

**Policy terminated because coverage is provided under
NCHC Durable Medical Equipment and Supplies**

Table of Contents

1.0	Description of the Procedure, Product, or Service.....	1
2.0	Eligible Recipients.....	1
2.1	General Provisions.....	1
3.0	When the Procedure, Product, or Service Is Covered.....	1
3.1	General Criteria.....	1
3.2	Specific Criteria.....	2
3.3	Policy Guidelines.....	2
4.0	When the Procedure, Product, or Service Is Not Covered.....	3
4.1	General Criteria.....	3
4.2	Specific Criteria.....	3
5.0	Requirements for and Limitations on Coverage.....	3
5.1	Prior Approval.....	3
6.0	Providers Eligible to Bill for the Procedure, Product, or Service.....	3
7.0	Additional Requirements.....	3
7.1	Compliance.....	3
8.0	Policy Implementation/Revision Information.....	4
	Attachment A: Claims-Related Information.....	5
A.	Claim Type.....	5
B.	Diagnosis Codes.....	5
C.	Procedure Code(s).....	5
D.	Modifiers.....	5
E.	Billing Units.....	5
F.	Place of Service.....	5
G.	Co-payments.....	5
H.	Reimbursement.....	5

1.0 Description of the Procedure, Product, or Service

Normal clearance of the airway rests on three (3) basic components: a patent airway, mucociliary clearance, and an adequate cough. Recipients with spinal cord injuries or a variety of neuromuscular diseases or chest wall deformities may have impaired cough responses, which may lead to respiratory failure during respiratory tract infections due to the inability to clear the profuse respiratory secretions. Chest wall deformities may include kyphosis, scoliosis, or lordosis, while neuromuscular diseases include muscular dystrophy, poliomyelitis, spinal muscle atrophy, myasthenia gravis, amyotrophic lateral sclerosis, or cerebral palsy. The great majority of neuromuscular disease morbidity and mortality is related to respiratory muscle weakness, and the vast majority of episodes of respiratory failure occur during otherwise benign episodes of respiratory tract infections. Chest infections may result in repeated episodes of pneumonia, repeated hospitalization, and finally, in tracheostomy with mechanical ventilation.

A cough stimulating device, also known as a mechanical insufflator-exsufflator, is a portable electric device intended to help pediatric or adult recipients with respiratory insufficiency (i.e., those with ineffective cough) clear retained bronchopulmonary secretions. This noninvasive device uses a blower and a valve to alternately apply a positive pressure and then an abrupt negative pressure to the recipient's airway. This rapid shift in pressure produces a high expiratory flow rate from the lungs, simulating a natural cough. Air moves to and from the recipient via a breathing circuit consisting of a flexible tube, a bacterial filter and either a facemask, a mouthpiece or an adapter to a tracheostomy or endotracheal tube.

2.0 Eligible Recipients

2.1 General Provisions

To be eligible, NCHC recipients must be enrolled on the date of service.

Note: Most children will be able to get all the services they need under the core (basic) plan of NC Health Choice. A child who qualifies as having special needs may be able to receive additional services not covered by the core plan.

3.0 When the Procedure, Product, or Service Is Covered

3.1 General Criteria

NCHC covers procedures, products, and services related to this policy when they are medically necessary and

- a. the procedure, product, or service is individualized, specific, and consistent with symptoms or confirmed diagnosis of the illness or injury under treatment, and not in excess of the recipient's needs;

- b. the procedure, product, or service can be safely furnished, and no equally effective and more conservative or less costly treatment is available; **AND**
- c. the procedure, product, or service is furnished in a manner not primarily intended for the convenience of the recipient, the recipient's caretaker, or the provider.

3.2 Specific Criteria

The use of a cough stimulating device (mechanical insufflation-exsufflation) may be considered medically necessary in recipients with neuromuscular disease or spinal cord injury and impaired ability to cough and who require ventilatory assistance. Cough stimulating devices may be considered medically necessary when **ALL** the following criteria are met:

- a. the recipient has a neuromuscular disease or high spinal cord injury that is causing a significant impairment of chest wall and/or diaphragmatic movement;
- b. for whom standard treatments (inhalers, IPPB, incentive spirometry, PEP devices, flutter valve devices and manual techniques such as chest percussion and postural drainage, under the guidance of a skilled professional practitioner) have not been successful in adequately mobilizing retained secretions;
- c. has a peak cough expiratory flow of less than 2-3L per second; **AND**
- d. is motivated to use the device as prescribed or has able caregivers who can be trained to use the device effectively.

Cough stimulating devices may either be offered on a temporary basis in recipients with noninvasive intermittent positive pressure ventilation (IPPV) who are suffering from a respiratory tract illness, or may be used on a more chronic basis in an attempt to avoid the option of tracheostomy and suctioning.

In recipients with a tracheostomy, a cough stimulating device may be offered in lieu of suctioning.

3.3 Policy Guidelines

The published data suggest that cough stimulating devices can improve the intermediate outcome of peak cough expiratory flow. While controlled trials would ideally further delineate who is most likely to benefit from the use of a cough stimulating device, particularly those who would benefit from having such a device in the home, such trials are logistically difficult. The heterogeneous nature of the patients, even among those with similar diseases, almost mandates a case by case approach for these patients. For example, the clinical utility of the device would not only depend on the physiologic parameters of lung function, but also on the tempo of the disease course, the availability of home caregivers, and patient preference and motivation. The non-investigational status for the device is based on these considerations.

4.0 When the Procedure, Product, or Service Is Not Covered

4.1 General Criteria

Procedures, products, and services related to this policy are not covered when

- a. the recipient does not meet the eligibility requirements listed in **Section 2.0**;
- b. the recipient does not meet the medical necessity criteria listed in **Section 3.0**;
- c. the procedure, product, or service unnecessarily duplicates another provider's procedure, product, or service; or
- d. the procedure, product, or service is experimental or investigational.

4.2 Specific Criteria

The use of a cough stimulating device is contraindicated in the presence of chronic obstructive pulmonary disease, bullous emphysema, known susceptibility to pneumothorax or pneumo-mediastinum or exposure to recent barotrauma.

5.0 Requirements for and Limitations on Coverage

5.1 Prior Approval

A cough stimulating device requires prior approval.

6.0 Providers Eligible to Bill for the Procedure, Product, or Service

To be eligible to bill for procedures, products, and services related to this policy, providers shall

- a. meet NCHC qualifications for participation;
- b. be currently enrolled with NCHC; **AND**
- c. bill only for procedures, products, and services that are within the scope of their clinical practice, as defined by the appropriate licensing entity.

7.0 Additional Requirements

7.1 Compliance

Providers must comply with all applicable federal, state, and local laws and regulations, including the Health Insurance Portability and Accountability Act (HIPAA) and record retention requirements.

8.0 Policy Implementation/Revision Information

Original Effective Date: July 1, 2010

Revision Information:

Date	Section Revised	Change
July 1, 2010	Throughout	Policy Conversion: Implementation of Session Law 2009-451, Section 10.32 "NC HEALTH CHOICE/PROCEDURES FOR CHANGING MEDICAL POLICY."
<u>October 31, 2011</u>	<u>Throughout</u>	<u>Policy Termination. Coverage for this policy is provided by NCHC policy 2011.09, Medical Equipment and Supplies.</u>

Attachment A: Claims-Related Information

Reimbursement requires compliance with all NCHC guidelines.

A. Claim Type

Professional (CMS-1500/837P transaction)

B. Diagnosis Codes

Providers must bill the ICD-9-CM diagnosis codes(s) to the highest level of specificity that supports medical necessity.

C. Procedure Code(s)

HCPCS Code
E0482

D. Modifiers

Providers are required to follow applicable modifier guidelines.

E. Billing Units

The appropriate procedure code(s) used determines the billing unit(s).

F. Place of Service

Home

G. Co-payments

Co-payment(s) may apply to covered prescription drugs and services

H. Reimbursement

Providers must bill their usual and customary charges.