

Cardiac Rehab and Secondary Prevention programs are becoming increasingly involved in the comprehensive care of patients with heart failure. Cardiac Rehab represents an ideal setting to address disease-specific education and medication reconciliation, as well as to provide clinical surveillance aimed at preventing rehospitalization by identifying signs and symptoms of cardiac decompensation and referring for treatment.¹

After a review of evidence sufficient to determine that cardiac rehabilitation for Medicare beneficiaries with chronic heart failure significantly improves health outcomes, CMS has announced the decision to include heart failure patients who have an ejection fraction of 35% or less and New York Heart Association (NYHA) class II-IV symptoms despite being on optimal heart failure therapy for at least 6 weeks.²

It is essential that CR professionals become experts in assessing patients for early signs of HF, including auscultation of heart and lung sounds, assessing for peripheral and central edema, and monitoring weight gain. The following guidelines utilize the FITT Principle to prescribe a safe and beneficial exercise training program in order to achieve optimal outcomes for patients with heart failure. For patients with an initially very poor exercise tolerance it may be helpful to begin with intermittent instead of continuous exercise, such that one continuous 30 minute bout of exercise is broken up into 3 or 4 separate bouts interspersed with brief rest periods. Extended warm-up and cool-down periods are also recommended.¹

AEROBIC TRAINING

FREQUENCY	INTENSITY	TIME	TYPE
Minimum of 3 days per week, but preferably on most days of the week.	40% to 80% of HRR; RPE 11 to 14 (where HRR is not appropriate)	20 to 60 min/ session	Dynamic activities involving large muscle groups

These parameters should be adjusted such that the total volume of aerobic exercise is gradually, safely and consistently increased to 180-360 MET-min/week. Before the start of a resistance training program, it is important that the patient first demonstrate that they can tolerate the aerobic training component, which usually requires about 3 to 4 weeks.¹

RESISTANCE TRAINING

FREQUENCY	INTENSITY	TIME	TYPE
2 or 3 days a week	50% to 70% 1RM for lifts involving the hips and lower body; 40% to 70% 1RM for lifts involving the upper body	20 to 30 min/ session; Contraction should be performed in a rhythmical manner at a moderate to slow controlled speed	8 to 10 muscle specific exercises involving resistance bands, weight machines, handheld weights, or combination; begin with one set of 10 to 15 repetitions

¹ AACVPR Guidelines for Cardiac Rehabilitation and Secondary Prevention Programs, 5th Edition.

² AACVPR statement Nov 22, 2013.

EVERY DAY

Every day you should:

- Weigh yourself in the morning before breakfast, write it down and compare it to yesterday's weight
- Take your medication as prescribed
- Check for swelling in your feet, ankles, legs and stomach
- Eat low salt food
- Balance activity and rest periods

? WHICH HEART FAILURE ZONE ARE YOU TODAY? GREEN, YELLOW OR RED?

GREEN ZONE

GOAL

Your symptoms are under control if you have:

- No shortness of breath
- No weight gain of more than 2 pounds in one day (it may change 1 or 2 pounds some days)
- No swelling of your feet, ankles, legs or stomach
- No chest pain
- No inability to do your usual activities

YELLOW ZONE

CAUTION

Call your doctor's office if you experience any of the following:

- A weight gain of 3 pounds in one day or 5 pounds or more in one week
- More shortness of breath than usual
- More swelling of your feet, ankles, legs or stomach than usual
- No energy or feeling more tired
- Dry, hacking cough
- Dizziness
- Feeling uneasy (you know something is not right)
- Difficulty breathing while lying down (need to sleep sitting up in a chair)

RED ZONE

EMERGENCY

Go to the Emergency Room or call 911 if you experience any of the following:

- Struggling to breathe
- Chest pain
- Confusion or can't think clearly