



Corporate Medical Policy

Lymphedema Pumps-Sequential Pneumatic Compression Device

File Name: lymphedema_pumps_sequential_pneumatic_compression_device
Policy Number: DME0170
Origination: 6/1994
Last Review: 10/2007

Active policy, no longer scheduled for routine literature review.

Description of Procedure or Service

Lymph is a yellowish liquid that flows through the body through lymph channels. Lymph nodes act to filter the lymph fluid before it is allowed to re-enter the blood. If these channels are blocked, the lymph can back up into the arm or leg causing swelling (lymphedema). Causes of the blockage can include such things as tumor, swollen organs, scarring by radiation, or removal by surgery. Lymphedema is a relatively uncommon chronic (long term) condition. To help the lymph flow better, various treatment measures may be used such as elevation of the arm or leg, manual massage, bandaging, [compression](#) garments, [pneumatic compression](#) devices (i.e. lymphedema pumps), drugs or rarely surgery.

[Pneumatic compression](#) devices were developed to aid in the mobilization of lymph from the extremity, to avoid the [morbid](#) consequences of uncontrolled lymphedema. Many different lymphedema pumps are available, with varying materials, design, and complexity. These devices can be classified into three types: 1) single compartment pumps-this device has a single outflow port on the compressor (Type I); 2) multi-chamber devices with each chamber [sequential](#)ly inflated but with [fixed pressure](#) in each (Type II); and 3) multi-chamber devices with [sequential](#) inflation and with manual control of the pressure in each chamber (Type III). Chambers may vary from 2 to 12 or more.

The lymphedema [pump](#) is used in conjunction with an [appliance](#) (i.e., sleeve) that is put on the affected body part. Segmental appliances are split up into sections, which will inflate and deflate in sequence. Non-segmental appliances are one continuous wrap that inflates and deflates all at once.

Lymphedema pumps should be used as a last resort, as they can cause complications by forcing the fluid into adjacent areas, such as the trunk of the body, genital area, or an unaffected limb.

Policy

Active policy, no longer scheduled for routine literature review.

BCBSNC will provide coverage for Lymphedema Pumps/Sequential Compression Devices when they are determined to be medically necessary because the medical criteria and guidelines shown below are met.

Benefits Application

Please refer to certificate for availability of benefit. See Covered Services section for [Durable Medical Equipment](#).

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This policy relates only to the services or supplies described herein. Benefits may vary according to benefit design, therefore certificate language should be reviewed before applying the terms of the policy.

Lymphedema pumps/[sequential compression](#) devices require a physician prescription to rent or purchase to be eligible for coverage.

The individual certificate should be reviewed to verify eligibility requirements and any prior approval or preauthorization necessary for the rental/purchase of equipment.

Equipment should be rented for the first two months to establish effectiveness and patient compliance.

When Lymphedema Pumps/Sequential Pneumatic Compression Devices are covered

Lymphedema pumps/[sequential pneumatic compression](#) devices are eligible for **initial coverage** when **ALL** of the following criteria are met:

1. Confirmed diagnosis of primary or secondary lymphedema; **and**
2. Lymphedema is associated with functional impairment e.g., impairment of activities of daily living; **and**
3. When there is failure of a **four-week trial of conservative medical therapies**, (examples include elevation of the affected limb, exercise, massage, use of an appropriate [compression](#) bandage system or [compression](#) garment); **and**
4. The patient has demonstrated compliance with past recommended medical treatment(s).

Continued use of lymphedema pumps/[sequential pneumatic compression](#) devices are considered eligible for coverage **when there is documented effectiveness of the pump**, with a decrease in edema as documented by pre- and post-treatment measurements and/or documented improvement in functional capacity.

[Pneumatic compression](#) devices **are covered as a treatment of last resort**; for example, other more conservative treatments must have been tried first and found to be inadequate. Such treatments would include leg or arm elevation and custom fabricated [gradient pressure](#) stockings or sleeves.

A segmented [pneumatic compression](#) device with manual control of the pressure in each chamber (HCPCS code E0652) is considered medically necessary only when the patient has unique characteristics that prevent them from receiving satisfactory [pneumatic compression](#) treatment using a nonsegmented device with a segmented appliance/sleeve or a segmented [compression](#) device without manual control of pressure in each chamber. Such conditions include significant scarring, sensitive skin or the presence of contracture with documentation of the need for a specified pressure to a localized area. In addition, the criteria above must be met.

When Lymphedema Pumps/Sequential Pneumatic Compression Devices are not covered

For indications other than cited above.

When the medical guidelines shown above are not met.

Policy Guidelines

Types of Lymphedema Pumps

Lymphedema pumps include, but are not limited to the following:

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- Type I: Nonsegmented (single compartment) **pneumatic** compressor (HCPCS code E0650): This device has a single outflow port on the compressor. Examples of models include the Huntleigh-Flow-plus[®], the Jobst-System 7000[®], the Talley-Multicom 100[®] and the Wright Linear[®] Pump-Solo50.
- Type II: Segmented (multi chamber) **pneumatic** compressor without calibrated pressure (no manual control of pressure) (HCPCS code E0651): This device is one in which either the same pressure is present in each segment, or there is a predetermined pressure gradient in successive segments but no ability to individually set or adjust pressures in each of the several segments. The pressure is usually set by a single control on the distal segment. Examples of models include: the BioCompression-Sequential Circulator 2000-2004[®], the Biomedical Horizons-Horizons Sequential[®], the Jobst-System 7500(II)[®], the Huntleigh-Lymphatron[®], the Kendall-Home Rx (5550)[®], Talley-Multicom 300[®], the Wright Linear[®] Pump-Solo 51, and the Ormed Medical-Lympha-Mat 300[®].
- Type III: Segmented (multi chamber) **pneumatic** compressor with (manually) **calibrated gradient pressure** (HCPCS code E0652): This device is characterized by a manual control on at least three outflow ports that can deliver an individually determined pressure to each segmental unit. Examples include: the Advantage-Advantage 2100[®], the BioCompression-Sequential Circulator models 3000-3004[®], the Chattanooga-PresSion 4330 VGS[®], the Digital Air Corp.-AirPerfect 1000[®], Flexitouch[®] 2-Phase Lymph Preparation and Drainage System[™] (Model PD32-120), the Talley-Multicom 500[®], and the Wright Linear Pump-AutoPro 52[®], and Pro 52[®].

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable Codes: A6545, E0650, E0651, E0652, E0655, E0656, E0657, E0660, E0665, E0666, E0667, E0668, E0669, E0671, E0672, E0673

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all **specific** information needed to make a medical necessity determination is included.

Policy Key Words

Key Words: Appliance, Compression Garment, Compressor, Lymph Fluid, Lymph nodes, Lymphedema, Lymphedema Pump, Non-Segmented Device, Pneumatic Compression Device, Pump, Segmented Device, DME0170

Medical Term Definitions

Compression

squeezing or pressure applied.

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Durable Medical Equipment

any equipment that provides therapeutic benefit to a patient due to certain medical conditions and/or illnesses. The equipment must be able to withstand repeated use and is primarily and customarily used to serve a medical purpose. It is appropriate for use in the home.

Gradient pressure

the pump puts stronger pressure on the hand area than it does on the upper arm, pushing fluid in the proper, upward direction.

Morbid

pertaining to, affected with, or inducing disease; diseased.

Pneumatic

using air to pump up; air-driven.

Sequential

the pump creates a sequence of pressure starting from the hand up to the shoulder with a sort of "milking" technique

Scientific Background and Reference Sources

Senior Director of Health Affairs

BCBSNC Matrix Program - Certificate Language

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Medical Policy Advisory Group 12/2/1999

Specialty Matched Consultant Advisory Panel - 10/2000

Medical Policy Advisory Group - 10/2000

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BCBSNC Internal Medical Directors' review 8/27/07

Policy Implementation/Update Information

- 6/94 Original policy issued.
- 8/96 Reaffirmed
- 5/97 Revised. Added DME Supplier information and Source as contract language.
- 5/99 Revised. Expanded definition section of the policy for clarification in understanding. Added HCFA guidelines from 1998. Referenced articles indicating the dangers and potential complications of lymphedema pumps. Review of 1998 BCBSA policy.
- 9/99 Reformatted, Medical Term Definitions Added
- 12/99 Reaffirmed. Medical Policy Advisory Group
- 4/00 Revised. Added statement to the Benefits Application section which states the equipment should be rented for two months.
- 10/00 Specialty Matched Consultant Advisory Panel review. No change recommended in criteria. System coding changes. Medical Policy Advisory Group review. No change in criteria. Approve.
- 4/02 Format changes.
- 10/02 Specialty Matched Consultant Advisory Panel review 8/15/02. Under when covered section, number 3 - added "...exercise, massage, use of an appropriate compression bandage system....". For continued use - added "as documented by pre- and post-treatment measurements" to "with a decrease in edema...".
- 1/03 Disclaimer added.
- 4/04 Benefits Application and Billing/Coding sections updated for consistency.
- 9/23/04 Specialty Matched Consultant Advisory Panel review 8/27/04. No changes recommended to criteria.
- 11/27/06 Under When Covered section, #3-A four week trial of conservative medical therapies will be required. Under When Not Covered section-added "Two-phase lymph preparation and drainage therapy devices (e.g., Flexitouch[®] Lymphedema System) are not covered. The devices are considered investigational and BCBSNC does not cover investigational services." Policy guidelines

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added. Policy status changed to "Active policy, no longer scheduled for routine literature review." Notification given 11/27/06. Effective date 1/29/07.

- 10/8/07 Additional information re: types of pneumatic compression devices added to "**Description**" section. Under "**When Covered**" section-added medical necessity criteria for segmented pneumatic compression devices with manual control in each chamber- "A segmented pneumatic compression device with manual control of the pressure in each chamber (HCPCS code E0652) is considered medically necessary only when the patient has unique characteristics that prevent them from receiving satisfactory pneumatic compression treatment using a nonsegmented device with a segmented appliance/sleeve or a segmented compression device without manual control of pressure in each chamber. Such conditions include significant scarring, sensitive skin or the presence of contracture with documentation of the need for a specified pressure to a localized area." The other criteria in the current policy must be met also. Under "**When not Covered**" section, deleted statement re: two phase lymph preparation and drainage therapy devices (e.g., Flexitouch[®] Lymphedema System) being not covered/investigational. Under "**Policy Guidelines**", deleted the paragraph currently in the policy and added information re: the various types of lymphedema pumps and examples of each; also added the following "Lymphedema systems, such as the Flexitouch[®] Lymphedema System, are comparable to Type III pneumatic compression devices. There are no published peer reviewed controlled clinical trials that demonstrate the superiority of the Flexitouch[®] Lymphedema System over other comparable units (e.g., those listed under Type III above [HCPCS code E0652]). For medically necessary services, the Plan may compare the cost-effectiveness of alternative services or supplies when determining which of the services or supplies will be covered; therefore this device will not be covered. (Refer to policy number ADM9066 Medical Necessity.) Added Key Words, Medical Term Definitions and Reference Sources. Notification given 10/8/07. Effective date 12/17/07.
- 01/05/09 HCPCS codes A6545, E0656 and E0657 effective January 1, 2009 added to Billing/Coding section.
- 2/2/09 Under Benefits Application, clarified that a physician prescription is required: "Lymphedema pumps/sequential compression devices require a *physician* prescription to rent or purchase to be eligible for coverage." Under Policy Guidelines, removed the last paragraph re: Flexitouch[®] Lymphedema System. Added Flexitouch[®] 2-Phase Lymph Preparation and Drainage System[™] (Model PD32-120) as a Type III device. Key words added.

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.