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"On my honor, I pledge that I have neither given nor received any unauthorized assistance on this paper."

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Improving Access to Cardiac Rehabilitation

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Abstract

Despite the well-documented evidence of the effectiveness of cardiac rehabilitation (CR) in

reducing the recurrence of cardiovascular diseases (CVD) events, many patients are not able to

participate in center-based cardiac rehabilitation (CBCR) because of individual and/or logistical

barriers. The latest evidence demonstrates that home-based cardiac rehabilitation (HBCR)

produces outcomes similar to those of center-based CR and can be used as a safe and effective

alternative method of CR. A prospective quality improvement study was conducted to assess the

feasibility of introducing an HBCR program. Twenty-two patients at the lowest risk for exercise

participation were enrolled between February 2017 and March 2017 and underwent a 12-week

CR program. Ten patients were unable to attend CBCR and completed hybrid cardiac

rehabilitation (HBCR in addition to CBCR) and then were compared with patients who attended

CBCR alone. The HBCR group completed significantly more exercise sessions (32.9 \pm 9.7 vs.

 15.56 ± 9.1 , p = 0.00) and had a higher adherence rate (90% vs. 75%) compared to the CBCR

group. In conclusion, HBCR is an effective alternation to CBCR in low-risk patients.

Keywords: Cardiac rehabilitation, home-based, tele-rehabilitation, hybrid, eHealth