

## Clinical overview

### Definition

Atrial fibrillation is an arrhythmia (an abnormal rhythm of the heart) in which the two small upper chambers of the heart, called the atria, “fibrillate” (contract very fast and irregularly) and quiver instead of beating effectively.

### Background

Atrial fibrillation is the most common type of heart arrhythmia. When the atria of the heart quiver or fibrillate, blood is not pumped completely out of the atria; thus, blood may pool and clot. If a blood clot is pumped out of the heart, it can lodge in an artery in the brain and block blood flow, causing a stroke. Further, atrial fibrillation that is not controlled can weaken the heart, causing heart failure (a condition in which the heart cannot effectively pump blood to the body).

### Types

- **Paroxysmal:** Atrial fibrillation begins suddenly and stops on its own. Symptoms range from mild to severe; can last seconds, minutes, hours or days; and can occur intermittently.
- **Persistent:** Atrial fibrillation persists and continues until it is resolved with treatment.
- **Permanent:** Atrial fibrillation cannot be stopped with the usual treatment. Paroxysmal and persistent atrial fibrillation can both lead to permanent atrial fibrillation.

### Some of the possible causes

- High blood pressure
- Heart attacks
- Abnormal heart valves
- Congenital heart defects
- Metabolic imbalances, such as an overactive thyroid
- Stimulants, such as medications, caffeine, tobacco or alcohol
- Emphysema or other lung diseases
- Prior heart surgeries
- Viral infections
- Stress related to surgery or other illnesses
- Sleep apnea

Note: Sometimes the cause is not known.

### Signs and symptoms

- Palpitations (sensations of a racing, irregular heartbeat or a pounding or flopping in the chest)
- Decreased blood pressure
- Weakness or fatigue
- Lightheadedness
- Confusion
- Shortness of breath
- Chest pain

Note: In some cases there may be no symptoms.

### Diagnostic tools

- Medical history and physical exam
- Electrocardiogram (ECG or EKG)
- Holter monitor
- Cardiac event recording
- Echocardiogram
- Blood tests (to check for metabolic problems or substances in the blood that can cause atrial fibrillation)
- Chest X-ray (to monitor for complications, such as fluid buildup in the lungs, or to check for other conditions that may be responsible for signs and symptoms)

### Treatment

- Blood-thinning medications to prevent clots
- Medications to control the heart rate and rhythm
- Medical procedures, such as electrical cardioversion (electrical shock delivered to reset the heart rhythm), or ablation therapy that destroys tiny areas of heart tissue that are causing atrial fibrillation by firing off abnormal electrical impulses (radiofrequency ablation, destruction by electrical current; or cryoablation, destruction by extreme cold energy)
- Pacemaker implantation
- Surgical procedures called Maze procedures that create a pattern of scar tissue in the heart (Since scar tissue does not conduct electricity, the abnormal electrical impulses causing the problem are disrupted.)

## Documentation tips for providers

### Abbreviations

A good rule of thumb for any medical record is to limit – or avoid altogether – the use of acronyms and abbreviations. While “AF” is a commonly accepted medical abbreviation for atrial fibrillation, this abbreviation has other meanings (example: atrial flutter). The meaning of an abbreviation or acronym can often be determined based on context, but this is not always true. **Best practice** is to always document atrial fibrillation by spelling it out in full.

### Subjective

- The subjective section of the office note should show the patient was screened for current symptoms related to atrial fibrillation.

### Objective

- The objective section should include any current associated physical exam findings (such as “irregularly irregular” rhythm or increased heart rate) and related diagnostic testing results.
- If there are no current related exam findings, the objective section should show the patient was evaluated for related findings.

### Current atrial fibrillation

- Do not use the descriptor “history of” to describe current atrial fibrillation. In diagnosis coding, the descriptor “history of” implies the condition occurred in the past and is no longer a current problem.

### Historical atrial fibrillation

- Temporary or transient atrial fibrillation that occurred in the past and is 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 an historical atrial fibrillation should ever recur.

### Medications

- Clearly link atrial fibrillation to any medications specifically being used in the treatment of atrial fibrillation.
- Include the purpose of each medication, for example: anti-arrhythmic to control heart rate and rhythm, anticoagulant to prevent blood clots.

### Final assessment / Impression

- In the final Assessment/Impression:
  - Document current atrial fibrillation to the highest level of specificity, using all applicable descriptors (paroxysmal, persistent, chronic, permanent).
  - Document the current status of atrial fibrillation (stable, worsening, controlled with medication, etc.).

### Electronic medical record (EMR) reminder

ICD-10-CM is a statistical classification; it is not a substitute for a health care provider’s final diagnostic statement. It is the provider’s responsibility to provide legible, clear, concise and specific documentation of a final diagnosis, which is translated to a code for reporting purposes. It is not appropriate for providers to simply list a code number or select a code number from a list of codes in place of a written final diagnosis.

### Plan

- Document a specific and concise treatment plan for atrial fibrillation.
  - Example: “Continue amiodarone for atrial fibrillation and follow-up in 3 months.”

### Documentation and coding examples

Example 1	
Final diagnosis	Paroxysmal atrial fibrillation
ICD-10-CM code(s)	I48.0

Example 2	
Final diagnosis	Persistent atrial fibrillation
ICD-10-CM code(s)	I48.1

Example 3	
Final diagnosis	Chronic atrial fibrillation
ICD-10-CM code(s)	I48.2

Example 4	
Final diagnosis	Permanent atrial fibrillation
ICD-10-CM code(s)	I48.2

Example 5	
Final diagnosis	Unspecified atrial fibrillation
ICD-10-CM code(s)	I48.91

## ICD-10-CM tips and resources for coders

### Current atrial fibrillation

According to the ICD-10-CM manual, current atrial fibrillation classifies to the following codes:

#### ALPHABETIC INDEX

##### Fibrillation

- atrial or auricular (established) I48.91
- chronic I48.2
- paroxysmal I48.Ø
- permanent I48.2
- persistent I48.1

#### TABULAR LIST

- I48.Ø Paroxysmal atrial fibrillation
- I48.1 Persistent atrial fibrillation
- I48.2 Chronic atrial fibrillation  
(Includes permanent atrial fibrillation)
- I48.91 Unspecified atrial fibrillation

### History of atrial fibrillation

No history code is available specifically for “personal history of atrial fibrillation” or “personal history of cardiac arrhythmia.”

The best code available is Z86.79, Personal history of other diseases of the circulatory system.

### Atrial fibrillation and anticoagulation therapy

Code Z79.Ø1 represents long-term (current) use of anticoagulants.

#### BACKGROUND

Quivering and ineffective beating of the heart that occurs with atrial fibrillation can cause blood to pool inside the chambers of the heart, which can result in the formation of blood clots inside the heart.

If the heart should spontaneously return to a normal rhythm and suddenly start pumping blood effectively, a blood clot can be dislodged and pumped out of the heart and to an artery in the brain. The blood clot can ultimately lodge in the brain artery, blocking blood flow of vital oxygen and nutrients to that area of the brain. This is known as an ischemic stroke and can lead to devastating neurological deficits, disability or even death.

To prevent this potential complication, blood-thinning drugs (anticoagulants) such as Coumadin (warfarin) are

used to prevent the development of blood clots inside the heart.

### Atrial fibrillation and anticoagulant therapy -- continued

#### KEY POINTS:

- Unlike antiarrhythmic drugs, anticoagulation therapy does not treat or control the atrial fibrillation arrhythmia itself. Rather, anticoagulants are used to prevent the complication of blood clot formation in the heart as previously described.
- 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.
- 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 (Z79.Ø1) 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) just in case atrial fibrillation should ever recur.

Ultimately, code assignment is based on the physician’s or other health care provider’s specific description of atrial fibrillation in the individual medical record, i.e., whether the medical record describes and supports atrial fibrillation as current versus historical.

### Postoperative atrial fibrillation

Postoperative atrial fibrillation with no further description classifies to the following codes:

- I97.89 Other postprocedural complications and disorders of the circulatory system, not elsewhere classified
- I48.91 Unspecified atrial fibrillation

**References:** American Heart Association; ICD-10-CM Official Guidelines for Coding and Reporting; Mayo Clinic; National Heart, Lung and Blood Institute; WebMD