Medical Policy: High Frequency Chest Wall Oscillation Devices and Intrapulmonary Percussive Ventilators

POLICY NUMBER	EFFECTIVE DATE	APPROVED BY
MG.MM.DM.09	9/13/2024	MPC (Medical Policy Committee)

IMPORTANT NOTE ABOUT THIS MEDICAL POLICY:

 The treating physician or primary care provider must submit to ConnectiCare, Inc. the clinical evidence that the patient meets the criteria for the treatment or surgical procedure. Without this documentation and information, ConnectiCare will not be able to properly review the request for prior authorization. This clinical policy is not intended to pre-empt the judgment of the reviewing medical director or dictate to health care providers how to practice medicine. Health care providers are expected to exercise their medical judgment in rendering appropriate care. The clinical review criteria expressed below reflects how ConnectiCare determines whether certain services or supplies are medically necessary. ConnectiCare established the clinical review criteria based upon a review of currently available clinical information (including clinical outcome studies in the peer-reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). ConnectiCare, Inc. expressly reserves the right to revise these conclusions as clinical information changes, and welcomes further relevant information. Identification of selected brand names of devices, tests and procedures in a medical coverage policy is for reference only and is not an endorsement of any one device, test or procedure over another. Each benefit plan defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered and/or paid for by ConnectiCare, as some plans exclude coverage for services or supplies that ConnectiCare considers medically necessary. If there is a discrepancy between this guideline and a member's benefits plan, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of the State of CT and/or the Federal Government. Coverage may also differ for our Medicare members based on any applicable Centers for Medicare & Medicaid Services (CMS) coverage statements including including National Coverage Determinations (NCD), Local Coverage Determinations (LCD) and/or Local Medical Review Policies (LMRP). All coding and web site links are accurate at time of publication.

Definitions

A high frequency chest wall oscillation device (HFCWOD) is an airway clearance device consisting of an inflatable vest connected by tubes to a small air-pulse generator.

Guideline

Members are eligible for coverage of an HFCWOD when any of the following conditions/diagnoses are applicable:

1. Acid maltase deficiency
2. Amyotrophic lateral sclerosis
3. Anterior horn cell diseases
4. Bronchiectasis
5. Cystic fibrosis
6. Hereditary muscular dystrophy
7. Multiple sclerosis
8. Myotonic disorders
9. Other myopathies
10. Paralysis of the diaphragm
11. Post-polio
12. Quadriplegia
13. Any neuromuscular disease disorder with ineffective cough

14. Members with a gastrostomy tube and risk of aspiration if manual chest physical therapy (PT) is indicated on a case-by-case basis when other methods of daily chest PT have been tried and failed

Well-documented failure of standard treatments to adequately mobilize retained secretions must be made available to the Plan upon request.

Limitations/Exclusions

High frequency chest wall oscillation devices are not covered for any conditions other than those listed above.

Intrapulmonary percussive ventilators (IPV) (e.g., the Impulsator F00012) are considered experimental and investigational for all indications due to insufficient evidence of therapeutic value (including but not limited to bronchiectasis, chronic obstructive pulmonary disease [COPD], cystic fibrosis, neuromuscular conditions associated with retained airway secretions or atelectasis, and post-operative pulmonary complications).

Procedure Codes

A7021	Supplies and accessories for lung expansion airway clearance, continuous high frequency oscillation, and nebulization device (e.g., handset, nebulizer kit, biofilter) (Eff. 10/1/2024)
A7025	High frequency chest wall oscillation system vest, replacement for use with patient owned equipment, each
A7026	High frequency chest wall oscillation system hose, replacement for use with patient owned equipment, each
E0467	Home ventilator, multi-function respiratory device, also performs any or all of the additional functions of oxygen concentration, drug nebulization, aspiration, and cough stimulation, includes all accessories, components and supplies for all functions
E0483	High frequency chest wall oscillation system, with full anterior and/or posterior thoracic region receiving simultaneous external oscillation, includes all accessories and supplies, each
94669	Mechanical chest wall oscillation to facilitate lung function, per session

Diagnosis Codes

A15.0	Tuberculosis of lung
B91	Sequelae of poliomyelitis
D81.810	Biotinidase deficiency
D84.1	Defects in the complement system
E84.0	Cystic fibrosis with pulmonary manifestations
E84.11	Meconium ileus in cystic fibrosis
G12.0	Infantile spinal muscular atrophy, type I [Werdnig-Hoffman]
G12.1	Other inherited spinal muscular atrophy

G12.20	Motor neuron disease, unspecified
G12.21	Amyotrophic lateral sclerosis
G12.22	Progressive bulbar palsy
G12.23	Primary lateral sclerosis
G12.24	Familial motor neuron disease
G12.25	Progressive spinal muscle atrophy
G12.29	Other motor neuron disease
G12.8	Other spinal muscular atrophies and related syndromes
G12.9	Spinal muscular atrophy, unspecified
G14	Postpolio syndrome
G35	Multiple sclerosis
~~G71.0~~	~~Muscular dystrophy~~ (incomplete code as of 10/01/2018)
G71.00	Muscular dystrophy, unspecified
G71.01	Duchenne or Becker muscular dystrophy
G71.02	Facioscapulohumeral muscular dystrophy
G71.03	Limb girdle muscular dystrophies
G71.031	Autosomal dominant limb girdle muscular dystrophy
G71.032	Autosomal recessive limb girdle muscular dystrophy due to calpain-3 dysfunction
G71.033	Limb girdle muscular dystrophy due to dysferlin dysfunction
G71.034	Limb girdle muscular dystrophy due to sarcoglycan dysfunction
G71.0340	Limb girdle muscular dystrophy due to sarcoglycan dysfunction, unspecified
G71.0341	Limb girdle muscular dystrophy due to alpha sarcoglycan dysfunction
G71.0342	Limb girdle muscular dystrophy due to beta sarcoglycan dysfunction
G71.0349	Limb girdle muscular dystrophy due to other sarcoglycan dysfunction
G71.035	Limb girdle muscular dystrophy due to anoctamin-5 dysfunction
G71.038	Other limb girdle muscular dystrophy
G71.039	Limb girdle muscular dystrophy, unspecified
G71.09	Other specified muscular dystrophies
G71.11	Myotonic muscular dystrophy
G71.12	Myotonia congenita
G71.13	Myotonic chondrodystrophy
G71.14	Drug induced myotonia
G71.19	Other specified myotonic disorders
G71.2	Congenital myopathies

G71.3	Mitochondrial myopathy, not elsewhere classified
G71.8	Other primary disorders of muscles
G72.0	Drug-induced myopathy
G72.1	Alcoholic myopathy
G72.2	Myopathy due to other toxic agents
G72.89	Other specified myopathies
G73.7	Myopathy in diseases classified elsewhere
G82.50	Quadriplegia, unspecified
G82.51	Quadriplegia, C1-C4 complete
G82.52	Quadriplegia, C1-C4 incomplete
G82.53	Quadriplegia, C5-C7 complete
G82.54	Quadriplegia, C5-C7 incomplete
J47.0	Bronchiectasis with acute lower respiratory infection
J47.1	Bronchiectasis with (acute) exacerbation
J47.9	Bronchiectasis, uncomplicated
J98.6	Disorders of diaphragm
M33.02	Juvenile dermatomyositis with myopathy
M33.12	Other dermatomyositis with myopathy
M33.22	Polymyositis with myopathy
M33.92	Dermatopolymyositis, unspecified with myopathy
M34.82	Systemic sclerosis with myopathy
M35.03	Sicca syndrome with myopathy
Q33.4	Congenital bronchiectasis

References

Centers for Medicare and Medicaid Services. National Coverage Determination for Intrapulmonary Percussive Ventilator. July 1997. Available at: http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=229&ncdver=1&DocID=240.5&ncd_id=240.5&ncd_version=1&basket=ncd%25253A240%25252E5%25253A1%25253AIntrapulmonary+Percussive+Ventilator+%252528IPV%252529&bc=gAAAAAgAAAAA&. Accessed September 15, 2024.

Deakins K, Chatburn RL. A comparison of intrapulmonary percussive ventilation and conventional chest physiotherapy for the treatment of atelectasis in the pediatric patient. Respir Care. 2002; 47(10):1162-1167.

Irwin RS, Baumann MH, Bolser DC, et al.; American College of Chest Physicians (ACCP). Diagnosis and management of cough executive summary: ACCP evidence-based clinical practice guidelines. Chest. 2006; 129(1 Suppl):1S-23S.

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Specialty-matched clinical peer review.

Varekojis SM, Douce FH, Flucke RL, et al. A comparison of the therapeutic effectiveness of and preference for postural drainage and percussion, intrapulmonary percussive ventilation, and high-frequency chest wall compression in hospitalized cystic fibrosis patients. Respir Care. 2003; 48(1):24-28.

Revision History

DATE	REVISION
9/13/2019	Added the following covered indications to HFDWOD: – Any neuromuscular disease disorder with ineffective cough – Members with a gastrostomy tube and risk of aspiration if manual chest physical therapy (PT) is indicated on a case-by-case basis when other methods of daily chest PT have been tried and failed