Cardiovascular Coding for General Surgery

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Agenda

- Hypertension
- Secondary Diagnosis Codes
- Current Complications Following STEMI or NSTEMI
- Atrial Fibrillation and Atrial Flutter
- Paroxysmal Tachycardia
- Other Cardiac Arrhythmias
- Embolisms/Thrombosis
- Atherosclerosis/Stenosis
- Varicose Veins

Hypertension

- Benign hypertension – I10
- Malignant hypertension – I10
- Combination Codes

Examples

EXAMPLE 1

Assessment: 1. Hypertension 2. Chronic diastolic congestive heart failure.

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I11.0 Hypertensive heart disease with heart failure
I50.32 Chronic diastolic (congestive) heart failure

Examples

EXAMPLE 2

Assessment: Hypertension with hypertensive chronic diastolic congestive heart failure

Examples

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Assessment: Hypertension with hypertensive chronic diastolic congestive heart failure

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I50.32 Chronic diastolic (congestive) heart failure

Example

The patient is a 68-year-old gentleman with hypertension and stage 3 CKD with a creatinine of 1.8.

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I12.9 Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease

N18.3 Chronic kidney disease, stage 3 (moderate)

Acute Myocardial Infarction (AMI)

General Surgeon is called to the ED. A 59-year-old man has presented with a 90-minute history of severe crushing chest pain. His ECG shows 3 mm ST segment elevation, and he is diagnosed with an acute MI. He is given loading doses of aspirin and clopidogrel. Forty-five minutes after admission, he undergoes successful primary percutaneous coronary intervention (PCI) with the insertion of a drug eluting stent into his critically narrowed left anterior descending coronary artery. By the time he is returned to the coronary care unit 30 minutes after the procedure, he is pain free and there is partial resolution of his ECG changes.

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I21.02 ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery

Subsequent MI

- When a code from category I22 is assigned, there should also be a code from category I21 assigned to designate the initial myocardial infarction site.

Example

Martha was admitted to the hospital after suffering an acute STEMI of the left circumflex. Two days after admission, she suffered a second anteroapical STEMI. Cardiology is called back to the hospital to see her for the new MI.

Subsequent MI

- When a code from category I22 is assigned, there should also be a code from category I21 assigned to designate the initial myocardial infarction site.

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

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

Secondary Codes

There are instructional notes under the I21 and I22 categories for myocardial infarctions that state that additional codes should be used to identify:

- Exposure to environmental tobacco smoke (Z77.22)
- History of tobacco use (Z87.891)
- Occupational exposure to environmental tobacco smoke (Z57.31)
- Status post administration of tPA in a different facility within the last 24 hours prior to admission to current facility (Z92.82)
- Tobacco dependence (F17.-)
- Tobacco use (Z72.0)

Example

Patient presents to a rural hospital with chest pressure on and off, arm and shoulder pain, and rapid heartbeat for the past hour. He is diagnosed with acute MI of the left main coronary artery and is administered tPA. He is stabilized and transferred to another facility that has an advanced coronary unit within 2 hours.

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- Physician at First Hospital: I21.01 *ST elevation (STEMI) myocardial infarction involving left main coronary artery.*
- Physician at Second Hospital: I21.01 *ST elevation (STEMI) myocardial infarction involving left main coronary artery.* Z92.82 *Status post administration of tPA (rtPA) in a different facility within the last 24 hours prior to admission to a current facility.*

Complications Following STEMI or NSTEMI

- Hemopericardium
- Atrial septal defect
- Ventricular septal defect
- Rupture of cardiac wall without hemopericardium
- Rupture of chordae tendineae
- Thrombosis of atrium, auricular appendage, and ventricle
- Postinfarction angina
- Other complications

Example

EXAMPLE A

Jack is seen for postinfarction angina. He is feeling better and his angina symptoms are decreasing.

Example

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I23.7 Postinfarction angina

Example

EXAMPLE B

Jack is seen for postinfarction angina. He suffered a non-Q wave MI 1 week ago. He is feeling better and his angina symptoms are decreasing.

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I23.7 Postinfarction angina

I21.4 Non-ST elevation (NSTEMI) myocardial infarction

Old Myocardial Infarction vs Aftercare

Example

John suffered an acute MI of the right coronary artery 3 weeks ago. He is presenting for his 2 week hospital follow-up.

Old Myocardial Infarction vs Aftercare

Example

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I21.11 ST elevation (STEMI) myocardial infarction involving right coronary artery

Old Myocardial Infarction vs Aftercare

Example

Barbara suffered an acute MI of the LAD and underwent stent placement. She is presenting 6 weeks postinfarction. She is complaining of continued fatigue.

Old Myocardial Infarction vs Aftercare

Example

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Z51.89 Encounter for other specified aftercare

Z48.812 Encounter for surgical aftercare following surgery on the circulatory system

Atrial Fibrillation and Atrial Flutter

- Paroxysmal atrial fibrillation (I48.0)—Also termed intermittent atrial fibrillation. It is transient in nature and terminates spontaneously.
- Persistent atrial fibrillation (I48.1)—Continues until reverted electrically or chemically.
- Chronic atrial fibrillation (I48.2)—Also termed permanent atrial fibrillation. It is present all the time and cannot be fixed with medication or cardioversion.
- Typical atrial flutter (I48.3)—Also termed Type I atrial flutter or common atrial flutter.
- Atypical atrial flutter (I48.4)—Also termed Type II atrial flutter. There is an atrial rate of 340 to 440 beats/minute. The reentrant loop circle is different than in Type I.

Example

Preoperative Diagnosis: Persistent Afib

Postoperative Diagnosis: Persistent Afib

Procedure Performed: Cardioversion

Procedure Note: The patient was brought to the endoscopy suite and was prepped and draped in the usual manner. Using adhesive anterior-posterior patches at 250 joule synchronized biphasic shock resulted in normal sinus rhythm in the 60s. Anesthesia was provided by Smith Anesthesia.

Plan: The patient will be discharged home, with a slight increase in the flecainide dose at 150 milligrams p.o. twice daily.

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I48.1 Persistent atrial fibrillation

Type

- Re-entry ventricular tachycardia
- Supraventricular tachycardia
- Ventricular tachycardia

Example

The surgeon is called to the emergency department. A 60-year-old male, who is a skydiving instructor was giving lessons. He was urgently rushed to the ED after experiencing a terrifying episode during a jump. The patient states that he began to have weakness and fatigue during his last jump; while making his descent from the plane, he became very dizzy and thinks that he may have passed out for a brief period of time. He states that he barely made it to the ground without major injury. Upon arrival to the ED, he was found to be in a wide complex ventricular tachycardia (VT) at a rate of 214 beats per minute (bpm). His systolic blood pressure was found to be 58 mm Hg. He was cardioverted and given a bolus of IV amiodarone. The patient was then rushed to the cardiac cath lab.

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I47.2 Ventricular tachycardia

Other Cardiac Arrhythmias

- Ventricular fibrillation
- Ventricular flutter
- Atrial premature depolarization
- Junctional premature depolarization
- Ventriuclar premature depolarization
- Sick sinus syndrome

Example

A 22-year-old female is seen in consultation for the evaluation of symptomatic premature ventricular contractions (PVCs). The patient had been experiencing fatigue, shortness of breath, frequent palpitations, and exercise intolerance for the last 5 years. Her past medical history was otherwise unremarkable, including no sudden death in the family. Further, she reported that the beta blockers and lifestyle modification had failed to resolve her symptoms. A review of 24-hour Holter monitoring demonstrated a total burden of 25,000 PVCs with left bundle morphology, in bigeminal and trigeminal pattern. Ischemic workup is negative. In view of the increased burden of symptomatic PVCs as well as no response to medication, she is considered for RF ablation.

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I49.3 Ventricular premature depolarization

Embolism/Thrombosis

- Arterial emboli
- Paradoxical embolization
- Deep vein thrombosis

Embolism/Thrombosis

- I74.01 Saddle embolus of abdominal aorta
- I74.11 Embolism and thrombosis of thoracic aorta
- I74.3 Embolism and thrombosis of the lower extremities
- I82.210 Acute embolism and thrombosis of superior vena cava
- I82.413 Acute embolism and thrombosis of femoral vein, bilateral

Example

A 47-year-old nonobese female presents for treatment. She originally presented to the Emergency Department with typical exertional chest pain which radiated to her left arm. All laboratory data was normal. ETT and myocardial perfusion scan were positive and angiography was done which revealed coronary artery disease. She presents today with unstable angina. She states that the chest pains are not regular, and occur while at rest at times.

Her blood pressure is 110/80, pulse 75, afebrile. Lungs: clear. Heart: PMI displaced. S1 and S2 regular. Abdomen: Soft, nontender. Bowel sounds present. Patient with CAD with unstable angina. Cardiac workup to be performed. Will schedule cardiac catheterization for patient.

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I25.110 Atherosclerotic heart disease of native coronary artery with unstable angina pectoris

Varicose Veins

This 47-year-old male presented with a massive vein that extended from the left upper inner thigh down into the lower inner leg with stasis dermatitis. A detailed history was taken which revealed that this grossly abnormal vein pattern was causing not only considerable leg aches, pain, and throbbing and also resulting in frequent cramps.

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I83.12 Varicose veins of left lower extremity with inflammation.

You Can Do It!