# **Payment Policy |** Outpatient Pulmonary Rehabilitation



**EFFECTIVE DATE:** 01 | 01 | 2020

**POLICY LAST UPDATED:** 05 | 04 | 2022

#### **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**

Not applicable

### **PRIOR AUTHORIZATION**

Not applicable

#### **POLICY STATEMENT**

# Medicare Advantage Plans and Commercial Products

Outpatient pulmonary rehabilitation is covered.

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

## Medicare Advantage Plans

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.

## **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.

# **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).

## Medicare Advantage Plans

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**

## Medicare Advantage Plans and Commercial Products

The following code(s) are covered:

- Physician or other qualified health care professional services for outpatient pulmonary rehabilitation; without continuous oximetry monitoring (per session) (New code effective 1/01/2022)
- physician or other qualified health care professional services for outpatient pulmonary rehabilitation; with continuous oximetry monitoring (per session) (New code effective 1/01/2022)
- **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 (Code deleted 12/31/2021)

For correct claims processing, claims should not include the following HCPCS code(s). 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, July 2022 Provider Update, June 2021 Provider Update, November 2019 Provider Update, November/December 2018 Provider Update, December 2017

#### **REFERENCES**

- 1. Centers for Medicare and Medicaid Services. CMS Manual System: Pub 100-04 Medicare Claims Processing Pulmonary Rehabilitation Services 140.4.
- 2. Centers for Medicare & Medicaid Services. National Coverage Determination (NCD) for Pulmonary Rehabilitation Services (240.8). 2008; https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCAId=130&NcaName=Smoking+%26+Tobacco+Use+Cessation+Counseling&ExpandC omments=n&CommentPeriod=0&NCDId=320&NCSelection=NCA%7CCAL%7CNCD%7CMEDCA C%7CTA%7CMCD&KeyWAccessed January 31, 2022.
- 3. 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
- 4. 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
- 5. McCarthy B, Casey D, Devane D, et al. Pulmonary rehabilitation for chronic obstructive pulmonary disease. Cochrane Database Syst Rev. Feb 23 2015; (2): CD003793. PMID 25705944
- 6. 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. 2015; 10: 791-801. PMID25945044
- 7. 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. PMID23399113
- 8. 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): 380-6. PMID 21936683
- 9. 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.https://journals.sagepub.com/doi/pdf/10.1016/j.hkjot.2012.06.002. Accessed January 31, 2022.
- 10. 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
- 11. Dowman L, Hill CJ, May A, et al. Pulmonary rehabilitation for interstitial lung disease. Cochrane Database Syst Rev. Feb 01 2021; 2: CD006322. PMID 34559419
- 12. Yu X, Li X, Wang L, et al. Pulmonary Rehabilitation for Exercise Tolerance and Quality of Life in IPF Patients: A Systematic Review and Meta-Analysis. Biomed Res Int. 2019; 2019: 8498603. PMID 31016200

- 13. Cheng L, Tan B, Yin Y, et al. Short- and long-term effects of pulmonary rehabilitation for idiopathic pulmonary fibrosis: a systematic review and meta-analysis. Clin Rehabil. Oct 2018; 32(10): 1299-1307. PMID29843523
- 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.e1. PMID 27320420
- 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): 2059-73. PMID 12759479
- 16. 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
- 17. 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 MedRehabil. Jan 2013; 94(1): 53-8. PMID 22926460
- 18. 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): 441-5. PMID 21663994
- 19. 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): e266-71. PMID 23959742
- 20. 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
- 21. 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
- 22. 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): 1584-92. PMID 22390625
- 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.e3. PMID27697429
- 24. Munro PE, Holland AE, Bailey M, et al. Pulmonary rehabilitation following lung transplantation. Transplant Proc. Jan-Feb 2009; 41(1): 292-5. PMID 19249538
- 25. 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): 214-21. PMID 23238118
- 26. Edvardsen E, Skjonsberg OH, Holme I, et al. High-intensity training following lung cancer surgery: a randomised controlled trial. Thorax. Mar 2015; 70(3): 244-50. PMID 25323620
- 27. Puhan MA, Gimeno-Santos E, Cates CJ, et al. Pulmonary rehabilitation following exacerbations of
- 28. 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
- 29. COPD Working Group. Pulmonary rehabilitation for patients with chronic pulmonary disease (COPD): an evidence-based analysis. Ont Health Technol Assess Ser. 2012; 12(6): 1-75. PMID 23074434
- 30. Guell MR, Cejudo P, Ortega F, et al. Benefits of Long-Term Pulmonary Rehabilitation Maintenance Program in Patients with Severe Chronic Obstructive Pulmonary Disease. Three-Year Follow-up. Am J Respir Crit CareMed. Mar 01 2017; 195(5): 622-629. PMID 27611807
- 32. Wilson AM, Browne P, Olive S, et al. The effects of maintenance schedules following pulmonary rehabilitation in patients with chronic obstructive pulmonary disease: a randomised controlled trial. BMJ Open. Mar 112015; 5(3): e005921. PMID 25762226
- 33. Liu XL, Tan JY, Wang T, et al. Effectiveness of home-based pulmonary rehabilitation for patients with chronic obstructive pulmonary disease: a meta-analysis of randomized controlled trials. Rehabil Nurs. Jan-Feb 2014;39(1): 36-59. PMID 23780865
- 34. Vieira DS, Maltais F, Bourbeau J. Home-based pulmonary rehabilitation in chronic obstructive pulmonary disease patients. Curr Opin Pulm Med. Mar 2010; 16(2): 134-43. PMID 20104176

- 35. Neves LF, Reis MH, Goncalves TR. Home or community-based pulmonary rehabilitation for individuals with chronic obstructive pulmonary disease: a systematic review and meta-analysis. Cad Saude Publica. Jun 202016; 32(6). PMID 27333130
- 36. Maltais F, Bourbeau J, Shapiro S, et al. Effects of home-based pulmonary rehabilitation in patients with chronic obstructive pulmonary disease: a randomized trial. Ann Intern Med. Dec 16 2008; 149(12): 869-78. PMID19075206
- 37. Rochester CL, Vogiatzis I, Holland AE, et al. An Official American Thoracic Society/European Respiratory Society Policy Statement: Enhancing Implementation, Use, and Delivery of Pulmonary Rehabilitation. Am JRespir Crit Care Med. Dec 01 2015; 192(11): 1373-86. PMID 26623686
- 38. Wedzicha JA, Miravitlles M, Hurst JR, et al. Management of COPD exacerbations: a European Respiratory Society/American Thoracic Society guideline. Eur Respir J. Mar 2017; 49(3). PMID 28298398
- 39. Holland AE, Cox NS, Houchen-Wolloff L, et al. Defining Modern Pulmonary Rehabilitation. An Official American Thoracic Society Workshop Report. Ann Am Thorac Soc. May 2021; 18(5): e12-e29. PMID 33929307
- 40. Qaseem A, Wilt TJ, Weinberger SE, et al. Diagnosis and management of stable chronic obstructive pulmonary disease: a clinical practice guideline update from the American College of Physicians, American College of Chest Physicians, American Thoracic Society, and European Respiratory Society. Ann Intern Med. Aug 02 2011; 155(3): 179-91. PMID 21810710

# ----- 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.

