CarePlus HEALTH PLANS | Myocardial infarction

Clinical overview

Definition [1]

A heart attack, or myocardial infarction, is a medical emergency in which the supply of blood to the heart is suddenly and severely reduced or cut off, causing the muscle to die from lack of oxygen.

Causes [2]
- Atherosclerosis
- Blood clots
- Coronary artery spasm

Risk Factors [3]
- Age/Gender
- Comorbid conditions (such as obesity, diabetes mellitus, hypertension, high cholesterol)
- Lifestyle style habits (smoking, illicit drug use, high-fat diet, lack of exercise)

Signs and symptoms [3]

There may be no signs or symptoms ("silent" myocardial infarction).
- Squeezing pain, heaviness, tightness, pressure in center of chest
- Shortness of breath, dizziness or weakness
- Heartburn or pain in the abdomen, nausea, vomiting

Complications [2]
- Arrhythmias (irregular or abnormal heart rhythms)
- Heart failure Heart valve problems
- Stroke

Diagnostic tools [2]
- Medical history and physical exam
- Blood tests
- Chest X-ray, electrocardiogram (ECG or EKG), echocardiogram, coronary angiogram, Stress test

Treatment [2]
- Medications (anticoagulants or thrombolytics, pain relievers, nitroglycerin, beta blockers, ACE inhibitors, statins)
- Oxygen therapy
- Surgical intervention (coronary angioplasty and stenting, coronary artery bypass grafting)

Best documentation practices for healthcare providers

Subjective

In the subjective section of the office note, document current symptoms (e.g., chest pain, shortness of breath, diaphoresis, nausea, etc.) that are directly related to current acute myocardial infarction or old/historical myocardial infarction.

Objective

The objective section should include any abnormal cardiovascular exam findings. Document results of diagnostic testing. Include the absence or presence of ST elevation on ECG/EKG tracing.

Assessment

Specificity: Describe the diagnosis to the highest level of specificity (site/location, type, presence or absence of ST elevation, dates/timelines).

Site/location and type

- Document the site or location within the heart of the myocardial infarction, such as anterolateral wall, inferoposterior wall, lateral wall, subendocardial, etc., and the specific coronary artery(ies) involved.
- Specify the type, for example: ST elevation myocardial infarction (STEMI) or non-ST elevation myocardial infarction (NSTEMI); Type 1, 2, 3, 4a, 4b, 4c or 5; intraoperative, postoperative; subsequent.

Abbreviations

- Limit – or avoid altogether – the use of acronyms and abbreviations. While "MI" is a commonly accepted medical abbreviation for myocardial infarction, this abbreviation has other meanings related to cardiac conditions (for example, mitral insufficiency and mitral incompetence).
- The meaning of an abbreviation can often be determined based on context, but this is not always true. Best practice is to document myocardial infarction by spelling it out in full with all relevant descriptors.

Plan

- Document a clear and concise treatment plan for acute or historical myocardial infarction, including orders for diagnostic testing.
- Clearly link the myocardial infarction diagnosis to medications being used to treat the condition.
- Document to whom/where referrals or consultation requests are made.
- Document when the patient will be seen again, even if only on an as-needed basis.

Coding tips

Dates/timelines

Clearly document specific timelines or dates associated with myocardial infarction, as this influences ICD-10-CM code assignment.

- A myocardial infarction that occurred four weeks ago or less is coded as an acute myocardial infarction (ICD-10-CM category I21, Acute myocardial infarction).[4]
- Encounters after the four-week time frame but with the patient still receiving care related to the myocardial infarction are reported with "aftercare" codes (rather than a code from category I21).[4]

- A myocardial infarction that occurred more than four weeks ago with no current symptoms directly associated with that myocardial infarction and requiring no current care is coded as an "old" or historical myocardial infarction (code I25.2, Old myocardial infarction).[4]
- Avoid use of vague descriptions (such as "recent" myocardial infarction), as these descriptions do not specify whether the myocardial infarction occurred less than or more than four weeks ago. If describing myocardial infarction as "recent," best practice is to include the specific date, as in "recent myocardial infarction on June 1, 20XX." [5]
- Documentation of ST elevation on EKG by itself with no mention of acute myocardial infarction is not coded as acute myocardial infarction. Medical conditions other than acute MI can cause ST elevation. Also, for some people, ST elevation on an EKG may be a normal variant.[2]

Coding examples

Example 1	
Medical record documentation	82-year-old female referred by her PCP to establish care for her cardiovascular conditions. PMH includes Atherosclerosis, HTN, MI earlier this year, Diabetes Mellitus. Physical Exam: Regular rate and rhythm-abdomen not distended, nontender- Lungs clear to auscultation
Assessment	Arteriosclerotic heart disease, inferior myocardial infarction six months ago. Doing well. Continue current meds.
ICD-10-CM codes	**I25.1Ø** Atherosclerotic heart disease of native coronary artery without angina pectoris **I25.2** Old myocardial infarction
Rationale	A myocardial infarction that occurred more than four weeks ago with no current symptoms directly associated with that myocardial infarction and requiring no current care is coded as an "old" or historical myocardial. [4]

Example 2	
Medical record documentation	76-year-old male was discharged from Memorial Hospital after treatment for a Type 1 acute myocardial infarction involving the right coronary artery. Today, exactly two weeks later, the patient is readmitted with a non-ST elevation Type 2 acute myocardial infarction determined to be due to supraventricular tachycardia.
ICD-10-CM codes	**I47.1Ø** Supraventricular tachycardia, unspecified **I21.A1** Myocardial infarction Type 2 **I21.11** ST elevation (STEMI) myocardial infarction involving the right coronary artery
Rationale	Code first, if applicable, the underlying cause of Type 2 myocardial infarction. ICD-10-CM Official Guidelines for Coding and Reporting Section I.C.9.e - 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.[4]

Example 3	
Medical record documentation	Chief complaint: Cardiology follow-up. History of Present Illness: Patient here for follow up of chronic conditions. Patient has a history of atrial fibrillation, hyperlipidemia and Diabetes Mellitus Type 2. Review of systems and physical exam are noted as unremarkable.
Assessment	Recent myocardial infarction with a total occlusion of the right coronary artery, 60 percent left anterior descending artery, 50 percent circumflex lesion.
ICD-10-CM codes	Query the provider for clarification regarding the specific date, type and site of the inferior myocardial infarction. Documentation is vague and does not provide sufficient information for accurate diagnosis code assignment.
Rationale	ICD-10-CM Official Guidelines for Coding and Reporting Section I.C.9.e Acute Myocardial Infarction guidance is as follows: 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.[4]

References

1. Cedars Sinai. Articles. Cedars-Sinai. Published 2020. https://www.cedars-sinai.org/health-library/diseases-and-conditions/h/heart-attack-myocardial-infarction.html
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4. CMS. *ICD-10-CM Official Guidelines for Coding and Reporting.*; 2024. Accessed October 3, 2024. https://www.cms.gov/files/document/fy-2025-icd-10-cm-coding-guidelines.pdf
5. AAPC. *ICD-10-CM Complete Code Set 2025*. AAPC; 2024.

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