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**POLICY LAST UPDATED:** 06|07|2016

## OVERVIEW

Pulmonary rehabilitation (PR) is a multidisciplinary approach to reducing symptoms and improving quality of life in patients with compromised lung function. The approach can be used in patients with chronic pulmonary disease and as preoperative conditioning before lung surgery.

## MEDICAL CRITERIA

### BlueCHiP for Medicare and Commercial Products

Outpatient pulmonary rehabilitation provided only in the ambulatory care setting, such as a physician's office or a hospital outpatient setting, is considered **medically necessary** for one of the following:

- Patients with chronic pulmonary disease who are experiencing disabling symptoms and significantly diminished quality of life in spite of optimal medical management; **or**
- As a preoperative conditioning component for those patients considered appropriate candidates for lung volume reduction surgery or lung transplantation; **or**
- Following lung transplantation.

## PRIOR AUTHORIZATION

Preauthorization is required for BlueCHiP for Medicare and recommended for Commercial products.

## POLICY STATEMENT

### BlueCHiP for Medicare and Commercial Products

Outpatient pulmonary rehabilitation is considered **medically necessary** when the medical criteria above has been met.

Outpatient pulmonary rehabilitation beyond one course of treatment is typically **not medically necessary** as the patient is expected to have been taught the appropriate self-care.

Outpatient pulmonary rehabilitation is considered not medically necessary in all other situations, including but not limited to following lung volume reduction surgery or surgical resection of lung cancer.

Home-based pulmonary rehabilitation programs are not covered for all Blue Cross & Blue Shield of Rhode Island (BCBSRI) products.

## COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for applicable Physical/Occupational Therapy benefits/coverage.

## BACKGROUND

Pulmonary rehabilitation was defined in a 1999 joint statement of the American Thoracic Society and the European Respiratory Society as a multi-disciplinary program of care for patients with chronic respiratory impairment that is individually tailored and designed to optimize physical and social performance and autonomy, and an evidence-based, multidisciplinary, and comprehensive intervention for patients with chronic respiratory diseases who are symptomatic and often have decreased daily life activities. Integrated into the individualized treatment of the patient, pulmonary rehabilitation is designed to reduce symptoms,

optimize functional status, increase participation, and reduce healthcare costs through stabilizing or reversing systematic manifestations of the disease.

Pulmonary rehabilitation programs are intended to improve the patient's functioning and quality of life and include exercise training, psychosocial support, and/or education. Programs typically include the following:

- **Team assessment** – input from physician, respiratory care practitioner, nurse, and psychologist, among others
- **Patient training** – breathing retraining, education on bronchial hygiene, proper use of medications, and proper nutrition
- **Psychosocial intervention** – addresses support system and dependency issues
- **Exercise training** – strengthening and conditioning, which may include stair climbing, inspiratory muscle training, treadmill walking, cycle training with or without ergometer, and supported and unsupported arm exercise training. Exercise conditioning is an essential component of pulmonary rehabilitation. Education in disease management techniques without exercise conditioning does not improve health outcomes of patients who have chronic obstructive pulmonary disease.

Candidates for pulmonary rehabilitation should be medically stable and not limited by another serious or unstable medical condition. Contraindications to pulmonary rehabilitation include severe psychiatric disturbance (e.g., dementia, organic brain syndrome), and significant or unstable medical conditions (e.g., heart failure, acute cor pulmonale, substance abuse, significant liver dysfunction, metastatic cancer, disabling stroke).

The vast majority of study has focused on patients with chronic obstructive pulmonary disease (COPD), although there has been some interest in PR in patients with asthma, cystic fibrosis, or bronchiectasis. PR may also be of value for conditions other than COPD (e.g., bronchiectasis, asthma and cystic fibrosis) in cases in which respiratory symptoms are associated with diminished functional capacity or reduced health-related quality of life.

PR is also routinely offered to patients awaiting lung transplantation and lung volume reduction surgery. PR before lung surgery may stabilize or improve patients' exercise tolerance, teach patients techniques that will help them recover after the procedure, and allow healthcare providers to identify individuals who might be suboptimal surgical candidates due to noncompliance, poor health, or other reasons.

A course of treatment typically consists of two 1-hour sessions per day for up to 36 sessions, with the option for an additional 36 sessions (not to exceed 72 sessions) if medically necessary. **Claims submitted for greater than 36 sessions will suspend for review.**

Most studies of home-based PR have compared outcomes with standard care. Very few have compared home-based PR with hospital- or clinic-based PR, and the available studies are mostly of low quality. The evidence is insufficient to determine the effects of the technology on health outcome. Thus, a single course of PR may be considered medically necessary in the ambulatory care setting for patients with moderate to severe chronic pulmonary disease who meet criteria and not medically necessary in the home setting.

The studies for repeat or maintenance outpatient PR in individuals who have had a previous course of PR have methodologic limitations and/or did not have clinically significant outcomes. The evidence is insufficient to determine the effects of the technology on health outcome. Thus, repeat and maintenance PR programs are considered not medically necessary.

For patients undergoing lung surgery, findings from the National Emphysema Treatment Trial suggest a subset of COPD patients who are appropriate candidates for PR before lung volume reduction surgery. For patients undergoing lung transplantation, PR is considered standard of care to maximize preoperative pulmonary status. For patients undergoing lung cancer resection, there are a few small randomized controlled

trials but these trials have not demonstrated a consistent benefit of PR on health outcomes. Therefore a single course of PR in an outpatient setting is considered medically necessary for patients before lung volume reduction surgery or lung transplantation.

There is a small amount of evidence that supports the use of PR post lung transplantation, and PR is part of standard post-transplantation protocols. Given the evidence and the current standard of care, PR may be considered medically necessary post lung transplantation. For other types of lung surgery, there is insufficient evidence on whether PR programs improve the net health outcome, and therefore PR is considered investigational post lung surgery for other indications.

### **BlueCHiP for Medicare**

Medicare covers pulmonary rehabilitation items and services for patients with moderate to very severe COPD (defined as GOLD classification II, III, and IV), when referred by the physician treating the chronic respiratory disease.

Pulmonary rehabilitation programs must include the following components:

- Physician-prescribed exercise. Some aerobic exercise must be included in each pulmonary rehabilitation session;
- Education or training closely and clearly related to the individual's care and treatment that is tailored to the individual's needs, including information on respiratory problem management and, if appropriate, brief smoking cessation counseling;
- Psychosocial assessment;
- Outcomes assessment; and,
- An individualized treatment plan detailing how components are utilized for each patient.

Pulmonary rehabilitation items and services must be furnished in a physician's office or a hospital outpatient setting. All settings must have a physician immediately available and accessible for medical consultations and emergencies at all times items and services are being furnished under the program.

### **CODING**

#### **BlueCHiP for Medicare and Commercial Products**

The following codes are covered and require preauthorization:

**S9473**

**G0424**

For correct claims processing, claims should not include the following HCPCS codes. Instead, the codes listed above should be used.

**G0237**

**G0238**

**G0239**

### **RELATED POLICIES**

Lung Volume Reduction Surgery

Acute Inpatient Rehabilitation Level of Care

### **PUBLISHED**

Provider Update, August 2016

Provider Update, January 2016

Provider Update, January 2015

Provider Update, August 2013

Provider Update, March 2012

Provider Update, June 2011

## REFERENCES

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4. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Pulmonary rehabilitation for patients with chronic obstructive pulmonary disease. TEC Assessments 1996; Volume 11, Tab 4.
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6. Beauchamp MK, Janaudis-Ferreira T, Goldstein RS et al. Optimal duration of pulmonary rehabilitation for individuals with chronic obstructive pulmonary disease- a systematic review. *Chron Respir Dis* 2011; 8(2):129-40.
7. Jacome CI, Marques AS. Pulmonary rehabilitation for mild chronic obstructive pulmonary disease: a 1 systematic review. *Respir Care* 2013.
8. Guell R, Casan P, Belda J et al. Long-term effects of outpatient rehabilitation of COPD: a randomized trial. *Chest* 2000; 117(4):976-83.
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