THE AUSTRALIAN AND NEW ZEALAND Pulmonary Rehabilitation Guidelines

A Summary of Evidence

Pulmonary rehabilitation (PR) that includes exercise training is considered to be a key component of the management of people with COPD¹ and has been shown to reduce symptoms of breathlessness and fatigue, improve health-related quality of life (HRQoL),² and may reduce hospital readmissions after an exacerbation.³

The Australian and New Zealand Pulmonary Rehabilitation Guidelines provide evidencebased recommendations for the practice of PR specific to Australian and New Zealand healthcare contexts.

This document provides a summary version of the Guidelines for clinicians and policy makers.

A full version is available from www.lungfoundation.com.au





Summary of Key Recommendations

Who should access pulmonary rehabilitation?

- People with stable COPD of all severities i.e mild, moderate or severe.
- People with COPD after a hospitalisation for an exacerbation (ideally PR should be accessed within two weeks of hospital discharge).
- People with bronchiectasis, interstitial lung disease or pulmonary hypertension.

Exercise training in pulmonary rehabilitation

Supervised exercise training should be offered to all people with COPD, irrespective of the availability of a structured multidisciplinary group education program.

Where can a pulmonary rehabilitation program be provided?

PR can be provided in hospital outpatient departments, in community facilities or at home. Home-based PR programs that include regular contact to facilitate exercise participation and progression, or community-based PR of equivalent frequency and intensity as hospital-based programs, can be offered to people with COPD as an alternative to usual care.

What happens after pulmonary rehabilitation?

It is important to keep exercising after the completion of a PR program. Current literature shows that maintenance programs of exercise supervised monthly, or less frequently, are insufficient to maintain the gains of PR and should not be offered.

Further research is needed in the following areas

- 1. Length of a PR program. There is a lack of evidence evaluating whether programs longer than the standard 8-week program duration are more effective.
- 2. Oxygen supplementation during exercise training. There is a lack of evidence evaluating whether oxygen supplementation during training is required in people whose oxygen levels fall during exercise.
- 3. Maintenance exercise programs. More research is needed to determine the most effective model.

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Development of Pulmonary Rehabilitation Guidelines

Members of the Pulmonary Rehabilitation Network of Lung Foundation Australia and members of the Thoracic Society of Australia New Zealand (TSANZ) were invited to submit an expression of interest to be considered for the Writing Group. In total, 28 healthcare professionals were appointed, with 11 of these forming the lead expert panel.

The research questions addressed in the guidelines were based on the expert panel's considered view of the nine most important questions related to PR in Australia and New Zealand. The questions were reviewed by a patient advocacy group and were constructed in accordance with the PICO (Population, Intervention, Comparator, Outcome) format. Systematic reviews were undertaken for each PICO question.

Conclusion

Given the compelling evidence for the benefits of PR, policy makers should ensure appropriate strategies are in place to enable equitable access to PR for people with COPD and other chronic lung conditions such as bronchiectasis, interstitial lung disease and pulmonary hypertension. Increased availability of PR programs and referral to these programs are vital to ensure improved patient access and increased patient participation in this effective evidence-based intervention.

References:

- ¹ Yang IA, Dabscheck E, George J, Jenkins S, McDonald CF, McDonald V, Smith B, Zwar N. The COPD-X Plan: Australian and New Zealand Guidelines for the management of Chronic Obstructive Pulmonary Disease 2016. Version 2.48, December 2016.
- ² McCarthy B, Casey D, Devane D, Murphy K, Murphy E, Lacasse Y. Pulmonary rehabilitation for chronic obstructive pulmonary disease. Cochrane Database of Systematic Reviews 2015, Issue 2. Art. No.: CD003793. DOI: 10.1002/14651858.CD003793.pub
- ³ Puhan MA, Gimeno-Santos E, Cates CJ, Troosters T. Pulmonary rehabilitation following exacerbations of chronic obstructive pulmonary disease. Cochrane Database of Systematic Reviews 2016, Issue 12. Art. No.: CD005305. DOI: 10.1002/14651858.CD005305.pub

Lung Foundation Australia Resources



Pulmonary Rehabilitation Toolkit

The Pulmonary Rehabilitation Toolkit is a resource for health professionals to design and deliver an evidence-based PR program to benefit people managing lung disease. www.pulmonaryrehab.com.au



Lungs in Action

Lungs in Action is a community-based exercise maintenance program specifically developed for people with stable, chronic lung disease. All Lungs in Action classes are run by exercise professionals who have been specially trained in exercising people with chronic lung conditions and heart failure. http://lungsinaction.com.au/

Stay Connected

Pulmonary Rehabilitation Network

In 2012 the Pulmonary Rehabilitation Network was developed with the main purpose of providing a forum for sharing ideas, providing peer support to new developing programs, and to promote increased access to pulmonary rehabilitation across Australia. The disciplines currently involved include but are not limited to physiotherapists, clinical nurses, respiratory specialist physicians, social workers, psychologists, occupational therapists and accredited exercise physiologists. Being a member of this network will provide access to the Pulmonary Rehabilitation Network Online Forum. Further information and enrolment documentation can be found at: www. http://pulmonaryrehab.com.au/pulmonary-rehabilitation-network/



Better Living with Exercise

Better Living with Exercise Your Personal Guide is designed to link health professionals and patients to help develop a personalised exercise program to improve self-management following PR. www.lungfoundation.com.au/ better-living-with-exercise-your-personal-guide/



Pulmonary Rehabilitation Training Online

Pulmonary Rehabilitation Training Online (PRT Online) is an interactive online training program for health professionals to increase their skills and confidence in the delivery of evidence-based, best practice PR. www.shop.lungfoundation.com.au/ product-category/training/

Airwaves Clinical Update

Airwaves Clinical Update is Lung Foundation Australia's bi-monthly newsletter which provides articles on the latest research into lung and respiratory disease as well as updates on the latest events, training and resources. This newsletter is available electronically for health professionals.

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