A pulmonary rehabilitation program should be considered for any patient who has underlying chronic lung disease and who is limited by dyspnoea.

Pulmonary rehabilitation programs require a health professional who has the expertise to conduct an exercise program and who is trained in cardiopulmonary resuscitation. For the educational component of the program, a multidisciplinary team of health professionals may be involved.

Implementing the Program

STEP 1 | Patient assessment

- Obtain medical history
- Assess smoking and nutritional status
- Perform spirometry
- Assess exercise capacity
  - Six-Minute Walk Test
    Perform two baseline 6MWTs with at least 30 minutes rest between tests.
  - Incremental Shuttle Walk Test
    Perform two baseline ISWTs with at least 30 minutes rest between tests.

- Assess quality of life
  - Chronic Respiratory Disease Questionnaire
  OR
  - St George’s Respiratory Questionnaire

- Assess breathlessness
  - Modified Medical Research Council Dyspnoea Scale
  OR
  - Modified Borg Dyspnoea Scale during exercise assessment

- Assess patient’s goals

Patients should be evaluated for contraindications and precautions to exercise. Supervisory staff should be aware of the criteria for termination of a test, and other important safety issues.

A primary goal of pulmonary rehabilitation is to reduce the patient’s perception of shortness of breath.

Helping patients to identify their most salient ‘problems’ can help patients to establish achievable and motivating ‘goals’.
Design an exercise program

- Lower limb endurance (walking, cycling)
  The following can also be included in a comprehensive program:
- Upper limb endurance (low weight, high repetition)
- Lower limb strength (high weight, low repetition)
- Upper limb strength (high weight, low repetition)
- Flexibility, stretching, balance

Determine appropriate exercise

- Intensity
- Duration
- Frequency

STEP 2 | Patient exercise training

- An improvement in exercise tolerance is one of the main benefits that can be obtained from a pulmonary rehabilitation program.
- Lower limb endurance training is the most important component of the exercise training program.
- Program length should be 6-8 weeks.

STEP 3 | Patient education

- Conduct educational sessions on:
  - The role and correct use of medications
  - Breathing techniques / managing breathlessness
  - Physical exercise
  - Nutrition / healthy eating
  - Information on diseases (e.g. what the lungs do)
  - Coping with chronic lung disease and management of depression, anxiety and panic attacks

STEP 4 | Program evaluation

- Evaluate the effectiveness of the program on:
  - Patient outcomes (exercise capacity, quality of life, breathlessness)
  - Patient feedback (using a patient satisfaction questionnaire)
- Communicate with patient’s GP / physician
  - Patient initial assessment
  - Patient final assessment

STEP 5 | Maintenance

- Continue to provide one supervised session a week for maintenance (if possible) or regular reassessment (every 6 months)
- Encourage patients to undertake a home exercise program
  - Start home training during supervised training program
  - Encourage three home training sessions per week

Further information on setting up and implementing a pulmonary rehabilitation program is available at www.pulmonaryrehab.com.au.
For further information on available pulmonary rehabilitation programs call The Australian Lung Foundation at 1800 654 301.