

Cardiac Ablation Procedures

I. Policy

University Health Alliance (UHA) will reimburse for Cardiac Ablation Procedures when determined to be medically necessary and when they meet the medical criteria guidelines (subject to limitations and exclusions) indicated below.

II. Background

Several very important treatment decisions arise in patients with both new onset and established cardiac conditions requiring cardiac catheter ablation, and it is UHA's position that adequacy of informed consent is heightened for treatments of this condition in view of direct internet marketing to patients and distinctly different outcomes of treatment in people with different clinical backgrounds (e.g., CHADS scoring), age, associated conditions, and anatomy.

Operator experience is an important determinant of outcome, particularly in repeated attempts at ablative control. As with many medical conditions, patients requiring cardiac catheter ablation can challenge providers with their unrealistic expectations. A detailed informed consent required by a payer can serve the needs of all parties. Therefore, UHA will require prior authorization for all cardiac catheter ablative treatment of conditions that include, but not necessarily limited to, atrial tachyarrhythmias, AVNRT, accessory pathway conditions, and ventricular tachyarrhythmias.

III. Criteria/Guidelines

UHA will reimburse with a prior authorization and subject to the limitations below for cardiac catheter ablation procedures for any of the following arrhythmias when reversible triggers and cases have been optimally managed.

- A. Atrial Tachyarrhythmias in members who meet or with any of the following:
 - 1. Resuscitated from sudden cardiac death due to atrial flutter or atrial fibrillation with a rapid ventricular response in the absence of an accessory pathway; or
 - 2. A dual-chamber pacemaker and pacemaker-mediated tachycardia that cannot be treated effectively by drugs or by re-programming the pacemaker; or
 - Symptomatic atrial tachyarrhythmia such as those above but when pharmacotherapy is not tolerated or the member does not wish to use it, even though the ventricular rate can be controlled; or
 - 4. Symptomatic atrial tachyarrhythmia who has inadequately controlled ventricular rates; or
 - 5. Symptomatic non-paroxysmal junctional tachycardia that is drug resistant, drugs are not tolerated, or the member does not wish to take them after comprehensive counseling regarding risks and benefits.
- B. <u>Atrioventricular nodal reentrant tachycardia (AVNRT)</u> in members who meet or with any of the following:
 - 1. Sustained AVNRT identified during electrophysiological study or catheter ablation of another arrhythmia; or
 - 2. Symptomatic sustained AVNRT that is drug-resistant, or the member is drug-intolerant or does not desire long-term drug therapy after comprehensive counseling; or

- The finding of dual atrio-ventricular (AV) nodal pathway physiology and atrial echoes but without AVNRT during electrophysiological study in members suspected of having AVNRT clinically.
- C. Atrial tachycardia, flutter, and fibrillation in members who meet or with any of the following:
 - 1. Atrial fibrillation and evidence of a localized site(s) of origin, atrial flutter, atrial tachycardia, or atrial flutter / atrial tachycardia associated with paroxysmal atrial fibrillation, when:
 - a. The tachycardia is drug-resistant, or the member is drug-intolerant or does not desire long-term drug therapy after comprehensive counseling
 - b. As an alternative to atrioventricular nodal ablation and pacemaker insertion in patients with class II or III congestive heart failure and symptomatic atrial fibrillation.
 - Transcatheter radiofrequency ablation or cryoablation to treat atrial fibrillation is covered (subject to Limitations and Administrative Guidelines) as an initial treatment for patients with recurrent symptomatic paroxysmal atrial fibrillation (>1 episode, with 4 or fewer episodes in the previous 6 months) in whom a rhythm-control strategy is desired.
 - a. Repeat radiofrequency ablation of cryoablation is covered (subject to Limitations and Administrative Guidelines) in patients with recurrence of atrial fibrillation and/or development of atrial flutter following the initial procedure.
 - 3. The Maze procedure:
 - a. UHA considers the Maze procedure, performed with cardiopulmonary bypass on a beating heart, medically necessary for members with atrial fibrillation when any of the following criteria are met:
 - i. Medical records indicate that the patient did not respond to other medical treatments, or those treatments were contraindicated; and
 - ii. Member cannot tolerate the side effects of drug therapy (adequate documentation of the nature and extent of the intolerance is required); or
 - iii. Member is suffering the hemodynamic consequences of chronic Atrial Fibrillation despite adequate attempts at medical management; or
 - iv. Member is at high risk for thromboembolism as evidenced as either:
 - A previous episode of thromboembolism when other sources of emboli have been ruled out; or
 - Documented long-standing atrial fibrillation in members with mitral valve disease undergoing open surgical repair of the mitral valve.
 - b. Because of the highly invasive nature of the Maze procedure, it is generally reserved for patients who are undergoing open heart surgery for other reasons (e.g., valve repair or coronary artery bypass grafting). Minimally invasive, off-pump Maze procedures, also known as thoracoscopic off-pump surgical ablation (TOPS), are not considered medically necessary for atrial fibrillation because there is insufficient evidence of effectiveness.
- D. <u>Accessory pathways (including Wolfe-Parkinson-White [WPW])</u> in members who meet or with any of the following:
 - 1. Asymptomatic members with ventricular pre-excitation whose livelihood or profession, important activities, insurability, or mental well-being, or the public safety would be affected by spontaneous tachyarrhythmias or the presence of the electrocardiographic abnormality; or
 - 2. A family history of sudden cardiac death; or

- With atrial fibrillation (or other atrial tachyarrhythmias) and a rapid ventricular response via the accessory pathway when the tachycardia is drug-resistant, or the member is drug-intolerant or does not desire long-term drug therapy after comprehensive counseling regarding risks and benefits; or
- 4. With atrial fibrillation and a controlled ventricular response via the accessory pathway; or
- 5. With AV reentrant tachycardia or atrial fibrillation with rapid ventricular rates identified during electrophysiological study of another arrhythmia; or
- 6. With symptomatic AV reentrant tachycardia that is drug-resistant, or the member is drugintolerant or does not desire long-term drug therapy after comprehensive counseling.
- E. Ventricular tachycardia (VT) in members who meet or with any of the following:
 - 1. Bundle branch reentrant ventricular tachycardia; or
 - 2. Sustained monomorphic VT and an implantable cardioverter-defibrillator (ICD) who are receiving multiple shocks not manageable by re-programming or concomitant drug therapy; or
 - 3. Symptomatic sustained monomorphic VT when the tachycardia is drug-resistant, or the member is drug-intolerant or does not desire long-term drug therapy after comprehensive counseling; or
 - 4. Non-sustained VT that is symptomatic when the tachycardia is drug-resistant, or the member is drug-intolerant or does not desire long-term drug therapy after comprehensive counseling.
- F. Operative Ablation
 - 1. UHA considers operative ablation medically necessary. This procedure may be used to eliminate AV condition defects.
- G. UHA considers cardiac catheter ablation procedures experimental and investigational for all other indications, including any of the following arrhythmias, as there is insufficient evidence in the peer reviewed medical literature of the effectiveness of cardiac catheter ablation for these indications:
 - 1. Benign non-sustained VT that does not cause symptoms; or
 - 2. Hypertrophic cardiomyopathy; or
 - 3. Multifocal atrial tachycardia (MAT); or
 - Other uses of radiofrequency catheter ablation not indicated above (e.g., AV junction ablation in combination with pacemaker implantation for symptomatic drug-refractory atrial fibrillation); or
 - 5. Unstable, rapid, multiple, or polymorphic VT that can not be adequately localized by mapping techniques.
- H. For all procedures, surgical and catheter ablation is covered only when performed by an electrophysiologist who has received appropriate training and is performing the procedure in an experienced center.
- I. The procedure includes temporary pacemaker placement if indicated.

NOTE:

This UHA payment policy is a guide to coverage, the need for prior authorization and other administrative directives. It is not meant to provide instruction in the practice of medicine, and it should not deter a provider from expressing his/her judgment.

Even though this payment policy may indicate that a particular service or supply is considered covered, specific provider contract terms and/or members' individual benefit plans may apply, and this policy is

not a guarantee of payment. UHA reserves the right to apply this payment policy to all UHA companies and subsidiaries.

UHA understands that opinions about and approaches to clinical problems may vary. Questions concerning medical necessity (see Hawaii Revised Statutes §432E-1.4) are welcome. A provider may request that UHA reconsider the application of the medical necessity criteria in light of any supporting documentation.

IV. Administrative Guidelines

- A. Prior authorization is required. To request prior authorization, please submit via UHA's online portal. If login has not been established, you may contact UHA at 808-532-4000 to establish one.
- B. Prior Authorization will rest upon standard clinical criteria (e.g., current Milliman Care Guidelines) and documented evidence that detailed informed consent has been obtained.
 - 1. Documentation supporting the medical necessity should be legible, maintained in the patient's medical record and must be made available to UHA upon request.
 - 2. The following issues must be addressed, and the nature and outcome of the physician patient encounter must be described:
 - a. Approximate likelihood of long-term success based upon personal experience of the interventional cardiologist or cardiac surgeon, duration of arrhythmia, and the likelihood of success in second or third procedures should they become necessary.
 - b. Significance of radiation exposure.
 - c. Quantitative risk of thromboembolic events with anti-arrhythmia drug therapy, rate control or ablative therapy.
 - d. Actual physiologic benefit of restoring electrocardiac function, especially in cases of atrial enlargement.
 - e. Risks of the contemplated procedure relative to the risks of drug or no therapy.
- C. For members who undergo an electrophysiology study on the same day as an ablation, an electrophysiologic study is considered medically necessary if no prior electrophysiology study has been performed within the previous 3 months. Two electrophysiologists are required to perform the ablation; one to manipulate the catheters and the other to guide the precise location for the ablation utilizing electrogram analysis and pacing. The procedure includes temporary pacemaker placement if indicated. When ablation of the His-bundle is indicated, a permanent pacemaker will always be placed because the ablation has caused a complete heart block.
- D. The use of the CARTO system (an intra-cardiac electrophysiological 3-D mapping system) for guiding radiofrequency ablation in the treatment of atrial fibrillation is considered medically necessary.
- E. This policy may apply to the following codes. Inclusion of a code in the table below does not guarantee that it will be reimbursed.

CPT Code	Description
33250	Operative ablation of supraventricular arrhythmogenic focus or pathway (e.g., Wolff-Parkinson- White, atrioventricular node re-entry), tract(s) and/or focus (foci); without cardiopulmonary bypass
33251	Operative ablation of supraventricular arrhythmogenic focus or pathway (e.g., Wolff-Parkinson- White, atrioventricular node re-entry), tract(s) and/or focus (foci); with cardiopulmonary bypass
33254	Operative tissue ablation and reconstruction of atria, limited (e.g., modified maze procedure)

33255	Operative tissue ablation and reconstruction of atria, extensive (e.g., maze procedure); without cardiopulmonary bypass
33256	Operative tissue ablation and reconstruction of atria, extensive (e.g., maze procedure); with cardiopulmonary bypass
33257	Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), limited (e.g., modified maze procedure)
33258	Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), extensive (e.g., maze procedure), without cardiopulmonary bypass
33259	Operative tissue ablation and reconstruction of atria, performed at the time of other cardiac procedure(s), extensive (e.g., maze procedure), with cardiopulmonary bypass
33261	Operative ablation of ventricular arrhythmogenic focus with cardiopulmonary bypass
33265	Endoscopy, surgical; operative tissue ablation and reconstruction of atria, limited (e.g., modified maze procedure), without cardiopulmonary bypass
33266	Endoscopy, surgical; operative tissue ablation and reconstruction of atria, extensive (e.g., maze procedure), without cardiopulmonary bypass
93462	Left heart catheterization by transseptal puncture through intact septum or by transapical puncture
93613	Intracardiac electrophysiologic 3-dimensional mapping
93650	Intracardiac catheter ablation of atrioventricular node function, atrioventricular conduction for creation of complete heart block, with or without temporary pacemaker placement
93653	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, right ventricular pacing and recording (when necessary), and His bundle recording (when necessary) with intracardiac catheter ablation of arrhythmogenic focus; with treatment of supraventricular tachycardia by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry
93654	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, right ventricular pacing and recording (when necessary), and His bundle recording (when necessary) with intracardiac catheter ablation of arrhythmogenic focus; with treatment of ventricular tachycardia or focus of ventricular ectopy including intracardiac electrophysiologic 3D mapping, when performed, and left ventricular pacing and recording, when performed
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 including transseptal catheterizations, insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia including left or right atrial pacing/recording, when necessary, right ventricular pacing/recording when necessary, and His bundle recording, when necessary, with intracardiac catheter ablation of atrial fibrillation by pulmonary vein isolation
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

V. Policy History

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