## Factors associated with non-completion of cardiac rehabilitation - Men vs. Women

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**Introduction:** Research suggests physical and psychological health outcomes are improved with participation in cardiac rehabilitation (CR). Despite this evidence, patient drop out is common. Most studies investigating reasons for non-completion of CR have small sample sizes and few have compared differences between men and women. Purpose: To investigate gender differences in reasons why patients do not complete CR. Design: We used a cross-sectional study design for CR facilities participating in the Montana Outcomes Project. Methods: The sample included patients seen in CR programs participating in the Montana Outcomes Project from October 2011 through September 2012. Comprehensive outcomes data were collected using an Excel spreadsheet and reported quarterly. The reporting spreadsheet utilized a dropdown menu that included pre-defined reasons for non-completion of CR. Statistical analysis included ANOVA and Chi-square tests with p-value of  $\leq 0.05$  indicating significance. **Results:** The sample consisted of 3714 patients (2506 men vs. 1208 women). There was a significant difference in age between men and women (62.8 vs. 65.1 years). Overall, the most common primary diagnoses for both genders included percutaneous transluminal intervention (PCI) (29%), myocardial infarction (MI)/PCI (24%) and coronary artery bypass graft (CABG) (21%). Significant differences between men and women were noted among MI (5% vs. 8%), MI/CABG (5% vs. 3%) and CABG (23% vs. 17%). In addition, women had a significantly higher prevalence of diabetes compared to men (31% vs. 25%). No significant difference between men and women was noted among MI/PCI, PCI, angina, valve surgery and heart failure diagnoses. Common reasons for non-completion for both men and women included return to work, financial burden (e.g., high co-pay, not a covered benefit, no insurance), hospital readmissions, transportation issues and "other". Among men, "return to work" was a significant cause for noncompletion compared to women (17 and 9%, respectively). Among women, "hospital readmission" was significant cause for not completing CR compared to men (6 and 5%) respectively. Conclusions: Our findings suggest that there are gender differences in reasons for non-completion of CR. Key differences may be the result of age differences among those

attending CR as men tended to be younger and not of retirement age. In addition, differences in the complexity of disease presentation related to women such as higher rates of diabetes and MI (without PCI) prior to CR initiation. Our findings suggest that gender specific strategies may be needed in order to effectively reduce non-completion rates.