A 67 yo man with COPD has severe exertional dyspnoea and is receiving maximal inhaled bronchodilator therapy. He no longer smokes. Lung function tests are as follows:

- FEV1 0.54L (18% predicted)
- FEV1/FVC 19%
- TLC 7.96L (121% predicted)
- Residual Volume 5.09L (245% predicted)
- DLCO 6.1mL/min/mmHg (19% predicted)

Arterial blood gases on room air are as follows:
- PaO2 65mmHg
- PaCO2 52mmHg
- pH 7.36

Which of the following is the most appropriate management to reduce this man’s exertional dyspnoea?

A. Inhaled corticosteroids  
B. Pulmonary rehabilitation program  
C. Lung volume reduction surgery  
D. Supplemental oxygen  
E. Lung transplantation

**Pulmonary Rehabilitation:**
- Pulmonary rehabilitation is one of the most effective interventions in COPD and has been shown to reduce symptoms, disability and handicap and to improve function  
- This is achieved by:
  - Improving CV fitness, muscle function and exercise endurance
  - Enhance confidence and coping strategies, improve compliance and use of treatment devices
  - Improve mood by controlling anxiety and panic, decreasing depression and reducing social impediments

**Supplemental Oxygen:**
- Long-term continuous oxygen therapy is appropriate for patients who have PaO2 consistently < 55mmHg  
- Continuous oxygen can be used for patients with polycythaemia (Hb >170), pulmonary HT, right heart failure if stable PaO2 55-59mmHg  
- Intermittent oxygen therapy has not been proven to be of benefit but can be considered for:
  - Pts who desaturate on exertion – may improve exercise capacity
  - Isolated pts prone to sudden life-threatening episodes while awaiting medical attention
  - Pts travelling by air
- Nocturnal oxygen therapy can be used in pts who are hypoxaemic during sleep
  - That is if sats fall to < 88%  
  - Need to exclude sleep apnoea

**Inhaled Corticosteroids:**
- May reduce exacerbations in certain patients and may reduce the rate of decline in quality of life
- Has not been shown to improve symptoms as such

So answer is B pulmonary rehabilitation.