

## Providing Awesome CDT in Home Health

### I. Introduction

- a. Common lymphedema referrals in the home care setting
  - i. Often in conjunction with wounds, specifically venous leg ulcers
  - ii. All lymphedema stages, but usually severe and with impaired mobility
  - iii. Homebound Status: **“Homebound” does NOT mean that a patient has to be “bed bound” to qualify.** The patient is considered “homebound” under Medicare if the patient cannot leave home without **“considerable and taxing effort”**.
    - 1. <https://homehealthunited.org/professional/medicare-criteria-for-home-care-homebound-status/>

### II. Statistics

- a. 57,700,000 Medicare beneficiaries in 2017. Expected Medicare beneficiaries expect to nearly double by 2047 to 92,600,000
- b. Average Post-Acute Discharge destinations from hospital
  - i. No Post-Acute Care: 48%
  - ii. Skilled Nursing Facility: 22%
  - iii. Home Health: 20%
  - iv. Hospital: 4%
  - v. Inpatient Rehab Facility: 5%
  - vi. Long-term Care Facility: 1%
- c. Home Health admissions rise yearly with a slight increase of 19,000 admissions seen from 2016-2017.
  - i. 3,705,000 in 2016
  - ii. 3,724,000 in 2017
- d. Source: Excel Health, Medicare FFS Home Health patients through Q4 2017. General Acute Care Hospitals. [www.excelhealthgroup.com](http://www.excelhealthgroup.com)

### III. Phlebolymphe­dema – the most common type of lymphedema in the United States

- a. 1-2 million people with primary lymphedema
- b. 2-3 million people with secondary lymphedema
- c. CDC estimates that 43% of US population will be obese by 2018. It is estimated that lymphedema secondary to obesity will surpass cancer-related lymphedema in the future
- d. 15-25% of individuals with axillary lymph node dissection have a lifetime risk of developing lymphedema.
- e. 6% of individuals whose surgery is limited to sentinel node dissection only, without adjuvant radiation are at risk of developing lymphedema.
- f. Huggenberger, K., Wagner, S., Lehmann, S., Aeschlimann, A., Amann-Vesti, B., & Angst, F. (2015). Health and quality of life in patients with primary and secondary lymphedema of the lower extremity. *Vasa*, 44(2), 129-137.
- g. Greene, A. K., Slavin, S. A., & Brorson, H. (Eds.). (2015). *Lymphedema: Presentation, Diagnosis, And Treatment*. Springer.

- h. Epidemiology and Public Health, Centers for Disease Control and Prevention (CDC) – 2014
  - i. Phlebolymphe<sup>d</sup>ema
    - i. Lymphedema secondary to vein disease and chronic excessive lymphatic overload
    - ii. Often bilateral, hemosiderin staining, lipodermatosclerosis (inverted champagne bottle appearance)
  - j. CVI – Chronic Venous Insufficiency
    - i. Occurs from valvular incompetence in any part of the venous system
    - ii. Estimated 10-15 million with CVI
    - iii. Occurs from:
      - 1. Reflux: Primary CVI. Weakening of the valves: 70%
      - 2. Venous Obstruction: Secondary CVI. Trauma from obstruction: 30%.
    - iv. Patel SK, Surowiec SM. Venous Insufficiency. [Updated 2018 Nov 18]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2019 Jan - Available from: <https://www.ncbi.nlm.nih.gov/books/NBK430975>
- IV. Take Home Message
- i. Phleblolymphedema is the most common type of lymphedema in the US
  - ii. Very high amount of population has CVI
  - iii. CVI can often lead to lymphedema
  - iv. Population of patients with CVI is generally geriatric which can mean more patients entering home health services
  - v. Increased Medicare beneficiaries means more patients entering the Home Health division
- V. There is not enough availability for lymphedema therapy in the home care setting. These patients often fall through the cracks since they are not physically able to attend outpatient services
- VI. Dilemmas with accepting lymphedema patients
- a. Unpredictable supply costs
  - b. Unpredictable visit frequencies
  - c. Unpredictable visit durations (healing time)
  - d. Lymphedema Difficult to discharge
- VII. Benefits to agencies that accept lymphedema patients
- a. New Referral sources
  - b. Competitive upper hand
  - c. Opportunity for increased revenue
  - d. Agency marketing call points
  - e. More program offerings
- VIII. Challenges for the home care CLT
- a. Length of time to treat a lymphedema patient
  - b. No control of geographical location of a patient; can require more drive time  
Discharge planning
  - c. Limitation on visits allotted

- IX. Benefits to the home care CLT
  - a. Opportunity for program development
  - b. Opportunity to service a neglected problem
  - c. Create a discharge site for hospitals, long-term care facilities and outpatient clinics
  - d. Work your own schedule, flexible hours
- X. How to be successful with your patient, your agency, and yourself
  - a. Realistic protocols
    - i. Suggested visit frequency – 3week2, 2week4 – total of 14 visits
  - b. Prioritize the therapy discipline needed most
  - c. Discharge to outpatient if homebound status changes
  - d. Phase 1 and Phase 2 of CDT should be combined on day one
  - e. Find a caregiver or family member to train whenever possible
  - f. Set appropriate patient expectation
- XI. Factors to consider that cause unpredictable costs
  - a. Severity of lymphedema
  - b. Skill level of clinician
  - c. Visit frequency
  - d. Length of visit
  - e. Patient adherence
- XII. Mixed edema
  - a. Because the population of patients with CVI and phlebolymphe­dema is generally geriatric, often times additional precautionary comorbidities can be present and can present in the form of edema.
  - b. Often times patients with phlebolymphe­dema can also have edema from these comorbidities and present with mixed edema/lymphe­dema
  - c. The presentation of phlebolymphe­dema and mixed edema in home care.
    - i. Patient can present with:
      1. Hypertension/High blood pressure
      2. Diabetes Mellitus II
      3. Chronic Kidney Disease
      4. Cardiovascular Disease
      5. Metabolic syndrome
      6. Obesity
- XIII. Lymphedema therapy in the home health setting
  - a. MLD for Phlebolymphe­dema vs. Cancer related lymphedema
    - i. Does not require re-routing with MLD and generally can utilize the natural lymphatic pathway
    - ii. Utilize Terminus or supraclavicular lymph nodes, deep abdominal breathing, inguinal lymph nodes, popliteal lymph nodes and medial natural pathway.
    - iii. Always include calf muscle pumping remedial exercises following compression, especially with the affected limb elevated.
  - b. Compression bandaging for phlebolymphe­dema

- i. Can be completed to the knee or thigh since lymph nodes are intact
      - ii. Use discretion when thigh high bandaging if patient has mixed edema, i.e. Hypertension, residual cardiac edema or fluid overload.
      - iii. Also use discretion with thigh bandaging if mobility is hindered or unsafe.
      - iv. Be aware of increased fall risk with bandaging.
      - v. Visit frequency average dependent on the lymphedema therapist
        - 1. Average therapist sees patient 3x's/week
        - 2. Other contingencies
        - 3. If frequency reduced to 2x's/week, progress is slowed as compression is not consistent for extended periods of time between treatments.
    - c. Bandaging alternative
      - i. Adjustable Velcro Compression Device
    - d. Evidence of Adjustable Velcro Compression Devices (AVCD) vs. Inelastic bandages.
      - i. 40 legs with chronic venous edema
        - 1. Reduction of edema volume
          - a. Day 1 – IB@13%, AVCD@19%
          - b. Day 7 – IB@19%, AVCD@26%
        - 2. Surface pressure
          - a. IB – decrease of 50% in 24 hours
          - b. AVCD – no decrease d/t adjustment
        - 3. Partsch, H., Menzinger, G., & Mostbeck, A. (1999). Inelastic leg compression is more effective to reduce deep venous refluxes than elastic bandages. *Dermatologic surgery*, 25(9), 695-700.
      - ii. New projected scenario for LE
        - 1. Visit Frequency
          - a. 3x's/week x 1 week
          - b. 2x's/week thereafter
      - iii. Discharge Planning
        - 1. Patient/Caregiver able to use compression product appropriately to manage swelling. Patient now able to ambulate and transfer into the car independently to attend outpatient services.
- XIV. Ergonomic strategies for CDT visits
- a. Carry a collapsible stool and/or knee bad
  - b. Use wheeled bag for supplies