

## Adult Heart Failure Care Path

(≥ 18 years old)

### Screening and Diagnosis

Congestive heart failure is a clinical diagnosis. Signs and symptoms may include: shortness of breath, paroxysmal nocturnal dyspnea, orthopnea, signs of volume overload (edema, abdominal distension, weight gain). Echocardiogram should be performed to assess congestive heart failure with preserved or reduced systolic function.

Classification: Heart failure with (1) preserved ejection fraction (EF) – with EF>40% depending on modality used is assessing heart function, and heart failure with (2) reduced EF - <40-55% depending on modality used.

### Treatment

#### *Heart Failure with reduced EF < 40%\**

- Fluid restriction: < 1.5 – 2 liters per day
  - Low sodium intake: < 2 grams sodium
  - Daily weight monitoring
  - Angiotensin converting enzyme inhibitor (ACEi) or Angiotensin receptor blocker (ARB) AND *beta-blocker*\*
  - Diuretic therapy
- Consider: African American individuals class III-IV HF; hydralazine-nitrates
- Consider: spironolactone class II-VI HF
- Consider: digoxin in class II-IV HR but keep digoxin level < 0.8

#### **Diagnostic Tests:**

- Labs: Complete Blood Count, Urinalysis, complete metabolic panel, lipid profile, thyroid stimulating hormone, glucose, B-type Natriuretic Peptide, Iron Level
- EKG
- Chest X-ray
- Echocardiogram

#### *Heart Failure with EF > 40%*

- Fluid restriction may be necessary
- Low sodium intake < 2 grams sodium
- Control blood pressure according to hypertension guidelines; Angiotensin converting enzyme inhibitor (ACEi) or Angiotensin receptor blocker (ARB) and Beta-blockers recommended
- Diuretic therapy for symptoms
- Daily weight monitoring

## Reassessment

Every 1-2 weeks after initial diagnosis if symptomatic, If on diuretic, angiotensin-converting enzyme (ACE) inhibitors, angiotensin II receptor blockers (ARBs), or Spironolactone, basic metabolic profile (BMP) should be performed every 1-2 weeks until stable. Follow up every 6-12 months if clinically stable.

## Patient Engagement

- Offer heart failure education annually
- Offer reconciled medication list
- Daily weight monitoring with communication to treating physician
- Offer dietician support
- Encourage regular physical activity

## Specialist Consult

### When to Refer:

- Symptomatic heart failure with reduced EF to assess etiology
- EF < 35%
- Left bundle branch block
- History of coronary artery disease / myocardial infarction
- History of syncope
- Atrial fibrillation
- Valvular pathology

### Evaluation to Consider:

- Ischemic workup
- Screening (if appropriate) for hemochromatosis, HIV, rheumatologic conditions, amyloidosis, pheochromocytoma

\*Measured care path metrics

Please note: The Via Christi Health Alliance in Accountable Care, Inc. (the "ACO") in consultation with its affiliated ACO providers developed these care pathways and guidelines based on the most recent evidenced based medicine data. The ACO is continually researching and updating its care pathways and guidelines to reflect the most recent evidence based standards. This information is intended to provide health professionals with information to improve the quality of care and ultimately lower the cost of such care to the patients they serve. By providing this evidence based information, it is not the intention of the ACO to provide specific medical advice for particular patients. Rather we urge each provider to review this material when consulting and evaluating the treatment options suitable for their patients. The ACO affiliated providers are solely responsible for confirming the accuracy, timeliness, completeness, appropriateness and helpfulness of this material and making all medical, diagnostic or prescription decisions.

<b>New York Heart Association (NYHA) Classification of heart failure symptoms</b>	
<b>Class I</b>	People whose physical activity is not limited. Ordinary physical activity does not cause undue fatigue, heart palpitations, trouble breathing, or chest pain.
<b>Class II</b>	People who have some limitation on physical activity. They are comfortable at rest, but ordinary physical activity causes fatigue, heart palpitations, trouble breathing, or chest pain.
<b>Class III</b>	People who have a marked limitation on physical activity. They are comfortable at rest, but less-than-ordinary physical activity causes fatigue, heart palpitations, trouble breathing, or chest pain.
<b>Class IV</b>	People who are unable to carry on any physical activity without discomfort. Symptoms may be present even at rest. If any physical activity is done, discomfort increases.

References:

1. American College of Cardiology Foundation Heart Failure Guidelines/GuidelineCentral.com.2013.
2. UpToDate.com/Heart Failure. (Document referred.) Date accessed 11/6/2014.

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