

# H | Heart failure

## 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. (American Heart Association, 2023a)

### Types (American Heart Association, 2023b)

- **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. There are two types of 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.
- **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.
- **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.

### Heart ejection fraction (American Heart Association, 2023c)

- Heart ejection fraction (EF) is a measurement, expressed as a percentage, of how much blood the left ventricle pumps out during systole (the phase in which the heart muscle contracts).
- A normal EF is about 50% to 75%. A person can have a normal EF measurement and still have heart failure (called HFpEF or heart failure with preserved ejection fraction). An EF measurement under 40% may be evidence of heart failure or cardiomyopathy.

### Causes/risk factors (CDC, 2023)

- Smoking or alcohol intake
- Hypertension, obesity, diabetes
- Abnormal heart valves or heart arrhythmias
- Congenital heart disease
- Coronary artery disease or a past heart attack
- Physical Inactivity

### Signs and symptoms (Beckerman, 2022)

- Shortness of breath (dyspnea)
- Persistent coughing or wheezing
- Edema
- Lack of appetite, nausea, indigestion or sudden weight gain
- Increased heart rate or palpitations
- Jugular venous distention

### Diagnostic tools (Beckerman, 2022)

- Blood testing, including B-type natriuretic peptide (BNP) test
- Chest X-ray
- Electrocardiogram (ECG or EKG), echocardiogram, CT, MRI, angiogram, Nuclear heart scans
- Cardiac stress testing and catheterization

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## Treatment (Auty, 2004)

- Smoking cessation
- Exercise, weight control and limited salt intake
- Medications linked to diagnosis (e.g., diuretics, beta blockers, ACE inhibitors, digoxin)
- Pacemaker, implantable cardioverter defibrillator (ICD) or heart pumps (left ventricular assist devices)
- Heart transplant or valve repair



## Best documentation practices for healthcare providers

### Subjective

The subjective section of the office note, document the presence or absence of any current patient-reported symptoms of heart failure (e.g., shortness of breath, edema, fatigue).

### Objective

The objective section should include physical exam findings (e.g., jugular venous distention, heart rate abnormalities, edema, weight gain, wheezing or crackles in the lungs, etc.) and related diagnostic testing results.

### Assessment

- Document heart failure to the highest level of specificity, using all applicable descriptors (congestive, hypertensive, postoperative, 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.).
- Include the current status of heart failure (stable, worsening, improved, in remission, compensated, decompensated, etc.)

### Plan

- Document a clear and concise treatment plan for heart failure, linking related medications to the diagnosis.
- Include orders for diagnostic testing.
- Indicate in the office note to whom or where any referral or consultation requests are made.
- Document when the patient will be seen again, even if only on an as-needed basis.



## Coding tips

### Coding heart failure

- 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. (AAPC, 2023)

### 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. (Leon-Chisen, 2023)

### 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. (American Hospital Association (AHA), 2017)

## Ejection fraction impact on code assignment

- Heart failure with preserved ejection fraction (HFpEF) is also referred to as diastolic heart failure and is coded as such.
  - Alphabetic index: **Failure** > heart > with > preserved ejection fraction – see Failure, heart, diastolic
  - Tabular list: Subcategory I50.3- Diastolic (congestive) heart failure
- Heart failure with reduced ejection fraction (HFrEF) is also referred to as systolic heart failure and is coded as such.
  - Alphabetic index: **Failure** > heart > with > reduced ejection fraction – see Failure, heart, systolic
  - Tabular list: Subcategory I50.2- Systolic (congestive) heart failure
- Heart failure with recovered ejection fraction (HFrecEF)
  - There is no specific coding path
  - Code assignment is based on medical record documentation and specific description of heart failure. (AAPC, 2023)

## Hypertension with heart disease

- ICD-10-CM presumes a cause-and-effect relationship between hypertension (HTN) and heart disease. These two conditions should be coded as related even in the absence of physician documentation explicitly linking them, unless the documentation clearly states the conditions are unrelated.
- ICD-10-CM Section I.C.9.a.1) Hypertension with Heart Disease states: HTN with heart conditions classified to I50.-, or I51.4-I51.7, I51.89, I51.9, are assigned to a code from category I11, Hypertensive heart disease. Use additional code(s) from category I50, Heart failure, to identify the type(s) of heart failure in those patients with heart failure. The same heart conditions (I50.-, I51.4-I51.7, I51.89, I51.9) with hypertension are coded separately if the provider has documented they are unrelated to the hypertension. Sequence them according to the circumstances of the admission/encounter. (AAPC, 2023)

## Additional reminders

- 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 healthcare provider.
- Please refer to the current ICD-10-CM coding manual to review instructional notes (e.g., code first or use additional code).
- ICD-10-CM also presumes a cause-and-effect relationship between hypertension (HTN), heart disease and chronic kidney disease. These conditions should be coded as related even in the absence of physician documentation explicitly linking them, unless the documentation clearly states the conditions are unrelated.
- Heart dysfunction without mention of heart failure codes to I51.89, Other ill-defined heart diseases. (AAPC, 2023)



## Coding examples

### Example 1

<b>Assessment</b>	Decompensated congestive heart failure associated with diastolic dysfunction
<b>ICD-10-CM code</b>	I50.33 Acute on chronic diastolic (congestive) heart failure
<b>Comments</b>	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. (Leon-Chisen, 2023)

### Example 2

<b>Assessment</b>	Hypertensive heart disease with chronic diastolic CHF and chronic kidney disease stage 4
<b>ICD-10-CM code</b>	I13.0 Hypertensive heart and chronic kidney disease with heart failure and stage 1 through 4 chronic kidney disease, or unspecified chronic kidney disease I50.32 Chronic diastolic (congestive) heart failure N18.4 Chronic kidney disease, stage 4 (severe)

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<b>Comments</b>	ICD-10-CM presumes a causal relationship between hypertension and heart disease and between hypertension and chronic kidney disease.  Following the instructional notes under code I13.Ø, code I5Ø.32 is assigned to report the type of heart failure and N18.4 is assigned to report the stage of chronic kidney disease. (AAPC, 2023)
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<b>Example 3</b>	
<b>Assessment</b>	1.Hypertension (HTN) 2.Diabetes 3.CHF
<b>ICD-10-CM code(s)</b>	I11.Ø Hypertensive heart disease with heart failure I5Ø.9 Heart failure, unspecified
<b>Comments</b>	ICD-10-CM Section I.C.9.a.1) Hypertension with Heart Disease ICD-10-CM presumes a cause-and-effect relationship between hypertension (HTN) and heart disease. These two conditions should be coded as related even in the absence of physician documentation explicitly linking them, unless the documentation clearly states the conditions are unrelated. (AAPC, 2023)

<b>Example 4</b>	
<b>Assessment</b>	Chronic systolic heart failure exacerbation being followed by cardiology
<b>ICD-10-CM code</b>	I5Ø.23 Acute on chronic systolic (congestive) heart failure
<b>Comments</b>	When heart failure is described as currently decompensated or exacerbated, it should be coded as acute-on-chronic. (Leon-Chisen, 2023)

<b>Example 5</b>	
<b>Assessment</b>	Chronic diastolic heart failure with recovered ejection fraction
<b>ICD-10-CM code</b>	I5Ø.32 Chronic diastolic (congestive) heart failure
<b>Comments</b>	Assign code I50.32, Chronic diastolic (congestive) heart failure, for a diagnosis of congestive heart failure with a recovered EF. Subcategory I50.3, Diastolic (congestive) heart failure, has inclusion terms for heart failure with normal ejection fraction. (American Hospital Association ("AHA"), 2020)

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