### PHYSICAL ASSESSMENT

<table>
<thead>
<tr>
<th><strong>History</strong></th>
<th>Inquire about history of hypertension, diabetes, hypercholesterolemia, coronary artery disease, alcohol and illicit drug use</th>
</tr>
</thead>
</table>
| **Vital Signs** | Assess at each visit:  
- Weigh and review patient’s self-reported daily weight record  
- Pulse rate  
- Blood pressure  
- Respiratory rate |
| **Cardiac** | Assess at each visit:  
- Jugular vein distention  
- Cardiac gallop (third or fourth heart sound) |
| **Extremities** | Assess at each visit for peripheral edema. |
| **Lung** | Assess at each visit for pulmonary rales. |

### PSYCHOLOGICAL ASSESSMENT

| **Depression Screen** | A high index of suspicion for depression should be maintained. Assess regularly and initiate treatment as needed.  
* Refer to PHP Preventive Health Guidelines |

### TESTS

| **Evaluation of ventricular function** | Perform echocardiography or other studies to evaluate cardiac structure and function and repeat as clinically indicated. |

### STAGING AND RECOMMENDED THERAPY

**Stage A**

**Patients at high risk for CHF but without structural heart disease or symptoms of CHF** (e.g., patients with systolic hypertension, coronary artery disease, diabetes mellitus, or history of cardiotoxic drugs, alcohol abuse or family history of cardiomyopathy)

- Treat hypertension
- Encourage smoking cessation
- Treat lipid disorders
- Encourage regular exercise
- Discourage alcohol intake, illicit drug use
- ACEI in patients with a history of atherosclerotic vascular disease, diabetes mellitus, hypertension and associated cardiovascular risk factors
### Stage B
**Patients with a structural disorder of the heart but without symptoms of CHF**
(e.g., patients with LVSD, left ventricular hypertrophy, fibrosis, dilatation; previous MI; asymptomatic valvular disease)

- All measures in Stage A
- ACEI in patients with either a history of recent or remote MI or with low ejection fraction
- Beta-Blockers in patients either with recent history of MI or with low ejection fraction

### Stage C
**Patients with past or current symptoms of CHF associated with structural heart disease**
(e.g., patients with known structural heart disease, shortness of breath and fatigue due to LVSD, reduced exercise tolerance. Asymptomatic patients who are undergoing treatment for prior symptoms of CHF)

- All measures in Stage A
- Drugs for routine use:
  - Diuretics, in patients who have evidence of fluid retention
  - ACEI
  - Beta-blockers, in patients with no or minimal fluid retention
  - Digitalis
  - Spironolactone in patients with recent or current (NYHA) Class IV symptoms, preserved renal function and a normal potassium concentration
- Dietary salt restriction

### Stage D
**End-stage disease; Refractory CHF requiring specialized interventions**
(e.g., patients who have marked symptoms at rest despite maximal medical therapy - recurrent hospitalizations or cannot be safely discharged from the hospital without special interventions)

- All measures under Stage A, B and C
- Mechanical assist devices
- Heart transplantation
- Continuous intravenous inotropic infusions for palliation
- Biventricular pacemaker to be considered in patients with prolonged QRS
- Hospice care
# Cardiovascular Health Practice Guidelines

*Outpatient Management of Congestive Heart Failure*

*Adopted by the Medical Management Guideline Committee 3/16/04*

## THERAPY

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACE Inhibitors (ACEI)</strong></td>
<td>In the absence of contraindications, start ACEI in patients with any of the following: Stages C or D chronic CHF, Stage B CHF with either a history of recent or remote MI or with low ejection fraction, and Stage A CHF with a history of atherosclerotic vascular disease, diabetes or hypertension and associated cardiovascular risk factors. Note: Treat all patients indefinitely post MI; start early in stable high-risk patients (anterior MI, Killip class II [S3 gallop, rales, radiographic CHF]). ARBs should be considered in patients who are intolerant to ACEI.</td>
</tr>
<tr>
<td><strong>Beta-Blockers</strong></td>
<td>Initiate and continue indefinitely in patients with any of the following: Stages C or D CHF, Stage B CHF with recent history of MI or with low ejection fraction. Start in all post-MI and acute ischemic syndrome patients if not contraindicated. Continue indefinitely. Note: Observe usual contraindications. Use as needed to manage blood pressure or symptoms in all other patients.</td>
</tr>
<tr>
<td><strong>Diuretics</strong></td>
<td>Begin in patients who have evidence of fluid retention, unless contraindicated. Consider spironolactone in patients with recent or current NYHA Class IV symptoms, preserved renal function and a normal potassium concentration.</td>
</tr>
<tr>
<td><strong>Digitalis</strong></td>
<td>Initiate in patients for the treatment of symptoms of CHF, unless contraindicated.</td>
</tr>
<tr>
<td><strong>Antiplatelet/anticoagulants</strong></td>
<td>Start and continue indefinitely aspirin 81 to 325 mg/d if not contraindicated. Consider clopidogrel 75 mg/d or warfarin if aspirin contraindicated. (ASA is recommended in the presence of comorbid conditions such as CAD, stroke, etc.)</td>
</tr>
</tbody>
</table>

## RISK INTERVENTION AND RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Area</th>
<th>Goal/Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diabetes Management</strong></td>
<td>Goal: A1C &lt; 7%. Appropriate hypoglycemic therapy to achieve near-normal fasting plasma glucose, as indicated by A1C.</td>
</tr>
<tr>
<td><strong>Blood Pressure Control</strong></td>
<td>Goal: &lt;140/90 mm Hg, or &lt;130/85 mm Hg if heart failure or renal insufficiency, &lt;130/80 mm Hg if diabetes. Initiate lifestyle modification (weight control, physical activity, alcohol moderation, and moderate sodium restriction) in all patients with blood pressure &gt; 130/80 mm Hg. Add blood pressure medications, individualized to patient if blood pressure is higher than established goals.</td>
</tr>
<tr>
<td><strong>Lipid Management</strong></td>
<td>Primary Goal: LDL &lt; 100 mg/dL Assess fasting lipid profile in all patients. Start dietary therapy (&lt;7% saturated fat and &lt;200 mg cholesterol). Add drug therapy according to the ATPIII guidelines.</td>
</tr>
</tbody>
</table>
### Cardiovascular Health Practice Guidelines

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| Secondary Goal: | If TG > 200 mg/dL, then non-HDL should be <130 mg/dL  
Emphasize weight management and physical activity. |
|----------------|--------------------------------------------------|
| **Smoking/Tobacco** | Assess smoking status at each visit. All smokers should be counseled on tobacco cessation.  
Refer to stop smoking program and, if necessary, recommend smoking cessation aids.  
Follow up on progress at each visit. |
| **Routine Weight Monitoring** | Educate patient to routinely monitor weight and maintain a weight log. Instruct patient on weight variances that should be reported to the provider. |
| **Symptom Recognition** | Educate patient of symptoms to report to provider that may indicate worsening condition. |
| **Low sodium diet** | Advise patient/caregiver on lower sodium diet. The most commonly recommended limit is 2000 mg of sodium daily. Consider referring to a dietitian if extremely low sodium diet is prescribed or if patient/caregiver fails to adhere to diet after initial instructions. |
| **Activity and exercise** | Advise patient to follow an appropriate exercise regimen. Encourage regular exercise.  
Counsel on recreation, leisure, and work activity. Address sexual activity, sexual difficulties, and coping strategies. |

This guideline is intended to provide information to aid health care providers and it is not a substitute for clinical judgment in treating individual patients. It is subject to updating pending the release and review of additional data, based upon changes in scientific knowledge and technology.
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References:


