

## Overview

The Bridgeport Hospital Cardiac Rehabilitation is certified by the American Association of Cardiovascular and Pulmonary Rehabilitation.<sup>3</sup>

**Location and Affiliation:** Bridgeport Hospital is affiliated with Yale New Haven Health and is located at 1305 Post Road, Fairfield CT.<sup>3</sup>

**Staff and Facility & Equipment:** The staffing includes Cardiac Nurses, Exercise Physiologists and a department secretary. They soon hope to expand and have a Registered Dietitian. The facility is smaller in size yet has all the equipment needed. This includes treadmills, NuStep, bicycles, and a stair master. They also have a full set of dumbbells ranging from 5-60lbs, resistance bands and stability balls. Each patient also wears portable EKG's that are closely monitored throughout each session. The facility also has RPE Borg Scales posted throughout the clinic. **Services:** The facility provides cardiovascular exercise and resistance training. They also provide education classes on topics including diet and nutrition, stress management, risk factor reduction, medications, and living a healthy lifestyle.

# **Priority Populations Served**

**Types/Diagnoses:** Heart attack, angioplasty/stent, chronic stable angina, congestive heart failure, coronary bypass, heart transplant, value repair or replacement, peripheral arterial disease (PAD), stroke patients with paralysis, cystic fibrosis, diabetes, and individuals who failed a stress test in preparation for musculoskeletal surgery.

**CVD Risk Factors**: Family history, hypertension, obesity, hyperlipidemia.

**General proportions:** Individuals who have an ejection fraction of 35% or less. Ages: 16-97 years old.

# Screening, Testing, & Safety

**Screening:** Patients are screened for CVD risk factors including family history, hypertension, obesity, and hyperlipidemia. During each session heart rate and rhythm is monitored using portable EKG machines. Blood sugar is taken before, during and after sessions. Blood sugar is also taken before and after sessions for individuals with diabetes.

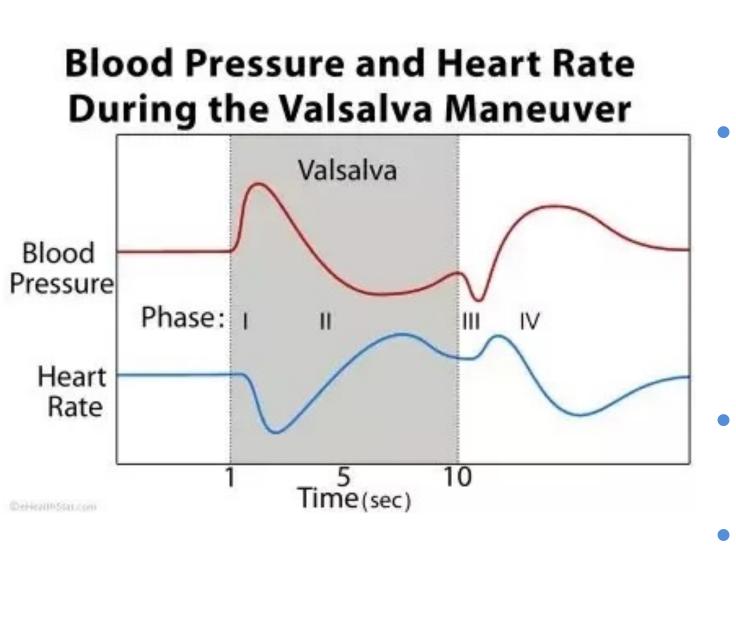
**Testing:** Stress tests are used as a common assessment to determine an individual's intensity and measure the heart's response to a stimulus.

**Safety:** The entirety of the staff is CPR certified. There is always a cardiologist on site and is called into the clinic as soon as they are needed. They also have a privacy screen to put up for anyone who needs to be assessed.

# **Bridgeport Hospital Cardiac Rehabilitation**

Lizzie Sherwood, Katie Delaney, Karlee Russo, Nina Bamberger, Sam McGann, Meaghan Reck [Mentor: Wendy Bjerke] **College of Health Professions** Department of Physical Therapy and Human Movement Science

### **Research Snapshot**

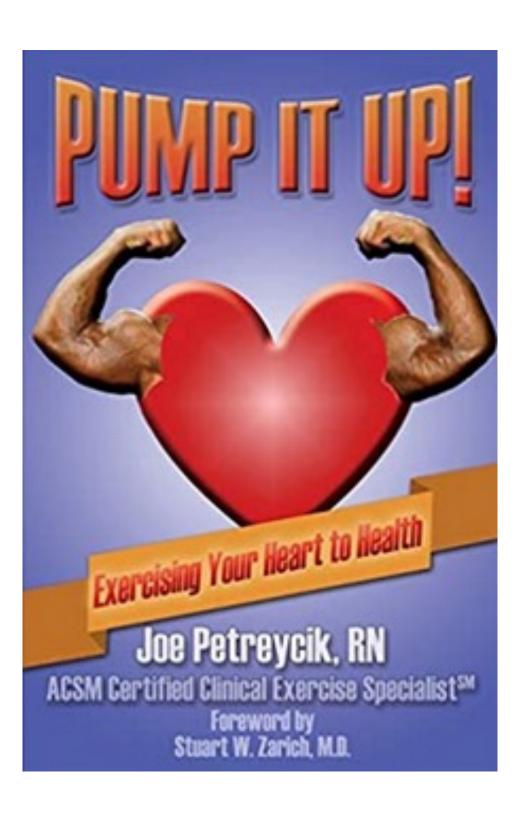


exercise performance.<sup>2</sup> may increase this response.<sup>2</sup>

• It is the combination of aerobic exercise with resistance training that is more beneficial for cardiac patients. This allows for increase muscle strength as well as increased cardiorespiratory health.<sup>2</sup>

<b>Example Exercise</b> "Tailored towards participant's		Active Time	Specifics
physical capability." -Exercise classes:	Treadmill	30:00	Walking at comfortable pace.
<ul> <li>I hour total: 45 minutes cardiovascular exercise and 15 minutes of resistance</li> </ul>		15:00	Moving at comfortable speed.
<ul> <li>training.</li> <li>Focus consists of aerobic f flexibility, and resistance t</li> <li>Resistance training: weigh</li> </ul>	itness, raining. Resistance Training	15:00	3 sets x 10 reps - Military Press - Squats - Bicep Curls

Resistance training: weights, Danus, and stability balls.



# What Distinguishes Bridgeport **Hospital From Other Programs?**

The director of the program is a SHU Exercise Science Graduate (2001), also holds a nursing degree. He is a bodybuilder, former Mr. Connecticut, and is competing in the same competition this year. Joe also published a book about resistance training for cardiac patients. As a result, a distinguishing feature is a wide variety of weight options for patients.

- cardiovascular exercise.
- more active populations.
- weights.

This work was presented at the 2023 Sacred Heart University Exercise Science Capstone Symposium

Cardiac rehabilitation programs including aerobic and resistance training improve quality of life, physical function and exercise capacity (average increase of 5.2 ml/kg/min).<sup>2,4</sup> Resistance training increases muscle strength (from 20% 1-RM to 80%), endurance, and

The acute response during resistance training is an increased blood pressure and heart rate due to higher pressure response. This response is based on load and intensity. The Valsalva maneuver should be avoided as it

Individuals with untreated HTN experienced 5mmHg decrease SBP and 3mmHg decrease DBP.<sup>2</sup>

• Emphasis on resistance training along with

Dumbbells up to 60lbs to accommodate stronger and

• Patients can choose their own cardio machines and

Class schedule is extended to accommodate a wider population of working individuals.

- 21% Hospitals

### RN

# YaleNewHavenHealth **Bridgeport Hospital**



## References

- https://www.bls.gov/
- doi:<u>10.1016/j.cger.2019.07.005</u>
- doi:10.1016/j.ijcard.2016.12.076

### **Job/Career Information**

**Exercise Physiologists** 

65% Self-employed at Outpatient Center 4% Private offices (PT, OT, Speech, Audiologists, Physicians) • 2% Government

60% Hospitals • 18% Ambulatory 6% Nursing/Residential Facilities 6% Government • 3% Educational Services 'Follow where your heart is!" -Joe Petreycik

Bureau of Labor and Statistics (2023). Retrieved from

Khadanga S, Savage PD, Ades PA. Resistance Training for Older Adults in Cardiac Rehabilitation. *Clin Geriatr Med*. 2019;35(4):459-468.

Bridgeport Hospital. Retrieved from <a href="https://www.bridgeporthospital.org/">https://www.bridgeporthospital.org/</a> Xanthos PD, Gordon BA, Kingsley MIC. Implementing resistance training in the rehabilitation of coronary heart disease: A systematic review and meta-analysis. International Journal of Cardiology. 2017;230:493-508.