Treatment of HF is based upon the four-stage classification system developed by the ACC/AHA, and should be used in conjunction with the New York Heart Association (NYHA) functional classification that estimates the severity of disease based on patient symptoms.

**Four-stage classification system (ACC/AHA)**

- **Stage A**: High risk for developing HF, but no structural heart disease.
- **Stage B**: Structural damage to the heart, but no symptoms.
- **Stage C**: Past or current HF symptoms and evidence of structural heart damage.
- **Stage D**: End-stage disease, requiring special interventions.

**Functional Classification (NYHA)**

- **I**: No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpititation, dyspnea, or angina.
- **II**: Slight limitation of physical activity. Ordinary physical activity results in fatigue, palpititation, dyspnea, or angina.
- **III**: Marked limitation of physical activity. Comfortable at rest, but less than ordinary physical activity results in fatigue, palpititation, dyspnea, or angina.
- **IV**: Unable to carry on any physical activity without discomfort. Symptoms are present at rest. With any physical activity, symptoms increase.

**Goals of therapy** - Improving symptoms, increasing functional capacity, improving quality of life, slowing disease progression, decreasing need for hospitalization, and prolonging survival.

**Management and Follow-up**

1. Nonpharmacologic therapy includes abstaining from alcohol and tobacco, limiting dietary sodium, reducing weight if appropriate, exercising regularly, and influenza and pneumococcal vaccinations. Other nonpharmacologic therapies such as automatic implantable defibrillators or cardiac resynchronization therapy should be considered in appropriate patients but are beyond the scope of this document.

2. Risk factor modification should be implemented in all patients in Stage A-C to potentially reduce the development of HF.

3. Patients should receive regular follow-up in order to provide the most effective care. At each encounter, an inquiry should be made as to the patient’s adherence to the medication regimen, nonpharmacologic measures, and adverse effects to therapy.

4. Patients should be scheduled for routine laboratory monitoring. The patient should also be assessed for any change in functional status or frequency of hospitalizations, and medication therapy should be optimized.
Pharmacologic treatment:

**Stage A:**
- Evaluate and treat of concomitant cardiac conditions and underlying causes

**Stage B:**
- Provide post-myocardial infarction (MI) treatment with an angiotensin-converting enzyme inhibitor (ACEI) and beta-adrenergic blocker, regardless of the presence of left ventricular systolic dysfunction, to prevent future development of HF and improve overall survival [A].

<table>
<thead>
<tr>
<th>Signs/Symptoms</th>
<th>Preferred Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence of left ventricular systolic dysfunction who are without symptoms</td>
<td>ACEI [A] and beta-adrenergic blocker [B] ARB may be used in patients who are ACEI intolerant [A].</td>
</tr>
</tbody>
</table>

**Stage C:**
- All patients should be treated with an ACEI unless contraindicated or ARB if not tolerated, to improve HF symptoms, functional status, and quality of life, while decreasing frequency of hospitalization and mortality. [A]
- Titrate to target dose or as tolerated
- Add other agent:

<table>
<thead>
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<tbody>
<tr>
<td>Stable patients (i.e., minimal or no signs of fluid overload or volume depletion and not in an intensive care unit),</td>
<td>A beta-adrenergic blocker that has proven to reduce mortality (i.e., bisoprolol, carvedilol, sustained release metoprolol succinate) in conjunction with an ACEI has been shown to reduce mortality and decrease the symptoms of HF [A].</td>
</tr>
<tr>
<td>Signs of fluid overload</td>
<td>A diuretic [B], titrate to euvolemic state</td>
</tr>
<tr>
<td>Recent Class IV HF and current Class III or IV symptoms and LVEF &lt; 35%, (with preserved renal function and normal potassium levels) OR LVEF &lt; 40% in patients early post-MI on standard therapy for HF</td>
<td>Consider low dose of an aldosterone antagonist to improves symptoms (as assessed by change in NYHA functional class), decreases hospitalizations for worsening HF, and decreases mortality [A]</td>
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<tr>
<td>Especially in African American patients with NYHA Class III or IV HF, who continue to have symptoms despite therapy with an ACEI and beta-adrenergic blocker</td>
<td>Combination of hydralazine and a nitrate [B]. Considered as an alternative to an ACEI in patients who are unable to tolerate an ACEI (or angiotensin II receptor antagonist) due to hypotension, renal hypertension, or glomerular filtration rate (GFR) less than 30 mL/min/1.73 m².</td>
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<td>Stage D</td>
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<td>- Refer to a cardiologist or appropriate specialist for evaluation and treatment</td>
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