

DOES PARTICIPATION IN CARDIAC REHABILITATION AFFECT HEALTH OUTCOMES AND HEALTH CARE UTILIZATION AND COSTS?

Bill Daub, Northern Alberta Cardiac Rehabilitation Program, Capital Health; Shawn N. Fraser, University of Alberta; Colleen Norris, Approach Project, Edmonton, Alberta; Padma Kaul, University of Alberta; William Black, Northern Alberta Cardiac Rehabilitation Program, Capital Health

Background:

Exercise based cardiac rehabilitation (CR) programs have been shown to be efficacious in the reduction of recurrent cardiovascular events and increased physical and psychological function. However, in North America only about 10-40% of eligible CVD patients are referred to CR. One reason for poor CR referral may be a lack of information on the costs and health care utilization associated with CR. Thus, the purpose of this project was to explore differences in health care utilization and costs among patients who attended and did not attend cardiac rehabilitation.

Methods:

Records from 5279 patients who had undergone catheterization from 1995-1997 were examined to determine if CR was attended. Costs from medications, home care use, and insurance claims paid were compared between CR attendees ($n = 760$) and non-attendees ($n = 4519$) over the following year.

Results:

In terms of cost, raw data showed that there was no significant difference in total costs between those who did (\$4004) and did not attend (\$3764) CR. However, a closer look showed that those attending CR had lower drug (\$1116 vs. \$1256; $p < .05$) and homecare (\$297 vs. \$561; $p < .05$) costs, and higher claims paid (\$3389 vs. \$2860; $p < .001$) per person than those who did not attend CR.

Conclusions:

In terms of health care use, the number of hospital admissions and length of stay per person within a year were less for those who had attended CR ($p < .001$) than those who did not. Results also showed that CR attendees lived significantly longer ($p < .001$) and were almost half as likely to die. Considering the reduction in morbidity following CR it was concluded that CR was an efficacious and cost effective intervention.