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**This month's question:** What is Aspen Healthcare's specialty?  
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**ASPEN**  **Healthcare**

Home Health & Hospice Services

*Pulmonary Rehab Specialists*

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## The Research Supporting At-Home Physical Therapy for COPD

COPD affects the lives of roughly 10% of the American population.<sup>1</sup> Those patients with declining health status, recent hospital discharges, or moderate disability due to COPD may be good candidates for additional programs designed to improve their quality of life and reduce overall health care spending. When patients are homebound, refer to Aspen Healthcare, *the Pulmonary Rehab Specialists*, for such programs. We can provide care plans involving nursing, interim aide services, home-based physical therapy, and more.

Currently, the most authoritative research paper on physical therapy for COPD is the meta-analysis by Salman et al., published in the *Journal of General Internal Medicine*.<sup>2</sup> Salman et al. combined 20 trials covering 979 patients. Interestingly, trials that used only respiratory muscle training showed no significant difference compared to control groups receiving no rehabilitation. However, patients receiving lower-extremity training only (training that can be accomplished readily in your patient's home) did significantly better on walking tests and on shortness of breath. Mild to moderate COPD cases responded well to both short-term and long-term rehabilitation, and severe COPD cases responded well to exercise training lasting six months or longer (a time period equating to three home health episodes).

This is not to say that home-based physical therapy should be limited to lower-extremity exercise. Current research also supports the theory that physical therapy for the upper extremities creates positive results in ventilator muscle recruitment.<sup>3-6</sup> Costi and colleagues found that when hand weight training was added to normal programs of pulmonary rehabilitation, patients showed significantly greater improvement in six second walking distance (+74 meters vs. +24 meters) and showed significantly greater improvement in dyspnea scores (-1.04 vs. -0.48).

Murphy and colleagues demonstrated that these physical therapy programs can be effectively delivered at home.<sup>7</sup> They compared patients receiving exercise training at home immediately after a hospitalization for COPD to patients receiving usual care. Early exercise training at home improved exercise tolerance, improved dyspnea scores, improved quality of life, and reduced the number of subsequent exacerbations.

Aspen therapists stand ready to design home exercise programs or continue supervision for programs initiated at inpatient facilities. In addition, we can teach energy conservation techniques that improve independence at home and coordinate the acquisition of helpful equipment. Furthermore, Aspen nurses and respiratory therapists can provide the teaching and observation that has been shown to reduce future hospitalizations and ED visits. 



### COPD Rehabilitation

- Upper Extremity Exercises
- Lower Extremity Exercises
- Breathing Exercises
- Energy Conservation Techniques
- Nursing for education, planning & coordination

### Respiratory Therapy on Staff



One of the strong differentiating factors of Aspen Healthcare's home health services is that, in addition to physical, speech, and occupational, we have respiratory therapy on-staff. This is not a service typically emphasized by Medicare, but as the Pulmonary Rehab Specialists, we know that adding this layer of expertise to our services is an important component of quality care.

**Please tell your patients about  
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