High Frequency Chest Wall Oscillation
DME-009

Iowa Medicaid Program	Prior Authorization	**Effective Date**	02/12/2015
Revision Number	6	**Last Reviewed**	07/18/2025
Reviewed By	Medicaid Medical Director	**Next Review**	07/17/2026
Approved By	Medicaid Clinical Advisory Committee	**Approved Date**	03/13/2018

Descriptive Narrative

High-frequency chest wall oscillation (HFCWO) is a form of chest physical therapy in which an inflatable vest is attached to a machine that vibrates it at high frequency. The vest vibrates the chest to loosen and thin mucus. The loosened secretions may require another intervention to be cleared from the airway.

Criteria

Medical equipment and supplies needed for HFCWO treatment are considered medically necessary when all of the following are met:

1. The member must have **ONE** of the following applicable diagnoses;
   a. Cystic fibrosis; **OR**
   b. Bronchiectasis - Confirmed by high resolution or spiral chest CT
      1) Daily productive cough for at least six months continuously; **OR**
      2) More than two exacerbations per year, requiring antibiotic therapy; **OR**
   c. Chronic or recurrent atelectasis as demonstrated by X-ray or CT; **OR**
   d. Neuromuscular diseases affecting the ability to cough or clear respiratory secretions with prior history of pneumonia or other significant worsening of pulmonary function, such as:
      1) Post-polio; **OR**
      2) Acid maltase deficiency; **OR**
      3) Anterior horn cell diseases; **OR**
      4) Multiple sclerosis; **OR**
      5) Quadriplegia; **OR**
      6) Hereditary muscular dystrophy; **OR**
      7) Myotonic disorders; **OR**
      8) Other myopathies; **OR**
      9) Paralysis of the diaphragm; **OR**
      10) Amyotrophic lateral sclerosis; **OR**

11) Spinal muscular atrophy; **AND**

2. **ONE** of the following must be documented:
   e. Pulmonary function tests (PFTs) within the 12 months before the initiation of the vest demonstrate an overall significant decrease in lung function; **OR**
   f. Increased frequency of hospitalizations for pulmonary issues, compared to the prior year **OR** three pulmonary hospitalizations within 1 year; **OR**
   g. If a renewal or treatment has already started must demonstrate improvement in PFTs, or decrease in incidence of hospitalizations, exacerbations or antibiotic use; **AND**
3. **ALL** of the following, a.-e. must be well-documented:
   a. Effective chest physiotherapy is required:
      1) There must be demonstrated presence of bronchopulmonary secretions with documented need for airway clearance - documentation of frequent respiratory infections should be indicated; **AND**
   b. Manual CPT is unavailable, ineffective, or not tolerated. There should be documented failure of standard treatments (chest physiotherapy and, if appropriate, use of an oscillatory positive expiratory pressure device, or cough assist), or valid reasons why standard treatment cannot be performed. Examples of valid reasons why standard treatment cannot be performed may include **ANY** of the following.
      1) There are two or more members with cystic fibrosis, chronic bronchiectasis, or chronic neuromuscular disorder (meeting criteria above) in the family; **OR**
      2) The caregiver is unable (physically or mentally) to perform chest physical therapy at the required frequency; **OR**
      3) There is no available parental or partner resource to perform chest physical therapy; **OR**
      4) The member has a medical condition that precludes use of standard treatments; **OR**
      5) Age alone is not considered sufficient contraindication to any method of airway clearance; **AND**
   c. Treatment by flutter device failed or is contraindicated; **AND**
   d. Treatment by intrapulmonary percussive ventilation failed or is contraindicated; **AND**
   e. A trial period is required to determine member and family compliance. Sufficient and appropriate usage of the device during the trial period must be documented; **AND**
4. The prescriber is a pulmonologist; **AND**
5. **NONE** of the following apply. These conditions do not support medical necessity to HFCWO:
   a. HFCWO is being used as an adjunct to chest physical therapy, or along with mechanical in/exsufflation device; **AND**

b. The member has COPD, or chronic bronchitis, unless accompanied by a diagnosis under #1; **AND**
c. HFCWO is being used prophylactically to prevent onset of respiratory symptoms; **AND**
d. Contraindications exist for external manipulation of the thorax, as outlined by the American Association of Respiratory Care and contained in their clinical practice guidelines for postural drainage therapy, which include, but may not be limited to: unstable head or neck injury; active hemorrhage with hemodynamic instability; subcutaneous emphysema; recent epidural, spinal fusion or spinal anesthesia; recent skin grafts or flaps on the thorax; burns, open wounds, and skin infections of the thorax; recently placed transvenous or subcutaneous pacemaker; suspected pulmonary tuberculosis; lung contusion; bronchospasm; osteomyelitis of the ribs; osteoporosis; coagulopathy; and complaint of significant chest wall pain; **AND**
e. HFCWO is not covered for convenience or to upgrade to newer technology when the current components remain functional.

Continued use of a HFCWO device is considered medically necessary when ongoing use (that is, compliance with use) is documented at 6-month to 12-month intervals. (Note: For HFCWO devices with usage meters, documentation should reflect use, in general, at least 67 percent of the prescribed time.)

Coding

The following list(s) of codes are provided for reference purposes only and may not be all inclusive. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment, nor does the exclusion of a code imply that its association to the HCPCS/CPT code is inappropriate.

HCPCS	Description
E0483	High frequency chest wall oscillation air-pulse generator system, (includes hoses and vest), each.

Compliance

1. Should conflict exist between this policy and applicable statute, the applicable statute shall supersede.
2. Federal and State law, as well as contract language, including definitions and specific contract provisions or exclusions, take precedence over medical policy and must be considered first in determining eligibility for coverage.
3. Medical technology is constantly evolving, and Iowa Medicaid reserves the right to review and update medical policy on an annual and as-needed basis.

Medical necessity guidelines have been developed for determining coverage for member benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations. Criteria are revised and updated annually, or more frequently if new evidence becomes available that suggests needed revisions.

References

Local Coverage Determination (LCD) for High Frequency Chest Wall Oscillation Devices (L33785) Revision Effective Date 10/1/2022: LCD - High Frequency Chest Wall Oscillation Devices (L33785).

Cystic Fibrosis Foundation. https://www.cff.org/managing-cf/high-frequency-chest-wall-oscillation-vest

IAC 78.10(5)

441—78.10(249A)

High Frequency Chest Compression Device ACG: A-0356 (AC). MCG Health Ambulatory Care 28th Edition. Copyright 2024.

Simon RH. Cystic fibrosis: Overview of the treatment of lung disease. UpToDate. This topic last updated: Mar 22, 2024. Accessed June 8, 2025

Development of utilization management criteria may also involve research into other state Medicaid programs, other payer policies, consultation with experts and review by the Medicaid Clinical Advisory Committee (CAC). These sources may not be referenced individually unless they are specifically published and are otherwise applicable to the criteria at issue.

Criteria Change History

Change Date	Changed By	Description of Change	Version
[mm/dd/yyyy]			[#]
Signature			

Change Date	Changed By	Description of Change	Version
[mm/dd/yyyy]			[#]
Signature			

Change Date	Changed By	Description of Change	Version
07/18/2025	CAC	Annual review. Updated Coding section. References updated.	6
Signature William (Bill) Jagiello, DO			

Change Date	Changed By	Description of Change	Version
07/19/2024	CAC	Annual review.	5
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07/21/2023	CAC	Annual review.	4
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04/15/2022	CAC	Annual review.	3
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01/15/2021	CAC	Annual review.	2
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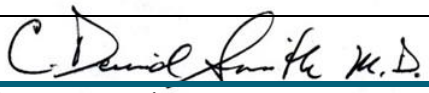
Change Date	Changed By	Description of Change	Version
03/13/2018	Medical Director	Criteria implementation.	1
Signature C. David Smith, MD			

CAC = Medicaid Clinical Advisory Committee