Heart failure

**Definition**
Heart failure is a condition in which the heart muscle is unable to pump enough blood through the heart to meet the body’s needs for blood and oxygen.

**Background**
The heart has four chambers: the upper chambers (right and left atria) and the lower chambers (right and left ventricles). Oxygen-rich blood travels from the lungs to the left atrium and into the left ventricle, where it is pumped out to the rest of the body. Oxygen-poor blood returns from the body to the right atrium, into the right ventricle and back to the lungs to again receive oxygen. When the heart functions properly, all four chambers beat and pump blood effectively in an organized way. When heart failure develops, the heart is no longer able to pump blood effectively. In the early stages, the heart is able to compensate in these ways:

- The heart chambers enlarge, and the heart develops more muscle mass.
- The heart pumps faster and diverts blood away from less-important areas of the body to the heart and brain.
- Blood vessels narrow to keep blood pressure up.

Eventually, the heart no longer can compensate, and signs and symptoms of heart failure develop.

**Types**
- **Left-sided heart failure**: The most common form of heart failure, it involves a decreased ability of the left ventricle to effectively pump blood out to the rest of the body. Fluid may back up in the lungs, causing shortness of breath.
- **Right-sided heart failure**: The right side no longer pumps effectively, and blood backs up in the body’s veins, causing swelling in the tissues. This form is usually due to left-sided heart failure.
- **Systolic failure**: The left ventricle loses its ability to contract normally; thus, it cannot effectively pump blood out of the heart to the body.
- **Diastolic failure**: The left ventricle loses its ability to relax normally; thus, it cannot fill with blood during the resting period between beats.
- **Congestive heart failure (CHF)**: A slowing of blood flow out of the heart that occurs with heart failure can cause the blood returning to the heart to also slow and back up, resulting in congestion in body tissues. This leads to edema, or swelling, in the lower extremities and congestion in the lungs that interferes with breathing. In addition, this process can interfere with disposal of sodium and water by the kidneys, which also can result in swelling in body tissues.

**Causes/risk factors**
- Smoking
- Obesity
- Coronary artery disease
- Past heart attack (myocardial infarction)
- Hypertension
- Abnormal heart valves
- Congenital heart disease
- Diseases of the heart muscle
- Heart arrhythmias
- Lung disease
- Diabetes
- Other medical conditions (such as severe anemia or hyperthyroidism)

**Signs and symptoms**
- Edema (swelling) of feet, ankles or abdomen
- Weight gain
- Shortness of breath
- Decreased exercise tolerance
- Persistent cough or wheezing
- Fatigue
- Confusion
- Increased heart rate or palpitations
- Loss of appetite, indigestion, nausea and vomiting
- Decreased urine
- Difficulty sleeping
Heart failure, continued

Diagnostic tools
- Medical history and physical exam
- B-type natriuretic peptide (BNP) lab test: BNP is a substance secreted by the ventricles in response to pressure changes in the heart that occur with heart failure. The blood BNP level increases when heart failure gets worse and decreases when heart failure is stable.
- Other lab testing
- Chest X-ray and electrocardiogram (ECG or EKG)
- Echocardiogram
- Cardiac stress testing and catheterization
- CT or MRI scans
- Nuclear heart scans

Treatment
- Regular monitoring
- Limited salt intake
- Smoking cessation
- Exercise
- Weight control and balanced nutrition
- Treatment of underlying conditions
- Medications (diuretics, beta blockers, angiotensin-converting enzyme inhibitors, digitalis glycosides, angiotensin receptor blockers)
- Pacemaker or implantable cardioverter defibrillator (ICD)
- Heart pumps (left ventricular assist devices)
- Heart transplant

Documentation tips for health care providers
- A good rule of thumb for any medical record is to limit – or avoid altogether – the use of acronyms and abbreviations. “CHF” is a commonly accepted medical abbreviation for congestive heart failure. “HF” sometimes is used to document heart failure; however, this abbreviation has other meanings. The meaning of an abbreviation or acronym often can be determined based on context, but this is not always true. Best practice is to always spell out in full all of the diagnoses in the final assessment or impression.
- The subjective section of the office note should document the presence or absence of any current symptoms related to heart failure. If there are no current symptoms, this section should show the patient was asked about symptoms.
- The objective section of the office note should include any current associated physical exam findings (such as edema, weight gain, shortness of breath, etc.) and results of any related diagnostic testing. If there are no current related findings, the objective section should show the patient was evaluated for associated findings.
- Do not use the descriptor “history of” to describe current heart failure. In diagnosis coding, the descriptor “history of” implies the condition occurred in the past and is no longer current.
- Temporary or transient heart failure that occurred in the past and is no longer present should not be documented as if it is current.
- In the final assessment/impression:
  o Do not document a suspected heart failure as if it is confirmed. Rather, document the signs and symptoms in the absence of a confirmed diagnosis.
  o For a confirmed current diagnosis of heart failure, do not use descriptors that imply uncertainty (such as “probable,” “apparently,” “likely” or “consistent with”).
  o Document heart failure to the highest level of specificity, using all applicable descriptors (congestive, hypertensive, post-operative, acute, chronic, acute-on-chronic, diastolic, systolic, etc.).
  o State the cause of heart failure, if known, using terms that clearly show cause and effect (such as “associated with,” “due to,” “secondary to,” “hypertensive,” etc.).
  o Document the current status of heart failure (stable, worsening, improved, in remission, compensated, etc.).
- Document a specific and concise treatment plan for heart failure.
  o If referrals are made or consultations requested, the office note should indicate to whom or where the referral or consultation is made or from whom consultation advice is requested.
  o Document when you plan to see the patient again.
ICD-10-CM tips and resources for coders

Heart failure classifies to category I50. Fourth and fifth characters are assigned from subcategories I50.1 — I50.9 to report the specific type of heart failure (left, systolic, diastolic, combined systolic and diastolic) and whether heart failure is acute, chronic or acute-on-chronic combined. Category I50 has multiple instructional notes that must be carefully reviewed by the coder to ensure accurate code assignment.

Subcategories I50.2 — I50.9 all include the descriptor “congestive” as a nonessential modifier (a supplementary word that may be absent or present in the diagnostic statement without affecting the code number to which it is assigned). In ICD-10-CM, congestive heart failure is included in unspecified heart failure.

“Heart failure” with no further description codes to I50.9, Heart failure, unspecified. Code I50.9 excludes (Excludes1) fluid overload (E87.70) and includes all of the following:

- Biventricular (heart) failure NOS
- Cardiac, heart or myocardial failure NOS
- Congestive heart disease
- Congestive heart failure NOS
- Right ventricular failure (secondary to left heart failure)

Heart failure diagnosis codes cannot be assigned based on documentation of certain signs and symptoms or lab values. Rather, code assignment is based on the provider’s specific description of the particular type of heart failure.

Hypertension with heart disease

Heart conditions classified to I50.- or I51.4 — I51.9 are assigned to a code from category I11, Hypertensive heart disease, when a causal relationship is stated (due to hypertension) or implied (hypertensive). Use an additional code from category I50, Heart failure, to identify the type of heart failure in those patients with heart failure. The same heart conditions (I50.-, I51.4 — I51.9) with hypertension but without a stated causal relationship are coded separately. Sequence according to the circumstances of the admission/encounter. (ICD-10-CM Official Guidelines for Coding and Reporting, Section I.C.9.a.1)

Coding examples

<table>
<thead>
<tr>
<th>Example 1</th>
<th>Final Diagnosis</th>
<th>ICD-10-CM code(s)</th>
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<tbody>
<tr>
<td>CHF with diastolic dysfunction</td>
<td>I50.30</td>
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<tr>
<th>Example 2</th>
<th>Final Diagnosis</th>
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<tbody>
<tr>
<td>Diastolic dysfunction</td>
<td>I51.89</td>
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<th>Example 3</th>
<th>Final Diagnosis</th>
<th>ICD-10-CM code(s)</th>
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<tbody>
<tr>
<td>Hypertensive heart failure</td>
<td>I11.0</td>
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<th>Example 4</th>
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<tbody>
<tr>
<td>Exacerbation of diastolic CHF</td>
<td>I50.31</td>
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<th>Example 5</th>
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<tr>
<td>Acute combined systolic and diastolic congestive heart failure</td>
<td>I50.41</td>
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<th>Example 6</th>
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<tr>
<td>Chronic diastolic CHF due to HTN</td>
<td>I11.0, I50.32</td>
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### Example 7

**Final Diagnosis:** CHF and hypertension  
**ICD-10-CM code(s):** I50.9, I10  
**Comments:** There is no stated causal relationship between the two conditions.

### Example 8

**Final Diagnosis:** CHF with hypertension  
**ICD-10-CM code(s):** I11.0, I50.9

### Example 9

**Final Diagnosis:** CHF secondary to hypertension  
**ICD-10-CM code(s):** I11.0, I50.9

### Example 10

**Final Diagnosis:** Malignant hypertensive heart disease with CHF and chronic kidney disease stage 4  
**ICD-10-CM code(s):** I13.0, I50.9, N18.4

**References:** American Heart Association; American Hospital Association Coding Clinic; Cleveland Clinic; ICD-10-CM Official Guidelines for Coding and Reporting; Mayo Clinic; MedlinePlus