

POSTER ABSTRACTS
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Evaluating Care Delivery
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Delivery of Outpatient Cardiac Rehabilitation in a Managed Care Organization

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Objective. To describe the overall rates, and rates by patient subgroups, of post-acute outpatient cardiac care, focussing on outpatient cardiac rehabilitation (OCR), following acute coronary heart disease (CHD) events in a managed care organization (MCO).

Methods. This was a retrospective review of cardiology and OCR medical records for Kaiser Permanente Georgia members 30 years of age and older following a CHD event (myocardial infarction [AMI] or major heart surgery such as coronary artery bypass [CABG] or percutaneous transluminal angioplasty [PTCA]) during 1997-1999 (N=945). Cardiology medical records were abstracted for evidence of post-acute visits, CHD-related counseling, and referral to OCR. For those who enrolled in OCR, OCR medical records were abstracted for data on assessment, prescription, and physiologic status on initial and final session. Logistic regression models were estimated for likelihood of referral to, and enrollment in, OCR. For those who enrolled in OCR, change in physiologic status was evaluated using parametric and non-parametric test statistics for paired data.

Results. Of the 945 CHD patients, 783 remained alive and enrolled for 12-months following the discharge date of the index event. 73.8% of these patients had at least one post-acute cardiologist visit. 18.0% were referred by the cardiologist to OCR; however, only 6.6% enrolled in OCR. Odds of referral to OCR were significantly ($p<0.05$) decreased among patients 65 years of age and older and PTCA events. Odds of enrollment in OCR were significantly decreased among patients 65 years of age and significantly increased among patients with a documented referral on a post-acute cardiologist consult. Of those who enrolled and completed the prescribed OCR program, significant improvements were noted for exercise heart rate, exercise heart rate as a percent of target heart rate, and METS ($p=0.02$, <0.01 , <0.01 , respectively, versus baseline).

Conclusions. In this MCO, less than 1-in-5 patients was referred to OCR on a cardiologist consult following an acute CHD event; and, about 1-in-15 enrolled in OCR. Enrollment in OCR was significantly related to whether or not the cardiologist referred the patient to OCR. Enrollment in OCR may, however, been adversely affected by barriers, such as limited hours of OCR operation, transportation barriers, and conflicting time commitments. Although nearly 20 years of research have consistently demonstrated benefits of OCR in reducing cardiovascular mortality and morbidity following acute CHD events, OCR remains generally underused.