

## Clinical overview

### 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 heart, where it is pumped out to the rest of the body.

Oxygen-poor blood returns from the body to the heart 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 also can cause blood returning to the heart to slow and back up, resulting in congestion in body tissues. This leads to edema – swelling – in the lower extremities and congestion in the lungs that interferes with breathing.

### Causes/risk factors

- Smoking
- Hypertension
- Lung disease
- Past heart attack
- Coronary artery disease
- Abnormal heart valves
- Obesity
- Diabetes
- Congenital heart disease
- Diseases of heart muscle
- Heart arrhythmias
- Other medical conditions

### Signs and symptoms

- Edema/swelling of feet, ankles, abdomen
- Increased heart rate or palpitations
- Shortness of breath
- Fatigue
- Confusion
- Decreased urine
- Difficulty sleeping
- Decreased exercise tolerance
- Persistent cough or wheezing
- Weight gain
- Loss of appetite
- Indigestion
- Nausea and vomiting

### Diagnostic tools

- Medical history and physical exam
- Lab testing, including 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.
- 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
- Heart pumps (left ventricular assist devices)
- Heart transplant

## Documentation tips for physicians

### Abbreviations

- 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” is sometimes used to represent heart failure; however, this abbreviation has other meanings. Best practice is to always spell out each diagnosis in full in the final assessment or impression.

### Subjective

- In the subjective section of the office note, document the presence or absence of any current patient-reported symptoms of heart failure.

### Objective

- 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.

### Current versus “history of”

- 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.

### Final assessment/impression

- Do not document suspected heart failure as if it is confirmed. Rather, document the signs and symptoms in the absence of a confirmed diagnosis.
- For a confirmed current diagnosis of heart failure, do not use descriptors that imply uncertainty (such as “probable,” “apparently,” “likely” or “consistent with”).
- 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.).
- 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.).
- Document the current status of heart failure (stable, worsening, improved, in remission, compensated, decompensated, etc.).

### Plan

- Document a specific and concise treatment plan for heart failure, including date of next appointment.
  - 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.

### Documentation and coding examples

#### Example 1

<b>Final diagnosis</b>	Decompensated congestive heart failure with diastolic dysfunction
<b>ICD-10-CM code</b>	I50.33 Acute on chronic diastolic (congestive) heart failure

#### Example 2

<b>Final diagnosis</b>	Acute combined systolic and diastolic congestive heart failure
<b>ICD-10-CM code</b>	I50.41 Acute combined systolic (congestive) and diastolic (congestive) heart failure

#### Example 3

<b>Final diagnosis</b>	Chronic diastolic CHF due to hypertension
<b>ICD-10-CM codes</b>	I11.0 Hypertensive heart disease with heart failure I50.32 Chronic diastolic (congestive) heart failure

#### Example 4

<b>Final diagnosis</b>	Heart dysfunction
<b>ICD-10-CM code</b>	I51.89 Other ill-defined heart diseases

#### Example 5

<b>Final diagnosis</b>	Hypertensive heart failure
<b>ICD-10-CM codes</b>	I11.0 Hypertensive heart disease with heart failure I50.9 Heart failure, unspecified

#### Example 6

<b>Final diagnosis</b>	Acute on chronic systolic heart failure
<b>ICD-10-CM code</b>	I50.23 Acute on chronic systolic (congestive) heart failure

## ICD-10-CM tips and resources for coders

### Basics of coding

For accurate and specific diagnosis code assignment:

- Review the entire medical record to verify the heart failure condition is current.
- Note the exact heart failure description documented in the medical record; then, in accordance with ICD-10-CM official coding conventions and guidelines:
- Search the alphabetic index for that specific description.
- Verify the code in the tabular list, following all instructional notes.

### Coding heart failure

Heart failure classifies to category I50. Fourth characters specify the type of heart failure, while fifth characters specify acute, chronic or acute-on-chronic. (See coding manual for all instructional notes.)

- I50.1 Left ventricular failure
- I50.2 Systolic (congestive) heart failure
- I50.3 Diastolic (congestive) heart failure
- I50.4 Combined systolic (congestive) and diastolic (congestive) heart failure
- I50.8 Other heart failure\*
- I50.9 Heart failure, unspecified

#### **Includes**

Cardiac, heart or myocardial failure NOS  
 Congestive heart disease  
 Congestive heart failure NOS

**Excludes2** fluid overload (E87.70)

### \*Subcategory I50.8, Other heart failure

This subcategory uniquely identifies several different specific types of heart failure. This allows for differentiating cases of pure right heart failure from left heart failure. Patients with right heart failure are treated differently than patients with left heart failure.

- I50.810 Right heart failure, unspecified
- I50.811 Acute right heart failure
- I50.812 Chronic right heart failure
- I50.813 Acute on chronic right heart failure
- I50.814 Right heart failure due to left heart failure

**Excludes1** right heart failure with but not due to left heart failure (I50.82)

- I50.82 Biventricular heart failure
  - I50.83 High-output heart failure
  - I50.84 End-stage heart failure
- (AHA Coding Clinic—Other heart failure, fourth quarter 2017, pages 15-16)

Subcategories I50.2 – I50.4 include the descriptor “congestive” as a nonessential modifier (a supplementary word that may be present or absent in the diagnostic statement without affecting the code number to which it is assigned).

- Therefore, when the final diagnosis lists congestive heart failure along with either systolic or diastolic heart failure, only the code for the type of heart failure is assigned (systolic and/or diastolic).

The terms “heart failure” and “congestive heart failure” are often used interchangeably, even though congestion (pulmonary or systemic fluid buildup) is one feature of heart failure that does not occur in all patients with heart failure. Thus, clinically “heart failure” and “congestive heart failure” are not one and the same.

- Despite this clinical information, in ICD-10-CM, “heart failure” and “congestive heart failure” classify to the same code: I50.9, Heart failure, unspecified. Code I50.9 includes congestive heart failure; ICD-10-CM does not provide a separate code for CHF.

It is not appropriate to code heart failure based on the coder’s own clinical interpretation of documented signs, symptoms or lab values. Rather, code assignment is strictly based on the specific description of heart failure documented by the physician.

### Compensated, decompensated, exacerbation

- “Compensated” heart failure means the heart has developed compensatory mechanisms that permit near-normal heart function.
- “Decompensated” or “exacerbation” both indicate a flare-up (acute phase) of heart failure – an increase in the severity of heart failure or any of its symptoms. When heart failure is described as currently decompensated or exacerbated, it should be coded as acute-on-chronic.

### Diastolic or systolic dysfunction with acute or chronic heart failure

- When the medical record links either diastolic or systolic dysfunction with acute or chronic heart failure, it should be coded as “acute/chronic diastolic or systolic heart failure.” If there is no documented linkage, assign code I50.9, Heart failure, unspecified. (AHA Coding Clinic – Acute congestive heart failure with diastolic or systolic dysfunction, first quarter 2017, page 46)

## ICD-10-CM tips and resources for coders

### Hypertension with heart disease

ICD-10-CM presumes a cause-and-effect relationship between hypertension (HTN) and heart disease, as the two conditions are linked by the term “with” in the alphabetic index. These two conditions should be coded as related even in the absence of physician documentation explicitly linking them, unless the documentation specifically indicates they are not related.

HTN with heart conditions classified to I50.- or I51.4 – I51.9 is assigned to a code from category I11, Hypertensive heart disease.

- 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 are coded separately if the physician has specifically documented a different cause. Sequence according to the circumstances of the admission/encounter.

### Hypertensive heart and chronic kidney disease

Assign codes from combination category I13, Hypertensive heart and chronic kidney disease, when there is hypertension with both heart and kidney involvement.

- If heart failure is present, assign an additional code from category I50 to identify the type of heart failure.
- The appropriate code from category N18, chronic kidney disease, should be used as a secondary code with a code from category I13 to identify the stage of chronic kidney disease.

The codes in category I13, Hypertensive heart and chronic kidney disease, are combination codes that include hypertension, heart disease and chronic kidney disease.

- The **Includes** note at I13 specifies that the conditions included at I11 and I12 are included together in I13.
- If a patient has hypertension, heart disease and chronic kidney disease, then a code from I13 should be used, not individual codes for hypertension, heart disease and chronic kidney disease, or codes from I11 or I12.

### Heart dysfunction

Heart dysfunction without mention of heart failure codes to I51.89, Other ill-defined heart diseases.

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