

Boosting Heart Health Through Active Living

The Benefits of Exercise for Cardiac Patients

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Introduction

Anna Jaques Hospital Cardiac Rehabilitation is a medically supervised therapy to help people recover after all kinds of heart conditions. The goal of cardiac rehabilitation is to make the patient feel physically and psychologically stronger. (AJH, 2024.)

- The program includes a range of services including cardiac risk factor modification, counseling, telemetry monitoring, educational classes, individual treatment plans, and support services.
- While being in the program patients are able to work with a variety of different healthcare professionals including but not limited to, exercise physiologists, nurses, respiratory therapists, and dietitians.
- Patients usually attend 12-24 rehab sessions to reach their goal. Exercises may include cycling, lifting weights, rowing, and walking on a treadmill.

Internship Project Objective

To visually measure the effectiveness and benefits on exercise of cardiac patients.

Related Literature

“Aerobic exercise or endurance training remains the mainstay of ET and includes treadmill walking, cycling, upper body ergometry, dancing, swimming, and playing sports (54). Aerobic training has been shown to reverse left ventricular remodeling in patients with HF who are clinically stable, results in improvements in aerobic capacity and peak oxygen uptake (Vo₂), and modifies cardiovascular disease risk factors (65). Moderate continuous training (MCT) is the most evaluated ET modality, as it is efficient, safe, and well tolerated by patients with HF (1).” (Bozkurt et al., 2021, p. 23)

“The evidence shows that rehabilitation may benefit any person with a long-lasting disability, arising from any cause, may do so at any stage of the illness, at any age, and may be delivered in any setting. Effective rehabilitation depends on an expert multidisciplinary team, working within the biopsychosocial model of illness and working collaboratively towards agreed goals. The effective general interventions include exercise, practice of tasks, education of and self-management by the patient, and psychosocial support.” (Wade, 2020, p. 47)



The Internship

- Worked one-on-one with each cardiac patient.
- Created workouts and participated with patients in the workouts if needed
- Formed bonds and trust with patients.
- Created individualized exercise prescription plans for each patient.
- Educated patients on their cardiac disease.
- Allowed patients to create their own exercise goals.

The Participants

- Up to 10 patients with cardiac problems
- Patient had to be independent enough to walk on their own, with the maximum walking assistance device being a cane.
- Some cardiac problems treated include heart disease, angina, cardiac arrest, heart transplants, and coronary artery bypass grafting.

Materials and Methods

- Observed new patient assessment and gathered information about patient, including diet, current exercise, quality of life, and past health concerns.
- Oriented new patients on how to set up telemetry monitor and read exercise prescription.
- Documented patients weight before every class and asked about any medication changes.
- Oriented patients on exercise machines that were prescribed for them. Asked patients how the level, rotations per minute, and speed felt. Asked how exerted they felt with the exercise.
- Upgraded patients' exercise prescriptions as patients strength and vitals improved.
- Discharged patients when exercise and health goal and/or when class limit was reached.

Methods for Prescribing Exercise Intensity

- Exercise and intensity are prescribed based on numerous factors: Individual cardiac event, individual level of fitness, presence of medication that may influence heart rate, risk of cardiovascular or orthopedic injury, individual preference of exercise, and individual program objectives and goals
- Continuous training imposes a submaximal energy requirement that is consistent throughout the training.

Acknowledgements and References

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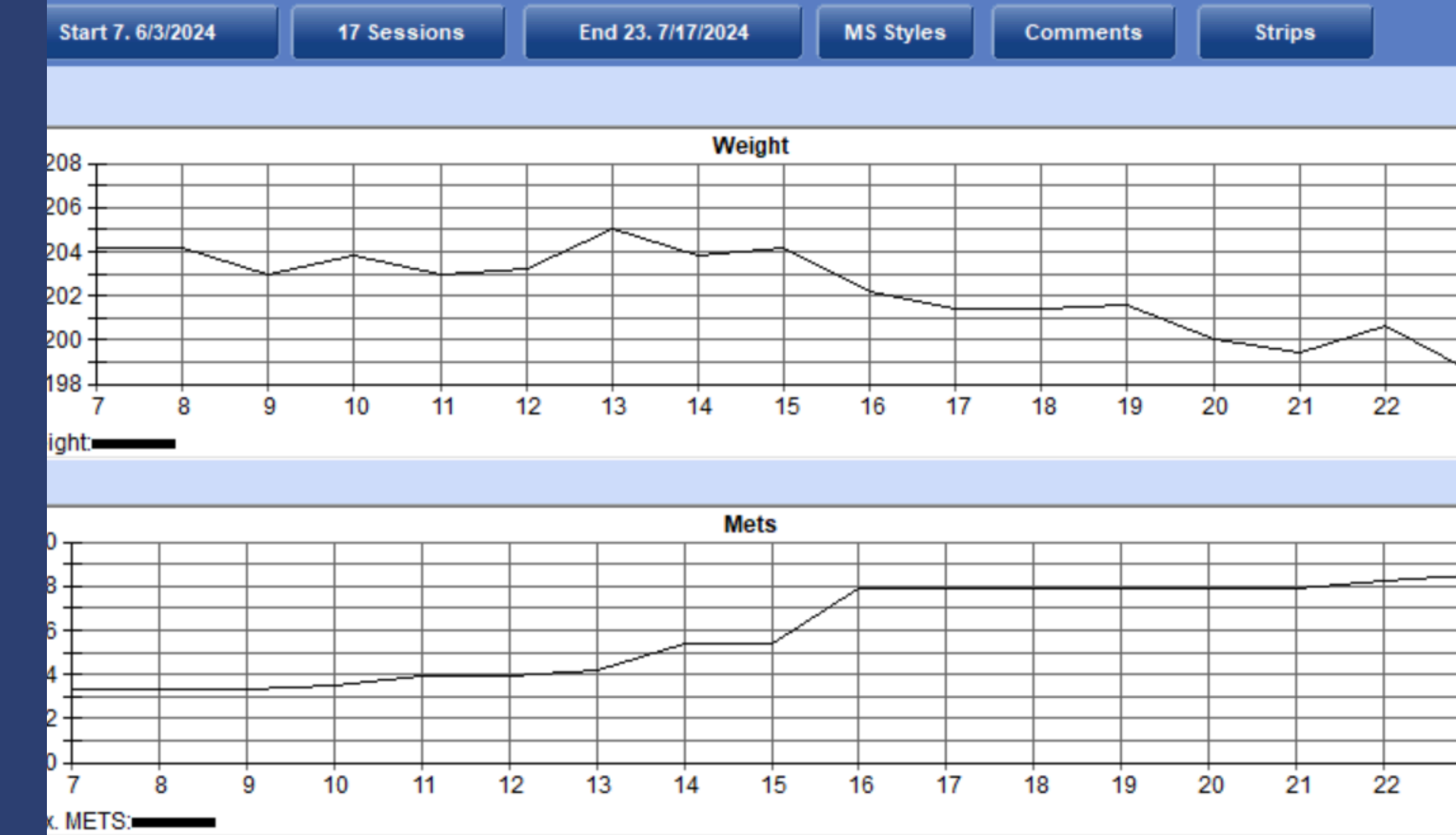
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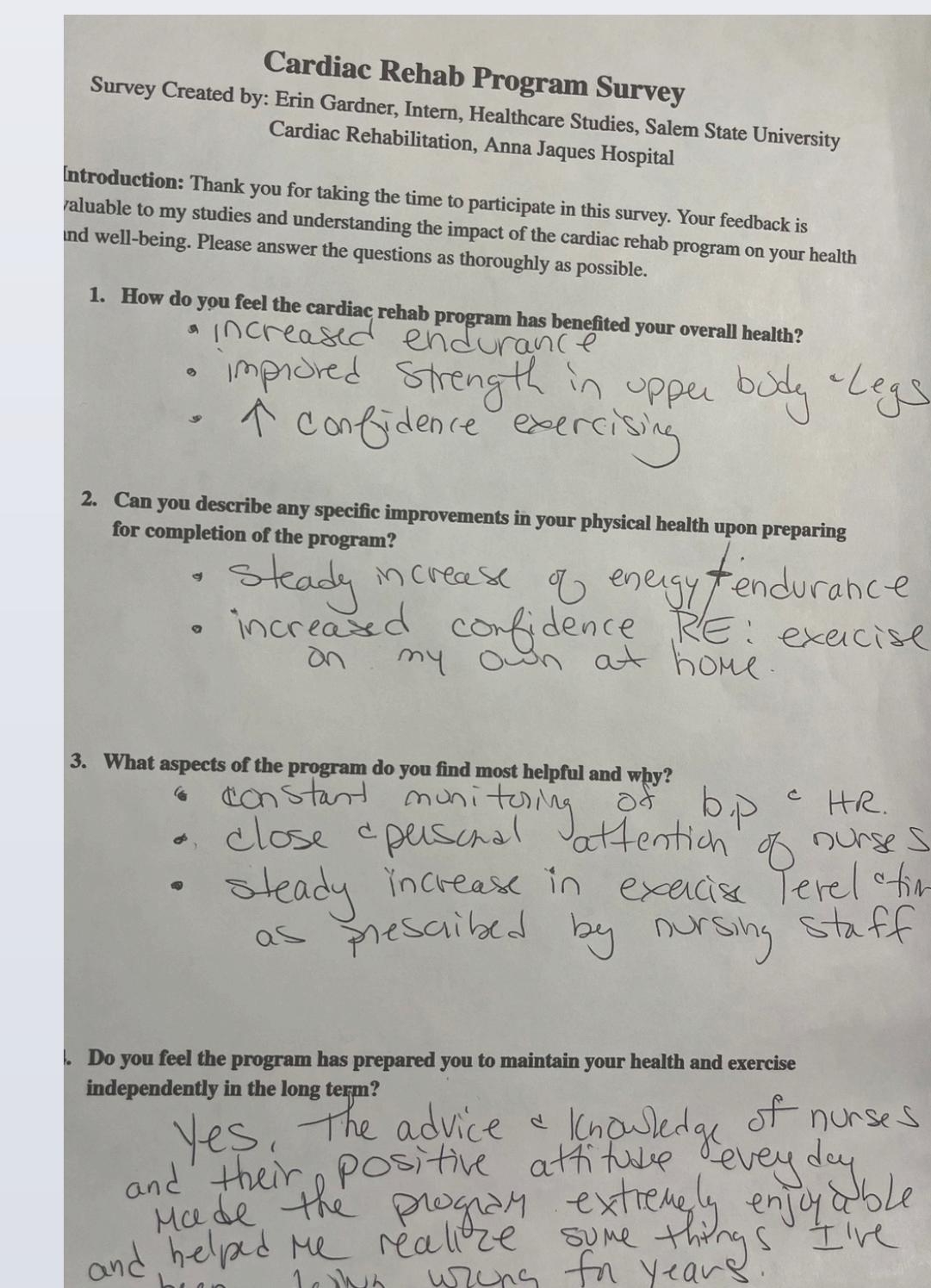
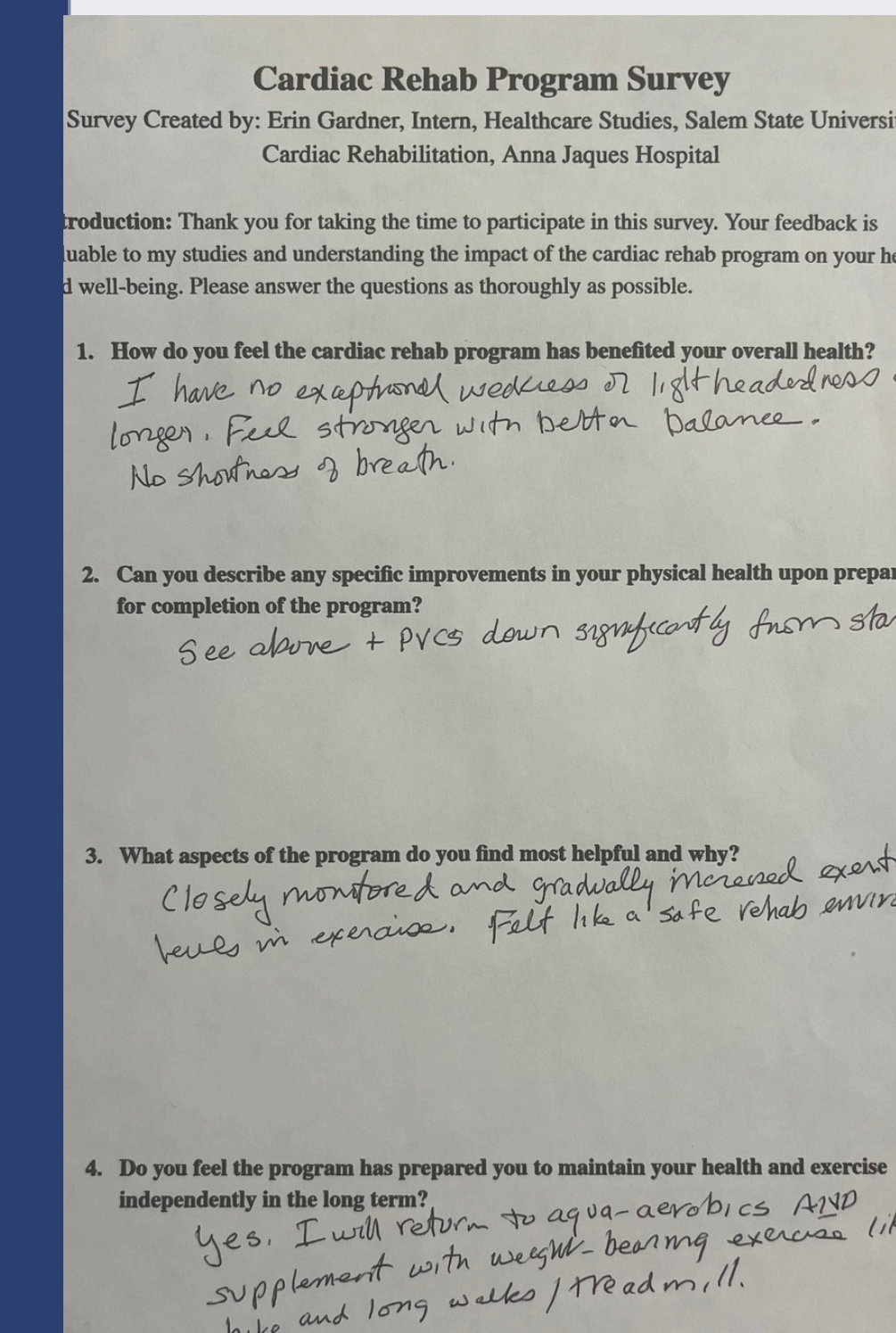
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Data and Observations



The charts above represent a patients' metabolic equivalents (METs) and weight scale after his final class. This patient completed 17 sessions of rehab. From his first to final class he dropped 5.7 pounds, which was part of his goal. His METs also increased which means he was able to use more energy than exerted when he first started.



Above are examples of a survey created to identify how patients have benefitted from the Cardiac Rehab program. The responses showed positive results about the program.

Conclusion

Anna Jaques Hospital provides cardiac rehabilitation that includes cardiac risk modification, telemetry monitoring, counseling, and so much more. The goal of the program is to help patients recover from their cardiac issues. Patients benefit from the advice from many different healthcare professionals. Observations and data collected show that patients have an outcome of mental and physical improvements.