



Pulmonary Rehabilitation

—Live Better and *Live Longer*

Over 16 million people in the US have COPD¹ and up to 60% go undiagnosed.² COPD is the third leading cause of death globally.³ COPD and fibrotic lung disease such as idiopathic pulmonary fibrosis (IPF) have no known cure, and are associated with significant suffering and disabling symptoms. Pulmonary Rehabilitation (PR) is the standard of care for persons with COPD and IPF, and is associated with improved physical function, symptoms, mood and quality of life. Although PR is well established as a highly effective treatment for COPD and other chronic respiratory diseases,^{4,5} in the US only 3–4% of Medicare beneficiaries with COPD receive PR.⁶ Similarly low estimates exist for the rest of the world.⁷

Emerging data suggests a further benefit of PR: a reduction in mortality. A study by Lindenauer and colleagues found that, in persons hospitalized due to exacerbation of COPD, PR within 3 months of discharge vs. later or no PR, was associated with a highly significant lower risk of mortality at 1 year (hazard ratio, 0.63; i.e., a 37% lower risk of death over the year following discharge).⁸ The study utilized claims data of 197,376 Medicare beneficiaries discharged after hospitalization for COPD. In persons with fibrotic interstitial lung disease (ILD) including IPF, Sabina Guler and colleagues demonstrated that those with greater improvement in exercise performance (assessed by six-minute walk distance) following PR had improved survival. Those persons with ILD who participated in at least 80% of planned PR sessions had a 33% lower risk of death.⁹ Both studies support PR as a high priority for persons with COPD and fibrotic ILD.

Patients suffering from COPD and fibrotic ILD should know that PR not only has potential for helping them feel better and being more independent, but also to live longer. We are asking for your support in communicating these important findings of improved survival after PR to providers and patients. Thank you in advance for your help and collaboration.

Allergy & Asthma Network
 Alpha 1 Foundation
 American Association of Cardiovascular and Pulmonary Rehabilitation
 American Association for Respiratory Care
 American Lung Association
 American Respiratory Care Foundation
 American Thoracic Society
 CHEST/American College of Chest Physicians
 COPD Foundation

Dorney-Koppel Foundation
 Global Allergy Airways & Patient Platform
 LAM Foundation
 Pulmonary Education and Research Foundation
 Pulmonary Fibrosis Foundation
 Respiratory Compromise Institute
 Respiratory Health Association
 Right2Breathe
 US COPD Coalition

1. COPD. Centers for Disease Control and Prevention. Published June 6, 2018. Accessed February 17, 2022. <https://www.cdc.gov/copd/index.html>
2. Martinez C, et al. Undiagnosed Obstructive Lung Disease in the U.S. *Annals ATS*. 2015;(12):1788-1795.
3. <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death> Accessed February 17, 2022.
4. Spruit MA, et al; ATS/ERS Task Force on Pulmonary Rehabilitation. An official ATS/ERS statement: key concepts and advances in pulmonary rehabilitation. *Am J Respir Crit Care Med*. 2013;188(8):e13-e64. doi:10.1164/rccm.201309-1634ST
5. McCarthy B, et al. Pulmonary rehabilitation for COPD. *Cochrane Database Syst Rev*. 2015;2(2):CD003793. doi:10.1002/14651858.CD003793.pub3
6. Nishi SP, et al. Pulmonary rehabilitation utilization in older adults with COPD, 2003 to 2012. *J Cardiopulm Rehabil Prev*. 2016;36(5):375-382. doi:10.1097/HCR.0000000000000194
7. Desveaux L, et al. An international comparison of pulmonary rehabilitation: a systematic review. *COPD*. 2015;12(2):144-53. doi: 10.3109/15412555.2014.922066
8. Lindenauer PK, Stefan MS, Pekow PS, et al. Association between initiation of pulmonary rehabilitation after hospitalization for COPD and 1-year survival among Medicare beneficiaries. *JAMA*. 2020 May 12;323(18):1813-1823. doi: 10.1001/jama.2020.4437.
9. Guler SA, Hur SA, Stickland MK, et al. Survival after inpatient or outpatient pulmonary rehabilitation in patients with fibrotic interstitial lung disease: a multicentre retrospective cohort study. *Thorax* 2021. doi: 10.1136/thoraxjnl-2021-217361