### Overview of the Condition/Disease

**Definition:** Heart failure results from any structural or functional cardiac disorder that impairs the ability of the ventricle(s) to fill with or eject blood.

**Pathophysiology:** The heart muscle compensates for the structural or functional cardiac disorder by enlarging, developing more muscle mass, and pumping faster. In addition, blood vessels narrow to keep blood pressure up and the body diverts blood away from less important tissues and organs (kidneys) to the heart and brain. An adaptive response results in fluid and salt retention.

#### Types of heart failure:

- Left-sided heart failure with reduced ejection fraction < 40 or preserved ejection fraction > 50
- Right-sided heart failure typically occurs as a result of left-sided failure
- Congestive heart failure

### Best Practice Standards for Prevention and Management

**Education:** Stress the importance of medication adherence, care plan adherence, and maintaining doctor appointments

#### Interventions:

- Daily weights with parameters of when to call MD
- Fluid restriction
- Salt restriction
- Pharmacologic therapy
- Cardiac Rehabilitation program for those who do not have advanced arrhythmias and who do not have other limitations to exercise
- Pneumococcal vaccination and annual influenza vaccination
- IDT to coordinate with provider/cardiologist managing disease process

**Lifestyle changes:** Heart-healthy eating, aiming for a healthy weight, physical activity, quit smoking, avoid drinking alcohol

**Device therapy:** Cardiac resynchronization therapy (CRT) with biventricular pacing and/or implantable cardioverter-defibrillator (ICD)



1 Updated: 04/06/2022

#### Additional conditions that negatively impact the condition/disease:

• overweight	<ul> <li>treatments for cancer (radiation and chemotherapy)</li> </ul>
• history of myocardial infarction (MI)	thyroid disorders
coronary heart disease	HIV/AIDS
high blood pressure	• alcohol and other drug abuse (AODA)
• diabetes	depression

### O Anticipating, Recognizing, and Responding to Symptoms

Seek timely medical attention when current interventions and/or medications are not managing symptoms.

Potential symptoms: Fatigue and shortness of breath after routine physical effort.

**Manifestation of symptoms:** Swelling in the ankles, feet, legs, abdomen, and veins in the neck, pulmonary edema, pleural effusion

**N** Interventions to manage symptoms: Prescribed medications may include:

- *ACE inhibitors* lower blood pressure and reduce strain on the heart. They also may reduce the risk of a future heart attack.
- *Aldosterone antagonists* trigger the body to remove excess sodium through urine. This lowers the volume of blood that the heart must pump.
- *Angiotensin receptor blockers* relax the blood vessels and lower blood pressure to decrease the heart's workload.
- *Beta blockers* slow the heart rate and lower blood pressure to decrease the heart's workload.
- *Digoxin* is used especially for heart failure in people with abnormal heart rhythms.
- *Diuretics* help reduce fluid buildup in the lungs and swelling in the feet and ankles.
- *Isosorbide dinitrate/ hydralazine hydrochloride* helps relax the blood vessels, so the heart doesn't work as hard to pump blood.

**Contraindicated medications:** NSAIDs, anti-arrhythmic drugs, calcium channel blockers, thiazolidinediones



# Didelines and Process for Interdisciplinary Team

Resources for negotiating incorporation of condition/disease prevention and management plan into the Member Centered Plan (MCP):

- MCP Policy
- Motivational Interviewing techniques
- Collaboration with Primary Care Provider (PCP) and/or Cardiologist

### Quality Assurance Monitoring

Members with diagnosis will be placed in a cohort with an identified start date. Cohort data will be analyzed at the one year, 18-month, and two-year timeframe for overall health outcomes.

### Additional Resources

Heart Failure Zoon Tool – English Heart Failure Zone Tool – Arabic Heart Failure Zone Tool – Chinese Heart Failure Zone Tool – Hmong Heart Failure Zone Tool – Lao Heart Failure Zone Tool – Russian Heart Failure Zone Tool - Serbian Heart Failure Zoon Tool - Spanish



- American Heart Association. (2017-a). Treatment options for heart failure. Retrieved from <u>http://www.heart.org/HEARTORG/Conditions/HeartFailure/TreatmentOptionsForHeartFailure/TreatmentOptions-for-Heart-Failure\_UCM\_002048\_Article.jsp</u>
- American Heart Association. (2017-b). Warning signs of heart failure. Retrieved from <u>http://www.heart.org/HEARTORG/Conditions/HeartFailure/WarningSignsforHeartFailure\_UCM\_002045\_Article.jsp</u>
- American Heart Association. (2017-c). What is heart failure. Retrieved from <u>http://www.heart.org/HEARTORG/Conditions/HeartFailure/AboutHeartFailure/What-is-Heart-Failure\_UCM\_002044\_Article.jsp</u>

Colucci, W. S. (2017). Overview of the therapy of heart failure with reduced ejection fraction. In S. B. Yeon (Ed.), *UpToDate*. Retrieved December 15, 2017 from https://www.uptodate.com/contents/overview-of-the-therapy-of-heart-failure-with-reduced-ejection-fraction?source=history\_widget



3 Updated: 04/06/2022

