



Heart failure

ICD-10-CM

Clinical overview

Disclaimer

This document is intended for physicians and office staff. The information here is not intended to serve as official coding or legal advice.

All coding should be considered on a case-by-case basis and should be supported by medical necessity and the appropriate documentation in the medical record.

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 of the heart and into the left ventricle, where it is pumped out to the rest of the body. Oxygen-poor blood returns from the body into the right atrium, then to the right ventricle where it is pumped 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, diverting 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 too 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

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). For example, an ejection fraction of 60% means 60% of the total amount of blood in the left ventricle is pushed out with each heartbeat.

A normal ejection fraction is about 50% to 75%. A person can have a normal ejection fraction measurement and still have heart failure (called HFpEF or heart failure with preserved ejection fraction). An ejection fraction measurement under 40% may be evidence of heart failure or cardiomyopathy.

Heart failure with preserved ejection fraction (HFpEF) – also referred to as diastolic heart failure

The heart muscle contracts normally but the ventricles do not relax as they should during ventricular filling (or when the ventricles relax).

Heart failure with reduced ejection fraction (HFrEF) – also referred to as systolic heart failure

The heart muscle does not contract effectively, and therefore less oxygen-rich blood is pumped out to the body.

Heart failure with recovered ejection fraction (HFrecEF)

The American College of Cardiology (ACC) advises HFrecEF is a clinical entity that is distinct from heart failure with reduced EF (HFrEF) and heart failure with preserved EF (HFpEF). The ACC also states there is no consensus on the definition, diagnosis and management of this condition. However, an expert panel affiliated with the ACC has published a working definition of "Heart failure with recovered ejection fraction" as follows:



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- 1) documentation of a decreased left ventricular ejection fraction (LVEF) less than 40% at baseline;
- 2) greater than or equal to 10% absolute improvement in LVEF; and
- 3) a second measurement of LVEF greater than 40%.

Causes/risk factors

- Smoking
- Hypertension
- Diseases of heart muscle
- Past heart attack
- Coronary artery disease
- Abnormal heart valves
- Obesity
- Diabetes
- Congenital heart disease
- Lung disease
- 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
- Cough, wheezing or crackles in lungs
- Weight gain
- Loss of appetite
- Indigestion
- Nausea and vomiting
- Jugular venous distention

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
- Electrocardiogram (ECG or EKG)
- Echocardiogram
- Cardiac stress testing and catheterization
- Computed tomography (CT) or magnetic resonance imaging (MRI) scans
- Nuclear heart scans

Treatment

- Regular monitoring
- Limited salt intake
- Smoking cessation
- Exercise
- Weight control and balanced nutrition
- Treatment of underlying conditions
- Medications (e.g., 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



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Best documentation practices for physicians

Subjective

In 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, fatigue).

Objective

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

Assessment

Specificity:

- 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.).

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 documentation practice is as follows:

- The initial notation of a condition should be spelled out in full followed by the abbreviation in parentheses — e.g., “Congestive Heart Failure (CHF).”
- Subsequent mention of the condition can then be made using the abbreviation.

Terms of uncertainty:

- 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 confirmed heart failure, do not use descriptors that imply uncertainty (such as “probable,” “apparently,” “likely” or “consistent with”).

Current versus historical:

- 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 no longer exists as a current problem.
- Temporary or transient heart failure that occurred in the past and is no longer present should not be documented as if it is current.

Treatment plan

Document a clear and concise plan for heart failure.

- Clearly link the heart failure diagnosis to all medications being used to treat the condition.
- Include orders for diagnostic testing (lab work, imaging, stress tests, etc.) and other diagnostic procedures.
- Provide details of related consultation requests and referrals to other providers and specialists.
- Include the date of next appointment.

Electronic health record (EHR) issues

Other and unspecified codes with descriptions:

Some EHRs insert ICD-10-CM codes with corresponding descriptions into the assessment section of the office note to represent the final diagnosis. For example:

“I50.89 Other heart failure”

“I50.9 Heart failure, unspecified”

These are vague descriptions and incomplete diagnoses.

- Codes titled “other” or “other specified” are for use when the medical record provides a specific diagnosis description for which a specific code does not exist.
- The “other” ICD-10-CM code with description should not be used, by itself, as a final diagnosis without clear documentation that specifies the particular “other” type of heart failure.
- Unspecified diagnosis descriptions should be used only when sufficient clinical information is not known or available to the provider at the time of the encounter.



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Best documentation practices for physicians

Electronic health record (EHR) issues, continued

Mismatch between final diagnostic statement and EHR-inserted diagnosis code with description:

Another scenario that causes confusion is one in which the assessment section documents a provider-stated diagnosis *PLUS* an EHR-inserted diagnosis code with description that does not match or may even contradict the final diagnosis. Example:

Final Assessment: **Systolic heart failure**

I50.42 Chronic combined systolic (congestive) and diastolic (congestive) heart failure

Here, the final diagnosis **in bold** in the assessment is “Systolic heart failure,” which codes to **I50.20**, Unspecified systolic (congestive) heart failure. The EHR-inserted diagnosis code with description that follows, however, is **I50.42** Chronic combined systolic (congestive) and diastolic (congestive) heart failure.

This can lead to confusion regarding which diagnostic statement is correct and which diagnosis code should be reported. Documentation elsewhere in the record does not always provide clarity.

To avoid confusion and ensure accurate diagnosis code assignment, the provider-stated final diagnosis must either:

- a) match the code with description; or
- b) classify in ICD-10-CM to the EHR-inserted diagnosis code with description.

Note: ICD-10-CM is a statistical classification; it is not a substitute for a provider’s final diagnostic statement. It is the healthcare provider’s responsibility to provide legible, clear, concise and specific documentation of each final diagnosis described to the highest level of specificity, which is then translated to a code for reporting purposes. It is not appropriate for healthcare providers to simply list a code number or select a code number from a list of codes in place of a written final diagnosis.



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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. Next, 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, carefully following all instructional notes as appropriate.

Coding heart failure

Heart failure classifies to category I50. Fourth characters specify the type of heart failure; fifth characters specify acute, chronic or acute-on-chronic; sixth characters are used to report other specific types of heart failure. (See coding manual for all instructional notes.)

- I50.1 Left ventricular failure, unspecified
- 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

Excludes 2 fluid overload unrelated to CHF (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
 - Excludes 1** 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
- I50.89 Other 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.

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. (Reference: AHA Coding Clinic – Acute congestive heart failure with diastolic or systolic dysfunction, First Quarter 2017, Page 46)



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Tips and resources for coders

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.

Review and follow all instructional notes as applicable based on medical record documentation.

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.

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.

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.



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Tips and resources for coders

Coding examples

Example 1	
Final diagnosis	Decompensated congestive heart failure with diastolic dysfunction
ICD-10-CM code(s)	I50.33 Acute on chronic diastolic (congestive) heart failure

Example 2	
Final diagnosis	Acute systolic and diastolic heart failure
ICD-10-CM code(s)	I50.41 Acute combined systolic (congestive) and diastolic (congestive) heart failure

Example 3	
Final diagnosis	Hypertensive heart disease with chronic diastolic CHF and chronic kidney disease stage 4
ICD-10-CM code(s)	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)

Example 4	
Final diagnosis	Acute right ventricular failure
ICD-10-CM code(s)	I50.811 Acute right heart failure

Example 5	
Final diagnosis	Hypertensive heart failure
ICD-10-CM code(s)	I11.0 Hypertensive heart disease with heart failure I50.9 Heart failure, unspecified

Example 6	
Final diagnosis	Chronic systolic heart failure exacerbation
ICD-10-CM code(s)	I50.23 Acute on chronic systolic (congestive) heart failure

Example 7	
Final diagnosis	Chronic diastolic heart failure with recovered ejection fraction
ICD-10-CM code(s)	I50.32 Chronic diastolic (congestive) heart failure
AHA Coding Clinic	Heart failure with recovered ejection fraction, Third Quarter 2020, Page 32

References: American College of Cardiology; American Heart Association; American Hospital Association Coding Clinic; Cleveland Clinic; ICD-10-CM Official Guidelines for Coding and Reporting; ICD-10-CM and ICD-10-PCS Coding Handbook; Mayo Clinic; MedlinePlus