SUBJECT: **Cough Assist Device**
INDEX TITLE: **Medical Management**
ORIGINAL DATE: **January 2013**

This policy applies to the following lines of business: (Check those that apply.)

COMMERCIAL	[ ] HMO	[ ] PPO	[ ] Fully Insured	[ ] Individual Product	[ ] Marketplace (Exchange)	[X] All
GOVERNMENT PROGRAMS	[ ] MA HMO	[ ] MA PPO	[ ] MA C-SNP	[ ] MA D-SNP	[X] MA All	
	[ ] Medicaid					
OTHER	[X] Self-funded/ASO					

I. POLICY

It is the policy of MedStar Health, Inc. to recognize that mechanical devices to aid pediatric and adult members in clearing secretions effectively and assisting with coughing is medically necessary (see CRM .015.MH Medical Necessity) in certain lung and neuromuscular diseases that affect normal breathing. Coverage of these devices will be based on medical necessity as detailed in this policy, and according to the member's individual benefit plan.

Payment for the Mechanical In-Exsufflation Devices is capped under the Durable Medical Equipment rental system (Refer to MP.010.MH DME and Corrective Appliances Policy).

For repairs and replacement information, refer to MP.010.MH Durable Medical Equipment and Corrective Appliances.

II. DEFINITIONS

Cough Assist Devices aka Mechanical In-Exsufflation Devices are used for patients with neuromuscular disorders to assist with coughing by inflating the lungs.

III. PURPOSE

The purpose of this policy is to outline the indications where cough assist devices are considered medically necessary.

IV. SCOPE

This policy applies to various departments as indicated by the Benefit and Reimbursement Committee. These include but are not limited to Medical Management, Benefit Configuration and Claims Departments.

V. PROCEDURE

A. Medical Description

The cough assist device, also known as, the mechanical in-exsufflation device is designed to inflate the lung with positive pressure and assist coughing with negative pressure. It is advocated for use in patients with neuromuscular diseases.

The mechanical in-exsufflation device, or cough machine, is a portable non-invasive machine used to stimulate a cough for individuals unable to cough or clear secretions effectively. It works by gradually applying a positive pressure to the airway, then rapidly shifting to a negative pressure. The rapid shift in pressure, via facemask or mouthpiece, produces a high expiratory flow rate from the lungs. A cough is stimulated, which assists in clearing broncho-pulmonary secretions. These mechanical devices, which can be used for children and adults, can be used at home, outside the home or in a hospital/institution.

In addition, effective clearing of broncho-pulmonary secretions reduces the risk of respiratory complications. It clears secretions from peripheral airways, avoids airway damage and is effective in situations when cough muscles do not work. When used timely, it can avoid hospitalization and the need for a tracheostomy.

B. Indications

A cough assist device, when used as an alternative to tracheostomy and/or other invasive procedures, is indicated when all of the following criteria are met:

1. Neuromuscular disease or high spinal cord injury; and
2. The condition is causing a significant impairment of the chest wall and/or diaphragmatic movement such that it results in an inability to clear retained secretions.

C. Limitations

1. Careful consideration must be given before mechanical in-exsufflation is used for individuals with **any** of the following conditions:
   - History of bullous emphysema
   - Known susceptibility to pneumothorax or pneumo-mediastinum
   - Known recent barotrauma.

2. Requests must be signed and dated by the treating physician, kept on file by the supplier, and made available upon request.

D. Codes

The following codes for treatments and procedures applicable to this policy are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

HCPCS Code:	Description:
A7020	Interface for cough stimulating device, includes all components, replacement only
E0482	Cough stimulating device, alternating positive and negative airway pressure

ICD 9 Codes:	Description:
138	Late effects of acute Poliomyelitis
335.0	Werdnig-Hoffmann Disease – Anterior Horn Cell Disease Unspecified
335.10	Spinal Muscular Atrophy unspecified
335.11	Kugelberg-Welander Disease
335.19	Other Adult Spinal Muscular Atrophy
335.2	Motor Neuron Disease
335.20	Amyotrophic Lateral Sclerosis (ALS)
335.21	Progressive Muscular Atrophy
335.22	Progressive Bulbar Palsy

335.23	Pseudobulbar Palsy
335.24	Primary lateral Sclerosis
335.29	Other Motor Neuron Diseases
335.8	Other Anterior Horn Cell Diseases
335.9	Anterior Horn Cell Disease – Unspecified
340	Multiple Sclerosis (MS)
344.00	Quadriplegia and quadriparesis – Spinal Cord Injury (SCI)
344.01	Quadriplegia C1-C4 Complete
344.02	Quadriplegia C1-C4 Incomplete
344.03	Quadriplegia C5-C7 Complete
344.04	Quadriplegia C5-C7 Incomplete
344.09	Other Quadriplegia; paralysis, unspecified
358.8	Other specified myoneural disorders
358.9	Unspecified myoneural disorders
359.0	Congenital Hereditary Muscular Dystrophy (MD)
359.1	Hereditary Progressive Muscular Dystrophy
359.21	Myotonic muscular dystrophy
359.71	Inclusion Body Myositis
907.2	Late effect of spinal cord injury
907.3	Late effect of injury to nerve root(s), spinal plexus(es), and other nerves of trunk
952.00-952.19	Cervical/thoracic spinal cord injury

ICD-10 Codes:	**Description:**
B91	Sequelae of poliomyelitis
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
G12.29	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
G70.2	Congenital and developmental myasthenia
G70.89	Other specified myoneural disorders
G70.9	Myoneural disorder, unspecified
G71.0	Muscular dystrophy
G71.11	Myotonic muscular dystrophy
G71.2	Congenital myopathies

G72.41	Inclusion body myositis [IBM]
G82.50	Quadriplegia, unspecified
G82.51	Quadriplegia, C1-C4 complete
G82.53	Quadriplegia, C5-C7 complete
G82.54	Quadriplegia, C5-C7 incomplete
S14.0XXS-S14.109S	Unspecified injury at unspecified level of cervical spinal cord, sequel
S14.2-S14.2XXS	Injury of nerve root of cervical spine, sequela
S14.9XXS	Injury of unspecified nerves of neck, sequela
S24.109S	Unspecified injury at unspecified level of thoracic spinal cord, sequel
S24.2XXS	Injury of nerve root of thoracic spine, sequel
S24.3XXS	Injury of peripheral nerves of thorax sequela
S24.8XXS	Injury of other specified nerves of thorax, sequela
S24.9XXS	Injury of unspecified nerve of thorax, sequela
S14.101A-S24.154A	Cervical/thoracic spinal cord injury

E. Variations

For Medical Assistance Product:
Providers participating in the Medical Assistance product are precluded from balance billing any Medical Assistance member for a procedure governed by this Pay Policy, unless the provider has specifically notified the Medical Assistance member prior to performing the procedure of the member's potential financial responsibility if payment for the procedure by MedStar Health were to be denied. The provider must obtain the member's written acknowledgment of this notification and consent to still proceed to receive the procedure in question.

F. Quality Audit

Quality Audit monitors policy compliance and/or billing accuracy at the request of the Technology Assessment Committee or the Benefits Reimbursement Committee.

G. Records Retention

Records Retention for documents, regardless of medium, is provided within the MedStar Health Policy HS-LE0009 Records Retention, Management and

Retirement, and as indicated in the Insurance Services Division Policy and Procedure CORP.028.MH Records Retention.

Unless otherwise mandated by Federal or State law, or unless required to be maintained for litigation purposes, any communications recorded pursuant to this Policy are maintained for a minimum of ten (10) years from the date of recording.

H. References

Medical Literature/Clinical Information:

1. J. H. Emerson Co. CoughAssist™ Mechanical Insufflator-Exsufflator - User's Guide. Accessed: 01/20/2015. Available at: http://www.apria.com/wps/wcm/connect/3176a06e-7ad3-42c1-9b44-a27d2e928924/Cough+Assist_CA-3000+-+Respironics.pdf?MOD=AJPERES
2. Irwin RS, Boulet LP, Cloutier MM. Managing cough as a defense mechanism and as a symptom. A consensus panel report of the American College of Chest Physicians. Chest. 1998 Aug; 114(2 Suppl): 133S-181S. http://journal.publications.chestnet.org/article.aspx?articleid=1073794
3. Bach J, Ishikawa Y, Kim H. Prevention of pulmonary morbidity for patients with Duchenne Muscular Dystrophy. Chest. 1997 Oct; 112 (4): 1024-1028. http://journal.publications.chestnet.org/data/Journals/CHEST/21752/1024.pdf
4. Bach J. Update and perspective on noninvasive respiratory muscle aids. Part 2: The expiratory aids. Chest. 1994 May; 105 (5): 1538-1544. http://journal.publications.chestnet.org/data/Journals/CHEST/21694/1538.pdf

Regulatory/Government Source:

1. Centers for Medicare and Medicaid Services (CMS). Local Coverage Determination (LCD). No. L12872 - Mechanical In-exsufflation Devices. (Contractor: NHIC Corp.) Revision effective date: 07/01/2013. http://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=12872&ContrId=137&ver=25&ContrVer=1&DocType=All&bc=AgIAAAAAAAAA%3d%3d&
2. U.S. Food and Drug Administration (FDA). Center for Devices and Radiological Health: 510 (K) Pre-Market Notification: K002598. Decision Date: November 22, 2000. http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm?ID=K002598

Disclaimer:

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