

# CHAPTER 9

Diseases of the Circulatory System

(I00-I99)

October 2020



# Hypertension

- The classification presumes a causal relationship between hypertension and heart involvement and between hypertension and kidney involvement, as the two conditions are linked by the term “with” in the Alphabetic Index.
- These conditions should be coded as related even in the absence of provider documentation explicitly linking them, unless the documentation clearly states the conditions are unrelated.
- For hypertension and conditions not specifically linked by relational terms such as “with,” “associated with” or “due to” in the classification, provider documentation must link the conditions in order to code them as related.

# Hypertension with Heart Disease

- Hypertension 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 according to the circumstances of the admission/encounter.

# Hypertensive Chronic Kidney Disease

- Assign codes from category I12, Hypertensive chronic kidney disease, when both hypertension and a condition classifiable to category N18, Chronic kidney disease (CKD), are present.
- CKD should not be coded as hypertensive if the provider indicates the CKD is not related to the hypertension.
- The appropriate code from category N18 should be used as a secondary code with a code from category I12 to identify the stage of chronic kidney disease.

*See Section I.C.14. Chronic kidney disease.*

- If a patient has hypertensive chronic kidney disease and acute renal failure, the acute renal failure should also be coded.
- 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.
- For patients with both acute renal failure and chronic kidney disease, **the acute renal failure should also be coded. Sequence according to the circumstances of the admission/encounter.**

# Hypertensive Cerebrovascular Disease and Hypertensive Retinopathy

- **Hypertensive Cerebrovascular Disease**

- For hypertensive cerebrovascular disease, first assign the appropriate code from categories I60-I69, followed by the appropriate hypertension code.

- **Hypertensive Retinopathy**

- Subcategory H35.0, Background retinopathy and retinal vascular changes, should be used with a code from category I10 – I15, Hypertensive disease to include the systemic hypertension. The sequencing is based on the reason for the encounter.

# Secondary, Transient and Controlled

- **Hypertension, Secondary**

Secondary hypertension is due to an underlying condition. Two codes are required: one to identify the underlying etiology and one from category I15 to identify the hypertension. Sequencing of codes is determined by the reason for admission/encounter.

- **Hypertension, Transient**

Assign code R03.0, Elevated blood pressure reading without diagnosis of hypertension, unless patient has an established diagnosis of hypertension. Assign code O13.-, Gestational [pregnancy-induced] hypertension without significant proteinuria, or O14.-, Pre-eclampsia, for transient hypertension of pregnancy.

- **Hypertension, Controlled**

This diagnostic statement usually refers to an existing state of hypertension under control by therapy. Assign the appropriate code from categories I10-I15, Hypertensive diseases.

# Uncontrolled, Crisis and Pulmonary Hypertension

**Hypertension, Controlled** This diagnostic statement usually refers to an existing state of hypertension under control by therapy. Assign the appropriate code from categories I10-I15, Hypertensive diseases.

**Hypertension, Uncontrolled** hypertension may refer to untreated hypertension or hypertension not responding to current therapeutic regimen. In either case, assign the appropriate code from categories I10-I15, Hypertensive diseases.

**Hypertensive Crisis** Assign a code from category I16, Hypertensive crisis, for documented hypertensive urgency, hypertensive emergency or unspecified hypertensive crisis. Code also any identified hypertensive disease (I10-I15). The sequencing is based on the reason for the encounter.

**Pulmonary Hypertension** is classified to category I27, Other pulmonary heart diseases. For secondary pulmonary hypertension (I27.1, I27.2-), code also any associated conditions or adverse effects of drugs or toxins. The sequencing is based on the reason for the encounter, except for adverse effects of drugs (See Section I.C.19.e.).

# Atherosclerotic Coronary Artery Disease and Angina

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- ICD-10-CM has combination codes for atherosclerotic heart disease with angina pectoris. The subcategories for these codes are I25.11, Atherosclerotic heart disease of native coronary artery with angina pectoris and I25.7, Atherosclerosis of coronary artery bypass graft(s) and coronary artery of transplanted heart with angina pectoris.
- When using one of these combination codes it is not necessary to use an additional code for angina pectoris. A causal relationship can be assumed in a patient with both atherosclerosis and angina pectoris, unless the documentation indicates the angina is due to something other than the atherosclerosis.
- If a patient with coronary artery disease is admitted due to an acute myocardial infarction (AMI), the AMI should be sequenced before the coronary artery disease.
- See Section I.C.9. Acute myocardial infarction (AMI)*

# Intraoperative and Postprocedural Cerebrovascular Accident

- Medical record documentation should clearly specify the cause- and-effect relationship between the medical intervention and the cerebrovascular accident in order to assign a code for intraoperative or postprocedural cerebrovascular accident.
- Proper code assignment depends on whether it was an infarction or hemorrhage and whether it occurred intraoperatively or postoperatively.
- If it was a cerebral hemorrhage, code assignment depends on the type of procedure performed.

# Sequela of Cerebrovascular Disease

- Category I69 is used to indicate conditions classifiable to categories I60-I67 as the causes of sequela (neurologic deficits), themselves classified elsewhere. These “late effects” include neurologic deficits that persist after initial onset of conditions classifiable to categories I60-I67.
- The neurologic deficits caused by cerebrovascular disease may be present from the onset or may arise at any time after the onset of the condition classifiable to categories I60-I67.
- Codes from category I69, Sequelae of cerebrovascular disease, that specify hemiplegia, hemiparesis and monoplegia identify whether the dominant or nondominant side is affected. Should the affected side be documented, but not specified as dominant or nondominant, and the classification system does not indicate a default, code selection is as follows:
  - 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.

## Codes from Category I69 with codes from I60-I67

- Codes from category I69 may be assigned on a health care record with codes from I60-I67, if the patient has a current cerebrovascular disease and deficits from an old cerebrovascular disease.
- Codes from Category I69 and Personal History of Transient Ischemic Attack (TIA) and Cerebral Infarction (Z86.73)
- Codes from category I69 should not be assigned if the patient does not have neurologic deficits.

*See Section I.C.21. 4. History (of) for use of personal history codes*

# Acute Myocardial Infarction (AMI)

- **Type 1 ST elevation myocardial infarction (STEMI) and non-ST elevation myocardial infarction (NSTEMI)**

The ICD-10-CM codes for type 1 acute myocardial infarction (AMI) identify the site, such as anterolateral wall or true posterior wall. Subcategories I21.0-I21.2 and code I21.3 are used for type 1 ST elevation myocardial infarction (STEMI). Code I21.4, Non-ST elevation (NSTEMI) myocardial infarction, is used for type 1 non-ST elevation myocardial infarction (NSTEMI) and nontransmural MIs.

If a type 1 NSTEMI evolves to STEMI, assign the STEMI code. If a type 1 STEMI converts to NSTEMI due to thrombolytic therapy, it is still coded as STEMI.

## Acute Myocardial Infarction (AMI) (continued)

- For encounters occurring while the myocardial infarction is equal to, or less than, four weeks old, including transfers to another acute setting or a post acute setting, and the myocardial infarction meets the definition for “other diagnoses” (see Section III, Reporting Additional Diagnoses), codes from category I21 may continue to be reported.
- For encounters after the 4-week time frame and the patient is still receiving care related to the myocardial infarction, the appropriate aftercare code should be assigned, rather than a code from category I21.
- For old or healed myocardial infarctions not requiring further care, code I25.2, Old myocardial infarction, may be assigned.

# Acute Myocardial Infarction Unspecified and AMI Documented as Nontransmural or Subendocardial but Site Provided

- Code I21.9, Acute myocardial infarction, unspecified, is the default for unspecified acute myocardial infarction or unspecified type. If only type 1 STEMI or transmural MI without the site is documented, assign code I21.3, ST elevation (STEMI) myocardial infarction of unspecified site.
- If an AMI is documented as nontransmural or subendocardial, but the site is provided, it is still coded as a subendocardial AMI.

*See Section I.C.21.3 for information on coding status post administration of tPA in a different facility within the last 24 hours.*

# Subsequent Acute Myocardial Infarction

- A code from category I22, Subsequent ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarction, is to be used when a patient who has suffered a type 1 or unspecified AMI has a new AMI within the 4-week time frame of the initial AMI.
- A code from category I22 must be used in conjunction with a code from category I21. The sequencing of the I22 and I21 codes depends on the circumstances of the encounter.
- Do not assign code I22 for subsequent myocardial infarctions other than type 1 or unspecified. For subsequent type 2 AMI assign only code I21.A1. For subsequent type 4 or type 5 AMI, assign only code I21.A9.
- If a subsequent myocardial infarction of one type occurs within 4 weeks of a myocardial infarction of a different type, assign the appropriate codes from category I21 to identify each type.
- Do not assign a code from I22. Codes from category I22 should only be assigned if both the initial and subsequent myocardial infarctions are type 1 or unspecified.

## Other Types of Myocardial Infarction

- The ICD-10-CM provides codes for different types of myocardial infarction. Type 1 myocardial infarctions are assigned to codes I21.0-I21.4.
- Type 2 myocardial infarction (myocardial infarction due to demand ischemia or secondary to ischemic imbalance) is assigned to code I21.A1, Myocardial infarction type 2 with the underlying cause coded first. Do not assign code I24.8, Other forms of acute ischemic heart disease, for the demand ischemia.
- If a type 2 AMI is described as NSTEMI or STEMI, only assign code I21.A1. Codes I21.01-I21.4 should only be assigned for type 1 AMIs.
- Acute myocardial infarctions type 3, 4a, 4b, 4c and 5 are assigned to code I21.A9, Other myocardial infarction type.
- The "Code also" and "Code first" notes should be followed related to complications, and for coding of postprocedural myocardial infarctions during or following cardiac surgery.

# Thank You

If you have any questions or concerns:

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