Cohere Medical Policy - Cardiac Ablation

Clinical Guidelines for Medical Necessity Review

Version: 3
Effective Date: January 9, 2025

Important Notices

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Guideline Information:

Specialty Area: Cardiovascular Disease
Guideline Name: Cohere Medical Policy - Cardiac Ablation
Date of last literature review: 1/7/2025
Document last updated: 1/9/2025
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17yo)

Table of Contents

Medical Necessity Criteria

Service: Cardiac Ablation

Recommended Clinical Approach:

Catheter ablation is a procedural approach to cardiac rhythm control. It is used to treat atrial fibrillation, atrial flutter, supraventricular tachycardia (SVT), and ventricular arrhythmias. Cardiac ablation involves the transcatheter access of tissue where inappropriate electrical activity originates (i.e., pulmonary veins, coronary sinuses, posterior wall, etc.) and the administration of cryothermal energy, electricity, radiofrequency or pulsed field energy to ablate the surrounding area. In effect, this electrically isolates the problematic site and prevents the inappropriate impulse (which causes arrhythmias) from traveling. Catheter ablation is particularly useful for patients who have exhausted conservative medical therapy, though it can be a first-line treatment for certain groups, such as patients with SVT and atrial fibrillation. Cardiac ablation generally has a high success rate with few complications, although repeat ablation is necessary for some patients. Importantly, AV nodal ablation is a palliative treatment for persistent atrial fibrillation that is symptomatic, has failed rhythm and rate control, and may be causing tachyarrhythmia-induced heart failure. AV node ablation is not considered a first-line treatment; it is a palliative treatment with distinct indications separate from other therapeutic cardiac ablations.

Medical Necessity Criteria

Indications

- ➔ **Cardiac ablation** is considered appropriate if **ANY** of the following is **TRUE**:
  - ◆ The procedure is for atrial fibrillation and **ANY** of the following is **TRUE**[1,10-12,17]:
    - Symptomatic atrial fibrillation (AF) in whom antiarrhythmic drugs have been ineffective, contraindicated, not tolerated, or not preferred, and continued rhythm control is desired; **OR**

- Repeat ablation after recurrent symptomatic atrial fibrillation, which reoccurs beyond the blanking period (at least 3 months after the initial ablation), when antiarrhythmic drugs have been ineffective, contraindicated, not tolerated, or not preferred, and continued rhythm control is desired[17]; **OR**
- Symptomatic AF and heart failure with reduced ejection fraction (HFrEF) on guideline-directed medical therapy (GDMT); **OR**
- Symptomatic AF and heart failure with preserved ejection fraction (HFpEF); **OR**

◆ The procedure is for atrioventricular node ablation, and **ALL** of the following are **TRUE**[1,2,13]:

- Persistent or permanent atrial fibrillation; **AND**
- Pharmacologic rate control has been unsuccessful due to rhythm refractoriness or patient intolerance; **AND**
- The patient has a permanent pacemaker implanted or is an appropriate candidate for ventricular pacing with plans to implant a pacemaker prior to (or on the same day as) ablation; **OR**
- Known or suspected tachycardia-induced cardiomyopathy; **OR**

◆ The procedure is for atrial flutter (AFL) and **ANY** of the following is **TRUE**[1,2,10,11]:

- Symptomatic atrial flutter that has become refractory or intolerant to treatment with a Class I or III antiarrhythmic; **OR**
- Atrial flutter that is favorable for ablation as a first-line therapy versus antiarrhythmic medication; **OR**
- Recurrent episodes of symptomatic atrial flutter; **OR**
- Recurrent atrial flutter with a reasonable expectation of success with a redo procedure; **OR**

◆ The procedure is an electrophysiology study (EPS)/cardiac ablation for supraventricular tachycardia (SVT) and **ANY** of the following is **TRUE**:

- Symptomatic or sustained SVT; **OR**
- Wolff-Parkinson-White (WPW) pattern with syncope[15];**OR**
- Episode of pre-excited atrial fibrillation[15]; **OR**

- New cardiomyopathy likely caused by focal atrial tachycardia; **OR**
- For evaluation of asymptomatic patients with ventricular preexcitation pattern to determine **ANY** of the following:
    - Inducibility of atrioventricular reentrant tachycardia (AVRT); **OR**
    - Rapidity of antegrade conduction as a risk factor for sudden cardiac arrest; **OR**
- For the presence of manifest ventricular preexcitation which would interfere with certain types of employment (including, but not limited to, pilots, military service, firefighters, competitive athletes, etc.)[15]; **OR**

◆ The procedure is for ventricular arrhythmia and **ANY** of the following is **TRUE**:

- Symptomatic premature ventricular complexes (PVCs) with frequency of greater than 15% of beats in a patient refractory to or intolerant to antiarrhythmic therapy; **OR**
- High PVC frequency (greater than 15% of beats and predominately of one morphology[7]) associated with symptoms or diminished left ventricular ejection fraction (less than 50%) on cardiac imaging; **OR**
- When a PVC of similar morphology is a trigger for other arrhythmias, such as ventricular fibrillation (VF); **OR**
- Frequent PVCs refractory to medical therapy, which are interfering with the effectiveness of biventricular pacing; **OR**
- Sustained symptomatic monomorphic ventricular tachycardia (VT) in a structurally normal heart; **OR**
- Episodes of VT causing excess appropriate ICD shocks (e.g., in arrhythmogenic right cardiomyopathy, Brugada syndrome, sarcoidosis); **OR**
- Recurrent sustained monomorphic VT in a patient with structural heart disease that is refractory to or intolerant to antiarrhythmic therapy[9]; **OR**
- Cardiomyopathy with VT storm; **OR**
- Sustained monomorphic VT in repaired tetralogy of Fallot[8]; **OR**
- In other forms of congenital heart disease (CHD) with sustained VT, which have undergone appropriate

evaluation and treatment for anatomic and hemodynamic etiologies.[8,16]

Non-Indications

➔ **Cardiac ablation** is not considered appropriate if **ANY** of the following is **TRUE**:[1,2,11]

- ◆ The procedure is for AV node ablation, and **ANY** of the following is **TRUE**:
  - The patient is a candidate for pharmacologic rhythm control; **OR**
  - The patient is taking a pharmacologic agent that is successfully achieving rate control; **OR**
  - The patient is not a candidate for permanent pacing; **OR**
- ◆ The procedure is an electrophysiology study/ablation for SVT and the patient has nonsustained, asymptomatic SVT; **OR**
- ◆ The procedure is cardiac ablation for ventricular arrhythmia and **ANY** of the following is **TRUE**:
  - The patient has infrequent nonsustained VT; **OR**
  - The patient has torsades de pointes or other sustained polymorphic VT; **OR**
  - After the patient has experienced VF arrest.

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
93462	Left heart catheterization by transseptal puncture through intact septum or by transapical puncture
93613	Intracardiac electrophysiologic three-dimensional mapping
93631	Intraoperative epicardial and endocardial pacing and mapping to localize the site of tachycardia or zone of slow conduction for surgical correction
93650	Intracardiac catheter ablation of atrioventricular node

	function, atrioventricular conduction for creation of complete heart block
93653	Comprehensive electrophysiologic evaluation with insertion and repositioning of multiple electrode catheters, with attempted induction of arrhythmia, with right atrial pacing and recording, with treatment of supraventricular tachycardia by ablation
93654	Comprehensive electrophysiologic evaluation with insertion and repositioning of multiple electrode catheters, with attempted induction of arrhythmia, with right atrial pacing and recording, with focus of ventricular ectopy
93655	Intracardiac catheter ablation of a discrete mechanism of arrhythmia which is distinct from the primary ablated mechanism, including repeat diagnostic maneuvers, to treat a spontaneous or induced arrhythmia
93656	Comprehensive electrophysiologic evaluation with transseptal catheterization, with insertion and repositioning of multiple electrode catheters, with attempted induction of arrhythmia, with atrial pacing and recording
93657	Additional linear or focal intracardiac catheter ablation of the left or right atrium for treatment of atrial fibrillation remaining after completion of pulmonary vein isolation

Medical Evidence

January et al. (2014) published an evidence-based, systematic review and subsequent guidelines for the American Heart Association, American College of Cardiology, and the Heart Rhythm Society, for the management of patients with atrial fibrillation. A number of recommendations were made or revised for optimal management of atrial fibrillation. Atrioventricular (AV) nodal ablation with permanent ventricular pacing was recommended to control heart rate when pharmacological therapy has not been effective and rhythm control could not be achieved.[2]

Joglar et al. (2024) published an updated guideline addressing the diagnosis and management of atrial fibrillation. The guideline recognized lifestyle and risk factor modification as a pillar of AF management to prevent progression, and adverse outcomes, as well as to emphasize the importance of early and continued maintenance of sinus rhythm and reduced AF burden. Catheter ablation of AF received a Class 1 indication as first-line therapy in selected patients based on recent randomized studies that have demonstrated the superiority of catheter ablation over drug therapy for rhythm control. Many patients require both pharmacological and interventional therapy, but catheter cardiac ablation was endorsed among those patients who would receive the greatest early benefit. Generally, optimal patients for first-line catheter ablation are younger and have few comorbidities.[17]

In 2021, a retrospective review of pediatric cardiac ablation was published by Walsh et al. This 20-year longitudinal study evaluated the use of cardiac ablation among children with supraventricular tachycardia. The authors concluded that cardiac ablation is safe and clinically successful for children with SVT, and that, from an overall cohort of 7,069 cases, the rate of major complications was low. Only 12 cases of complete heart block (necessitating pacemaker insertion) occurred in the cohort. Although repeat ablation was required for a proportion of patients, the authors note that technological advances are likely to improve the overall safety profile as children continue to be treated with cardiac ablation and other interventional cardiovascular procedures.[25]

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Clinical Guideline Revision History/Information

Original Date: December 29, 2023		
Review History		
Version 2	July 29, 2024	Re-formatted document updated indications and non-indications/references
Version 3	January 9, 2025	Annual policy review and restructure: • Updated recommended clinical approach to the current format. • Condensed the detail in the recommended clinical approach section to better align with other similar policies. • Removed redundant indications and non-indications that were already covered by existing language. • Wordsmithed for clarity and to better reflect the cited references. • Expanded examples of high-risk employment. • Updated references. • Updated medical evidence section. • Clarified repeat ablation criteria based on current ACC guidelines. • Removed non-indication for paroxysmal atrial fibrillation. • Removed CPT code 93662 - not in scope of

		policy.