Clinical Review Criteria
Lymphedema Therapy
• Comprehensive Decongestive Therapy (CDT) Training for Lymphedema
• Lymphatic Venous Anastomosis (LVA) for the Treatment of Lymphedema

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Criteria
For Medicare Members
Local Coverage Article
Lymphedema Decongestive Treatment (A52959). Used for services billed with HCFA 1500.
Lymphedema Decongestive Treatment (A52958). Used for services billed with on a UB

For Non-Medicare Members
Comprehensive Decongestive Therapy (CDT):
A. For members to qualify for Comprehensive Decongestive Therapy (CDT) they must meet ALL of the following:
   1. The treating or consulting practitioner (within the scope of their practice) documents a diagnosis of primary or secondary lymphedema and specifically orders CDT training. Primary lymphedema is a relatively uncommon, chronic condition that may be due to such causes as Milroy's Disease or congenital anomalies. Secondary lymphedema, which is much more common, results from the destruction or damage to formerly functioning lymphatic channels. This includes surgical removal of lymph nodes, post radiation fibrosis, or other conditions that result in destruction or obstruction of lymphatic channels. There are other forms for secondary lymphedema that are not covered. GHC will only cover CDT for surgical removal or radiation of lymph nodes.
   2. The presence of lymphedema must be documented. CDT training is not covered prophylactically.
   3. Documentation that the lymphedema is not reversible by exercise or elevation of the affected area.
   4. The patient or patient’s caregiver has the ability to understand and provide home-based CDT. The goal of the CDT training is to promptly transfer responsibility for on-going CDT to the patient or patient caregiver.
   5. CDT training services must be performed by a licensed PT or OT that has received specific training for this service.
   6. The frequency and duration of services must be necessary and reasonable. CDT training services are comprised of 8-10 sessions over a 2-4 week period. In the event that treatment is interrupted by chemotherapy or radiation therapy the course of treatment can be adjusted to accommodate for this interruption.

The goal of therapy is not to achieve maximum volume reduction but to ultimately transfer the responsibility for the care from the provider to the patient and/or caregiver, generally within a 1-3 week time period. There is only temporary benefit from the treatment unless the patient and/or caregiver are able to complete treatments at home on an ongoing basis. The end of treatment is not when the edema resolves or stabilizes but when the patient and/or caregiver are able to continue the treatments at home. The key issue is whether the skills of a therapist are needed, or whether the services can be carried out by the patient and/or caregiver after sufficient training. The medical record must clearly indicate the patient’s condition before, during, and after the therapy episode to support that the patient significantly benefitted from ongoing therapy services and that the progress was sustainable and of practical value when measured against the patient’s condition at the start of treatment. Documentation should indicate clear objective evidence of improvement generally within the first week or 10 days of therapy (changes in weight, extremity circumference, etc.).

CDT Training should include instruction in assessment for lymphedema, manual decompressive therapy techniques and the application of compressive bandages or garments if applicable.

A CDT course of training is generally expected to occur no more than once per lifetime. In general, refresher training will be 1-2 sessions to review CDT techniques.
Please note: While some Comprehensive Decongestive Therapy will be provided by the therapist initially in the course of training, CDT is covered only when it is being provided for the purposes of training. If CDT is requested for ongoing-treatment for lymphedema (not for training in CDT technique) this would be considered maintenance therapy and is not covered.

Denial of coverage should be considered when any of the following are true:
1) Therapy is limited to exercise or elevation of the affected area and is not CDT.
2) Therapy does not include ongoing patient education.
3) Therapy treatment is designed principally for temporary benefit.
4) The patient or patient caregiver does not have the capacity to learn CDT techniques within a reasonable amount of time.

**Lymphatic Venous Anastomosis (LVA) for the Treatment of Lymphedema:**
There is insufficient evidence in the published medical literature to show that this service/therapy is as safe as standard services/therapies and/or provides better long-term outcomes than current standard services/therapies.

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**Background**
Lymphedema is an accumulation of protein-rich fluid that occurs when lymphatic drainage is interrupted, usually due to lymph node dissection or radiation or both. A smaller number of patients develop primary lymphedema, which has a genetic basis. In women with breast cancer the risk of developing lymphedema increases with irradiation of the axilla and the extent of axillary dissection. Affected patients can experience pain, swelling, tightness and heaviness, and recurrent skin infections. Lymphedema remains a problem even with modern treatment modalities. There is a lack of prospective randomized trials evaluating the different treatment options for lymphedema. The strongest evidence available supports the use of compression garments. There is some evidence to support the use of complex decongestive physiotherapy, which is a treatment regimen that includes meticulous skin hygiene, manual lymph drainage, bandaging, exercises, and compression garments. Several physical and occupational therapists throughout the Kaiser Permanente system have received training in the use of complex decongestive physiotherapy.

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**Evidence and Source Documents**
Medicare B Issues Notice 177, Page 14, 15, 16

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**Lymphatic Venous Anastomosis (LVA) for the Treatment of Lymphedema**
**BACKGROUND**
Lymphedema is a condition of localized fluid retention and tissue swelling caused by impairment of the lymphatic transport capacity. Primary lymphedema occurs in patients with a congenital dysfunction or abnormality of the lymphatic system, while secondary lymphedema is an acquired condition that results from disruption or obstruction of the normal lymphatic system. The most common cause of secondary lymphedema in the U.S. is malignancies and their related treatment. The overall incidence of arm lymphedema can range from 8% to 56% within 2 years following surgery for breast cancer, depending on the extent of axillary node dissection and the use of radiotherapy. Breast cancer-related lymphedema (BCRL) is characterized by an abnormal accumulation of lymph in the interstitial spaces leading to swelling in the affected arm, shoulder, neck, breast, thoracic area, or any combination of these. The condition may develop gradually or suddenly, and can cause physical discomfort, pain, impaired function, and emotional distress (Damstra 2009, Fu 2009, Haghighat 2010).
There is no cure for lymphedema in terms of total subsidence of edema and restoration of the shape of the extremity. It may, however, be controlled by a combination of conservative treatments that include meticulous skin care, manual lymph drainage, multilayer compression bandage, elastic compression garments, specialized massages, and physical therapy. The goal of these treatment modalities is to reduce capillary filtration, and improve drainage of interstitial fluid and macromolecules, which in turn reduces swelling, inflammation, and improves the quality of life. The effectiveness of conservative therapies is dependent on strict patient compliance, which is often poor due to the complex treatment regimens, and the life-long use of uncomfortable compressive garments that is required to prevent progression of the lymphedema (Olszewski 1988, Damstra 2009).

Surgical management of lymphedema is usually reserved for patients who are refractory to conventional measures. Traditional surgical management of lymphedema is divided into two categories: excisional and physiologic. Excisional or debulking surgery decreases the limb volume by resection. Complications associated with this type of surgery include poor wound healing, extensive scarring, ulceration, poor cosmetic outcome, sensory nerve damage, and worsening of edema. Surgical techniques that aim at restoring physiologic lymphatic function include lympho-venous-lymphatic (LVL) transplant, lymph vessels transplantation, and lymphovenous anastomosis (LVA) which is the most commonly used technique (Damstra 2009, Avraham 2010).

Lymphaticovenous shunt was first described for the surgical treatment of lymphedema by Nielubowiez and Olszewski in 1968. Since then, several modifications have been made, and different microsurgical techniques of the lymphatic venous anastomosis (LVA) were described. LVA involves anastomizing lymphatic vessels to a collateral branch of the main vein. The technique described by Campisi and colleagues (2010) involves performing multiple microsurgical LVA, by directly introducing healthy appearing lymphatics (at the site of the surgical operation) together into the vein by a U shaped stitch, then fixing them to the cut end of the vein by means of additional stitches between the vein border and the perilymphatic adipose tissue. With the use of Patent Blue dye, properly functioning lymphatics appear blue, and the passage of blue lymph into the vein branch verifies the patency of the LVA under the operating microscope when the anastomosis is completed. For upper limb lymphedema, LVA is performed at the medium third of the flexor surface of the arm, using both superficial and deep lymphatic collectors, evidenced by the blue dye (Campisi 2001, 2010 Avraham 2010).

Medical Technology Assessment Committee (MTAC)

**Lymphatic Venous Anastomosis**

**06/20/2011: MTAC REVIEW**

**Evidence Conclusion:** There is insufficient published evidence to determine the efficacy and safety of lymphatic venous anastomosis in the treatment breast cancer-related lymphedema.

**Articles:** The literature on the lymphatic venous anastomosis (LVA) for the treatment of breast cancer-related lymphedema (BCRL) is very limited; the search did not reveal any meta-analyses or randomized controlled trials that evaluated efficacy or safety of the procedure. The empirical study published on the LVA for the treatment (BCRL) was a small case series with ten patients.

The use of lymphatic venous anastomosis (LVA) for the treatment of post-breast cancer lymphedema does not meet the Kaiser Permanente Medical Technology Assessment Criteria.

**Hayes Technology Brief**


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MDCRPC Medical Director Clinical Review and Policy Committee

MPC Medical Policy Committee

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<th>Revision History</th>
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<td>05/05/2015</td>
<td>The criteria was completely revised to mirror Medicare guidelines to support payment for comprehensive decongestive therapy only.</td>
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<tr>
<td>05/03/2016</td>
<td>Merged CDT &amp; LVA criteria into one document under Lymphedema Therapy</td>
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<tr>
<td>04/13/2017</td>
<td>Added Hayes Technology Brief Review</td>
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Codes
CPT: 97140, 97535 w/ dx of lymphedema, S8950