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Home Health & the Latest Research on
Cardiac Rehabilitation

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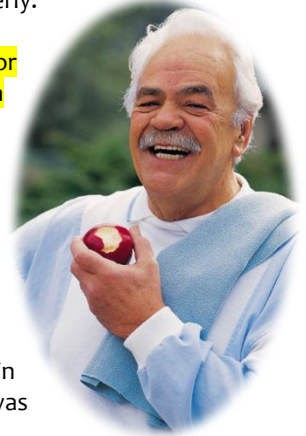
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The American College of Cardiology recommends cardiac rehabilitation for secondary prevention of coronary heart disease,¹ and research has established well the efficacy of cardiac rehabilitation at qualified centers. For instance, exercise training after myocardial infarction has been shown to improve functional capacity by 20-25%, reduce all-cause mortality by 24%, and reduce cardiovascular mortality by 25%.^{2,3} However, patients with cardiac disease have historically underutilized cardiac rehabilitation.^{4,5} Financial concerns and problems with transportation have been cited as two barriers to cardiac rehabilitation among the elderly.

Research has consistently shown home-based rehabilitation to be a good option for patients with heart failure, post myocardial infarction, or after revascularization procedure. Jolly and colleagues performed a meta-analysis including 21 studies on home-based cardiac rehabilitation.⁶ They found that home-based rehabilitation consistently out-performed usual care (i.e. medical care without center-based rehabilitation). For instance, compared to usual care, home-based rehabilitation created a significant reduction in systolic blood pressure and a drop in the rate of smoking. They also found that home-based rehabilitation was not inferior to center-based rehabilitation. While center-based rehabilitation created a trend toward better results in all but one measure, this trend never reached statistical significance even after combining the results of six separate trials. Therefore, the differences in outcomes were slight. The one outcome that favored home-based rehabilitation was adherence to the exercise programs and increase in physical activity.



Jolly et al note that the home-based rehabilitation programs included fairly different interventions. Some of the home-based interventions included in their meta-analysis used exercise only, some used intensive counseling only, and some used a combination of both. Very interestingly, although the programs were heterogeneous, their statistical outcomes were virtually the same. In other words, even patients who are not safe for home exercise will likely benefit from intensive, home-based counseling from a home health nurse. Jolly also notes that there is no established definition for "cardiac rehabilitation." Medicare fiscal intermediaries sometimes define cardiac rehabilitation as a facility-based service only, with a physician on premises, and with the equipment for immediate cardiopulmonary emergency diagnostics and therapeutics. Therefore, Medicare certified home health agencies sometimes resist orders phrased as "cardiac rehabilitation." However, as Jolly's meta-analysis demonstrated, counseling alone produces significantly positive outcomes for patients, and successful rehabilitation is often accomplished at home. When patients are homebound and are having cardiopulmonary difficulties, a referral to Florida Hospital Memorial Home Health (FHMHH) for "cardiovascular health teaching" would be appropriate. When these patients are safe to learn home-exercises under professional supervision at home, a referral for "cardiovascular health home exercise" would also be appropriate.

A healthy heart program from Florida Hospital Memorial Home Health would offer the important advantages of Medicare paying 100%, eliminating the transportation barrier, and probably inspiring greater physical activity in the future. Carlson et al found that using home-based rehabilitation as follow-up to center-based rehabilitation improved rates of exercise after discharge from the program.⁷ For your homebound patients, please consider healthy heart teaching and/or exercise as follow-up to center-based cardiac rehabilitation or in lieu of cardiac-rehabilitation for appropriate cases.

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References

1. Eagle K, Guyton R, Davidoff R, et al. ACC/AHA 2004 guideline update for coronary artery bypass graft surgery. (2004) *Circulation*, 110 (14), 340-437.
2. Jolliffe J, Rees K, Taylor R, et al. Exercise-based rehabilitation for coronary heart disease (Cochrane Review). In: *The Cochrane Library*, Issue 1, UK: John Wiley & Sons, Ltd.
3. Taylor R, Brown A, Ebrahim S, et al. Exercise-based rehabilitation for patients with coronary heart disease: Systematic review and meta-analysis of randomized controlled trials. *American Journal of Medicine*. (2004) 116: 682-692
4. Mark D, Naylor C, Hlatky M, et al. Use of medical resources and quality of life after acute myocardial infarction in Canada and the United States.(1994) *New England Journal of Medicine*. 331: 1130-35.
5. Wenger N, Forelicher E, Smith L, et al. (1995) *Cardiac Rehabilitation. Clinical Practice Guideline, #17*. Rockville: US Department of Health and Human Services, Public Health Service, Agency of Health Care Policy and Research and the National Heart, Lung and Blood Institute.
6. Jolly K, Taylor R, Lip G, Stevens A. "Home-based cardiac rehabilitation compared with centre-based rehabilitation and usual care: A systematic review and meta-analysis." *International Journal of Cardiology* 111 (2006) 343-51.
7. Carlson J, Johnson J, Franklin B, et al. Program participation, exercise adherence, cardiovascular outcomes, and program cost of traditional versus modified cardiac rehabilitation. (2000). *American Journal of Cardiology*, 86, 17-23.