure control due to unique clinical factors

Limitations

Not medically necessary if:

- Conservative therapy not completed
- Used as first-line without justification
- Compression therapy not attempted (unless contraindicated)
- Garments are improperly fitted or non-compliant
- Documentation incomplete
- Not used under Qualified licensed practitioner

References

- CMS National Coverage Determination (NCD) 280.6 – Pneumatic Compression Devices
- CMS NCD: Durable Medical Equipment Reference List, §280.1
- Nelson EA, et al. Cochrane Database Syst Rev. 2014
- American Academy of Family Physicians (AAFP), 2019
- Society for Vascular Surgery & American Venous Forum, 2014
- Ridner SH, et al. Support Care Cancer. 2021
- Ridner SH, et al. Breast Cancer Res Treat. 2012

Summary of Changes:	07/26

	• Removal of retired LCD L33829 and associated requirements **07/25:** • Updated name to Director of Clinical Operations **07/24:** • Updated Responsible Parties to include only position titles and not names. • **07/23:** • No substantive changes. • **07/22:** • Updated Responsible Parties • Updated Approved • Clarified E0652 not covered without lymphedema extending onto chest, trunk, abdomen • Added requirement of documentation of ability of member/caregiver to apply the device in frequency prescribed. • **12/20:** • Specified “extremity lymphedema” in Section B. #2d. • Renumbered and added content in Section B. #4-7. • **10/20:** • New policy.