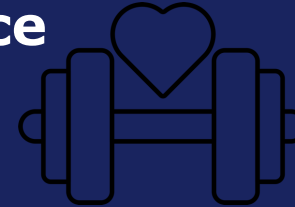




From Risk to Resilience

The Cardiac Rehabilitation Journey

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Healthcare Studies



INTRODUCTION

- Anna Jaques Hospital (AJH) offers a cardiac rehabilitation program for those who have experienced a cardiac episode.
- Cardiac rehab (CR) is a medically supervised exercise and counseling program that will assist the patients overcome the physical and psychological impact of heart disease. (AJH, 2025)
- The CR program at AJH includes prescribed exercise plans, education, counseling, and telemetry monitoring.
- Exercises are weightlifting (2-30 lbs.), walking/running on the treadmill, cycling, rowing and arm strengthening.
- Patients will attend the program from a range of 12-24 sessions to achieve their goal.
- Registered nurses, exercise physiologist, and nutritionist specialized in cardiology that are apart of the program to provide the services and the support for each patient.



RELATED LITERATURE

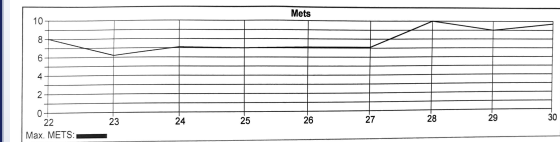
- "They found that exercise-based CR reduced overall and cardiovascular mortality [RR 0.87 (95% CI 0.75, 0.99) and 0.74 (95% CI 0.63, 0.87), respectively], as well as hospital admission rates [RR 0.69 (95% CI 0.51, 0.93)]" (Bellmann et al., Lin, Greissing, Rottner, Rillig, Simmerling, 2020)
- "Studies have found that cardiac rehabilitation decreases the chance that you will die in the 5 years following a heart attack or bypass surgery by about 35" (CDC, 2024)
- "One of the most valuable benefits of cardiac rehab is an improved quality of life. Some people who continue with cardiac rehab end up feeling better than they did before they had heart surgery or a heart condition." (Mayo Clinic, 2024)

INTERNSHIP PROJECT OBJECTIVE

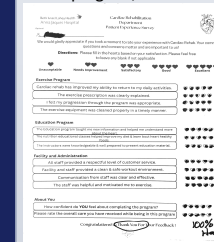
- Follow patients' progress in cardiac rehab and follow the METS, starting and ending heart rate, and starting and ending blood pressure and how effective the program is physically and personally.
- METS: The measure of the energy expenditure of physical activity.
- Heart Rate: The patients resting heart rate is collected before exercise and is monitored throughout class, when it is over the staff has the patient rest until their rate is in the range from their starting heart rate.
- Blood pressure: Before the patient leaves after exercise their blood pressure needs to be in a range no greater than 10 for both systolic and diastolic from resting rate.

MATERIALS & METHODS

- Assessed new patients and acquired patients' health records, cardiac event, weight, BP, HR, exercise status, and living conditions.
- Weighed in patients before every class and set them up with assigned telemetry monitor.
- Assisted patients with direction with their personalized exercise prescription.
- Monitored patients heart rate and blood pressure before, during, and after exercise.
- Checked up on patients progress with exercise and how the levels felt.
- With improved data of patients BP and heart rate exercise prescriptions increased
 - Each patient is prescribed with an exercise card that is based on their fitness level, cardiac event, medication, preference to exercise and of injury.
 - When the patient progress with each class the prescription will change to help them keep improving and reach their overall goal
- Patients were then discharged when they have reached their class limit and overall goal
- Upon being discharged, patients were presented a satisfactory survey



- The Chart above demonstrates a patients METS (Metabolic Equivalent of Task) levels from the start of the program to the end . This patient had attended and completed 30 rehab session. This patient's goal was to increase his energy level while working out. In the graph it shows that from when he first started, he was at 8 METS but then maintained around 7. At the end of the program, he succeed his goal and got up to 10 METS.



To the left is a satisfaction survey that I had created to collect data from the patients to see how beneficial this program was to them. This was handed out to each patient once they had graduated from the program. Each survey had shown that this program was highly beneficial to them during their cardiac Rehab journey!

CONCLUSIONS

- Overall, Patients who complete Cardiac Rehab at Anna Jaques Hospital will benefit. At Anna Jaques they provide a 12-24 rehab program for cardiac patients. With specialized nurses and exercise physiologist they help patients reach their end goal of recovering from their cardiac event and maintaining a heart healthy lifestyle. With the data collected, it is proven that this program has left patients satisfied and happy with their outcome of improvements.



REFERENCES

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ACKNOWLEDGEMENTS

- Site Supervisor: Claudia Olivia- Manger of Cardiac Rehabilitation at Anna Jaques Hospital