

atherosclerosis of coronary artery bypass graft (s) and coronary artery of transplanted heart with angina pectoris (I25.7-)  
postinfarction angina (I23.7)

**GUIDELINES** Section I.C.9.b. 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.

**CODING TIPS** ✓ Do not assign a code from I20.- for a patient who also has coronary artery disease (CAD)/atherosclerotic heart disease (ASHD). Angina in a patient with CAD/ASHD should be coded to the appropriate I25.11-code.

**SP SH + I20.0 Unstable angina**  
Accelerated angina  
Crescendo angina  
De novo effort angina  
Intermediate coronary syndrome  
Preinfarction syndrome  
Worsening effort angina

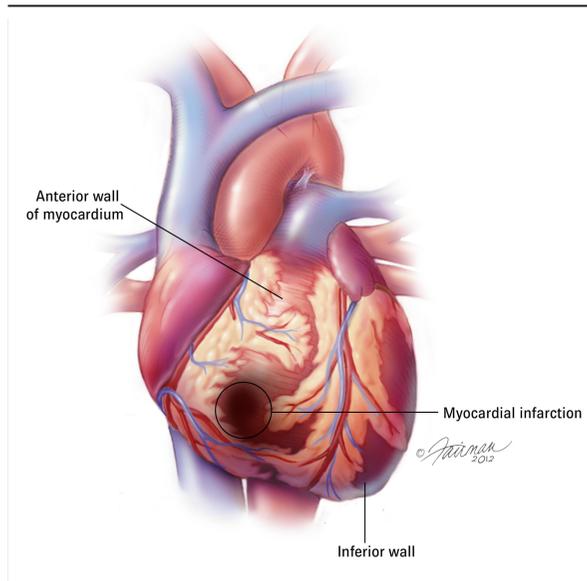
**CODING TIPS** ✓ Unstable angina is also known as angina at rest.

**SP SH + I20.1 Angina pectoris with documented spasm**  
Angiospastic angina  
Prinzmetal angina  
Spasm-induced angina  
Variant angina

**SP SH + I20.8 Other forms of angina pectoris**  
Angina equivalent  
Angina of effort  
Coronary slow flow syndrome  
Stenocardia  
Stable angina

Use additional code(s) for symptoms associated with angina equivalent

**SP SH + I20.9 Angina pectoris, unspecified**  
Angina NOS  
Anginal syndrome  
Cardiac angina  
Ischemic chest pain



#### + 4 I21 Acute myocardial infarction

**INCLUDES** cardiac infarction  
coronary (artery) embolism  
coronary (artery) occlusion  
coronary (artery) rupture  
coronary (artery) thrombosis  
infarction of heart, myocardium, or ventricle  
myocardial infarction specified as acute or with a stated duration of 4 weeks (28 days) or less from onset

Use additional code, if applicable, to identify:  
exposure to environmental tobacco smoke (Z77.22)  
history of tobacco dependence (Z87.891)  
occupational exposure to environmental tobacco smoke (Z57.31)  
status post administration of tPA (rtPA) in a different facility within the last 24 hours prior to admission to current facility (Z92.82)  
tobacco dependence (F17.-)  
tobacco use (Z72.0)

**EXCLUDES 2** old myocardial infarction (I25.2)  
postmyocardial infarction syndrome (I24.1)  
subsequent type 1 myocardial infarction (I22.-)

**GUIDELINES** Section I.C.9.e.4  
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.

**GUIDELINES** Section I.C.9.e.1)

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.

**CODING TIPS** ✓ When assigning any code from I21.- to report STEMI or NSTEMI, note that ICD-10 coding guidelines only allow assignment of these codes for 4 weeks following the occurrence of the MI. Use I22 codes for any subsequent MI during the same 4 weeks, if both the initial and subsequent MI were Type 1 or unspecified.

**CODING TIPS** ✓ I21 codes specify STEMI or ST elevation myocardial infarction. If the physician has not documented STEMI, but has documented location, use the specific I21 code for that location. STEMI is more common than NSTEMI, and is the default.

- + 5 I21.0 ST elevation (STEMI) myocardial infarction of anterior wall**  
Type 1 ST elevation myocardial infarction of anterior wall
- \$P + I21.01 ST elevation (STEMI) myocardial infarction involving left main coronary artery**
- \$P + I21.02 ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery**  
ST elevation (STEMI) myocardial infarction involving diagonal coronary artery
- \$P + I21.09 ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall**  
Acute transmural myocardial infarction of anterior wall  
Anteroapical transmural (Q wave) infarction (acute)  
Anterolateral transmural (Q wave) infarction (acute)  
Anteroseptal transmural (Q wave) infarction (acute)  
Transmural (Q wave) infarction (acute) (of) anterior (wall) NOS
- + 5 I21.1 ST elevation (STEMI) myocardial infarction of inferior wall**  
Type 1 ST elevation myocardial infarction of inferior wall
- \$P + I21.11 ST elevation (STEMI) myocardial infarction involving right coronary artery**  
Inferoposterior transmural (Q wave) infarction (acute)
- \$P + I21.19 ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall**  
Acute transmural myocardial infarction of inferior wall

Inferolateral transmural (Q wave) infarction (acute)  
Transmural (Q wave) infarction (acute) (of) diaphragmatic wall  
Transmural (Q wave) infarction (acute) (of) inferior (wall) NOS

**EXCLUDES 2** ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery (I21.21)

- + 5 I21.2 ST elevation (STEMI) myocardial infarction of other sites**  
Type 1 ST elevation myocardial infarction of other sites
- \$P + I21.21 ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery**  
ST elevation (STEMI) myocardial infarction involving oblique marginal coronary artery
- \$P + I21.29 ST elevation (STEMI) myocardial infarction involving other sites**  
Acute transmural myocardial infarction of other sites  
Apical-lateral transmural (Q wave) infarction (acute)  
Basal-lateral transmural (Q wave) infarction (acute)  
High lateral transmural (Q wave) infarction (acute)  
Lateral (wall) NOS transmural (Q wave) infarction (acute)  
Posterior (true) transmural (Q wave) infarction (acute)  
Posterobasal transmural (Q wave) infarction (acute)  
Posterolateral transmural (Q wave) infarction (acute)  
Posteroseptal transmural (Q wave) infarction (acute)  
Septal transmural (Q wave) infarction (acute) NOS
- \$P + I21.3 ST elevation (STEMI) myocardial infarction of unspecified site**  
Acute transmural myocardial infarction of unspecified site  
Transmural (Q wave) myocardial infarction NOS  
Type 1 ST elevation myocardial infarction of unspecified site  
**CODING TIPS** ✓ This code is used for a documented STEMI, but of unspecified location. Do not use this code for MI, NOS. Do not use this code if the physician has documented Type 2 MI.
- \$P + I21.4 Non-ST elevation (NSTEMI) myocardial infarction**  
Acute subendocardial myocardial infarction  
Non-Q wave myocardial infarction NOS  
Nontransmural myocardial infarction NOS  
Type 1 non-ST elevation myocardial infarction

**GUIDELINES Section I.C.9.e.1)**  
Code I21.4, Non-ST elevation (NSTEMI) myocardial infarction, is used for type 1 non ST elevation myocardial infarction (NSTEMI) and nontransmural MIs.

**GUIDELINES Section I.C.9.e.3)**  
If an AMI is documented as nontransmural or subendocardial, but the site is provided, it is still coded as a subendocardial AMI.

**SP + I21.9 Acute myocardial infarction, unspecified**

Myocardial infarction (acute) NOS

**GUIDELINES Section I.C.9.e.2)**  
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.

**CODING TIPS ✓** This code is used for the initial MI when the physician has not documented the type or location of the infarct.

**+ S I21.A Other type of myocardial infarction**

**CODING TIPS ✓** There is no code for a subsequent MI of types 2, 3, 4, 5. Continue to use I21.A-, remembering that a code can only be used once on a POC/claim.

- ▲ SP + I21.A1 Myocardial infarction type 2**  
Myocardial infarction due to demand ischemia  
Myocardial infarction secondary to ischemic imbalance  
Code first the underlying cause, such as:  
anemia (D50.0-D64.9)  
chronic obstructive pulmonary disease (J44.-)  
paroxysmal tachycardia (I47.0-I47.9)  
shock (R57.0-R57.9)

**GUIDELINES Section I.C.9.e.5)**  
The ICD-10-CM provides codes for different types of myocardial infarction. Type 1 myocardial infarctions are assigned to codes I21.0-I21.4, and I21.9.

Type 2 myocardial infarction, and myocardial infarction due to demand ischemia or secondary to ischemic balance, is assigned to code I21.A1, Myocardial infarction type 2 with a code for the underlying cause. Do not assign code I24.8, Other forms of acute ischemic heart disease for the demand ischemia. Sequencing of type 2 AMI or the underlying cause is dependent on the circumstances of admission. When a type 2 AMI code 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.

**CODING TIPS ✓** When the physician documents Type 2 MI, assign I21.A1, even if the physician documents STEMI or NSTEMI. Type 2 MIs are not due to atherosclerotic plaque, but to a problem with supply and demand of oxygen. The documented cause of the problem should be coded first.

- ▲ IQ + I21.A9 Other myocardial infarction type**  
Myocardial infarction associated with revascularization procedure  
Myocardial infarction type 3  
Myocardial infarction type 4a  
Myocardial infarction type 4b  
Myocardial infarction type 4c  
Myocardial infarction type 5

Code first:

, if applicable, postprocedural myocardial infarction following cardiac surgery (I97.190), or postprocedural myocardial infarction during cardiac surgery (I97.790)

Code also complication, if known and applicable, such as:

(acute) stent occlusion (T82.897-)  
(acute) stent stenosis (T82.855-)  
(acute) stent thrombosis (T82.867-)  
cardiac arrest due to underlying cardiac condition (I46.2)  
complication of percutaneous coronary intervention (PCI) (I97.89)  
occlusion of coronary artery bypass graft (T82.218-)

- + 4 I22 Subsequent ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarction**