



CHAPTER 9

Diseases of the Circulatory System

(I00–I99)

ICD-10-CM Official Guidelines — Condensed Student Quick Reference

CODING DECODED

a. Hypertension

Core Rule: ICD-10-CM presumes hypertension IS causally related to heart disease and to CKD — they're linked by “with” in the Alphabetic Index. Code them as related even without explicit provider linkage, unless documentation clearly states they're unrelated. For conditions NOT linked by relational terms (“with,” “due to,” “associated with”), the provider MUST document the link before you can code them as related.

Category Quick Reference

Code	Category
I10	Essential (primary) hypertension
I11	Hypertensive heart disease
I12	Hypertensive chronic kidney disease
I13	Hypertensive heart AND chronic kidney disease
I15	Secondary hypertension
I16	Hypertensive crisis
I1A.0	Resistant hypertension (additional code only)

1. Hypertension with Heart Disease

- **Heart failure / ill-defined disease:** I50.-, I51.4, I51.89, I51.9 + hypertension → I11 + an additional code from I50/I51 to identify the heart condition.
- **Degeneration/cardiomegaly:** I51.5 (myocardial degeneration) or I51.7 (cardiomegaly) + hypertension → I11 only — no additional heart code needed.
- **If documented unrelated:** Code hypertension (I10 or I15) and the heart condition separately; sequence per circumstances of the encounter.

2. Hypertensive Chronic Kidney Disease

- **Rule:** Hypertension + N18.- (CKD) → I12 + secondary N18 code for CKD stage.
- **Exception:** Not coded as hypertensive if provider states CKD is unrelated to the hypertension.
- **AKI + hypertensive CKD:** Also code the acute renal failure; sequence per encounter (see I.C.14).

3. Hypertensive Heart AND Chronic Kidney Disease

- **Rule:** Hypertension + heart disease + CKD → single combination code I13 (not I11 or I12 separately — I13 already includes what's in both).
- **Additional codes:** Add a code from I50 if heart failure is present, plus the N18 code for CKD stage.
- **AKI + CKD:** Also code the acute renal failure; sequence per encounter.

4. Hypertensive Cerebrovascular Disease

- **Sequencing:** Code the cerebrovascular condition (I60–I69) FIRST, then the hypertension code.

5. Hypertensive Retinopathy

- **Rule:** H35.0 + a code from I10–I15 to capture the systemic hypertension; sequence by reason for the encounter.

6. Secondary Hypertension

- **Rule:** Two codes always: the underlying etiology + an I15 code for the hypertension; sequence by reason for admission.

7. Transient Hypertension

- **Default:** R03.0 (elevated BP reading, no hypertension diagnosis) — unless the patient has an established hypertension diagnosis.
- **In pregnancy:** O13.- (gestational hypertension w/o significant proteinuria) or O14.- (pre-eclampsia).

8. Controlled Hypertension

- **Rule:** Existing hypertension controlled by therapy → code from I10–I15.

9. Uncontrolled Hypertension

- **Rule:** Whether untreated OR not responding to current therapy — either way, code from I10–I15.

10. Hypertensive Crisis

- **Rule:** I16 (urgency, emergency, or unspecified crisis) + code any identified hypertensive disease (I10–I15); sequence by reason for the encounter.

11. Pulmonary Hypertension

- **Code:** I27 (Other pulmonary heart diseases).
- **Secondary PH:** Secondary types (I27.1, I27.2-) → also code the associated condition or the drug/toxin cause; sequence by reason for encounter (except adverse drug effects — see I.C.19.e).

12. Resistant Hypertension

- **Rule:** I1A.0 as an ADDITIONAL code when “apparent treatment-resistant,” “treatment-resistant,” or “true resistant” hypertension is documented.
- **Sequencing:** The specific hypertension type code is sequenced first, if known.



b. Atherosclerotic Coronary Artery Disease and Angina

Core Rule: ICD-10-CM has combination codes for atherosclerotic heart disease WITH angina pectoris — a causal relationship is assumed unless documentation says the angina is due to something else.

Code	Description
I25.11	Atherosclerotic heart disease of native coronary artery with angina pectoris
I25.7	Atherosclerosis of coronary artery bypass graft(s)/transplanted heart artery with angina pectoris

- **No extra code needed:** Do not assign an additional code for angina pectoris when a combination code is used.
- **CAD + acute MI on admission:** Sequence the AMI before the coronary artery disease (see Section I.C.9.e).

c. Intraoperative and Postprocedural Cerebrovascular Accident

- **Requirement:** Documentation must clearly specify a cause-and-effect relationship between the medical intervention and the CVA before a code can be assigned.
- **Code depends on:** Infarction vs. hemorrhage, AND whether it occurred intraoperatively or postoperatively.
- **Hemorrhage:** If cerebral hemorrhage, code assignment also depends on the type of procedure performed.

d. Sequelae of Cerebrovascular Disease

1. Category I69

- **What it captures:** Represents “late effects” — neurologic deficits that persist after (or arise any time after) the onset of a condition classifiable to I60–I67.
- **Laterality default:** If laterality is documented but not specified as dominant/nondominant, and there’s no classification default, use:
 - Ambidextrous patients → default is dominant.
 - Left side affected → default is non-dominant.
 - Right side affected → default is dominant.

2. Codes from I69 with Codes from I60–I67

- **Rule:** May be coded together when the patient has a CURRENT cerebrovascular disease AND deficits from an OLD cerebrovascular event.

3. I69 and Personal History of TIA / Cerebral Infarction (Z86.73)

- **Rule:** Do not assign an I69 code if the patient has no neurologic deficits — use Z86.73 instead (see I.C.21.4).

e. Acute Myocardial Infarction (AMI)

1. Type 1 STEMI and NSTEMI

Code	Meaning
I21.0–I21.2, I21.3	Type 1 STEMI (by site, or I21.3 = unspecified site)
I21.4	Type 1 NSTEMI (includes nontransmural MI)
I25.2	Old / healed MI, no further care required

- **Evolving MI:** If a type 1 NSTEMI evolves to STEMI → code the STEMI.
- **Thrombolytics:** If STEMI converts to NSTEMI due to thrombolytic therapy → still code as STEMI.
- **Timing:** ≤ 4 weeks old and meets “other diagnosis” criteria (incl. transfers) → continue reporting I21.
- > 4 weeks and still receiving related care → use the aftercare code instead of I21.

2. Acute MI, Unspecified

- **Default code:** I21.9 = default for unspecified AMI / unspecified type.
- **Type 1 STEMI without site:** I21.3 = ST elevation (STEMI) MI of unspecified site.

3. Nontransmural/Subendocardial AMI with Site Documented

- **Rule:** Still code as a subendocardial AMI, even though a site is provided (see I.C.21.3 for tPA given at a different facility within 24 hours).

4. Subsequent Acute MI

- **Rule:** I22 = a NEW type 1 or unspecified AMI within 4 weeks of the initial type 1/unspecified AMI — always paired with an I21 code; sequence per encounter.
- **Subsequent type 2 AMI:** Only I21.A1 (no I22).
- **Subsequent type 4 or type 5 AMI:** Only I21.A9 (no I22).
- **Two different types within 4 weeks:** Code each with the appropriate I21 code; do NOT assign I22 (I22 applies only when both events are type 1/unspecified).

5. Other Types of Myocardial Infarction

MI Type	Code
Type 1	I21.0–I21.4
Type 2 (demand ischemia / ischemic imbalance)	I21.A1 + code underlying cause first, if known
Type 2 documented as STEMI/NSTEMI	Still only I21.A1
Types 3, 4a, 4b, 4c, 5	I21.A9

- **Watch out:** Do not assign I24.89 (Other forms of acute ischemic heart disease) for demand ischemia.
- Follow “Code also” / “Code first” notes for complications and for postprocedural MI during/after cardiac surgery.

6. MI with Coronary Microvascular Dysfunction (CMD)

- **I21.B:** Assign for MI with CMD, MI with coronary microvascular disease, and MINOCA (MI with non-obstructive coronary arteries) with microvascular disease.