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Title: Differences in Cardiac Rehabilitation Outcomes over a 90 day Period Based on Gender

## **Abstract**

Introduction: Cardiac rehabilitation programs lead to better outcomes for patients after cardiac events. Lower rates of enrollment and adherence to cardiac rehabilitation programs have been shown in female patients. The goal of this study is to add to the research concerning differences between the sexes when participating in cardiac rehabilitation and to look at their outcomes from participation.

### Methods:

Data was collected on 25 male subjects and 25 female subjects selected randomly from patients enrolled in SSM Health St. Mary's cardiac rehabilitation program. The study is a descriptive non-experimental study with data collected via a retrospective chart review. The primary outcome is to observe a potential difference in rehospitalization within 90 days after enrollment between male and female patients. The secondary outcome is enrollment length out of 36 sessions. Descriptive statistics were used to compare rates of rehospitalization using Microsoft Excel 2016. In order to compare the event rates in our primary outcome a Fisher's Exact test was planned due to a low expected event rate.

### Results:

The average age for male subjects was 69 years and 66.4 years for females. There were no rehospitalizations secondary to cardiac events that occurred within 90 days of enrollment into the program in either group. Due to the lack of events in the primary outcome no further testing was performed. Out of 36 sessions males completed 27.2 (76%) of sessions while females attended 29 (81%) sessions on average.

# Conclusion:

Based on the data from this study we cannot say there is a difference in 90 day readmissions based on cardiac events based on gender. Information on readmission rates and attendance may be better found in a study that is larger in scope. Further research is required to provide more insight on the differences in readmission rates between different groups of patients.