

High Frequency Chest Wall Oscillation/Compression Therapy (Chest Vest)

Last revision approved 7/12/06

****FYI**** Requests for HFCWC/HFCWO should be referred to the [Case Management Department](#) for review and a CRS referral should be made for members 0-21 years of age with a diagnosis of Cystic Fibrosis

Background:

According to AHCCCS Medical Policy Manual, Chapter 300-25 effective 10/1/04, High Frequency Chest Wall Oscillation therapy (HFCWO) is a form of chest physiotherapy that promotes airway clearance for retained pulmonary secretions. This form of therapy has been shown to be equally as effective as other forms of such therapy, such as postural drainage and clapping (CPT), or flutter valve, or blow glove, etc. in helping an individual with clearing secretions from the lungs. A HFCWO vest will not replace a percussor, caregiver and/or self-administration of chest physiotherapy unless it is demonstrated that these forms of therapy are no longer effective.

HFCWO requires prior authorization. All cases will be reviewed on a case-by-case basis. Requests for prior authorization must be accompanied by specific documentation in the individual's personal medical record that supports the medical necessity for HFCWO.

Criteria:

As specified in the AHCCCS Medical Policy Manual, Chapter 300-25 effective 10/1/04, HFCWC/HFCWO (Chest Vest) may be considered medically appropriate for individuals when all of the following criteria are met:

1. Diagnosis of cystic fibrosis, **and**
2. Documentation of excessive sputum production and inability to clear sputum without assistance, **and**
3. Copy of chest x-ray report and pulmonary function tests showing findings consistent with moderate or severe chronic obstructive pulmonary disease (COPD), **and**
4. Prescription by a pulmonary specialist (M.D. or D.O.) indicating the need for at least daily chest physiotherapy, **and**
5. Age 2 years or older or 20 inch chest size which ever comes first, **and**
6. Specific documentation of failure of other more cost effective methods of chest physiotherapy, or airway clearance, including CPT and flutter valve, **and**
7. Specific documentation supporting why HFCWO therapy for the member is superior to other more cost-effective therapy methods, including at least one of the following:
 - a. Promotes independent self-care for the individual, **or**
 - b. Allows independent living or attendance at an institution of higher learning for the individual , **or**
 - c. Provides health stabilization in single adults or emancipated individuals without able partners to assist with CPT, **or**
 - d. Severe end-stage lung disease requiring complex or frequent chest physiotherapy, **or**
8. Evidence that the member can use the vest effectively, including continuing compliance with all forms of prescribed therapy and treatment, and member and family acceptance of HFCWO therapy, **and**
9. Coordination between the provider office or clinic and AHCCCS or other payer source, such as ADHS/CRS or AHCCCS Contractor, **prior to** implementation of HFCWO therapy for long term use

Discontinuation Criteria for HFCWO:

Discontinuation criteria for the HFCWO vest include, but are not limited to, the following:

1. Patient and/or prescribing physician request
2. Patient treatment compliance at a rate of less than 50% usage as prescribed in the medical treatment plan, to be checked at two (2) and six (6) months of usage

HFCWO for Members Without Diagnosis of Cystic Fibrosis:

According to the Hayes director, the evidence regarding efficacy of HFCWO therapy in patients with non-CF related disorders of airway clearance is very limited and thus insufficient to support definitive conclusions regarding the use of this technology in these patient populations. Thus, HFCWO is considered experimental and is not a covered benefit for non-CR related disorders of airway clearance at this time.

Contraindications:

Patients who possess a contraindication for external manipulation of the thorax as defined by the American Association of Respiratory Care (AARC) will be excluded from use of HFCWO. **These contraindications include:**

- a. Bronchospasms
- b. Complaint of chest wall pain
- c. Head and/or neck injury which has not yet been stabilized
- d. Subcutaneous emphysema
- e. Recent epidural spinal infusion or spinal anesthesia
- f. Recent skin grafts, or flaps, on the thorax
- g. Burns, open wounds, and skin infections of the thorax
- h. Recently placed transvenous pacemaker or subcutaneous pacemaker
- i. Osteomyelitis of the ribs
- j. Coagulopathy
- k. Suspected pulmonary tuberculosis
- l. Lung contusion

If the request does not meet criteria, the request must be reviewed by the Medical Director

References: See attached Hayes directory summary for HFCWO 4/14/05, AHCCCS Medical Policy Manual, Chapter 320-24 effective 10/1/04, Aetna medical policy bulletin 2/11/05, Cigna healthcare coverage position revised 5/15/05

Approved by: Clinical and Service Quality Improvement Committee

Date: July 12, 2006

Approved by: Dr Paula Olen-Mikrut, MD / Dr Rene Bartos, MD

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