



A CELERIAN GROUP COMPANY

**AIRWAY CLEARANCE: HIGH FREQUENCY CHEST WALL OSCILLATION  
DEVICES & MECHANICAL IN-EXSUFFLATION DEVICES  
PHYSICIAN DOCUMENTATION REQUIREMENTS**  
*Revised April 2023*

*We IMPACT lives.*

Dear Physician,

Medicare covers various devices to assist your patients in clearing respiratory secretions. Two types of devices, high frequency chest wall oscillation (HFCWO) devices and mechanical in-exsufflation devices, are covered by Medicare, based on local coverage determinations (LCDs) for these therapies. The coverage for these categories of products is outlined below.

### **High Frequency Chest Wall Oscillation Devices**

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High Frequency Chest Wall Oscillation (HFCWO) devices use positive and negative pressure changes to augment peripheral and tracheal mucus movement towards the airway opening. This function is performed by extra-thoracic oscillations generated by forces external to the respiratory system. External chest wall oscillations are applied using a vest worn around the torso, which vibrates at variable frequencies and intensities, as set by the operator. E0483 devices may use differing technologies, e.g. air-pulse generators and an inflatable vest, an array of mechanical oscillators in a vest providing synchronized oscillation.

For Medicare, HFCWO devices are covered for patients who meet:

- A. Criterion 1, 2, or 3, and
- B. Criterion 4
  - 1. There is a diagnosis of cystic fibrosis (refer to the ICD-10 code list in the LCD-related Policy Article for applicable diagnoses).
  - 2. There is a diagnosis of bronchiectasis (refer to the ICD-10 code list in the LCD-related Policy Article for applicable diagnoses) which has been confirmed by a high resolution, spiral, or standard CT scan and which is characterized by:
    - a. Daily productive cough for at least 6 continuous months; or
    - b. Frequent (i.e., more than 2/year) exacerbations requiring antibiotic therapy.

Chronic bronchitis and chronic obstructive pulmonary disease (COPD) in the absence of a confirmed diagnosis of bronchiectasis do not meet this criterion.

- 3. The patient has one of the following neuromuscular disease diagnoses (refer to the ICD-10 code list in the LCD-related Policy Article for applicable diagnoses):
  - Post-polio
  - Acid maltase deficiency
  - Anterior horn cell diseases
  - Multiple sclerosis
  - Quadriplegia
  - Hereditary muscular dystrophy
  - Myotonic disorders
  - Other myopathies
  - Paralysis of the diaphragm
- 4. There must be well-documented failure of standard treatments to adequately mobilize retained secretions.

If all of the criteria are not met, the claim will be denied as not reasonable and necessary.



## Mechanical In-Exsufflation Devices

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Mechanical insufflation-exsufflation is a therapy in which the device, via a mouthpiece, gradually inflates the lungs (insufflation), followed by an immediate and abrupt change to negative pressure, which produces a rapid exhalation (exsufflation), which simulates a cough and thus moves secretions cephalad. Mechanical insufflation-exsufflation is used with patients with neuromuscular disease and muscle weakness due to central nervous system injury.

For Medicare, mechanical in-exsufflation devices are covered for beneficiaries who meet all of the following criteria:

1. They have a neuromuscular disease (refer to the ICD-10 code list in the LCD-related Policy Article for applicable diagnoses), and
2. This condition is causing a significant impairment of chest wall and/or diaphragmatic movement, such that it results in an inability to clear retained secretions.

If both of these criteria are not met, the claim will be denied as not reasonable and necessary.

For both HFCWO and mechanical in-exsufflation devices, your patient's medical record must include information that supports that the coverage criteria outlined above are met. In the event of a claim audit, in addition to looking for a standard written order, clinicians will be reviewing your medical records to determine that the coverage criteria have been met.

Note that it is not reasonable and necessary for your patient to use both a HFCWO device and a mechanical in-exsufflation device.

This article is only intended to be a general summary. It is not intended to take the place of the written law, regulations, national coverage determinations (NCDs) or LCDs. Coverage, coding and documentation requirements for HFCWO devices may be found in the High Frequency Chest Wall Oscillation Devices LCD (<https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=33785>), and LCD-related Policy Article (<https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=52494>). Coverage, coding and documentation requirements for mechanical in-exsufflation devices may be found in the Mechanical In-exsufflation Devices LCD (<https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=33795>) and LCD-related Policy Article (<https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleId=52510>).

Sincerely,

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