

Diseases of the Circulatory System (100-199) ICD-10-CM



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Chapter 9 (I00–I99): circulatory system

Hypertensive diseases (I10-I16)

The hypertension codes extend from I10 to I16; there is not an I14 category.

- Includes various hypertensive diseases, such as hypertensive heart disease, hypertension (HTN) with acute renal failure and HTN with chronic renal failure.*
- For a patient with HTN and chronic renal disease, the primary code should be from category I12, hypertensive chronic kidney disease (CKD), followed by a secondary code from category N18 to report the stage of CKD. An additional code is required if acute renal failure is present with hypertensive CKD.
- The combination hypertensive codes require supplementary codes to identify the stage of CKD and/or the type of heart failure when those disorders are present.
- There are just two base codes for patients with HTN and heart disease: I11.0 (with heart failure) and I11.9 (without heart failure).
- ICD-10 assumes a causal relationship between HTN and heart disease and/or CKD.

The ICD-10-CM codes that denote circulatory diseases in chapter 9 start with the letter I, not the digit 1.

Chronic rheumatic heart diseases (I05-I09)

Includes chronic heart disorders related to rheumatic fever

Pulmonary heart disease and diseases of pulmonary circulation (I26-I28)

Includes pulmonary embolism, pulmonary HTN, cor pulmonale, arteriovenous fistula of pulmonary vessels and pulmonary artery aneurysm*

Diseases of veins, lymphatic vessels and lymph nodes, NEC (I80-I89)

Includes phlebitis and thrombophlebitis, venous embolism and thrombosis, varicose veins, venous insufficiency, vein strictures, lymphangitis, lymphedema, and esophageal varices*

Other and unspecified disorders of circulatory system (I95-I99)

Includes hypotension, gangrene NEC, intraoperative and postprocedural complications and disorders of circulatory system NEC*

Ischemic heart diseases (I20-I25)

Coronary artery disease (CAD) and angina:

ICD-10-CM establishes the code selection by type of vessel or graft:

- CAD of a native coronary artery appears in subcategory I25.1. The additional characters in this code denote the presence, or absence, of angina pectoris. By creating a combination code, it eliminates the argument about which diagnosis should be considered the principal diagnosis.
- The default code is I25.10 for a native coronary artery without angina pectoris. Code I25.11 corresponds to atherosclerotic heart disease of native coronary artery with angina pectoris.
- **Atherosclerosis of coronary artery bypass graft(s) (CABG) and coronary artery of transplanted heart with angina pectoris (I25.7-):** When using one of these combination codes, it is not required to use an additional code for angina pectoris. A causal relationship is assumed in a patient with both atherosclerosis and angina pectoris, except when documentation specifies the angina is due to something other than the atherosclerosis.
- If a patient with CAD is admitted due to an acute myocardial infarction (MI), the acute MI should be sequenced before the CAD.
- Angina pectoris:
 - Unstable (I20.0)
 - With documented spasm (I20.1)
 - Other forms (I20.8)

Example:

A patient is diagnosed with CAD and angina with no previous history of a CABG.

ICD-10-CM: atherosclerotic heart disease of native coronary artery with unspecified angina pectoris (I25.119)

Chronic ischemic heart disease, unspecified (I25.9):

ischemic heart disease not otherwise specified with a stated duration of over four weeks, or specified as chronic

MI:

Acute MI is coded by:

- **Site:** anterolateral or posterior wall
- **Type:** STEMI or NSTEMI
- **Temporal parameter:** initial, subsequent and old

Acute MI appears in the following code categories:

- **Acute myocardial infarction (I21.-):** Denotes the specific wall and the coronary artery involved in the MI. Code (I21.-) has an includes note for MI specified as acute or with stated duration of four weeks (28 days) or less from onset.
- **STEMI of unspecified site (I21.3):** The default for unspecified acute MI. If only STEMI or transmural MI is documented, query the provider as to the site, or assign code I21.3.
- **Subsequent STEMI and NSTEMI (I22.-):** There is a separate code specifically for subsequent MI; the term subsequent denotes an additional acute MI within a four-week time frame of an initial MI. Category I22 also distinguishes between STEMI versus NSTEMI and denotes the specific wall involved in the MI. It includes a note that states the subsequent MI occurs within four weeks (28 days) of a previous MI, regardless of site. Coders must report a code from the I22 category in conjunction with a code from the I21 category. The sequencing of the I22 and I21 codes depends on the circumstances of the encounter.
- **Complications following MI (I23.-):** certain current complications occurring within the 28 -day period
- **Old MI (I25.2):** history of an MI

Examples:

A patient is being treated for an acute non-ST elevation MI which she suffered five days ago. The patient also has atrial fibrillation.

ICD-10-CM: NSTEMI (I21.4) and unspecified atrial fib (I48.91)

Patient suffered an acute MI of the right coronary artery three weeks ago. He is presenting for his two-week hospital follow-up. He is getting better.

ICD-10-CM: STEMI involving right coronary artery (I21.11) (less than 28 days)

Patient presents for a routine check-up. She suffered an MI of the left main coronary artery three months ago. She is asymptomatic and requires no continued care for the MI.

ICD-10-CM: old myocardial infarction (I25.2)

ICD-10-CM defines acute MI as encounters that occur when MI is less than or equal to four weeks (28 days) from date of onset.

Diseases of arteries, arterioles and capillaries (I70-I79)

Includes atherosclerosis, aneurysm, arterial thrombus and embolism, peripheral vascular disease (PVD), and other strictures and arterial dissections of these vessels*

- As required by the specificity needed in ICD-10, it is important to:
 - State laterality and acuity, when applicable.
 - Identify any chronic total occlusion of an artery.
 - Detail the diseased vessel (e.g., atherosclerosis of popliteal artery Gore-Tex graft).
 - Clarify atherosclerosis versus PVD.
 - Differentiate a bypass graft in-stent versus end-stent stenosis.

Other forms of heart disease (I30-I52)

Includes various forms of pericarditis, cardiomyopathy, heart block, arrhythmias, valve disorders, pericardial effusion and heart failure*

Heart failure (I50.-):

The subcategories indicate the type: left ventricular; systolic; diastolic and combined systolic, and diastolic.

- Congestive is a nonessential modifier in the heart failure codes. It is broken down by time parameters as acute, chronic and acute on chronic.
- Heart conditions classified to I50.– or I51.4-I51.9 with hypertension are assigned a code from category I11, hypertensive heart disease. Use an additional code from category I50 to specify the type of heart failure when appropriate.

Examples:

Patient comes for a check-up of his chronic diastolic heart failure. Reports he is sleeping and feeling better on meds. He will return in 3 months.

ICD-10-CM: chronic diastolic (congestive) heart failure (I50.32)

78-year-old female returns for recheck. She has chronic systolic heart failure due to HTN.

ICD-10-CM: hypertensive heart disease with heart failure (I11.0) and chronic systolic heart failure (I50.22)

Patient has diagnosis of congestive heart failure due to hypertensive heart disease and stage 5 chronic kidney failure.

ICD-10-CM: hypertensive heart and CKD with heart failure and with stage 5 CKD or ESRD (I13.2), congestive heart failure NOS (I50.9) and CKD 5 (N18.5)

Atrial fibrillation

- Paroxysmal (I48.0)
- Persistent (I48.1)
- Chronic (I48.2)
- Unspecified (I48.91)

Atrial flutter

- Typical (I48.3)
- Atypical (I48.4)
- Unspecified (I48.92)

Sick sinus syndrome (I49.5)

Cerebrovascular diseases (I60-I69)

Nontraumatic intracranial hemorrhagic CVAs (I60.- to I62.-):

It is important to provide the location or source of the hemorrhage (if known) and specify right or left artery (if applicable). If documentation states bilateral hemorrhage sites, assign codes for each side since there is not a bilateral option for this series.

Example:

A patient has a nontraumatic subarachnoid hemorrhage of bilateral vertebral arteries.

ICD-10-CM: nontraumatic subarachnoid hemorrhage from right vertebral artery (I60.51) and nontraumatic subarachnoid hemorrhage from left vertebral artery (I60.52)

Occlusive CVAs (I63.- to I68.-):

Documentation must specify whether or not a cerebral infarction occurred due to a thrombosis, embolism, occlusion, stenosis, etc. while also identifying the artery(ies) involved.

- Codes in category I63 has been revised to include a bilateral option.

Sequela of cerebrovascular disease (I69):

Sequelae of cerebrovascular disease (synonymous with late effect) specifies whether the sequelae is the result of a hemorrhagic or occlusive CVA, as well as the residual condition. The combination codes make it easier to identify all specific information in one code.

- Codes from category I69 specify hemiplegia, hemiparesis and monoplegia and further identify whether the dominant or nondominant side is affected:

- For ambidextrous patients, the default should be dominant.
- If the left side is affected, the default is non-dominant.
- If the right side is affected, the default is dominant.

- As required by the specificity needed in ICD-10, it is important to:
 - List conditions that exist due to a cerebrovascular event.
 - Describe residual condition completely (e.g., cognitive deficits, aphasia, dysarthria, hemiplegia, ataxia).
 - Specify the anatomic site (e.g., upper or lower limb).
 - State laterality, when applicable (i.e., right, left, both).
 - Identify affected side as dominant or non-dominant.
 - Provide underlying cause (e.g., homonymous hemianopia due to history of a ruptured aneurysm).

Personal history of CVA/TIA without residual deficits (Z86.73):

Reported for history of cerebrovascular disease when no neurologic deficits are present.

References

Medical Management Plus Inc, *ICD-10-CM Diseases of the Circulatory System* (January 2014): mmplusin.com

Medicare Learning Network, *ICD-10-CM Classification Enhancements* (August 2016): www.cms.gov/Medicare/Coding/ICD10/downloads/icd-10quickrefer.pdf

HCPPro, Inc., *The Coder's Guide to ICD-10*, ICD-10-CM Chapter 9: Diseases of the Circulatory System (2011): hcpro.com

Excellus BCBS, *Circulatory System Diseases— ICD-9 vs. ICD-10* (February 2013, Connection Newsletter): excellusbcbcs.com

Indian Health Partnerships Conference ICD-10 Initiative, ICD-10-CM Chapter 9: Diseases of the Circulatory System (August 2013): ihs.gov

Universal Class, *ICD-10-CM Coding Guidelines— Diseases of the Circulatory System* (Chapter 9) and *Diseases of the Respiratory System* (Chapter 10): universalclass.com

University of Arizona Health Plans, *The Road to ICD-10* (2011): ufcaz.com

Anita Schmidt, K.K., & P.W. (2016). *ICD-10- CM Expert for Physicians*. Optum360

** Not all inclusive, reference ICD-10-CM codebook for complete listing of conditions included in code category.*