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.

Stages of Heart Failure

**At Risk for Heart Failure**

- **Stage A**
  - At high risk for HF but without structural heart disease or symptoms of HF

- **Stage B**
  - Structural heart disease, but without signs and symptoms

**Heart Failure**

- **Stage C**
  - Structural heart disease with prior or current symptoms of HF

- **Stage D**
  - Refractory HF

**Patients with:**
- **Stage A**
  - HTN
  - Atherosclerotic disease
  - DM
  - Obesity
  - Metabolic syndrome
  - OR

**Patients with:**
- **Stage B**
  - Previous MI
  - LV remodeling including LVH and low EF
  - Asymptomatic valvular disease

**Stage C**

- Previous MI
- LV Remodeling including LVH and low EF
- Asymptomatic valvular disease

**Patients with:**
- **Stage D**
  - Previous MI
  - LV Remodeling including LVH and low EF
  - Asymptomatic valvular disease

**Goals**
- **Stage A**
  - Heart Healthy lifestyle
  - Prevent vascular, coronary disease
  - Prevent LV structural abnormalities

**Goals**
- **Stage B**
  - Prevent HF symptoms
  - Prevent further cardiac remodeling
  - Discuss advanced care planning

**Drugs**
- **Stage A**
  - ACEI or ARB in appropriate patients for vascular disease or DM
  - Statins as appropriate

**Drugs**
- **Stage B**
  - ACEI or ARB in appropriate patients for vascular disease or DM
  - Beta-blockers as appropriate

**In selected patients**
- **Stage A**
  - ICD
  - Revascularization or valvular surgery as appropriate

**In selected patients**
- **Stage B**
  - CRT
  - CRT

**Therapy**
- **Stage C**
  - Control symptoms
  - Patient education
  - Improve HRQOL
  - Encourage outpatient management

**Drugs for routine use**
- **Stage C**
  - Diuretics for fluid retention
  - ACEI or ARB
  - Beta-blockers
  - Aldosterone antagonists

**Drugs for use in selected patients**
- **Stage C**
  - Hydralazine/isosorbide dinitrate
  - ACEI and ARB
  - Digitals

**In select patients**
- **Stage C**
  - CRT
  - ICD

**Therapy**
- **Stage D**
  - Control symptoms
  - Improve HRQOL
  - Reduce hospital re-admissions
  - Establish patient’s end-of-life goals

**Options**
- Advanced care measures
- Heart transplant
- Chronic inotropes
- Temporary or permanent MCS
- Experimental surgery or drugs
- Support care with regards to goals of care
- ICD deactivation
- Hospice care

Referral for Specialist Consult Appropriate

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

### 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 utilizing a team based approach. (e.g. Nurse, Pharm D, etc.)
- Offer reconciled medication list
- Daily weight monitoring with communication to treating physician
- Offer dietician support
- Encourage regular physical activity

### Specialist Consult
**When to Refer:**
- Stage C
- 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 hemochromotosis, HIV, rheumatologic conditions, amyloidosis, pheochromocytoma

*Measured care path metrics

### References:
2. UpToDate.com/Heart Failure. (Document referred.) Date accessed 11/6/2014.