



Subject: *High Frequency Chest wall Oscillation Vest*

Number: *200309-0008*

Effective date: 09/29/2003

Revision date(s): 09/26/2003

Important note

Even though this policy may indicate that a particular service or supply is considered covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. You need to consult the *Evidence of Coverage* to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and your plan of benefits, the provisions of your benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, federal mandates will apply to all plans. With respect to Medicare and Medicaid members, this policy will apply unless Medicare and Medicaid policies extend coverage beyond this Medical Policy and Criteria Statement. Medicare and Medicaid policies will only apply to benefits paid for under Medicare or Medicaid rules, and not to any other health benefit plan benefits. CMS's Coverage Issues Manual can be found on the following Web site: <http://www.cms.hhs.gov/manuals/pub06pdf/pub06pdf.asp>

Overview

Certain patients, such as those with cystic fibrosis (CF), produce large amounts of respiratory secretions, which may clog the airways, resulting in pneumonia or other problems. To help cough up and clear these secretions, patients often receive chest physiotherapy (CPT), consisting of clapping and pounding of the chest to loosen the secretions.

The **high frequency chest wall oscillation vest** (The Vest™) can be used as a replacement for, or enhancement of, CPT to help loosen secretions. The vest is hooked up to a hose attached to a machine, and vibrations are transmitted to the patient's chest to loosen the secretions inside. Like CPT, it is done two or more times a day in patients with CF or certain other lung diseases that cause large amounts of sputum.

The Vest™ is considered durable medical equipment (DME) and would apply towards the annual limit for this benefit for those products that have an annual DME limit.

The Vest™ Airway Clearance System (formerly known as the ThAIRapy Vest, ABI Vest), (Advanced Respiratory, St. Paul, MN).

Policy and criteria

NOTE: These services require prior authorization by the plan medical director.

When services are covered:

FCHP covers The Vest™ as augmentation to CPT for members who meet the following *precursors*:

- The patient is 12 years of age or older; **and**
- There is well-documented failure of standard treatments to adequately mobilize retained secretions; **and**
- One of the following diagnoses exists;
 - Amyotrophic lateral sclerosis (ALS), OR
 - Cystic fibrosis (CF), OR

- Bronchiectasis
 - Characterized b daily productive cough for at least six continuous months or frequent (i.e., more than two per year) exacerbations requiring antibiotic therapy, and
 - Confirmed by high resolution or spiral CT scan

In addition, one or more of the following indications must exist:

- Two or more children in the family with ALS, CF or bronchiectasis
- Parents that are separated or divorced, so that there is only one primary care giver
- Adolescents with CF who are rebellious when confronted by their parents
- Patient is away from home at college
- Adults with ALS, CF or bronchiectasis in situations when care by a spouse has a long-term negative influence on a relationship
- A patient with established bronchiectasis and productive cough in need of twice-a-day therapy, when one session is already provided by the parents

When services are not covered:

We **do not cover** services when the above criteria are not met.

We **do not cover** services for any other diagnosis as use of The Vest™ and similar devices has not been scientifically proven to be efficacious.

Codes:

Codes	Number	Description
HCPCS	A7025	High frequency chest wall oscillation system vest, replacement for use with patient owned equipment, each
HCPCS	A7026	High frequency chest wall oscillation system hose, replacement for use with patient owned equipment, each
HCPCS	E0483	High frequency chest wall oscillation air-pulse generator system (includes hoses and vest), each

FCHP products to which this policy applies:

- ⊕ FCHP Direct and FCHP Select Care (HMO)
- ⊕ FCHP Flex Care Direct and Select (POS)
- ⊕ Fallon Preferred Care (PPO)
- ⊕ FCHP MassHealth
- ⊕ Major Medical
- ⊕ Non-Group: FCHP Independent Care, Direct enrollment and Bill-at-home

Medicare plan – *reminder* to refer to CMS for policy and criteria

References

1. AARC Clinical Practice Guidelines (1991). Postural Drainage Therapy. Respiratory Care. 1991;36:1418-1426.
2. AARC Clinical Practice Guidelines (1993). Directed Cough. Respiratory Care. 1993;38:495-499.
3. Goss CH. Airway clearance in cystic fibrosis. Respir Care. 2003;48(1):20-21.
4. Hardy KA, Anderson BD. Noninvasive clearance of airway secretions. Respir Care Clin N Am. 1996;2(2):323-345.
5. Hardy, KA, Anderson BD. Noninvasive clearance of airway secretions. Respiratory Care Clinics of North America. 1996;2(2):323-345.
6. Hayes, WF. High Frequency Chest Wall Compression. March 2000.
7. Hess DR. The evidence for secretion clearance techniques. Respir Care. 2002;46(11):1276-1293.

8. Houtmeyers E, Gosselink R, Gayan-Ramirez G, et al. Regulation of mucociliary clearance in health and disease. *Eur Respir J.* 1999;13(5):1177-1188.
9. Jones AP, Rowe BH Bronchopulmonary hygiene physical therapy for chronic obstructive pulmonary disease and bronchiectasis (Cochrane Review). In: *The Cochrane Library*, Issue 1, 2003. Oxford: Update Software.
10. Katkin JP. Cystic Fibrosis. In: *Rakel, ed, Conn's Current Therapy 1999*, 51st ed. W. B. Saunders Co. 58;1999.
11. Langenderfer B. Alternatives to percussion and postural drainage. A review of mucus clearance therapies: percussion and postural drainage, autogenic drainage, positive expiratory pressure, flutter valve, intrapulmonary percussive ventilation, and high-frequency chest compression with the ThAIRapy Vest. *J Cardiopulm Rehabil.* 1998;18(4):283-289.
12. Oermann CM, Sockrider MM, Giles D, et al. Comparison of high-frequency chest wall oscillation and oscillating positive expiratory pressure in the home management of cystic fibrosis: a pilot study. *Pediatr Pulmonol.* 2001;32(5):372-377.
13. Pryor JA. Physiotherapy for airway clearance in adults. *Eur Respir J.* 1999;14(6):1418-1424.
14. Reisman JJ, Rivington-Law B, Corey M, et al. Role of conventional physiotherapy in cystic fibrosis. *J Pediatr.* 1988;113(4):632-636.
15. Thomas J, Cook DJ, Brooks D. chest physical therapy management of patients with cystic fibrosis. A meta-analysis. *Am J Respir Crit Care Med.* 1995;151(3 Pt 1):846-850.
16. TriCenturion LLC. High frequency chest wall oscillation device. Medicare Draft Local Medical Review Policies. DMERC Region A. Columbia, SC: TriCenturion; June 1, 2003. Accessed September 25, 2003.
17. Whitman J, Van Beusekom R, Olson S, et al. Preliminary evaluation of high-frequency chest compression for secretion clearance in mechanically ventilated patients. *Respir Care.* 1992;38(10):1081-1087.

Mandated benefit/Regulatory issues

- Federal
- Commonwealth of Massachusetts
- Medicare – National Policy
- Medicare – Local Medical Review Policy
- Not applicable

Committee review dates:

Technology Assessment Committee: 11/2003

Approved by:	<i>Signature on file</i>	<i>10/30/2003</i>
	Dennis A. Batey, M.D.	Date
	Medical Director for Utilization & Care Management	