

Clinical overview

Definition

Atrial fibrillation is a quivering or irregular heartbeat (arrhythmia) that can lead to stroke and other heart-related complications. In atrial fibrillation, the upper chambers of the heart (the atria) beat irregularly (quiver) instead of beating effectively to move blood into the ventricles. (American Heart Association, 2016)

Types

- **Paroxysmal atrial fibrillation:** Terminating spontaneously or within seven days of treatment and can occur intermittently. (Ludhwani & Wieters, 2023)
- **Persistent atrial fibrillation:** Does not terminate within seven days or that requires repeat pharmacological or electrical cardioversion.
- **Longstanding persistent:** Persistent and continuous atrial fibrillation lasting longer than a year.
- **Permanent atrial fibrillation:** Persistent or longstanding persistent atrial fibrillation where cardioversion cannot or will not be performed or is not indicated.
- **Chronic atrial fibrillation (unspecified):** May refer to any persistent, longstanding persistent or permanent atrial fibrillation. However, in clinical practice, use of one of the more specific descriptive terms is preferred over the use of the nonspecific term chronic atrial fibrillation.
- **Chronic persistent atrial fibrillation:** Has no widely accepted clinical definition or meaning. Assign code I48.19, Other persistent atrial fibrillation, for chronic persistent AF. (American Hospital Association (AHA), 2019)

Causes/Risk factors

- Heart diseases (e.g., high blood pressure, heart attack, Congenital heart defects, heart valve disease)
- Conditions such as obesity, type 2 diabetes, chronic kidney disease, lung diseases and sleep apnea
- Sometimes the cause is unknown (Cleveland Clinic, 2022)

Signs and symptoms

- Heart palpitations, chest pain
- Dizziness or lightheadedness, fainting (syncope), shortness of breath (dyspnea)
- There may be no symptoms (Cleveland Clinic, 2022)

Diagnostic tools

- Electrocardiogram (ECG or EKG), echocardiogram, Holter monitor, implantable loop recording, exercise stress test
- Blood testing to check for health conditions or substances that may affect the heart or heartbeat
- Chest X-ray (Mayo Clinic, 2019)

Treatment

- Medications linked to the diagnosis
- Blood-thinning medications to prevent clots or strokes
- To slow heartbeat (e.g., beta blockers, digoxin)
- Antiarrhythmics for prevention
- Medical procedures
- Electrical cardioversion
- Pacemaker or Watchman™ implantation
- Ablation therapy or Maze procedure (Cedars Sinai, 2020)

Best documentation practices for healthcare providers

Subjective

In the subjective section of the office note, document the presence of any current patient-reported symptoms of atrial fibrillation (e.g., palpitations, weakness, fatigue).

Objective

The objective section should include any current associated physical exam findings, present at time of visit (such as “irregularly irregular” rhythm or increased heart rate and rhythm) and related diagnostic testing results.

Assessment

- Document current atrial fibrillation to the highest level of specificity, using all applicable descriptors (paroxysmal, persistent, longstanding, chronic, permanent).
- Include the current status (stable, worsening, improved, controlled, etc.).

Plan

- Document a clear and concise treatment plan.
- Clearly link atrial fibrillation to any medications specifically being used to treat the condition.
- Include the purpose of each medication (i.e., anti-arrhythmic versus anticoagulation.)
- Include orders for diagnostic testing and plans for medical or surgical procedures.
- Indicate in the office note to whom or where any referral or consultation requests are made.
- Document when the patient will be seen again, even if only on an as-needed basis.

Coding tips

Unlike antiarrhythmic drugs, neither anticoagulant or antiplatelet therapy treat or control the atrial fibrillation arrhythmia itself. Rather, these drugs are used to prevent the complication of blood clot formation in the heart.

1. A coder cannot assume anticoagulation therapy is being used to treat atrial fibrillation when there is no documented link between the two in the record.
2. Even when the medical record links anticoagulation therapy to the treatment of atrial fibrillation, this does not necessarily mean atrial fibrillation is current, since long-term anticoagulant therapy may be used to:
 - a) prevent blood clots in a patient with **current** atrial fibrillation (category I48); OR
 - b) prevent blood clots in a patient with a **past history** of atrial fibrillation (Z86.79) in case atrial fibrillation should ever recur.

Secondary hypercoagulable state

A link between atrial fibrillation and secondary hypercoagulable state is not required in the record as long as both conditions are present. Provider must document the hypercoagulable state is secondary for a coder to presume it is due to the atrial fibrillation.

(American Hospital Association (AHA), 2021)

Additional reminders

- Temporary or transient atrial fibrillation that occurred in the past, if no longer present should not be documented as if it is current. This is true even in the presence of ongoing, chronic anticoagulation therapy that is being used, just in case a historical atrial fibrillation should ever recur.
- The American Heart Association along with American College of Cardiology further classifies paroxysmal atrial fibrillation as intermittent and can be present without treatment.

Coding examples

Example 1	
Chief complaint	Presents to clinic for follow-up of his diabetes.
Past medical history	Obesity, hypertension, diabetes mellitus type II, benign prostatic hypertrophy, atrial fibrillation
Review of systems	Well-groomed male in no acute distress. Blood sugars at home have been running between 130 and 250.
Physical exam	Vital signs stable. Lungs clear to auscultation. Heart regular rate and rhythm without murmur.
Impression	Diabetes mellitus type II with hyperglycemia
Plan	Encouraged weight loss and exercise. Referred to dietitian.
ICD-10-CM code(s)	E11.65 Type 2 diabetes mellitus with hyperglycemia
Comments	Atrial fibrillation is not coded as current since it is mentioned only in the history and the record does not otherwise support atrial fibrillation as a current problem. Atrial fibrillation is not linked to any specific treatment; is not included in the Impression; and is not addressed in the plan.

Example 2	
HPI	72-year-old female with a cutaneous SCC of the left pretibial leg, s/p definitive radiotherapy. Recovering from RT. Skin is healing.
Physical exam	Skin (focused): small approx. 0.5-1cm healing ulcer of the left pretibial leg surrounded by healing erythematous skin
Impression	Small healing ulcer of the L pretibial leg. Hypertension and persistent longstanding atrial fibrillation, both controlled on medications.
ICD-10-CM codes	L97.829 Non-pressure chronic ulcer of other part of left lower leg with unspecified severity I10 Essential (primary) hypertension I48.11 Longstanding persistent atrial fibrillation
Comments	Documentation supports longstanding persistent atrial fibrillation as a current condition controlled by medications.

Example 3	
Subjective	79-year-old female with secondary hypercoagulable state and has a history of paroxysmal atrial fibrillation on anticoagulant maintenance. Currently she is taking 3.5mg of Coumadin daily. Denies any chest pain, palpitations and shortness of breath or dizziness.
Objective	BP 120/82. Pulse 57. Respiration 16. Weight 150. Lungs clear to auscultation with no wheezes, rales or rhonchi. Heart regular rate and rhythm with no rubs, murmurs or gallops.
Assessment	1. History of atrial fibrillation on long-term anticoagulant therapy * 2. Secondary hypercoagulable state
Plan	Continue current dose of Coumadin at 3.5mg daily. Return to clinic in one month for recheck.
ICD-10-CM codes	Z86.79 Personal history of other diseases of the circulatory system Z79.01 Long term (current) use of anticoagulants D68.69 Other thrombophilia (secondary hypercoagulable state NOS)
Comments	In the final assessment, atrial fibrillation is described as historical. A link between atrial fibrillation and secondary hypercoagulable state is not required in the record as long as secondary hypercoagulable state is documented. (American Hospital Association (AHA), 2021) *When atrial fibrillation is not documented as historical, rather paroxysmal or intermittent, and patient is on long term anticoagulant therapy, it would be coded as current I48.0 Paroxysmal atrial fibrillation.

References

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6. Ludhwani, D., & Wieters, J. (2023). *Paroxysmal Atrial Fibrillation*. StatPearls Publishing.
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7. Mayo Clinic. (2019, October 19). *Atrial Fibrillation - Diagnosis and Treatment - Mayo Clinic*.
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