Management of Congestive Heart Failure

BACKGROUND

Heart failure (HF) is a major and growing public health problem in the United States. Approximately 5 million patients in the country have heart failure and there will be approximately 550,000 new cases of heart failure each year. Heart failure accounts for approximately 12 to 15 million office visits each year and 6.5 million hospital days each year. The total estimated cost for heart failure is about 27.9 billion dollars each year and 2.9 billion of that is spent on drugs.

The American College of Chest Physicians (ACCF) and the American Heart Association (AHA) (2013) issued a joint guideline on the management and treatment of individuals with heart failure (HF). Key items are below.

**History and Physical Examination**

Providers should review the following items during the **history** portion of their assessment of the Member:

- Potential clues suggesting etiology of HF
- Duration of illness
- Severity and triggers of dyspnea and fatigue, presence of chest pain, exercise capacity, physical activity and sexual activity
- Anorexia and early satiety, weight loss
- Weight gain
- Palpitations, (pre)syncope, ICD shocks
- Symptoms suggesting transient ischemic attack or thromboembolism
- Development of peripheral edema or ascites
- Disordered breathing at night, sleep problems
- Recent or frequent prior hospitalizations for HF
- History of discontinuation of medications for HF
- Medications that may exacerbate HF
- Diet
- Adherence to medical regimen

Providers should review the following items during the **physical examination** portion of their assessment of the Member:

- BMI and evidence of weight loss
- Blood pressure (supine and upright)
- Pulse
- Examination for orthostatic changes in blood pressure and heart rate
- Jugular venous pressure at rest and following abdominal compression
- Presence of extra heart sounds and murmurs
- Size and location of point of maximal impulse
- Presence of right ventricular heave
- Pulmonary status: respiratory rate, rales, pleural effusion
Clinical Signs & Lab Values to Obtain

- Hepatomegaly and/or ascites
- Peripheral edema
- Temperature of lower extremities

In addition, Providers should request the following laboratory tests to further assess the Member:
- Complete blood count, urinalysis, serum electrolytes (including calcium and magnesium), blood urea nitrogen, serum creatinine, glucose, fasting lipid profile, liver function tests, and thyroid-stimulating hormone
- Serial monitoring, when indicated, should include serum electrolytes and renal function
- A 12-lead ECG should be performed initially on all patients presenting with HF

Stages of Congestive Heart Failure
(Source: Yancy & et al., 2013)

Stage A  At risk for heart failure, but without structural heart disease or symptoms of heart failure. (e.g. patients with hypertension, atherosclerotic disease, diabetes, obesity, metabolic syndrome)

Stage B  Structural heart disease, but without signs or symptoms of heart failure. (e.g. patients with previous MI, left ventricular remodeling including LVH and low ejection fraction, asymptomatic valvular disease)

Stage C  Structural heart disease with prior or current symptoms of heart failure. (e.g. patients with known structural heart disease and shortness of breath and fatigue, reduced exercise tolerance)

Stage D  Refractory heart failure requiring specialized interventions. (e.g. patients who have marked symptoms at rest despite maximal medical therapy)

Treatment Goals for Each Class
(Source: Yancy & et al., 2013)

Stage A  Treat all other diseases (e.g. hypertension, diabetes, lipid disorders, etc.), encourage smoking cessation, discourage alcohol use, discourage illicit drug use, encourage exercise. Drug therapy includes ACE (angiotensin converting enzyme) inhibitor or ARB (angiotension II receptor blocker) in appropriate patients for vascular disease and diabetes.

Stage B  Take into account all of the steps for class one. Drug therapy includes ACE inhibitor or ARB’s. Also beta-blockers for appropriate patients.

Stage C  Take into account all of the steps for classes one and two. Also include dietary salt restriction. Drug therapy includes diuretics for fluid retention, ACE inhibitor, and Beta-blockers. For selected patients, treatment may include Aldosterone antagonist, ARB, Digitalis, Hydralazine, or Nitrates.

Stage D  Take into account all of the steps for the first 3 classes. Also reassess appropriate level of care.

Clinical Practice Guideline
Education

- Educate patient on weight reduction, including diet and exercise. Patients should be instructed to record weight daily at home and contact the physician if there is any weight gain of more than 3-5 pounds since the last exam.
- For diabetic patients, educate on how to take blood glucose levels, keep logs, and set goals for patient.
- If patient has hypertension, educate how to obtain blood pressure scores and set goals.
- Provide information on various side effects of medications; for those not listed, patients should contact physician.

<table>
<thead>
<tr>
<th>Medication Type</th>
<th>Side Effects</th>
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<tbody>
<tr>
<td>Aldosterone Antagonist</td>
<td>breast tenderness in females, deepening of voice in females, diarrhea, dizziness, drowsiness, headache, increased hair growth in females, irregular menstrual periods, nausea, vomiting, sexual difficulty, inability to have an erection, stomach pain or cramps, and indigestion</td>
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<tr>
<td>ACE inhibitors</td>
<td>cough, diarrhea, headache, increased sensitivity to the sun, nausea, tiredness, or fatigue</td>
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<tr>
<td>ARB</td>
<td>back pain, cough, fatigue, dizziness/lightheadedness, headache, sore throat, nasal congestion, runny nose</td>
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<tr>
<td>Beta-Blockers</td>
<td>diarrhea, dry itching skin, headache, nausea, sexual difficulties, impotence, or unusual tiredness</td>
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<tr>
<td>Digitalis</td>
<td>breast enlargement in men and women, and sexual problems such as impotence</td>
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<tr>
<td>Diuretics</td>
<td>dizziness or lightheadedness, headache, increased sensitivity to the sun, loss of appetite, stomach upset, pain, or cramps</td>
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<tr>
<td>Nitrates</td>
<td>dizziness or fainting, flushing of the face or neck, headache (common after a dose, but usually only lasts for a short time), irregular heartbeat, palpitations, nausea, and vomiting</td>
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Self-Care Behaviors for Patients
(Source: Riegel, Moser, Anker, Appel, Dunbar, Grady, & et al., 2009)

- Maintain current immunizations, especially influenza and Streptococcus pneumoniae
- Develop a system for taking all medications as prescribed
- Monitor for an unexpected decline in body weight and for signs/symptoms of shortness of breath, swelling, fatigue, and other indicators of worsening HF
- Restrict dietary sodium and alcohol intake; avoid other recreational toxins, especially cocaine
- Cease all tobacco use and avoid exposure to second-hand smoke
- Do not ignore emotional distress, especially depression and anxiety. Seek treatment early.
- Tell your provider about sleep disturbances
- Achieve and maintain physical fitness
- Visit your provider at regular intervals
- Talk to a pharmacist or other provider about herbal medicines.
- If diabetic, achieve diabetes mellitus treatment goals.

To promote self-care, skill development is vital for patients. For example, helping them understand how to prepare meals, identifying low-sodium foods and reading food labels, how to read prescription drug information, and how to handle challenging situations such as maintaining self-care during vacation or dietary considerations at restaurants. Other areas to promote self-care include behavior change, enlisting family support and utilizing systems of care such as disease management and care coordination.
Components to Include in Annual Heart Failure Review
(Source: Allen, Stevenson, Grady, Goldstein, Matlock, Arnold, & et al., 2012)

- Characterization of clinical status
  - Functional ability, symptom burden, mental status, quality of life, and disease trajectory
  - Perceptions from caregiver
- Solicitation of patient values, goals, and general care preferences
- Estimation of prognosis
  - Consider incorporating objective modeling data
  - Orient to wide range of uncertainty
- Review of current therapies
  - Indicated heart failure therapies in appropriate patients (BB, ACEI/ARB, AA, CRT, ICD)
  - Treatment of comorbidities (AF, HTN, DM, CKD, etc.)
  - Appropriate preventive care, within the context of symptomatic heart failure
- Planning for future events/advance care planning
  - Resuscitation preferences
  - Desire for advanced therapies, major surgery, hospice
- Standardized documentation of the annual review in the medical record

Shared Decision Making (SDM) – Things to Know
(Source: Allen, Stevenson, Grady, Goldstein, Matlock, Arnold, & et al., 2012, p. 1929)

1. SDM is the process through which clinicians and patients share information and work toward decisions about treatment chosen from medically reasonable options aligned with the patients’ values, goals, and preferences.
2. For patients with advanced heart failure, SDM has become both more challenging and more crucial as duration of disease and treatment options have increased.
3. Difficult discussions now will simplify difficult decisions in the future.
4. Ideally, SDM is an iterative process that evolves over time as a patient’s disease and quality of life change.
5. Attention to the clinical trajectory is required to calibrate expectations and guide timely decisions, but prognostic uncertainty is inevitable and should be included in discussions with patients and caregivers.
6. An annual heart failure review with patients should include discussion of current and potential therapies for both anticipated and unanticipated events.
7. Discussions should include outcomes beyond survival, including major adverse events, symptom burden, functional limitations, loss of independence, quality of life, and obligations for caregivers.
8. As the end of life is anticipated, clinicians should take responsibility for initiating the development of a comprehensive plan for end-of-life care consistent with patient values, preferences, and goals.
9. Assessing and integrating emotional readiness of the patient and family is vital to effective communication.
10. Changes in organizational and reimbursement structures are essential to promote high-quality decision making and delivery of patient-centered health care.

NCQA Disease Management Performance Measures

WellCare adheres to the measures issued by the National Committee for Quality Assurance (NCQA) (2014) for the management of people with heart failure. Members should be assessed for the following:
- Influenza and pneumococcal vaccinations
- Tobacco use and assistance with tobacco cessation (for those Members using tobacco)

REFERENCES


LEGAL DISCLAIMER

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MEDICAL POLICY COMMITTEE HISTORY AND REVISIONS

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<tr>
<th>Date</th>
<th>History and Revisions by the Medical Policy Committee</th>
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<tr>
<td>6/17/2014</td>
<td>Approved by MPC. Inclusion of NCQA Disease Management Performance Measure.</td>
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<tr>
<td>6/7/2012</td>
<td>Approved by MPC. Added two references (Allen, &amp; et al., 2012; Riegel, &amp; et al., 2009).</td>
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<tr>
<td>12/1/2011</td>
<td>New template design approved by MPC.</td>
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<tr>
<td>7/2010</td>
<td>Approved by MPC.</td>
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