

Cardiac arrhythmias occur when the electrical impulses that coordinate your heartbeats do not work properly. This causes improper beating of the heart - irregular, too fast, or too slow.

Types of Arrhythmias:

- **Premature or extra heartbeat**- When the signal to beat comes early. Also known as ectopic heartbeats.
- **Supraventricular arrhythmia**- Arrhythmias start at the heart's upper chamber or gateway to the lower chambers.
- **Atrial fibrillation**- During atrial fibrillation, the heart's two upper chambers (the atria) beat chaotically and irregularly — out of coordination with the two lower chambers (the ventricles) of the heart.
- **Atrial flutter**- In atrial flutter, your heart's upper chambers (atria) beat too quickly. This causes the heart to beat in a fast, but usually regular, rhythm.
- **Paroxysmal supraventricular tachycardia (PSVT)**- Electrical signals begin in the upper chambers and travel to the lower chambers causing extra heartbeats. This type of arrhythmia begins and suddenly ends.
- **Ventricular arrhythmia**- abnormal heartbeats that originate in the heart's lower chambers called ventricles. These arrhythmias cause a fast heartbeat, preventing oxygen rich blood from circulating to the brain and body which may result in a cardiac arrest. Common types:
 - **Ventricular Tachycardia**- abnormal electrical pathways in the ventricles that been damaged by a heart attack or disease.
 - **Ventricular Fibrillation**- Abnormal circuit that are usually due to damaged heart muscles.

- **Heart Block**- caused by a congenital heart defect or result from disease or injury.

- **Long QT Syndrome**- Life threatening form of arrhythmia which causes fast chaotic heartbeats causing syncope, seizures, or sudden death.

- **Bradycardia**- a type of arrhythmia that occurs when the heart beats very slowly, conventionally defined as less than 60 beats/min.

Signs & Symptoms

There may not be noticeable signs and symptoms. The following are symptoms that may occur:

- A fluttering in your chest
- Racing heart
- Feeling dizzy
- Chest pain
- Shortness of breath

Risk Factors

Certain conditions may increase your risk of developing an arrhythmia. These include:

- Coronary artery disease, other heart problems and previous heart surgery.
- High blood pressure.
- Congenital heart disease.
- Thyroid problems.
- Diabetes.
- Obstructive sleep apnea.

Complications

- Certain arrhythmias may increase your risk of developing conditions such as:
 - Stroke.
 - Heart failure.
 - Death

Diagnostic Tools

- **Electrocardiogram**- A test that monitors with electrodes attached to your body to measure heart's electrical activity for a short time.
- **Holter monitor and Event recorders** –
- **Echocardiogram**- A heart ultrasound that uses sound waves to create detailed images of the heart.
- **Implantable loop recorder**- A tiny device implanted under the skin of the chest Measure the heart's activity for up two years.
- **Coronary angiogram**- Catheter based test uses X rays to display blood flow through the heart arteries.
- **Stress test**- Measures the heart's electrical activity using an EKG while exercising on a treadmill or bicycle.
- **Transesophageal echocardiogram (TEE)**- An echo with an ultrasound probe inserted through the mouth down to the esophagus to provide a clearer image of the heart.

Treatment

- Electrical cardioversion
- Medications
 - Calcium channel blockers
 - Beta- Blockers
 - Anticoagulants
- Electroconvulsive therapy.
- Cardioversion
- Catheter ablation
- Pulmonary vein isolation
- Permanent pacemaker
- Implantable cardioverter-defibrillator ICD
- Biventricular (B-V) pacemakers or defibrillators or Cardiac resynchronization therapy or CRT
- Coronary artery bypass surgery

Clinical Documentation and Coding Tips

- Always document it to the highest level of specificity
- SOAP Notes documentation tips:

- **Subjective** – In the subjective section of the office note, document the presence or absence of any current symptoms related to arrhythmias.
- **Objective** – In the objective section, include any current associated physical exam findings (such as “irregularly irregular” rhythm or increased or decreased heart rate) and related diagnostic testing results.
- **Assessment** – Describe each final diagnosis clearly, concisely and to the highest level of specificity. Use all applicable descriptors.
- **Plan** – Include details of plans for diagnostic testing and medical or surgical procedures. Details of referrals or consultations requested. Document when you will see the patient again.

Medicare Hierarchal Condition Categories (HCC)

Hierarchical condition category (HCC) coding is a risk-adjustment model designed to estimate future health care costs for patients. This model filters ICD-10CM codes into diagnosis groups (DxGs), and then into Conditions Categories (CCs). Hierarchies or families are placed to gain an HCC numeric code, which translates to a risk adjustment factor (RAF) value. Each diagnosis code found in the model, as a stand-alone diagnosis code or within a family or hierarchy, carries a value through RAF, but this value can change if the patient has other influencing factors such as ESRD, hospice, or are dual-eligible. Families or hierarchies set a value based on severity of illness, with more severe diagnoses carrying the overall risk score for that family. Diagnoses within families or hierarchies are inclusive of one another, while any additional diagnoses from other hierarchies or stand-alone diagnoses are additive and increase each patient's overall risk score.

Arrhythmias are conditions that falls within the category “Specified Heart Arrhythmias” (HCC 96) with an average RAF Score of 0.384

Coding Arrhythmias

There are nine (9) ICD - 10CM applicable codes to use for coding Arrhythmias (excluding Afib and Sick sinus syndrome)

ICD-10 Code Code description

I44.2	Atrioventricular block, complete
I47.0	Re-entry ventricular arrhythmia
I47.1	Supraventricular tachycardia
I47.2	Ventricular tachycardia
I47.9	Paroxysmal tachycardia, unspecified
I48.3	Typical atrial flutter
I48.4	Atypical atrial flutter
I48.92	Unspecified atrial flutter
I49.2	Junctional premature depolarization

Always Remember

- Verify any Arrhythmias that are current.
- Note the exact Arrhythmia description.
- Follow the ICD-10 CM official coding guidelines and conventions.
- Select the correct ICD-10 CM code to the highest specificity.