

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

INCLUDES acute myocardial infarction occurring within four weeks (28 days) of a previous acute myocardial infarction, regardless of site cardiac infarction
coronary (artery) embolism
coronary (artery) occlusion
coronary (artery) rupture
coronary (artery) thrombosis
infarction of heart, myocardium, or ventricle
recurrent myocardial infarction
reinfarction of myocardium
rupture of heart, myocardium, or ventricle
subsequent type 1 myocardial infarction

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 1 *subsequent myocardial infarction, type 2 (I21.A1)*
subsequent myocardial infarction of other type (type 3) (type 4) (type 5) (I21.A9)

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.4)

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.

CODING TIP ✓ A code from category I22 must be used in conjunction with a code from category I21. The sequencing of the codes will depend on the circumstances of the encounter.

CODING TIP ✓ A code from category I22 should not be used for subsequent MIs other than type 1 or unspecified. For subsequent type 2 AMIs, assign code I21.A1. For subsequent type 4 or 5 AMIs, assign code I21.A9. When assigning I21.A1, you must code first the underlying cause.
AHA: 4Q 2012, 97, 103-104
AHA: 1Q 2013, 25

I22.0 Subsequent ST elevation (STEMI) myocardial infarction of anterior wall

Subsequent acute transmural myocardial infarction of anterior wall
Subsequent transmural (Q wave) infarction (acute)(of) anterior (wall) NOS
Subsequent anteroapical transmural (Q wave) infarction (acute)
Subsequent anterolateral transmural (Q wave) infarction (acute)
Subsequent anteroseptal transmural (Q wave) infarction (acute)
CC Ex: See Appendix

I22.1 Subsequent ST elevation (STEMI) myocardial infarction of inferior wall

Subsequent acute transmural myocardial infarction of inferior wall
Subsequent transmural (Q wave) infarction (acute)(of) diaphragmatic wall
Subsequent transmural (Q wave) infarction (acute)(of) inferior (wall) NOS
Subsequent inferolateral transmural (Q wave) infarction (acute)
Subsequent inferoposterior transmural (Q wave) infarction (acute)
AHA: 4Q 2012, 97, 102, 103-104
CC Ex: See Appendix

I22.2 Subsequent non-ST elevation (NSTEMI) myocardial infarction

Subsequent acute subendocardial myocardial infarction
Subsequent non-Q wave myocardial infarction NOS
Subsequent nontransmural myocardial infarction NOS
CC Ex: See Appendix

I22.8 Subsequent ST elevation (STEMI) myocardial infarction of other sites

Subsequent acute transmural myocardial infarction of other sites
Subsequent apical-lateral transmural (Q wave) myocardial infarction (acute)
Subsequent basal-lateral transmural (Q wave) myocardial infarction (acute)
Subsequent high lateral transmural (Q wave) myocardial infarction (acute)
Subsequent transmural (Q wave) myocardial infarction (acute)(of) lateral (wall) NOS
Subsequent posterior (true) transmural (Q wave) myocardial infarction (acute)
Subsequent posterobasal transmural (Q wave) myocardial infarction (acute)
Subsequent posterolateral transmural (Q wave) myocardial infarction (acute)
Subsequent posteroseptal transmural (Q wave) myocardial infarction (acute)
Subsequent septal NOS transmural (Q wave) myocardial infarction (acute)
CC Ex: See Appendix

I22.9 Subsequent ST elevation (STEMI) myocardial infarction of unspecified site

Subsequent acute myocardial infarction of unspecified site
Subsequent myocardial infarction (acute) NOS
CC Ex: See Appendix

I23 Certain current complications following ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarction (within the 28 day period)

CODING TIP ✓ When assigning a code from category I23.-, also assign a code from category I21.-, and I22.-, as appropriate, if the encounter is within 4 weeks of the AMI. Use of codes from category I23.- may be appropriate after the 4 week period has lapsed. "Within the 28 day period" is a non-essential modifier in the category title. (AHA: 2Q 2017)

I23.0 Hemopericardium as current complication following acute myocardial infarction

EXCLUDES 1 *hemopericardium not specified as current complication following acute myocardial infarction (I31.2)*

CODING TIP ✓ **Documentation:** Hemopericardium is frequently documented with cardiac wall rupture, including ventricular rupture, following MI, and results in pooling of blood in the pericardial space, leading to tamponade. This life-threatening condition may occur during or shortly after an MI.

CC Ex: See Appendix

I23.1 Atrial septal defect as current complication following acute myocardial infarction

EXCLUDES 1 *acquired atrial septal defect not specified as current complication following acute myocardial infarction (I51.0)*

CC Ex: See Appendix

I23.2 Ventricular septal defect as current complication following acute myocardial infarction

EXCLUDES 1 *acquired ventricular septal defect not specified as current complication following acute myocardial infarction (I51.0)*

CC Ex: See Appendix

I23.3 Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction

AHA: 2Q 2017, 11

CC Ex: See Appendix

I23.4 Rupture of chordae tendineae as current complication following acute myocardial infarction

EXCLUDES 1 *rupture of chordae tendineae not specified as current complication following acute myocardial infarction (I51.1)*

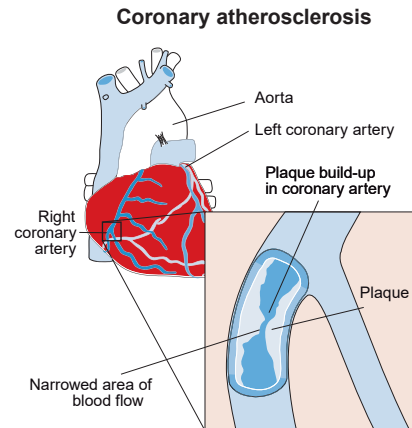
- DEFINITION** Tear in the fibrous, cord-like tissue connecting the papillary muscles to the valves, holding the valve flaps in place to prevent their eversion.
CC Ex: See Appendix
- I23.5 Rupture of papillary muscle as current complication following acute myocardial infarction** MCC HCC
EXCLUDES 1 *rupture of papillary muscle not specified as current complication following acute myocardial infarction (I51.2)*
CC Ex: See Appendix
- I23.6 Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction** CC HCC A
EXCLUDES 1 *thrombosis of atrium, auricular appendage, and ventricle not specified as current complication following acute myocardial infarction (I51.3)*
CC Ex: See Appendix
- I23.7 Postinfarction angina** CC HCC A
CODING TIP ✓ Post-infarction angina includes a syndrome of ischemic chest pain occurring either at rest or during minimal activity 24 hours or more following an acute MI. It is more common after NSTEMI. Post infarction angina is considered a complication (not simply angina after an MI) and must be documented by the physician.
 AHA: 2Q 2015, 16-17
CC Ex: See Appendix
- I23.8 Other current complications following acute myocardial infarction** CC HCC A
CC Ex: See Appendix
- I24 Other acute ischemic heart diseases**
EXCLUDES 1 *angina pectoris (I20.-) transient myocardial ischemia in newborn (P29.4)*
EXCLUDES 2 *non-ischemic myocardial injury (I5A)*
- I24.0 Acute coronary thrombosis not resulting in myocardial infarction** CC HCC
 Acute coronary (artery) (vein) embolism not resulting in myocardial infarction
 Acute coronary (artery) (vein) occlusion not resulting in myocardial infarction
 Acute coronary (artery) (vein) thromboembolism not resulting in myocardial infarction
EXCLUDES 1 *atherosclerotic heart disease (I25.1-)*
 AHA: 1Q 2013, 24
CC Ex: See Appendix
- I24.1 Dressler's syndrome** CC HCC
 Postmyocardial infarction syndrome
EXCLUDES 1 *postinfarction angina (I23.7)*
DEFINITION Fever, chest pain, pleuritis, and pericarditis weeks or months after heart injury caused by surgery or myocardial infarction.
CC Ex: See Appendix
- I24.8 Other forms of acute ischemic heart disease** CC HCC
EXCLUDES 1 *myocardial infarction due to demand ischemia (I21.A1)*
CC Ex: See Appendix
- I24.9 Acute ischemic heart disease, unspecified** CC HCC
EXCLUDES 1 *ischemic heart disease (chronic) NOS (I25.9)*
CC Ex: See Appendix
- I25 Chronic ischemic heart disease**
Use additional code to identify:
chronic total occlusion of coronary artery (I25.82)
exposure to environmental tobacco smoke (Z77.22)
history of tobacco dependence (Z87.891)
occupational exposure to environmental tobacco smoke (Z57.31)
tobacco dependence (F17.-)
tobacco use (Z72.0)
EXCLUDES 2 *non-ischemic myocardial injury (I5A)*

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.

DEFINITION Refractory angina pectoris (RAP) is defined as the occurrence of frequent angina attacks uncontrolled by maximal drug therapy, significantly limiting patients daily activities. This type of angina can be referred to as "no options" since the patient has exhausted revascularization options but still has disabling symptoms.

- I25.1 Atherosclerotic heart disease of native coronary artery**
 Atherosclerotic cardiovascular disease
 Coronary (artery) atheroma
 Coronary (artery) atherosclerosis
 Coronary (artery) disease
 Coronary (artery) sclerosis
Use additional code, if applicable, to identify:
coronary atherosclerosis due to calcified coronary lesion (I25.84)
coronary atherosclerosis due to lipid rich plaque (I25.83)
EXCLUDES 2 *atheroembolism (I75.-) atherosclerosis of coronary artery bypass graft (s) and transplanted heart (I25.7-)*
- I25.10 Atherosclerotic heart disease of native coronary artery without angina pectoris** A
 Atherosclerotic heart disease NOS
DEFINITION Clogging of coronary arteries with fatty plaque build-up, restricting blood flow and hardening the arteries.
 AHA: 4Q 2012, 92
 AHA: 4Q 2013, 128
 AHA: 2Q 2015, 17
 AHA: 3Q 2021, 5
 AHA: 3Q 2021, 5
 AHA: 3Q 2021, 6



- I25.11 Atherosclerotic heart disease of native coronary artery with angina pectoris**
CODING TIP ✓ When a patient presents with both coronary artery disease (CAD) / atherosclerotic heart disease and angina, a code from I25.11- should be assigned. If the specific type of angina is not specified in the clinical record, assign code I25.119.

J40 Bronchitis, not specified as acute or chronic

Bronchitis NOS
Bronchitis with tracheitis NOS
Catarrhal bronchitis
Tracheobronchitis NOS

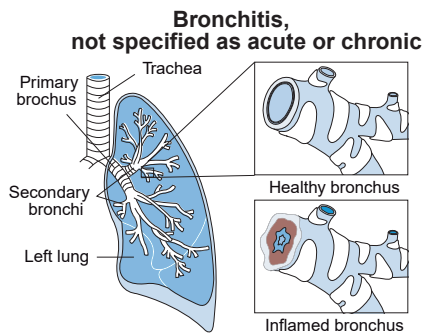
Use additional code to identify:

- exposure to environmental tobacco smoke (Z77.22)*
- exposure to tobacco smoke in the perinatal period (P96.81)*
- history of tobacco dependence (Z87.891)*
- occupational exposure to environmental tobacco smoke (Z57.31)*
- tobacco dependence (F17.-)*
- tobacco use (Z72.0)*

EXCLUDES 1 acute bronchitis (J20.-)
allergic bronchitis NOS (J45.909-)
asthmatic bronchitis NOS (J45.9-)
bronchitis due to chemicals, gases, fumes and vapors (J68.0)

CODING TIP ✓ Do not assign code J40 for chronic, chronic obstructive, or acute bronchitis. J40 should be assigned only when no diagnostic information is available to differentiate the type of bronchitis.

AHA: 1Q 2020, 27



J41 Simple and mucopurulent chronic bronchitis

Use additional code to identify:

- exposure to environmental tobacco smoke (Z77.22)*
- exposure to tobacco smoke in the perinatal period (P96.81)*
- history of tobacco dependence (Z87.891)*
- occupational exposure to environmental tobacco smoke (Z57.31)*
- tobacco dependence (F17.-)*
- tobacco use (Z72.0)*

EXCLUDES 1 chronic bronchitis NOS (J42)
chronic obstructive bronchitis (J44.-)

CODING TIP ✓ Chronic bronchitis not specified as "obstructive" should be coded to J41.0-J42. Chronic bronchitis that is specified as obstructive is coded to category J44.-. Chronic indicates cough with mucus most days of the month for at least 3 months out of the year.

J41.0 Simple chronic bronchitis HCC

J41.1 Mucopurulent chronic bronchitis HCC

J41.8 Mixed simple and mucopurulent chronic bronchitis HCC

J42 Unspecified chronic bronchitis HCC

Chronic bronchitis NOS
Chronic tracheitis
Chronic tracheobronchitis

Use additional code to identify:

- exposure to environmental tobacco smoke (Z77.22)*
- exposure to tobacco smoke in the perinatal period (P96.81)*
- history of tobacco dependence (Z87.891)*
- occupational exposure to environmental tobacco smoke (Z57.31)*
- tobacco dependence (F17.-)*
- tobacco use (Z72.0)*

EXCLUDES 1 chronic asthmatic bronchitis (J44.-)
chronic bronchitis with airways obstruction (J44.-)
chronic emphysematous bronchitis (J44.-)
chronic obstructive pulmonary disease NOS (J44.9)
simple and mucopurulent chronic bronchitis (J41.-)

CODING TIP ✓ Chronic bronchitis not specified as "obstructive" should be coded to J41.0-J42. Chronic bronchitis that is specified as obstructive is coded to category J44.-. Chronic indicates cough with mucus most days of the month for at least 3 months out of the year.

J43 Emphysema

Use additional code to identify:

- exposure to environmental tobacco smoke (Z77.22)*
- history of tobacco dependence (Z87.891)*
- occupational exposure to environmental tobacco smoke (Z57.31)*
- tobacco dependence (F17.-)*
- tobacco use (Z72.0)*

EXCLUDES 1 compensatory emphysema (J98.3)
emphysema due to inhalation of chemicals, gases, fumes or vapors (J68.4)
emphysema with chronic (obstructive) bronchitis (J44.-)
emphysematous (obstructive) bronchitis (J44.-)
interstitial emphysema (J98.2)
mediastinal emphysema (J98.2)
neonatal interstitial emphysema (P25.0)
surgical (subcutaneous) emphysema (T81.82)
traumatic subcutaneous emphysema (T79.7)

CODING TIP ✓ Emphysema and COPD is coded to J43. Emphysema is a type of COPD.

CODING TIP ✓ Do not assign a code from J43.- when the provider's documentation reports emphysema with chronic obstructive bronchitis or emphysematous bronchitis. Emphysema with chronic obstructive bronchitis and emphysematous bronchitis should be coded to J44.- and cannot be coded on the same claim as J43.-.

CODING TIP ✓ When a diagnosis supports coding a more specific code for emphysema, such as interstitial emphysema (J98.2), compensatory emphysema (J98.3), or subcutaneous emphysema due to trauma (T79.7), then do not assign J43.-, but assign the more specific code.

J43.0 Unilateral pulmonary emphysema HCC
[MacLeod's syndrome]

Swyer-James syndrome
Unilateral emphysema
Unilateral hyperlucent lung
Unilateral pulmonary artery functional hypoplasia
Unilateral transparency of lung

J43.1 Panlobular emphysema HCC
Panacinar emphysema

J43.2 Centrilobular emphysema HCC

J43.8 Other emphysema HCC

J43.9 Emphysema, unspecified HCC

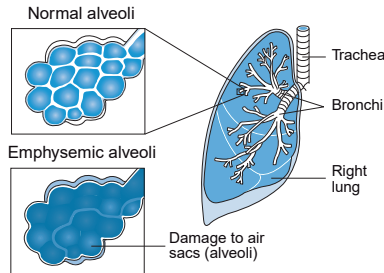
Bullous emphysema (lung)(pulmonary)
Emphysema (lung)(pulmonary) NOS
Emphysematous bleb
Vesicular emphysema (lung)(pulmonary)

CODING TIP ✓ Assign J43.9 and J20.9 for emphysema, COPD and acute bronchitis when there's no mention of chronic bronchitis; assign J43.9 with J18.9 for emphysema, COPD and pneumonia; assign J43.9 with a code from J45 for emphysema, COPD and asthma. (AHA: 1Q 2019)

DEFINITION Abnormal enlargement of the air sacs in the lungs, which lose their elasticity, making breathing increasingly difficult.

- AHA: 4Q 2017, 76
- AHA: 4Q 2017, 77
- AHA: 1Q 2019, 26
- AHA: 1Q 2019, 26
- AHA: 1Q 2019, 27
- AHA: 1Q 2019, 27

Emphysema, unspecified



J44 Other chronic obstructive pulmonary disease

- INCLUDES** asthma with chronic obstructive pulmonary disease
 chronic asthmatic (obstructive) bronchitis
 chronic bronchitis with airway obstruction
 chronic bronchitis with emphysema
 chronic emphysematous bronchitis
 chronic obstructive asthma
 chronic obstructive bronchitis
 chronic obstructive tracheobronchitis

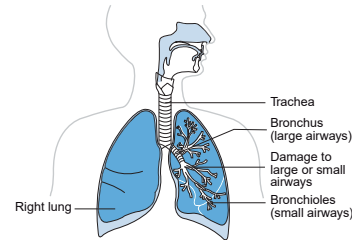
Code also:
 type of asthma, if applicable (J45.-)
Use additional code to identify:
 exposure to environmental tobacco smoke (Z77.22)
 history of tobacco dependence (Z87.891)
 occupational exposure to environmental tobacco smoke (Z57.31)
 tobacco dependence (F17.-)
 tobacco use (Z72.0)

- EXCLUDES 1** bronchiectasis (J47.-)
 chronic bronchitis NOS (J42)
 chronic simple and mucopurulent bronchitis (J41.-)
 chronic tracheitis (J42)
 chronic tracheobronchitis (J42)
 emphysema without chronic bronchitis (J43.-)

GUIDELINES Section I.C.10.a
 The codes in categories J44 and J45 distinguish between uncomplicated cases and those in acute exacerbation. An acute exacerbation is a worsening or a decompensation of a chronic condition. An acute exacerbation is not equivalent to an infection superimposed on a chronic condition, though an exacerbation may be triggered by an infection.

CODING TIP ✓ When the physician reports chronic obstructive asthma or chronic asthmatic bronchitis, and the type of asthma is specified, an additional code from category J45.- should be reported.
 AHA: 1Q 2017, 25
 AHA: 2Q 2017, 30

Chronic obstructive pulmonary disease



J44.0 Chronic obstructive pulmonary disease with (acute) lower respiratory infection CC HCC

Code also:
 to identify the infection

CODING TIP ✓ Assign a code from J44.0 when a patient has both a condition classifiable to J44 and a diagnosis of a lower respiratory tract infection. An additional code should be assigned to report the infection. If the physician confirms both a diagnosis of a lower respiratory tract infection and exacerbation of the condition classifiable to J44, both J44.1 and J44.0 should be assigned, followed by a code for the specific lower respiratory infection. Lower respiratory infections include pneumonia, bronchitis and bronchiolitis.

- AHA: 3Q 2016, 15-16
- AHA: 1Q 2017, 26
- AHA: 2Q 2017, 30
- AHA: 4Q 2017, 75

CC Ex: See Appendix

J44.1 Chronic obstructive pulmonary disease with (acute) exacerbation CC HCC

Decompensated COPD
 Decompensated COPD with (acute) exacerbation
EXCLUDES 2 chronic obstructive pulmonary disease [COPD] with acute bronchitis (J44.0) lung diseases due to external agents (J60-J70)

CODING TIP ✓ **Documentation:** Do not assign J44.1 unless the physician has confirmed that the condition is exacerbated. An exacerbation may not be assumed without physician confirmation, and changes in treatment and medication regimen do not presume an exacerbation.

- AHA: 1Q 2016, 36
- AHA: 3Q 2016, 15-16
- AHA: 1Q 2017, 26
- AHA: 4Q 2017, 75

CC Ex: See Appendix

J44.9 Chronic obstructive pulmonary disease, unspecified HCC

Chronic obstructive airway disease NOS
 Chronic obstructive lung disease NOS
EXCLUDES 2 lung diseases due to external agents (J60-J70)

- AHA: 4Q 2013, 109, 129
- AHA: 4Q 2014, 21
- AHA: 1Q 2016, 36-37
- AHA: 1Q 2017, 24
- AHA: 1Q 2017, 25
- AHA: 4Q 2017, 76
- AHA: 4Q 2017, 76