

EFFECTIVE DATE: 07|07|2009
POLICY LAST UPDATED: 10|02|2018

OVERVIEW

Pulmonary rehabilitation (PR) is a multidisciplinary approach to reducing symptoms and improving quality of life in patients with compromised lung function. PR programs generally include a patient assessment followed by therapeutic interventions including exercise training, education, and behavior change.

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.

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

BlueCHiP for Medicare

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

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

Commercial Products

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.

COVERAGE

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

BACKGROUND

In 2013, the American Thoracic Society and the European Respiratory Society defined pulmonary rehabilitation (PR) as a “comprehensive intervention based on a thorough patient assessment followed by patient-tailored therapies that include, but are not limited to exercise training, education, and behavior change.” PR programs are intended to improve patient functioning and quality of life. Most research has focused on patients with chronic obstructive pulmonary disease, although there has been some interest in patients with asthma, cystic fibrosis, or bronchiectasis.

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 health care providers to identify individuals who might be suboptimal surgical candidates due to noncompliance, poor health, or other reasons.

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).

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.**

For individuals with idiopathic pulmonary fibrosis who receive a single course of outpatient PR, the evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals with bronchiectasis who receive a single course of outpatient PR, the evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals with scheduled lung surgery for volume reduction, transplantation, or resection who receive a single course of outpatient PR, the evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have had LVRS who receive a single course of outpatient PR, the evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have had lung cancer resection who receive a single course of outpatient PR, the evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have had an initial course of PR who receive repeat or maintenance outpatient PR, the evidence is insufficient to determine the effects of the technology on health outcome.

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 when the medical criteria above are met:

S9473 Pulmonary rehabilitation program, non-physician provider, per diem

G0424 Pulmonary rehabilitation, including exercise (includes monitoring), one hour, per session, up to two sessions per day

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

G0237 Therapeutic procedures to increase strength or endurance of respiratory muscles, face to face, one on one, each 15 minutes (includes monitoring)

G0238 Therapeutic procedures to improve respiratory function, other than described by G0237, one on one, face to face, per 15 minutes (includes monitoring)

G0239 Therapeutic procedures to improve respiratory function or increase strength or endurance of respiratory muscles, two or more individuals (includes monitoring)

RELATED POLICIES

Lung Volume Reduction Surgery

Non Reimbursable Health Service Codes

PUBLISHED

Provider Update, November/December 2018

Provider Update, December 2017

Provider Update, August 2016

Provider Update, January 2016

Provider Update, January 2015

REFERENCES

1. Centers for Medicare and Medicaid Services. CMS Manual System: Pub 100-04 Medicare Claims Processing Pulmonary Rehabilitation Services 140.4.
2. Spruit MA, Singh SJ, Garvey C, et al. An official American Thoracic Society/European Respiratory Society statement: key concepts and advances in pulmonary rehabilitation. *Am J Respir Crit Care Med*. Oct 15 2013;188(8):e13-64. PMID 24127811
3. Puhan MA, Gimeno-Santos E, Cates CJ, et al. Pulmonary rehabilitation following exacerbations of chronic obstructive pulmonary disease. *Cochrane Database Syst Rev*. Dec 08 2016;12:CD005305. PMID 27930803
4. McCarthy B, Casey D, Devane D, et al. Pulmonary rehabilitation for chronic obstructive pulmonary disease. *Cochrane Database Syst Rev*. Feb 23 2015;2(2):CD003793. PMID 25705944
5. Rugbjerg M, Iepsen UW, Jorgensen KJ, et al. Effectiveness of pulmonary rehabilitation in COPD with mild symptoms: a systematic review with meta-analyses. *Int J Chron Obstruct Pulmon Dis*. May 2015;10:791-801. PMID 25945044
6. Roman M, Larraz C, Gomez A, et al. Efficacy of pulmonary rehabilitation in patients with moderate chronic obstructive pulmonary disease: a randomized controlled trial. *BMC Fam Pract*. Feb 11 2013;14:21. PMID 23399113
7. Gottlieb V, Lyngso AM, Nybo B, et al. Pulmonary rehabilitation for moderate COPD (GOLD 2)--does it have an effect? *COPD*. Oct 2011;8(5):380-386. PMID 21936683
8. Liu X-D, Jin H-Z, Ng B-P, et al. Therapeutic effects of qigong in patients with COPD: a randomized controlled trial. *Hong Kong J Occup Ther*. Aug 9 2012;22(1):38-46. PMID
9. van Wetering CR, Hoogendoorn M, Mol SJ, et al. Short- and long-term efficacy of a community-based COPD management programme in less advanced COPD: a randomised controlled trial. *Thorax*. Jan 2010;65(1):7-13. PMID 19703824
10. Jackson RM, Gomez-Marin OW, Ramos CF, et al. Exercise limitation in IPF patients: a randomized trial of pulmonary rehabilitation. *Lung*. Jun 2014;192(3):367-376. PMID 24705678
11. Gaunaurd IA, Gomez-Marin OW, Ramos CF, et al. Physical activity and quality of life improvements of patients with idiopathic pulmonary fibrosis completing a pulmonary rehabilitation program. *Respir Care*. Dec 2014;59(12):1872-1879. PMID 25185149
12. Lee AL, Hill CJ, McDonald CF, et al. Pulmonary rehabilitation in individuals with non-cystic fibrosis bronchiectasis: a systematic review. *Arch Phys Med Rehabil*. Apr 2017;98(4):774-782 e771. PMID 27320420
13. Fishman A, Martinez F, Naunheim K, et al. A randomized trial comparing lung-volume-reduction surgery with medical therapy for severe emphysema. *N Engl J Med*. May 22 2003;348(21):2059-2073. PMID12759479
14. Hoffman M, Chaves G, Ribeiro-Samora GA, et al. Effects of pulmonary rehabilitation in lung transplant candidates: a systematic review. *BMJ Open*. Feb 03 2017;7(2):e013445. PMID 28159852
15. Morano MT, Araujo AS, Nascimento FB, et al. Preoperative pulmonary rehabilitation versus chest physical therapy in patients undergoing lung cancer resection: a pilot randomized controlled trial. *Arch Phys Med Rehabil*. Jan 2013;94(1):53-58. PMID 22926460
16. Benzo R, Wigle D, Novotny P, et al. Preoperative pulmonary rehabilitation before lung cancer resection: results from two randomized studies. *Lung Cancer*. Dec 2011;74(3):441-445. PMID 21663994
17. Bradley A, Marshall A, Stonehewer L, et al. Pulmonary rehabilitation programme for patients undergoing curative lung cancer surgery. *Eur J Cardiothorac Surg*. Oct 2013;44(4):e266-271. PMID 23959742
18. Beling J. Improved health-related quality of life after lung volume reduction surgery and pulmonary rehabilitation. *Cardiopulm Phys Ther J*. Sep 2009;20(3):16-22. PMID 20467519
19. Wickerson L, Mathur S, Brooks D. Exercise training after lung transplantation: a systematic review. *J Heart Lung Transplant*. May 2010;29(5):497-503. PMID 20133160

20. Langer D, Burtin C, Schepers L, et al. Exercise training after lung transplantation improves participation in daily activity: a randomized controlled trial. *Am J Transplant.* Jun 2012;12(6):1584-1592. PMID 22390625
21. Fuller LM, Button B, Tarrant B, et al. Longer versus shorter duration of supervised rehabilitation after lung transplantation: a randomized trial. *Arch Phys Med Rehabil.* Feb 2017;98(2):220-226.e223. PMID 27697429
22. Munro PE, Holland AE, Bailey M, et al. Pulmonary rehabilitation following lung transplantation. *Transplant Proc.* Jan-Feb 2009;41(1):292-295. PMID 19249538
23. Stigt JA, Uil SM, van Riesen SJ, et al. A randomized controlled trial of postthoracotomy pulmonary rehabilitation in patients with resectable lung cancer. *J Thorac Oncol.* Feb 2013;8(2):214-221. PMID 23238118
24. Edvardsen E, Skjonsberg OH, Holme I, et al. High-intensity training following lung cancer surgery: a randomized controlled trial. *Thorax.* Mar 2015;70(3):244-250. PMID 25323620
25. Carr SJ, Hill K, Brooks D, et al. Pulmonary rehabilitation after acute exacerbation of chronic obstructive pulmonary disease in patients who previously completed a pulmonary rehabilitation program. *J Cardiopulm Rehabil Prev.* Sep-Oct 2009;29(5):318-324. PMID 19561523

[CLICK THE ENVELOPE ICON BELOW TO SUBMIT COMMENTS](#)

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member's subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.

