

# 2022 FAQ

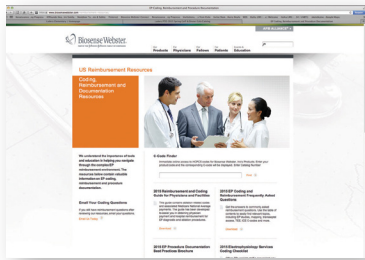
## EP Coding and Reimbursement

### Physicians and Facilities



# RESOURCES TO ASSIST YOU WITH THE REIMBURSEMENT PROCESS

## Resources to assist you with the reimbursement process



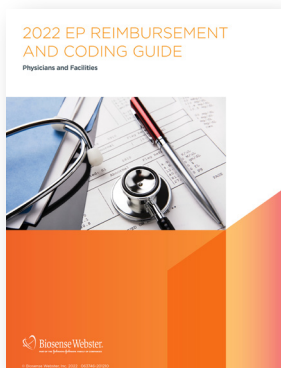
Online HCPCS C-Code Finder



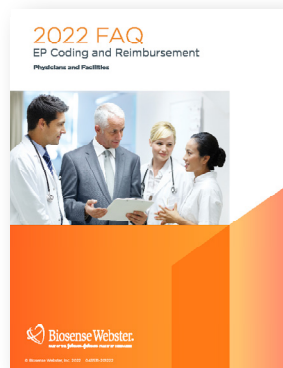
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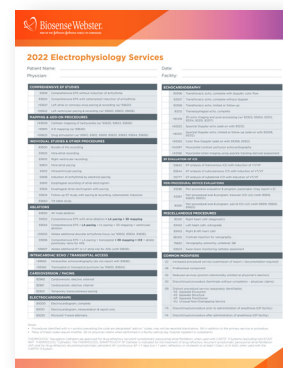
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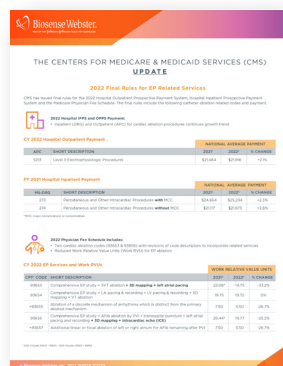
Reimbursement and Coding Guide



Coding and Reimbursement Frequently Asked Questions



Electrophysiology Coding Checklist



2022 CMS Final Rules for EP Related Services



EP Procedure Documentation Best Practices

FOR ADDITIONAL QUESTIONS OR INFORMATION CONTACT:

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## ABLATION PROCEDURES

### Q. What CPT® codes are reported for ablation procedures?

A. As a result of the Joint CPT® / RUC screen for procedures inherently performed together, three primary codes were introduced in 2013 which bundle electrophysiological (EP) evaluation and intracardiac ablation procedures, as well as two add-on ablation codes. These codes have been revised again for 2022. Code 93650, AV node ablation, was unaffected.

- 93650** AV node ablation
- 93653** Comprehensive EPS with atrial ablation, single focus, includes 3-D mapping, LA pacing & recording
- 93654** Comprehensive EPS with ventricular ablation, includes 3-D mapping, LA and LV pacing & recording
- + **93655** Ablate additional discrete arrhythmia mechanism
- 93656** Comprehensive EPS with pulmonary vein isolation for AFib, includes transeptal access, LA pacing & recording, includes 3-D mapping, intracardiac echocardiography
- + **93657** Additional linear or focal left or right atrial ablation for AFib

### Q. What are the 2022 revisions to the CPT® ablation procedures?

A. The CPT® Editorial Panel annually reviews codes which are frequently reported together, and for 2022 has bundled certain add-on codes into the primary ablation packages:

- Intracardiac electrophysiologic 3-D mapping (93613) and left atrial (LA) pacing and recording from coronary sinus or left atrium (93621) are bundled into code 93653.
- Left atrial (LA) pacing and recording from coronary sinus or left atrium (93621) is bundled into code 93654.
- Intracardiac electrophysiologic 3-D mapping (93613) and intracardiac echocardiography including imaging supervision and interpretation (93662) are bundled into code 93656.

### Q. When would one of the ablation “add-on” procedures be reported?

A. There are two codes for additional ablation performed in combination with a base procedure. These codes would be used in different situations:

- + **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 (List separately in addition to code for primary procedure)

Code 93655 is reported in combination with any of the three “primary” ablation services, when two distinctly different arrhythmia foci are treated. This could represent:

- two different atrial pathways,
  - two different ventricular mechanisms,
  - one atrial and one ventricular arrhythmia, or
  - a distinct arrhythmia in conjunction with paroxysmal atrial fibrillation, such as atrial flutter or other atrial tachycardia.
- + **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 (List separately in addition to code for primary procedure)

Code 93657 is reported only in combination with 93656. If, subsequent to completion of pulmonary vein isolation, diagnostic measurements indicate that there are still remaining triggers for atrial fibrillation, then 93657 for further ablation of these site(s) is additionally reported.

**Q. May an add-on ablation code be reported more than once during a case?**

**A.** The CMS Medically Unlikely Edits (MUEs), effective July 1, 2013, indicated that either 93655 or 93657 are intended to be reported only once per case. Subsequently, the MUEs were revised to allow 2 units of 93655 or 93657.

If the documentation does support medical necessity for an extended atrial fibrillation ablation, but there are multiple sites, the MUE of two units is unlikely to be overridden, even if several additional lines are ablated; the interpretation seems to be “for treatment of atrial fibrillation remaining”, even if that involves multiple lines, not “per individual site ablated”, so distinct areas or triggers would be appropriate. For comparison, code 93656 is also ablation around all 4 pulmonary veins, not per line. Similarly, 93655 has an MUE of 2 units, and it would be expected that a total of 3 distinct arrhythmia mechanisms (the primary plus 2 others) would be documented in order to report 93655 x 2.

It should be noted, however, that “unlikely” is not synonymous with “never”, and exceptions may be submitted for consideration.

**Q. May 93653 and 93650 be reported together?**

**A.** Per the CCI and CPT parenthetical notes, there should be no barrier to reporting these two codes together, so long as they are addressing distinct arrhythmias or conduction disorders.

**Q. If both atrial and ventricular tachycardia ablations are performed in a single setting, how is this reported?**

**A.** Only one primary ablation package procedure may be reported in a single case - as each of these codes include a comprehensive diagnostic study, it would be duplicative; so 93653 and 93654 may not be reported together. Therefore, the first ablation could be reported with either 93653 or 93654, and the distinct mechanism would be reported as 93655.

**Q. Can an EP bill 93655 with an atrial fibrillation procedure? Can they bill it alone? Can they bill it with 93657?**

**A.** Code 93655 can be billed in addition to any of the primary ablation services — 93653 (atrial), 93654 (ventricular), or 93656 (atrial fibrillation, pulmonary vein isolation), for treatment of a distinct arrhythmia focus. It cannot be billed as a stand-alone. 93657 may only be billed in conjunction with 93656. Potentially, 93655 could be reported in addition to 93657 (eg, it is not contradictory to 93657) when both are provided in combination with 93656.

**Q. Ablation package codes (93653, 93654, 93656) all include comprehensive EP study; how should one code if physician does not perform a complete study, but only limited sites (eg, only atrial or only ventricular)?**

**A.** This issue raised questions when the codes were introduced in 2013, requiring these studies to be reported with modifier -52, as a reduced service. Subsequently, several revisions in the code descriptors and instructions were made for 2014 to clarify these situations by adding phrases such as “when clinically indicated” or “when necessary”. The 2022 updates revised this language to “when performed,”, which is more consistent with other CPT® nomenclature. Therefore, when performance of one or more components is not possible or is not indicated, the physician should document the reason for not performing. Modifier -52 is not required.

THERMOCOOL® Navigation Catheters are indicated for the treatment of recurrent drug/device refractory sustained monomorphic ventricular tachycardia (VT) due to prior myocardial infarction (MI) in adults.

The THERMOCOOL SMARTTOUCH® SF Catheter is indicated for the treatment of drug refractory recurrent symptomatic paroxysmal atrial fibrillation (AF) and for drug refractory recurrent symptomatic persistent AF (continuous AF > 7 days but < 1 year), refractory or intolerant to at least 1 Class I or III AAD, when used with the CARTO® 3 System.

**Q. What if documentation describes ablation & mapping only, but there is no real discussion of any diagnostic EP study?**

**A.** The general assumption which was incorporated into these codes is that a physician needs to perform a diagnostic EP study in order to identify the need and location for ablation and/or confirm success. As noted above, however, when performance of one or more components of a comprehensive study is not possible or is not indicated, the physician should document the reason for not performing. It may be appropriate to discuss with the physician options for documentation improvement, and to confirm the full extent of services performed.

**Q. If documentation supports reporting two units of 93655, do you bill with one line item and quantity 2, or on a separate line for each service.**

**A.** If reporting for the physician service, this may be submitted either as one line with two units, or as separate line items. For the outpatient facility, each procedure must typically be on a separate line item with a unit of 1. It may be appropriate to add modifier -59 to the second unit of 93655, even though it is a designated add-on code, based on payor policy.

**Q. If a physician performs a CTI ablation prior to the pulmonary vein isolation and documents “to prevent atrial flutter”, should 93655 be coded when there is no documentation of previous atrial flutter or SVT?**

**A.** Medical necessity is always the underlying requirement for any service. When there is no documentation of a clinical indication for a procedure, clarification with the physician would be appropriate.

**Q. Does 93657 need a different diagnosis code, or can we use I48.0?**

**A.** Since 93657 is specifically intended for treatment of atrial fibrillation remaining after pulmonary vein isolation, atrial fibrillation (eg, I48.0) would be the appropriate diagnosis code for both 93656 and 93657.

**Q. How should a repeat ablation for atrial fibrillation be reported?**

**A.** There are two possible options.

- The first is to report the treatment of the atrial fibrillation with 93656, which is specifically defined for atrial fibrillation. In this instance, the usual bundling edits will apply regarding any additional services, so transeptal puncture, 3-D mapping (93613) and intracardiac echo (93662-26) are included in 93656.

It is appropriate to report 93656 for a second ablation service, as it is not uncommon that some patients will require more than one treatment for atrial fibrillation. The CPT<sup>®</sup> section notes state, “Code 93656 is a primary code for reporting treatment of atrial fibrillation by ablation to achieve complete pulmonary vein electrical isolation.” (emphasis added). While this code includes ablation around all four pulmonary veins – which would have been done at the first treatment – the intent is the achievement of isolation; the code does not require repeat ablation on all four sites, if one of the pulmonary veins has reconnected.

- Alternatively, if the pulmonary vein isolation is complete from the initial treatment, and the repeat intervention is specifically limited to additional sites, such as the roofline or isthmus, a more conservative approach would be to report 93653 for an EP study with atrial ablation. It would then be appropriate to separately report, as documented, the transeptal access (93462), and intracardiac echo guidance (93662-26).

Although specific codes have been created for treatment of atrial fibrillation, there is nothing in the definition of 93653 which prevents it from being reported when the procedure is not pulmonary vein isolation – 93653 references multiple different potential sites of arrhythmogenic focus “ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry”. However, third party payor coverage criteria or other edits may question a claim with a diagnosis of atrial fibrillation if 93656 is not reported, so the EOB should be monitored.

**Q. What if a patient in the EP lab for atrial fibrillation ablation has a successful ablation and is transported to recovery. In recovery, the patient has a reoccurrence of AFIB and is transported back to the EP lab for additional ablation. Would you just add 93657 to the original charges or would you bill all services again with the appropriate modifier?**

**A.** Conservatively, report with 93657 and possibly modifier 22 and/or -XE to reflect the extra work of a separate operative session. However, since everything occurs on the same calendar day, MUE edits would prevent repeat billing of the entire case.

**Q. For an inpatient case, what MS-DRGs would apply to intracardiac EP procedures?**

**A.** Medicare reimburses inpatient hospital services under the Inpatient Prospective Payment System (IPPS), which bases payment on MS-DRGs (Medicare Severity Diagnosis Related Group). The MS-DRG Grouper will generally assign each Medicare patient discharge to one of these new MS-DRGs 273 or 274 when ICD-10-PCS electrophysiology diagnostic and ablation procedure codes are used to describe the principal procedure that the patient received during their hospital stay.

**273** Percutaneous and Other Intracardiac Procedures with MCC

**274** Percutaneous and Other Intracardiac Procedures without MCC

**Q. What are the electrophysiology ICD-10-PCS procedure codes that comprise MS-DRGs 273 and 274?**

**A.** In addition to several other intracardiac procedures in MS-DRGs 273 and 274, the most common transcatheter electrophysiology procedures which may cause an admission to be assigned to one of these MS-DRGs are:

**02583ZZ** Destruction, percutaneous, conduction mechanism

**4A023FZ** Measurement, cardiac, percutaneous, rhythm

**4A0234Z** Measurement, cardiac, percutaneous, electrical activity

**02K83ZZ** Map conduction mechanism, percutaneous

**Q. What other types of procedures would cause the admission to be assigned to MS-DRG 273 or 274?**

**A.** MS-DRGs 273 and 274 report percutaneous and other intracardiac procedures, including:

- Diagnostic electrophysiology procedures and mapping
- Percutaneous destruction (eg, ablation) of various anatomic sites within the heart
- Percutaneous endoscopic dilation of heart valves, with or without placement of device
- Percutaneous septectomy or septostomy
- Percutaneous closure of atrial septal defect with implant
- Percutaneous or percutaneous endoscopic excision, destruction, or occlusion of left atrial appendage

**Q. What diagnoses constitute an MCC, such that the admission is assigned to MS-DRG 273?**

**A.** A list of all MCCs is included in the Medicare Inpatient Prospective Payment System Final Rule, which is published each year on or about August 1<sup>st</sup>, effective for discharges October 1st and later. This rule and the associated data tables are available at the CMS website at [www.cms.gov](http://www.cms.gov):

- Select “Medicare”;
- Scroll down to “Medicare Fee-for-Service Payment”, select “Acute Inpatient PPS”;
- Select “FY 2022 IPPS Final Rule Home Page” at left;
- FY 2022 Final Rule and Correction Notice Tables.

For 2022, the complication and comorbidity diagnosis codes are included in Table 6I (MCCs) and Table 6J (CCs). MCCs listed include secondary diagnoses such as: tuberculosis, pneumonia, and certain other infectious diseases; sickle-cell disease; diabetes mellitus with ketoacidosis, hyperosmolarity, or coma; acute MI; endocarditis and myocarditis; ventricular arrhythmias; cardiac arrest; acute or acute on chronic heart failure; stroke; arterial dissections; acute respiratory failure; acute kidney failure or end stage renal disease; cardiogenic and other sepsis / septic shock; and a wide range of fractures and other traumatic injuries.

Note that these diagnoses typically reflect a significant increase in patient risk of morbidity or mortality, and documentation of diagnoses needs to be as specific as possible to capture the intensity of the manifestation.

Note that these diagnoses typically reflect a significant increase in patient risk of morbidity or mortality, and documentation of diagnoses needs to be as specific as possible to capture the intensity of the manifestation.

EXAMPLES OF VAGUE LANGUAGE	EXAMPLES OF MORE PRECISE LANGUAGE
Diabetes poorly controlled	Specific diabetic manifestations
Urosepsis	Sepsis, involved organ system(s), organism if known
Respiratory insufficiency	Respiratory failure, and acute vs. chronic
CHF or EF 35%	Systolic vs. diastolic heart failure, and acute vs. chronic
NA = 120	Hyponatremia, and cause if known
Renal insufficiency	Severity of chronic kidney disease, or acute failure
Obesity	Morbid obesity, and Body mass index

Additionally, the principal diagnosis (that primarily responsible for necessitating the admission) generally cannot also be an MCC -- CCs and MCCs are secondary diagnoses which increase the complexity of managing the admission for the principal diagnosis. However, due to changes in ICD-10-CM, there are some principal diagnoses which are considered to be their own MCC.

There are also certain code pairs which are considered too similar to one another, and therefore cannot be CCs or MCCs, which are identified in Table 6K.



## ELECTROPHYSIOLOGY STUDIES

**Q. The physician did not complete all of the components for a comprehensive diagnostic EP Study. No ablation is performed. How would this be reported? Would they bill each procedure separately?**

**A.** A comprehensive EP study (93619) is essentially comprised of 5 services, each of which does have a defined CPT® code available if performed individually:

- 93600 Bundle of His recording
- 93602 Intra-atrial recording
- 93610 Intra-atrial pacing
- 93603 Right ventricular recording
- 93612 Right ventricular pacing

Comprehensive study 93620 adds the sixth element of induction of arrhythmia (93618). If only 2 areas of the heart are evaluated, then the individual service codes should be reported by preference. For example, if the patient's condition is of atrial origin, and no pacing or recording is performed in the right ventricle, then use codes 93600, 93602, and 93610 (each with modifier -26 for the physician claim). Alternatively, the comprehensive study code 93619 or 93620 may be reported with a modifier -52 as a reduced service. This may be preferable in situations where add-on procedures are also performed, such as:

- 93621 Left atrial pacing and recording
- 93622 Left ventricular pacing and recording
- 93623 Programmed stimulation and pacing after IV drug infusion

These services may only be reported in conjunction with the primary procedure code 93620 (comprehensive study with induction of arrhythmia) or one of the ablation package codes, as indicated by CPT® parenthetical instructions. 2014 revisions to parenthetical notes indicate that 93623 may also be reported with 93610, 93612, or 93619, so individual component coding is more appropriate if no left-sided studies are performed.

**Q. Is the following documentation sufficient to meet the requirements for billing CPT code 93621 - Left atrial pacing and recording from the coronary sinus or left atrium "We then advanced a pacing catheter in the coronary sinus so that coronary sinus potentials could be recorded." ?**

**A.** Documentation stating solely the placement of the catheter into the coronary sinus without any additional comment regarding its use would not be strongly supportive. However, Coronary sinus potentials are left atrial signals, so this documentation does appear to also capture the clinical intent of the procedure, so 93621 would be appropriate.

**Q. Due to an initially presenting arrhythmia (eg, atrial fibrillation or flutter), it was not possible to perform right atrial pacing prior to ablation. However, pacing and recording of the left atria via the coronary sinus were performed and, once the arrhythmogenic focus was mapped and ablated, programmed stimulation and pacing was performed in an attempt to induce the arrhythmia. How can the services described by 93621 and 93623 be captured?**

**A.** As described in the scenario above, to use the electrophysiology (EP) add-on codes, a base code must first be reported.

The packaged ablation codes include comprehensive study in their definitions. Atrial flutter ablation would be reported as 93653, while atrial fibrillation ablation of pulmonary veins would be 93656. The descriptor for code 93656 states, "including left or right atrial pacing/recording, when performed", which allows reporting in cases when this is not possible. Code 93653 also includes the language "when performed" regarding diagnostic maneuvers, so has the flexibility to accommodate variable situations.

However, it is usually proper to perform a complete study once a sinus rhythm is obtained after cardioversion or ablation for atrial flutter and fibrillation. This is to ensure that there is not a hidden accessory pathway or another problem. If atrial and ventricular pacing is done before or after the ablation, the complete electrophysiologic study is supported.

Per the CCI, although 93623 may be reported for IV drug infusion for diagnostic programmed stimulation and pacing, it should not be reported for injections of a drug with stimulation and pacing following an intracardiac ablation procedure (93653-93657) to confirm the adequacy of the ablation. Confirmation of the adequacy of the ablation is included in the intracardiac catheter ablation procedure.

**Q. The physician attempted to induce the patient's arrhythmia during the study, but was unable to reproduce it in the lab. Does this have to be reported as 93619?**

**A.** Whether the induction of arrhythmia is successful is irrelevant, because the code describes the attempt at induction, not the success of the procedure, and supports the use of code 93620.

**Q. Is it appropriate when performing AV node ablation, 93650, to also bill some EP study component codes such as 93602, 93610, 93600, and possibly mapping codes 93609 or 93613, if the codes are documented in the report?**

**A.** These services are not bundled in the CCI, so if documentation supports that they (a) have been performed and (b) are clinically indicated and medically necessary, then they may be reported in combination with the AV node ablation. Beginning in 2019, the Medicare Outpatient Payment Rule notes if 93650 is reported in conjunction with a comprehensive EP study 93619 or 93620, it will be assigned to a higher APC category, the same as other ablation packages, so it is recognized that additional diagnostic evaluation may occur. However, there may be limitations. The CPT parenthetical notes following 93609 and 93613 do not reference 93650, and CMS has additional edits for which primary codes are required to accompany certain add-on codes, including mapping. It is therefore highly likely that 93613 will be denied and not reimbursed.

**Q. For a diagnostic EP study without ablation, how can we code a bi-atrial study (without ventricular pacing/recording)?**

**A.** This is reported as 93620 with add-on code 93621; and one would also report the transeptal puncture code (93462), if this is performed. However, if documentation discusses findings of atrial sites only, the comprehensive study may be more appropriately reported with modifier -52; unlike the ablation procedures, 93619 and 93620 which do not include qualifying phrases such as "when performed". A comprehensive study code may be reported with modifier -52 when it is reduced at the physician's discretion; it should be noted that payor policy regarding use of modifier -52 on these codes may vary, and reporting by this method may lead to a request for documentation.

Confirm with physician and via ancillary documents for complete information before assigning codes or assuming study is reduced. Documentation improvement could include:

PROMPTS FOR NARRATIVE INPUT OF DATA	TABLES			
"Quad was advanced to the right atrium, His position, and RV apical position. HA interval of ____, HV interval of ____, PR interval of ____, QRS duration of ____, QT interval of ____, AV block cycle length at baseline was ____."	R-R		QT	
	PR		AH	
	QRS		HV	
	AV block cycle			
	Slow pathway ERP			
	Fast pathway ERP			

**Q. What is the correct CPT® code for rapid atrial pacing to terminate atrial flutter?**

**A.** Rapid atrial pacing, sometimes termed burst pacing or overdrive pacing, may be reported in different ways depending upon technique:

- If pacing is performed using externally placed electrodes: **92953** Temporary transcutaneous pacing
- If pacing is performed during a catheter-based EP study, then it is included in the description of **93620, 93653, 93654, or 93656.**
- If pacing is performed via the electrodes of an existing pacemaker, it might be reported as:  
**93724** Electronic analysis of antitachycardia pacemaker system (includes electrocardiographic recording, programming of device, induction and termination of tachycardia via implanted pacemaker, and interpretation of recordings)

However, this is dependent upon the device -- code 93724 is only appropriate if the patient has an “antitachycardia pacemaker system” in place. If not, then this is an unlisted procedure, 93799.

**Q. What is the CPT code for a “conduction study”?**

**A.** Diagnostic electrophysiology studies focused on conduction disorders, rather than arrhythmias, would be reported with 93619, as supported by documentation.

**Q. Can there be instances where 93620 is done with 93650?**

**A.** This is possible if it is performed, documented, and clinically indicated as medically necessary. As always, this is dependent upon the patient’s presentation and the physician’s clinical judgment.

**Q. Why would an electrophysiology service be denied?**

**A.** There are many reasons why a service could be denied by an insurer:

- Certain procedures are designated add-on codes per CPT® definition, and may only be reported in conjunction with a primary procedure – it may not be reported “stand-alone.” EP examples include mapping (93609 or 93613), IV drug study (93623), left atrial or ventricular pacing and recording (93621 and 93622), and intracardiac echocardiography (93662).
- CPT® may indicate in a parenthetical instruction that a procedure may only be reported when in conjunction with other specified services. Examples relevant to EP services include:
  - Mapping (93609 or 93613) may be reported only in conjunction with 93620;
  - Left atrial (93621) pacing and recording may only be reported in conjunction with 93620;
  - Left ventricular (93622) pacing and recording may be reported in conjunction with 93620 – it may also be appropriate with 93653 or 93656;
  - IV drug study (93623) may be reported in conjunction with 93610, 93612, 93619, or 93620 – it may also be reported with ablation codes 93653, 93654, and 93656;
  - Intracardiac echocardiography (93662) may be reported in conjunction with 93620, 93653, or 93654
  - Transseptal puncture (93462) may be reported in conjunction with 93653 or 93654.

If none of these identified procedures are also on the claim, then the ancillary procedure will likely be denied. The CCI Chapter Notes contain bundling instructions which limit the reporting of 93623 with ablation procedures:

“CPT® code 93623 (programmed stimulation and pacing after intravenous drug infusion) is an add-on code that may be reported per CPT® Manual instructions only with CPT® codes 93610, 93612, 93619, 93620, or 93653-93656. Although CPT® code 93623 may be reported for intravenous drug infusion for diagnostic programmed stimulation and pacing, it should not be reported for injections of a drug with stimulation and pacing following an intracardiac catheter ablation procedure (e.g., CPT® codes 93650-93657) to confirm adequacy of the ablation. Confirmation of the adequacy of ablation is included in the intracardiac catheter ablation procedure.”

However, this has not always been the case. Previously, 93623 was bundled into all ablation package codes, with a modifier to override when indicated. This is an example of why it is suggested that the CCI and the AMA website be monitored for updates, revisions and clarifications that may be issued which change billing practices, sometimes retroactively.

- Individual payors may have guidelines related to a given procedure which more specifically indicate coverage requirements - such as a list of approved diagnosis codes, frequency, submission of documentation, or other criteria. It is important to understand and keep abreast of individual payor coverage policies. While a code may exist to describe a procedure, this is no guarantee that a payor will cover it. The FDA has approved devices which some payors still consider ‘investigational’, and may not reimburse when used, even for performance of an otherwise covered service - or may have stringent requirements for authorization, such as specific energy source, clinical indication, or other more narrow limits or interpretation.

#### **Q. How are diagnostic and ablation electrophysiology studies reimbursed?**

**A. PHYSICIAN SERVICES:** Codes 93619 or 93620 are mutually exclusive, so selection is dependent upon attempted induction of arrhythmia. Add-on codes, such as 93621, 93622, or 93623, are exempt from multiple procedure payment reduction, and so should be reimbursed at the full fee schedule amount identified by the payor. If an ablation procedure is performed, then one of the ablation packages would be reported in lieu of a diagnostic study; review CPT® definitions for additional bundling guidance.

**HOSPITAL OUTPATIENT SERVICES:** For the outpatient facility claim, most diagnostic EP studies, as well as 93650, would be assigned to APC 5212; ablation procedures 93653, 93654, and 93656 are assigned to APC 5213. All EP procedures have a status indicator of J1, so only one APC would be reimbursed, even if multiple line items are reported. If an ablation procedure is performed, the appropriate ablation package code would be reported. Add-on codes are typically status N1, and not separately reimbursed.

**HOSPITAL INPATIENT SERVICES:** ICD-10-PCS procedure codes reported for percutaneous electrophysiology procedures could be 4A0234Z (measurement of cardiac electrical activity) or 4A023FZ (measurement of cardiac rhythm). An ablation procedure is usually reported with 02583ZZ. All intracardiac electrophysiology procedures would be assigned to MS-DRG 273 or 274. Reimbursement will be driven by the principal procedure and presence or absence of an MCC.

## MAPPING

### Q. What is mapping?

**A.** Mapping is a distinct procedure performed in addition to a diagnostic electrophysiologic or ablation procedure. When a tachycardia is induced, the site of tachycardia origination or its electrical path through the heart is often depicted by mapping. Mapping creates a multidimensional depiction of a tachycardia by recording multiple electrograms obtained sequentially or simultaneously from multiple catheter sites in the heart. Depending upon the technique, a mapping catheter may be repositioned from point-to-point within the heart, allowing sequential recording from the various sites to construct maps. Other types of mapping catheters allow simultaneous recording from many electrodes on the same catheter and computer-assisted three dimensional (3-D) reconstruction of the tachycardia activation sequence.

### Q. What code is used to report mapping?

**A.** There are two CPT® codes which describe mapping:

- + 93613** Intracardiac electrophysiologic three-dimensional (3-D) mapping (List separately in addition to code for primary procedure)
- + 93609** Intraventricular and/or intra-atrial mapping of tachycardia site(s) with catheter manipulation to record from multiple sites to identify origin of tachycardia (List separately in addition to code for primary procedure)

### Q. What is the difference between 93609 and 93613?

**A.** In standard mapping (93609), the mapping catheter is moved from point to point to record endocardial activation during tachycardia or during sinus rhythm (voltage map identifying scar) to identify an early point of activation, mid-diastolic potential, Kent potential, and/or similar paced maps. The map is displayed and analyzed.

3-D mapping (93613) requires use of specialized catheters and an advanced three-dimensional, computer-assisted mapping system to localize the arrhythmia origin. The system is calibrated, and recordings are made during sinus rhythm to identify normal activation and the location of scar and during each distinct tachycardia. The computer-generated map is displayed, modifications in the computer parameters and display are performed, and the tachycardia origin is identified. The ablation catheter is moved to the point of early activation localized by the mapping system to identify a mid-diastolic potential, Kent potential, and/or similar paced maps. As this technology has matured, it has become the technique of choice by many electrophysiologists.

### Q. Can I report both 93609 and 93613 in the same case? Also, if the physician does mapping of the left heart as well as the right, do we bill for both?

**A.** No. Do not report standard mapping in addition to 3-D mapping - report only 93613. Either mapping code may be reported only once per case.

**Q. How is mapping reimbursed?**

**A. PHYSICIAN SERVICES:** Code 93613 or 93609 is reported as a distinct line item when performed. Mapping is a designated add-on service per CPT®, and is considered a distinct procedure performed in conjunction with a diagnostic electrophysiology procedure (93620). Mapping is bundled into the ablation procedures 93653, 93654, and 93656, but may be reported in addition to a diagnostic EP study. Add-on codes are exempt from multiple procedure payment reduction, and so should be reimbursed at the full fee schedule amount identified by the payor.

**HOSPITAL OUTPATIENT SERVICES:** For the outpatient facility claim, there is no additional reimbursement for mapping. 93609 and 93613 are not assigned to an APC, but are considered ancillary to the primary procedure. Status indicator is “N” on these procedures; no separate APC payment is made for mapping.

**HOSPITAL INPATIENT SERVICES:** ICD-10-PCS procedure code 02K83ZZ is reported for percutaneous cardiac mapping, but typically does not affect MS-DRG assignment or change the payment amount. There is no additional payment for use of mapping. Reimbursement will be driven by the principal procedure (eg, ablation) and principal diagnosis determining the MS-DRG.

## TRANSESSEPTAL ACCESS

### Q. How is a transseptal puncture reported?

**A.** An add-on CPT code is used to report transeptal access.

**+ 93462** Left heart catheterization by transseptal puncture through intact septum or by transapical puncture  
(List separately in addition to code for primary procedure)

(Use 93462 in conjunction with 33477, 33741, 33745, 93452, 93453, 93458-93461, 93582, 93595, 93596, 93597, 93653, 93654)

Code 93462 is a designated add-on code, as indicated by the symbol “+” preceding the code. Add-on codes are always performed in conjunction with a primary service or procedure and should not be reported as a stand-alone code. Transseptal puncture is included in the code descriptor for 93656, and so 93462 may not be reported in conjunction with 93656.

### Q. Do we have to perform a full left heart hemodynamic assessment (eg, left ventricular pressures) in order to report 93462?

**A.** No, although some pressure measurement and/or contrast injection may be performed to confirm successful access, this is not a required component of the code.

CPT® code 93462 does not require or describe the hemodynamic assessment, but is only the puncture access service. Although used with ablation for EP procedures, the parenthetical states to also report in conjunction with a range of cardiac catheterization codes which describe left heart catheterization – the hemodynamic study – so 93462 would not capture or include that service.

### Q. Can we charge for an atrial angiogram when we perform a transseptal puncture?

**A.** If a full diagnostic atrial angiogram is performed, and documentation supports that it is clinically indicated, then it may potentially be reported. However, it is more likely that a small amount of contrast is injected to confirm completion of transseptal access, rather than to evaluate atrial function, in which case it is included in 93462.

### Q. Can we still use CPT® code 93462 for a transseptal puncture if they are not going via the right heart?

**A.** Yes, the definition of 93462 states that it reflects access to the left heart either by transseptal puncture (eg, starting from the right heart) or by a transapical puncture.

### Q. Do you need a -26 modifier for 93462?

**A.** No, the concept of technical and professional component is not applicable to this code.

### Q. If the physician performs more than one transseptal puncture in the same procedure, can he bill for it more than once?

**A.** No, the code may be billed only one time per case.

### Q. Can the physician report 93462 additionally whenever left atrial pacing and recording (93621) or left ventricular pacing and recording (93622) is performed?

**A.** Code 93462 may be reported in conjunction with ablation procedure codes 93653 or 93654; it is included in the definition of 93656. CPT® instructional notes do not indicate that 93462 may be reported in conjunction with a diagnostic electrophysiology study in the absence of ablation, but specifically references only 93653 and 93654 within the electrophysiology codes; therefore, it should not be expected that payors would consider it appropriate to report except in conjunction with 93653 or 93654.

**Q. How is the transeptal access procedure reimbursed?**

**A. PHYSICIAN SERVICES:** Code 93462 is reported as a distinct line item when performed with 93653 or 93654; it may not be reported in addition to 93656. Add-on codes are exempt from multiple procedure payment reduction, and so should be reimbursed at the full fee schedule amount identified by the payor.

**HOSPITAL OUTPATIENT SERVICES:** While code 93462 may be additionally reported with 93653 or 93654, there will be no additional reimbursement. Note that code 93656 includes transeptal access in its descriptor, and therefore 93462 may not be reported additionally. In the Hospital Outpatient Prospective Payment System, 93462 is identified as status “N”, meaning that it is packaged into the other APC, and has no APC assignment or separate payment directly.

**HOSPITAL INPATIENT SERVICES:** There is not a similar ICD-10-PCS procedure code for transeptal access. Reimbursement will be driven by the principal procedure and principal diagnosis determining the MS-DRG, and transeptal access has no affect on MS-DRG assignment. There is no additional payment for transeptal access.



## ECHOCARDIOGRAPHY (TEE AND ICE)

**Q. What types of echocardiogram services might be provided in conjunction with electrophysiology procedures?**

**A.** The most likely services will be transesophageal echocardiography (TEE) or intracardiac echocardiography (ICE) procedures.

**Q. Why would a transesophageal echocardiography be performed with an EP procedure?**

**A.** Transesophageal echocardiography may be commonly performed in conjunction with an atrial fibrillation ablation procedure to ensure the patient does not have left atrial appendage thrombus present prior to performing the case. If a full evaluation of cardiac structures is not performed and documented, but only evaluation of this single issue, then it may be appropriate to report as a reduced study with modifier -52. Although transthoracic echos have a CPT® code option for limited study, there is not one for TEE.

**Q. Can both a transesophageal echocardiography (TEE) and intracardiac echocardiography (ICE) be reported for the same ablation procedure?**

**A.** Yes, there is no conflict between TEE and ICE. If the use of both are documented and clinically indicated, then both imaging services may be reported on the same case. For example, a TEE may be performed to rule out left atrial appendage thrombus, then ICE used for guidance to perform a transseptal puncture.

**Q. What codes are used to report transesophageal echocardiogram (TEE)?**

**A.** Transesophageal echocardiography has two families of codes — standard “adult” patients, and congenital cardiac anomalies. The usual service codes are:

<b>93312</b>	Transesophageal echocardiogram; complete
<b>93313</b>	placement of transesophageal probe only
<b>93314</b>	image acquisition, interpretation and report only

93312 is used most often. Codes 93313 and 93314 are reported on the infrequent situation where the physician obtaining and interpreting the image is different from the person who places the transesophageal probe — these codes were introduced into CPT® when the service was a new technology, and sometimes the cardiologist was not comfortable with this placement and asked a gastroenterologist or anesthesiologist to place the probe. Also, if an anesthesiologist has been using TEE for intraoperative monitoring (93318) and observes something of concern, he/she may request a cardiologist to review and interpret the TEE diagnostically, then 93314-26 would apply for the cardiologist, as the probe is already in place.

When the procedure is performed in a facility setting, the physician would report with modifier -26 (professional component) on either 93312 or 93314, indicating interpretation without ownership of the equipment. Modifier -TC (technical component), which indicates the equipment and supplies but not interpretation, is most often used by independent diagnostic testing facilities (IDTFs); hospitals usually report without modifiers for APC reimbursement.

For patients with congenital cardiac anomalies, TEE codes are:

<b>93315</b>	Transesophageal echocardiogram for congenital cardiac anomalies; complete
<b>93316</b>	placement of transesophageal probe only
<b>93317</b>	image acquisition, interpretation and report only

These procedures would more typically be related to evaluations for patients who subsequently undergo percutaneous atrial or ventricular septal defect closure procedures.

If performed, it is also appropriate to report add-on code(s) for use of Doppler imaging technology:

- +93320** Doppler echocardiography, pulsed wave and/or continuous wave with spectral display (List separately in addition to codes for echocardiographic imaging); complete
- +93321** follow-up or limited study
- +93325** Doppler echocardiography color flow velocity mapping (List separately in addition to codes for echocardiographic imaging).
- 93355** Echocardiography, transesophageal (TEE) for guidance of a transcatheter intracardiac or great vessel(s) structural intervention(s) (eg, TAVR, transcatheter pulmonary valve replacement, mitral valve repair, paravalvular regurgitation repair, left atrial appendage occlusion/closure, ventricular septal defect closure) (peri-and intra-procedural), realtime image acquisition and documentation, guidance with quantitative measurements, probe manipulation, interpretation, and report, including diagnostic transesophageal echocardiography and, when performed, administration of ultrasound contrast, Doppler, color flow, and 3-D.

Code 93355 is used to report TEE services during advanced transcatheter structural heart procedures, such as referenced in the parentheses – specific guidance regarding its use with electrophysiological procedures is not included in the CPT®, and may vary by payor. Code 93355 is reported once per intervention and only by a separate individual who is not performing the interventional procedure.

**Q. Is TEE before the case billable as a separate procedure or is it included in the total charges for an ablation?**

**A.** Transesophageal echocardiography is not defined as included in the ablation procedure, and may be reported additionally. However, please note that a formal written interpretation report is required for any diagnostic echocardiography procedure, distinct from the EP service report. If no formal interpretation report is documented, then the TEE is not distinctly reported.

**Q. If the TEE probe is placed by anesthesiology and the EP provider reports the findings of the TEE with Doppler and color flow documented, would 93314, 93321 and 93325 be appropriate to bill by the electrophysiologist?**

**A.** So long as a formal interpretation report is documented, and there is a clinical indication for the service, then yes, this would be appropriate. Modifier 26 would apply.

**Q. How are TEE procedures paid?**

**A. PHYSICIAN SERVICES:** Transesophageal echocardiography (TEE) may be reimbursed separately from an EP procedure when a distinct diagnostic TEE is performed. This would be reported with either 93312, 93314, 93315, or 93317, as appropriate, with add-on codes for spectral or color flow Doppler, if performed. These physician services are coded as facility-based procedures (eg, performed in a hospital inpatient or outpatient setting), which would be reported with modifier -26. Please note that a formal written interpretation report is required for this procedure, separate from the EP service report. If transthoracic or transesophageal ultrasound is used solely for guidance, it is not separately reportable. Physicians should not report CPT® codes 76937, 76942, 76998, 93318, or other ultrasound procedural codes if the ultrasound procedure is performed for guidance during one of the procedures described by CPT® codes 93600 - 93662.

**HOSPITAL OUTPATIENT SERVICES:** Transesophageal echocardiography (TEE) may be reimbursed when a distinct diagnostic TEE is performed. TEE procedures are assigned to APC 5524, and have a payment status of “S” (Significant procedure – APC paid separately, not subject to multiple procedure discount). The add-on codes for Doppler imaging (93320, 93321, 93325) have an APC status of “N”, and are not separately reimbursed. However, beginning in 2015 most EP procedures are assigned status J1, which will cause the TEE to be bundled with the primary EP procedure.

**HOSPITAL INPATIENT SERVICES:** ICD-10-PCS procedure codes differentiate between transthoracic and transesophageal ultrasound and area of the heart examined. Echocardiography typically does not affect MS-DRG assignment, as it would not be the principal procedure for an admission. There is no additional payment for use of TEE in conjunction with EP procedures. Reimbursement will be driven by the principal procedure (eg, ablation), and principal and secondary diagnoses determining the MS-DRG.

**Q. How is intracardiac echocardiography (ICE) reported?**

A. Intracardiac echocardiography has only one code, which might be reported in conjunction with either ablation or septal defect closure procedures, or to guide transeptal access.

**+ 93662** Intracardiac echocardiography during therapeutic/diagnostic intervention

The CPT® definition of the service also indicates it may be reported when used for purely diagnostic evaluation, without ablation or other treatment at the same session - report in conjunction with 33274, 33275, 33340, 33361, 33362, 33363, 33364, 33365, 33366, 33418, 33477, 33741, 33745, 32986, 92987, 92990, 92997, 93451, 93452-93461, 93505, 93580, 93581, 93582, 93583, 93590, 93591, 93593, 93594, 93595, 93596, 93597, 93620, 93653, 93654, 0345T, 0483T, 0484T, 0543T, 0544T, 0545T, as appropriate. However, payor policy may vary on coverage for diagnostic-only situations.

**Q. When physicians use an ICE catheter that is capable of both 3-D mapping and intracardiac echocardiography, can they still bill for both 93613 and 93662?**

A. As long as both procedures are being performed, it is appropriate to bill for both – separate devices are not required. Please note that these are both add-on codes and would need to be billed with a primary procedure.

**Q. How are ICE procedures paid?**

**A. PHYSICIAN SERVICES:** Intracardiac echocardiography (ICE) may be reimbursed separately from an EP procedure when performed in conjunction with one of the procedures noted above and in the parenthetical notes, and is reported with 93662-26. Intracardiac echo may be reported when used for guidance to perform another procedure, such as a transeptal puncture, or for diagnostic purposes.

**HOSPITAL OUTPATIENT SERVICES:** Intracardiac echocardiography (ICE) is not assigned to an APC for the hospital – it is considered ancillary to the primary procedure, and no additional payment will be made by Medicare or other payors who follow APC methodology.

**HOSPITAL INPATIENT SERVICES:** ICD-10-PCS procedure codes B244ZZ3, B245ZZ3, or B246ZZ3 are reported for intracardiac echocardiography. ICE typically does not affect MS-DRG assignment, as it would not be the principal procedure for an admission. There is no additional payment for use of ICE in conjunction with EP procedures. Reimbursement will be driven by the principal procedure (eg, ablation), and principal and secondary diagnoses determining the MS-DRG.

**Q. How is a transesophageal temperature probe reported?**

**A.** There is no distinct CPT® or ICD-10-PCS procedure code for insertion of an esophageal temperature probe. Esophageal temperature monitoring of a patient during an ablation procedure is included in the primary procedure; when performed by an anesthesiologist, it is included in the primary anesthesia service.

**Q. What is the best code for ultrasound guidance for vascular access? Are there differences between what would be coded on an EP case versus an interventional case?**

**A.** The CPT® code for ultrasound guidance for vascular access is:

**76937** Ultrasound guidance for vascular access requiring ultrasound evaluation of potential access sites, documentation of selected vessel patency, concurrent realtime ultrasound visualization of vascular needle entry, with permanent recording and reporting (List separately in addition to code for primary procedure)

Guidelines had not been clear on reporting 76937 with electrophysiology services in the past. However, the CCI Policy Manual (excerpt below) states that ultrasound guidance is bundled with all of these procedures, and were revised effective January 1, 2019 to include reference to 76937.

“21. Many Pacemaker/Implantable Defibrillator procedures (CPT® codes 33202-33249) and Intracardiac Electrophysiology procedures (CPT® codes 93600-93662) require intravascular placement of catheters into coronary vessels or cardiac chambers under fluoroscopic guidance. Physicians shall not separately report cardiac catheterization or selective vascular catheterization CPT® codes for placement of these catheters. A cardiac catheterization CPT® code is separately reportable if it is a medically reasonable, necessary, and distinct service performed at the same or different patient encounter. Fluoroscopy codes (e.g., CPT® codes 76000, 76001) are not separately reportable with the procedures described by CPT codes 33202- 33249 and 93600-93662. Fluoroscopy codes intended for specific procedures may be reported separately. Additionally, ultrasound guidance is not separately reportable with these HCPCS/ CPT® codes. Physicians shall not report CPT® codes 76937, 76942, 76998, 93318, or other ultrasound procedural codes if the ultrasound procedure is performed for guidance during one of the procedures described by CPT® codes 33202-33249 or 93600-93662. (CPT® code 76001 was deleted January 1, 2019.)”

For the outpatient hospital, code 76937 has a status of “N”, so has no separate reimbursement is made by Medicare or any other payor which utilizes the APC payment system.

**Q. Is there a way to bill for TEE and ICE for a left atrial appendage closure device? ICE imaging may occasionally be used as an alternative to TEE for these procedures older patients, who are higher risk / cannot tolerate TEE.**

**A.** A left atrial appendage closure device insertion would be reported with CPT® code 33340, and TEE code 93355 is appropriate to report separately:

**33340** Percutaneous transcatheter closure of the left atrial appendage with endocardial implant, including fluoroscopy, transseptal puncture, catheter placement(s), left atrial angiography, left atrial appendage angiography, when performed, and radiological supervision and interpretation

The CPT® includes a listing of specific codes which may be reported with ICE (93662), which includes 33340 as of 2022. That list is:

“Use 93662 in conjunction with 33274, 33275, 33340, 33361, 33362, 33363, 33364, 33365, 33366, 33418, 33477, 33741, 33745, 32986, 92987, 92990, 92997, 93451, 93452-93461, 93505, 93580, 93581, 93582, 93583, 93590, 93591, 93593, 93594, 93595, 93596, 93597, 93620, 93653, 93654, 0345T, 0483T, 0484T, 0543T, 0544T, 0545T as appropriate”

Many payors, including Medicare, do not cover ICE for any additional procedures. While unusual circumstances may be appealed, there is no guarantee of approval, particularly as CMS has published as list of add-on codes and their accepted primary procedures. Code 93662 is in the section entitled “TYPE I - CPT® MANUAL, HCPCS MANUAL, AND/OR CMS POLICY DEFINES ALL ACCEPTABLE PRIMARY CODES”, and precisely matches the CPT® list.

**Q. When inserting a left atrial appendage (LAA) closure device, may multiple ultrasound codes be reported?**

**A.** There are some nuances related to reporting multiple ultrasound codes.

Echocardiography codes:

- Both 93312 and 93355 are used to report transesophageal echocardiography (TEE):
  - 93312 is TEE for a diagnostic study
  - 93355 is a guidance procedure using TEE for intracardiac structural procedures
- 93662 is intracardiac echocardiography (ICE)
- There is no conflict between reporting both ICE and TEE for the same case, and this concept is not limited to ablation procedures, so long as both are documented and supported as clinically appropriate.
- TEE guidance for intracardiac structural procedures, code 93355, is bundled by Medicare when reported by the same physician who is performing the primary procedure. The CCI edits show that 93355 is bundled with 33340, without any recognized exceptions by reporting with a modifier. It would only be reimbursed if submitted by a separate NPI (essentially as an assistant at surgery). The CCI is a Medicare policy, so may not apply to all commercial plans, although many do follow the same edits or use it as a starting point for their payment edits.
- There is a parenthetical following 93355 stating “do not report in conjunction with ... 93312...”. However, that would be limited to the same session. If performed on a separate date, or otherwise distinct from the operative session – for purposes of baseline diagnostic study or follow-up evaluation -- it would be appropriate to report separately. However, if it is a single insertion of the TEE probe to “scout” before starting the Watchman placement, then that is considered part of the service reported by 93355.
- Beginning in 2022, 33340 is included in the list of codes to be reported in conjunction with ICE, so 93662 should be separately reported.

**Q. May the transseptal puncture for inserting the LAA device be performed using ICE for guidance?**

**A.** LAA closure device transseptal puncture (TSP) can be done with TEE or ICE, the TSP is a component of LAA closure and so 93462 cannot be listed on the claim. CPT 33340 is included in the list of codes to be reported in conjunction with ICE, so 93662 should be separately reported.

**Q. How about reporting ICE for transeptal puncture related to a transcatheter mitral valve procedure?**

**A.** While ICE is not typically reimbursed with a transcatheter mitral valve repair (TMVR) it may be reported if the physician can document improved patient safety, reduced complications, reduced case time. NOTE: This may require submission of documentation and may be up to payor determination, as there is no specific guidance relating to ICE. TMVR (33418) is included on the CPT® list of ICE codes beginning 2022. The CPT® instructional notes do state that the surgical code includes contrast injections, roadmapping, and/or fluoroscopic guidance for TMVR, but not ultrasound. The TSP itself is bundled with TMVR, per CPT® definition.

**Q. How should transesophageal echocardiography be reported with other transcatheter procedures, such as valve replacements and defect closures?**

**A.** Although many of these procedures include fluoroscopy or angiography, ultrasound guidance may be reported separately. There is a specific code for TEE for structural interventions, and the transthoracic echo codes may also be reportable. The parenthetical notes following these codes are fairly extensive, and should be reviewed.

**93355** Echocardiography, transesophageal (TEE) for guidance of a transcatheter intracardiac or great vessel(s) structural intervention(s) (eg, TAVR, transcatheter pulmonary valve replacement, mitral valve repair, paravalvular regurgitation repair, left atrial appendage occlusion/closure, ventricular septal defect closure) (peri-and intra-procedural), real-time image acquisition and documentation, guidance with quantitative measurements, probe manipulation, interpretation, and report, including diagnostic transesophageal echocardiography and, when performed, administration of ultrasound contrast, Doppler, color flow, and 3D.

However, the CCI bundles both TTE and TEE with TAVR for Medicare, which will only be reimbursed if submitted by a separate NPI, despite the fact that 93355 specifically references its use with TAVR in the CPT definition. This may be payor specific.

**Q. Can ICE or transeptal access be reported with other non-electrophysiology procedures, such as transcatheter intrahepatic portosystemic shunt (TIPS)?**

**A.** ICE is typically not reimbursed separately for transcatheter intrahepatic portosystemic shunt (TIPS) procedures, as the definition of TIPS in CPT® states it includes “all associated imaging guidance and documentation”.

Separate reimbursement may be provided for transeptal puncture (93462) with DIPS/TIPS, if performed, depending upon payor. However, the parenthetical notes following 93462 includes a list of codes with which it is to be reported, that does not include TIPS – Medicare and some other payors may limit coverage to only the listed procedures (33477, 33741, 33745, 93452, 93453, 93458, 93459, 93460, 93461, 93582, 93595, 93596, 93597, 93653, 93654). Additionally, CCI does include edits that bundle complex TEE (93355) or TEE monitoring by anesthesiologist (93318) with TIPS procedures.

**Q. If an ultrasound catheter is approved for “great vessels” as well as intracardiac applications, is it appropriate to report for a probe inserted via the radial artery?**

**A.** Coding is often based on anatomical area, and the CPT® code for ICE is only recognized for “intracardiac” procedures. Since 93662 specifically states intracardiac in its definition, for other vessels, use of an ultrasound catheter may be more appropriately reported as intravascular ultrasound, which would be different codes depending upon the anatomy imaged:

**37252** Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; initial noncoronary vessel (List separately in addition to code for primary procedure)

**37253** each additional noncoronary vessel (List separately in addition to code for primary procedure)

Note: 37252/37253 are bundled with inferior vena cava filter procedures (IVC) (37191, 37192, 37193) and removal of intravascular foreign body (37197); do not report additionally.

## HCPCS CODES (C-CODES)

### Q. What are C-codes, and when would they be used?

**A.** C-codes are part of the HCPCS Level II coding system, and are primarily used to describe various supplies and devices which may be used in a case, such as particular types of electrode catheters. Occasionally, C-codes may be developed which mirror CPT codes, but with reference to use of a specific type of device or technology, or including additional services.

C-codes may only be reported on outpatient hospital facility claims – they do not apply to inpatient cases or to physician billing.

### Q. How do C-codes affect reimbursement?

**A.** In general, no additional reimbursement will be provided to the facility for a device C-code on an individual claim, with a few exceptions for transitional pass-through payment of new technologies. However, Medicare uses C-codes to track device cost information for future APC rate-setting purposes, so they have an indirect and statistical impact on future payment rates.

To ensure this information is received, a number of CPT<sup>®</sup> procedure codes have been “linked” to one or more C-codes, without which the procedure presumptively cannot be performed. Reporting the appropriate C-code is mandatory and CMS will return a hospital claim if the appropriate tracking code is not identified on the claim when a device-dependent procedure is performed.

### Q. Does every device used have to be reported with a C-code?

**A.** No, not all devices will have an associated C-code. If none is defined, then the facility will assign its own internal charge code, associated with an appropriate revenue code, to record the cost of the device or supply.

For example, please note that there is no C-code for the REFSTAR<sup>®</sup> Plus with QWIKPATCH<sup>®</sup> External Reference Patch, COOLFLOW<sup>®</sup> Pump Tubing, PERRY<sup>®</sup> Exchange Dilator, or HeartSpan<sup>®</sup> Transseptal Needle, MOBICATH<sup>®</sup> Transseptal Needle as they are considered by CMS to be accessory items.

### Q. For G0269 (Placement of occlusive device in vein or artery), there are no NCCI edits for this with ablation or other EP procedures. How is it reported?

**A.** Code G0269 may be reported separately, and it is appropriate to do so; however, there will be no separate payment, as the code itself is defined by CMS as “bundled” and there is no allowable amount assigned to it. It is used statistically, as part of cost projections for the market basket of what it “costs” to be able to perform the average case -- how many did vs. did not use a closure device. So there is a potential long-term affect on the fee schedules, but no direct payment on a claim. Code G0269 may be reported by both the physician and facility; the facility would also report the device itself with code C1760.

### Q. How is the CARTO VIZIGO™ Bi-Directional Guiding Sheath reimbursed?

**A.** CARTO VIZIGO™ Bi-Directional Guiding Sheath, like many of our products, has been assigned a HCPCS code:

**C1766** Introducer/sheath, guiding, intracardiac electrophysiological, steerable, other than peel-away

The HCPCS code is used to track use of CARTO VIZIGO™ Bi-Directional Guiding Sheath in outpatient procedures, it is not associated with any additional payment. Medicare (and most private payers) provides hospitals with a fixed fee (APC) or global payment for the procedure, which covers the costs of all devices used.

HeartSpan<sup>®</sup> is a trademark of Thomas Medical Products, Inc.

The THERMOCOOL SMARTTOUCH<sup>®</sup> SF Catheter is indicated for the treatment of drug refractory recurrent symptomatic paroxysmal atrial fibrillation (AF) and for drug refractory recurrent symptomatic persistent AF (continuous AF > 7 days but < 1 year), refractory or intolerant to at least 1 Class I or III AAD, when used with the CARTO<sup>®</sup> 3 System.

Therefore, CARTO VIZIGO™ Bi-Directional Guiding Sheath and other Biosense Webster, Inc. products are not separately payable items. It should be noted, the physician will use CPT® codes to identify the work/procedure completed and not the tools used to perform the procedure.

**Q. How do I find a C-code for the device which has been used?**

**A.** The HCPCS Level II codes are updated annually, and a current list may be obtained from CMS or several private publishers. Quarterly updates are also published on the CMS website. These codes tend to be fairly generic and are intended to reflect a broad range of devices with similar capabilities.

- C-Codes for Biosense Webster, Inc. products may be found:
  - Online at [www.biosensewebster.com/reimbursement](http://www.biosensewebster.com/reimbursement)  
Enter Biosense Webster, Inc. product number into On-line C-Code Finder.
- For other products, review the HCPCS Level II codebook or contact the manufacturer.

HCPCS CODE	CATHETERS AND INTRODUCERS
C1730	Catheter, electrophysiology, diagnostic, other than 3D mapping (19 or fewer electrodes)
C1731	Catheter, electrophysiology, diagnostic, other than 3D mapping (20 or more electrodes)
C1732	Catheter, electrophysiology, diagnostic / ablation, 3D or vector mapping
C1733	Catheter, electrophysiology, diagnostic / ablation, other than 3D or vector mapping, other than cooltip
C2630	Catheter, electrophysiology, diagnostic / ablation, other than 3D or vector mapping, cool-tip
C1756	Catheter, pacing, transesophageal
C1759	Catheter, intracardiac echocardiography
C1892	Introducer/sheath, guiding, intracardiac electrophysiological, fixed-curve, peel-away
C1893	Introducer / sheath, guiding, intracardiac electrophysiological, fixed-curve, other than peel-away
C1766	Introducer / sheath, guiding, intracardiac electrophysiological, steerable, other than peel-away

Please note that not all products or supplies will have an associated C-code. There is no C-code for: REFSTAR® Catheter with QWIKPATCH® External Reference Patch, COOLFLOW® Pump Tubing, PERRY® Exchange Dilator, or HeartSpan® Transseptal Needle, as these are considered by CMS to be accessory items. If none is defined, the facility will assign an internal charge code associated with an appropriate revenue code.

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## MISCELLANEOUS

**Q. Is it appropriate to charge cardioversion (92960) during an atrial fibrillation ablation when the patient enters the procedure room in normal sinus rhythm (NSR) but during the procedure atrial fibrillation is induced?**

**A.** It is generally not considered appropriate to report cardioversion for a patient in whom an arrhythmia has been induced as part of an EP study.

However, if the patient had initially presented in active atrial fibrillation or other arrhythmia, it may be necessary to cardiovert the patient prior to the study, so that a baseline may be obtained. In this instance, it is considered distinct, and 92960 could be reported additionally, with modifier -59 to indicate a distinct procedure. Internal cardioversion (92961) may not be reported in conjunction with any EP procedures, per CPT® descriptor.

**Q. If there are CCI edits, can we submit using the codes anyway?**

**A.** Any CCI edits must be honored – submission of two codes which are identified as bundled or mutually exclusive will lead to a denial. Sometimes exceptions can be identified with a billing modifier, if appropriately performed and supported by documentation. The CCI code pair will identify if exceptions are made to allow both codes for a distinct and separately performed procedure with a modifier indicator of “1”. However, edits should not be routinely overridden.

**Q. How do we code for percutaneous patent foramen ovale (PFO) and septal defect closures?**

**A.** If septal defect closure is performed via a transcatheter / percutaneous approach, appropriate CPT® codes would be:

**93580** Percutaneous transcatheter closure of congenital interatrial communication (ie, Fontan fenestration, atrial septal defect) with implant

**93581** Percutaneous transcatheter closure of a congenital ventricular septal defect with implant

**93582** Percutaneous transcatheter closure of patent ductus arteriosus

Code 93580 is also appropriate for closure of patent foramen ovale (PFO). Note that 93580 and 93581 include right heart catheterization, injection of contrast, and angiography procedures which may be necessary, so many of the cardiac catheterization services are bundled. Code 93582 includes congenital right and left heart catheterization, catheter placement in aorta, and aortic arch angiography, when performed.

Intracardiac echocardiography guidance (93662) or other echocardiography services (93302-93317 or 93355) may be reported additionally with 93580, 93581, and 93582. Parenthetical notes indicate that transesophageal echocardiography (93315-93317) in conjunction with 93582 is only allowed if performed by another physician.

The ICD-10-PCS procedure codes for septal defect closures are differentiated by anatomic site, and either open or closed. Percutaneous repairs would therefore be reported as one of the following, with intracardiac echocardiography as a secondary procedure:

**02U53JZ** Supplement, atrial septum, percutaneous, with synthetic substitute  
This procedure maps to DRGs 273 or 274

**02UM3JZ** Supplement, ventricular septum, percutaneous, with synthetic substitute  
This procedure maps to DRGs 228, or 229

**02LR3DT** Occlusion, percutaneous, ductus arteriosus of left pulmonary artery, intraluminal device  
This procedure maps to DRGs 270, 271, or 272

**Q. How would we report for an attempted closure of a patent foramen ovale (PFO) that is not completed?**

**A.** If a PFO case is discontinued or it is determined the patient doesn't have one, this can still be reimbursed, at least partially. It depends upon the circumstances of the case. If it is found that the patient does not have PFO, then a diagnostic cardiac catheterization study would be reported, instead. If it is attempted, but unsuccessful / terminated, the physician would report the intended procedure 93580 with a modifier -53 (discontinued), and the facility would report with modifier -74 (discontinued after induction of anesthesia). Documentation must be submitted. The physician reimbursement is carrier determined, and may be based on specifics of the documentation. The facility is often reimbursed in full, as many of the supplies and other costs have already been incurred. Any procedure which was completely performed (eg, diagnostic imaging) may be reported without the modifier, on the same claim, and payable in full.

**Q. Can transseptal access (93462) be reported in conjunction with codes for septal defect closures?**

**A.** The transseptal puncture typically cannot be billed for percutaneous septal defect closures, as there is already a septal opening. However, if needed, transseptal puncture (93462) may be reported in conjunction with percutaneous closure of patent ductus arteriosus (93582).

**Q. Does it matter what order the procedure codes are listed on the claim?**

**A.** For physician or hospital outpatient claims, it is generally recommended that the primary or most significant procedure be listed first, and then additional or ancillary services in descending order. However, most payors employ software which applies their payment policies and reimburse accordingly, regardless of the sequence in which the codes appear on a physician or outpatient claim.

For hospital inpatient claims, however, it is necessary to identify the principal procedure, as well as principal diagnosis, in specific fields. The principal procedure is the procedure performed for definitive treatment rather than diagnostic or exploratory purposes, or which is necessary to take care of a complication.

**Q. The 2017 CPT<sup>®</sup> indicated a majority of the electrophysiology codes as revised, by deletion of the symbol "⊙". What did this mean?**

**A.** This 2017 CPT<sup>®</sup> change affected 180 procedure codes, removing moderate sedation from the definition of the service. Therefore, physicians who perform moderate sedation with a procedure – particularly when there is no anesthesiologist involved in the case -- must report the appropriate moderate sedation code(s) (99151-99157) to receive full payment.

- 99151 Moderate sedation services provided by the same physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports, requiring the presence of an independent trained observer to assist in the monitoring of the patient's level of consciousness and physiological status; initial 15 minutes of intra-service time, patient younger than 5 years of age
- 99152 initial 15 minutes of intra-service time, patient age 5 years or older
- + 99153 each additional 15 minutes intra-service time (List separately in addition to code for primary service)

- 99155 Moderate sedation services provided by a physician or other qualified health care professional other than the physician or other qualified health care professional performing the diagnostic or therapeutic service that the sedation supports; initial 15 minutes of intra-service time, patient younger than 5 years of age
- 99156 initial 15 minutes of intra-service time, patient age 5 years or older
- + 99157 each additional 15 minutes intra-service time (List separately in addition to code for primary service)

As the procedure no longer includes sedation as an inherent component, do not report modifier -52 (Reduced services) with a procedure that is performed without moderate sedation.

Moderate sedation codes are not used for general anesthesia or monitored anesthesia care (MAC) provided by an anesthesiologist or CRNA; those procedures continue to be reported with anesthesia codes.

**Q. Must the physician personally administer the sedative, or may this be performed by a hospital-employed clinical staff member?**

**A.** The physician is responsible for the service, which may be delegated to a nurse or other clinical staff member under his/her personal supervision. The concept is not the same as incident-to reporting.

**Q: How will moderate sedation be reimbursed?**

**A. PHYSICIAN SERVICES:** The initial service code (eg, 99152) would be reported for initiation of sedation and the first 15 minutes of sedation time; in order to report, a minimum of 10 minutes sedation must be provided. Each additional 15 minutes is reported with the appropriate add-on code. Note that the 2022 Medicare physician fee schedule has not assigned RVUs for additional 15 minutes by the same physician performing the procedure in the facility setting, but will separately reimburse the initiation. If a second practitioner provides or supervises the moderate sedation, Medicare reimburses 99157 additionally.

**HOSPITAL OUTPATIENT OR INPATIENT SERVICES:** Sedation is not separately reimbursed to the facility, but is included in the primary procedure.

**Q. A patient presents for a planned external cardioversion. The initial shock does not convert the rhythm, so the physician increases the joules and repeats. Would we bill more than one cardioversion for this situation?**

**A.** Typically, cardioversion is intended to reflect one treatment episode, rather than each individual application of electricity, so as a general rule no. Interestingly, the medically unlikely edits (MUEs) do recognize reporting of up to 2 units of 92960 on the same day, so that if a patient requires a full repetition of the cardioversion it may be reported.

**Q. What does the physician bill (CPT code) for chemical cardioversion?**

**A.** There is no specific CPT code for chemical cardioversion; rather, infusion codes would apply for administration of medication. If performed in a facility setting, the infusion is reported by the facility. The physician would be limited to related services, such as an E/M code or an ECG.

**Q. When a patient has hypertension and cardiomyopathy, is it hypertensive cardiomyopathy?**

**A.** The revision of the terminology “with” in the ICD-10-CM Guidelines states that “The classification presumes a causal relationship between the two conditions linked by these terms in the Alphabetic Index or Tabular List. These conditions should be coded as related even in the absence of provider documentation explicitly linking them, unless the documentation clearly states the conditions are unrelated or when another guideline exists that specifically requires documented linkage between two conditions.” Therefore, this has expanded the applicability of combination codes, even when cause and effect is not directly stated in documentation.

The ICD-10-CM Index references Cardiomyopathy, hypertensive to See Hypertension, Heart. As cardiomyopathy is not synonymous with heart failure, I11.0 does not apply, but I11.9, Hypertensive heart disease without heart failure, is appropriate, although a specific presentation of cardiomyopathy may be more precise.

**Q. If a patient comes in for AV node ablation and also has right heart catheterization to evaluate congestive heart failure, is it permissible to code both procedures?**

**A.** The cardiac catheterization could be reported separately, as there is a distinct clinical indication, so long as a full hemodynamic study is documented. Modifier -59 may apply, and it is possible that the payor may request documentation.

## PROCEDURE VIGNETTES

### HOSPITAL OUTPATIENT SERVICES

EP procedures may be performed as either inpatient or outpatient services. If outpatient, the hospital reports CPT<sup>®</sup> codes and is reimbursed by Ambulatory Payment Classifications (APCs). Sometimes multiple APC payments may be allowed, but often EP services are packaged into a single comprehensive APC (additional APC discussion is found in the Resources section). Physician CPT<sup>®</sup> codes are reimbursed individually.

#### EXAMPLE #1

ATRIAL FIBRILLATION ABLATION, PULMONARY VEIN ISOLATION	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Diagnostic EP study with left atrial pacing and recording via transseptal puncture. Left atrial pulmonary vein isolation for treatment of refractory paroxysmal atrial fibrillation using 3-D mapping and intracardiac ultrasound	93656	Comprehensive EPS with pulmonary vein isolation for AFib, includes transseptal access, left atrial pacing & recording, 3-D mapping, and intracardiac echocardiography	19.77	32.86
<b>TOTAL RVU</b>			<b>19.77</b>	<b>32.86</b>

#### EXAMPLE #2

ATRIAL FIBRILLATION ABLATION, EXTENDED	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
External cardioversion to establish NSR. Left atrial pulmonary vein isolation ablation for treatment of refractory paroxysmal atrial fibrillation using 3-D mapping and intracardiac echo (ICE); left atrial pacing and recording via transseptal puncture; programmed stimulation using IV drug; completed second lesion set for additional atrial fibrillation	93656	Comprehensive EPS with pulmonary vein isolation for AFib, includes transseptal access, left atrial pacing & recording, 3-D mapping, and intracardiac echocardiography	19.77	32.86
	+93623-26	Programmed stimulation with IV drug	0.98	3.01
	92960-59	External cardioversion	2.00	3.16
	+93657	Additional linear or focal atrial ablation for AFib	5.50	9.14
<b>TOTAL RVU</b>			<b>28.25</b>	<b>48.17</b>

## EXAMPLE #3

ATRIAL FIBRILLATION ABLATION + ATRIAL FLUTTER ABLATION	CPT CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Left atrial pulmonary vein isolation ablation for treatment of refractory paroxysmal atrial fibrillation using 3-D mapping and Intracardiac ultrasound; left atrial pacing and recording via transseptal puncture; programmed stimulation with IV drug; ablated CTI Line for right atrial flutter	93656	Comprehensive EPS with pulmonary vein isolation for AFib, includes transseptal access, left atrial pacing & recording, 3-D mapping, and intracardiac echocardiography	19.77	32.86
	+93623-26	Programmed stimulation with IV drug	0.98	3.01
	+93655	Ablation of distinct arrhythmia mechanism	5.50	9.15
<b>TOTAL RVU</b>			<b>26.25</b>	<b>45.02</b>

## EXAMPLE #4

EXTENDED ATRIAL FIBRILLATION ABLATION + ATRIAL FLUTTER ABLATION	CPT CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Left atrial pulmonary vein isolation ablation for treatment of refractory paroxysmal atrial fibrillation using 3-D mapping and Intracardiac ultrasound; left atrial pacing and recording via transseptal puncture; completed second lesion set for atrial fibrillation; programmed stimulation with IV drug; ablated CTI Line for right atrial flutter	93656	Comprehensive EPS with pulmonary vein isolation for AFib, includes transseptal access, left atrial pacing & recording, 3-D mapping, and intracardiac echocardiography	19.77	32.86
	+93623-26	Programmed stimulation with IV drug	0.98	3.01
	+93655	Ablation of distinct arrhythmia mechanism	5.50	9.15
	+93657	Additional linear or focal atrial ablation for AFib	5.50	9.14
<b>TOTAL RVU</b>			<b>31.75</b>	<b>54.16</b>

## EXAMPLE #5

COMPLEX ATRIAL FIBRILLATION ABLATION + ATRIAL FLUTTER ABLATION + SVT ABLATION	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Left atrial pulmonary vein isolation ablation for treatment of refractory paroxysmal atrial fibrillation using 3-D mapping and intracardiac echo (ICE); left atrial pacing and recording via transeptal puncture; completed second and third lesion sets for atrial fibrillation; ablated left atrial flutter; programmed stimulation with IV drug; ablated SVT induced during EP study	93656	Comprehensive EPS with pulmonary vein isolation for AFib, includes transeptal access, left atrial pacing & recording, 3-D mapping, and intracardiac echocardiography	19.77	32.86
	+93657	Additional linear or focal atrial ablation for AFib	5.50	9.14
	+93657	Additional linear or focal atrial ablation for AFib	5.50	9.14
	+93655	Ablation of distinct arrhythmia mechanism	5.50	9.15
	+93655	Ablation of distinct arrhythmia mechanism	5.50	9.15
<b>TOTAL RVU</b>			<b>41.77</b>	<b>69.44</b>

## EXAMPLE #6

ATRIAL FLUTTER OR TACHYCARDIA ABLATION, RIGHT SIDED	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Complete diagnostic EP study with induction of arrhythmia; 3-D mapping; atrial ablation for atrial flutter	93653	Comprehensive EPS with atrial ablation, single focus, includes left atrial pacing & recording, 3-D mapping	14.75	24.49
<b>TOTAL RVU</b>			<b>14.75</b>	<b>24.49</b>

## EXAMPLE #7

ATRIAL FLUTTER OR TACHYCARDIA ABLATION, LEFT SIDED	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Complete diagnostic EP study with induction of arrhythmia; 3-D mapping; programmed stimulation with IV drug infusion; transeptal puncture using ICE; atrial ablation for atrial flutter or tachycardia	93653	Comprehensive EPS with atrial ablation, single focus, includes left atrial pacing & recording, 3-D mapping	14.75	24.49
	+93623-26	Programmed stimulation with IV drug	0.98	3.01
	93462	Transeptal puncture	3.73	6.17
	+93662-26	Intracardiac echocardiography	1.44	2.67
<b>TOTAL RVU</b>			<b>20.90</b>	<b>36.34</b>

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## EXAMPLE #8

ATRIAL TACHYCARDIA ABLATION, DUAL MECHANISMS, RIGHT SIDED	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Complete diagnostic EP study with induction of arrhythmia; 3-D mapping; programmed stimulation with IV drug infusion; atrial ablation for atrial flutter; atrial ablation for atrial tachycardia	93653	Comprehensive EPS with atrial ablation, single focus, includes left atrial pacing & recording, 3-D mapping	14.75	24.49
	+93655	Ablation of distinct arrhythmia mechanism	5.50	9.15
	+93623-26	Programmed stimulation with IV drug	0.98	3.01
<b>TOTAL RVU</b>			<b>21.23</b>	<b>36.65</b>

## EXAMPLE #9

ATRIAL TACHYCARDIA ABLATION, DUAL MECHANISMS, RIGHT AND LEFT SIDED	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Complete diagnostic EP study with induction of arrhythmia; Programmed stimulation with IV drug infusion; 3-D mapping; atrial ablation for left-sided atrial flutter; intracardiac ultrasound; transseptal puncture; CTI line for typical atrial flutter	93653	Comprehensive EPS with atrial ablation, single focus, includes left atrial pacing & recording, 3-D mapping	14.75	24.49
	+93655	Ablation of distinct arrhythmia mechanism	5.50	9.15
	93462	Transseptal puncture	3.73	6.17
	93662-26	Intracardiac echocardiography	1.44	2.67
	+93623-26	Programmed stimulation with IV drug	0.98	3.01
<b>TOTAL RVU</b>			<b>26.40</b>	<b>45.49</b>

## EXAMPLE #10

VENTRICULAR TACHYCARDIA ABLATION, RIGHT SIDED*	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Complete diagnostic EP study with induction of ventricular arrhythmia; 3-D mapping, programmed stimulation with IV drug and ventricular ablation	93654	Comprehensive EPS with ventricular ablation, includes 3-D mapping, left atrial and/or ventricular pacing & recording	19.75	32.76
	+93623-26	Programmed stimulation with IV drug	0.98	3.01
<b>TOTAL RVU</b>			<b>20.73</b>	<b>35.77</b>

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## EXAMPLE #11

VENTRICULAR TACHYCARDIA ABLATION, LEFT SIDED*	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Complete diagnostic EP study with induction of ventricular arrhythmia; 3-D mapping, and ventricular ablation. Programmed stimulation using IV drug; intracardiac ultrasound; transseptal puncture	93654	Comprehensive EPS with ventricular ablation, includes 3-D mapping, left atrial and/or ventricular pacing & recording	19.75	32.76
	+93462	Transseptal puncture	3.73	6.17
	+93662-26	Intracardiac echocardiography	1.44	2.67
	+93623-26	Programmed stimulation with IV drug	0.98	3.01
<b>TOTAL RVU</b>			<b>25.90</b>	<b>44.61</b>

## EXAMPLE #12

VENTRICULAR TACHYCARDIA ABLATION, DUAL MECHANISMS*	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Complete diagnostic EP study with induction of ventricular arrhythmia; 3-D mapping, and Ventricular ablation. Intracardiac ultrasound; transseptal puncture; programmed stimulation using IV drug; ablation for second clinical VT	93654	Comprehensive EPS with ventricular ablation, includes 3-D mapping, left atrial and/or ventricular pacing & recording	19.75	32.76
	+93655	Ablation of distinct arrhythmia mechanism	5.50	9.15
	+93462	Transseptal puncture	3.73	6.17
	+93662-26	Intracardiac echocardiography	1.44	2.67
	+93623-26	Programmed stimulation with IV drug	0.98	3.01
<b>TOTAL RVU</b>			<b>31.40</b>	<b>53.76</b>

## EXAMPLE #13

AV NODE ABLATION	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Bundle of His recording; ablate AV node	93600-26	Bundle of His recording	10.24	17.32
	93650	AV node ablation	2.12	3.45
<b>TOTAL RVU</b>			<b>12.36</b>	<b>20.77</b>

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In the US, 4mm Catheters (NAVISTAR<sup>®</sup> Catheter, CELSIUS<sup>®</sup> Catheter, EZ STEER<sup>®</sup> Catheter (NAV and Non-NAV)) have a "General Indication" for creation of endocardial lesions in patients 4 years of age and older.

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EXAMPLE #14

LIMITED EP STUDY WITH ATRIAL ABLATION	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
Limited diagnostic EP study comprised of His bundle recording and right atrial pacing and recording; atrial ablation	93653	Comprehensive EPS with atrial ablation, single focus, includes left atrial pacing & recording, 3-D mapping	14.75	24.49
<b>TOTAL RVU</b>			<b>14.75</b>	<b>24.49</b>

EXAMPLE #15

PLACEMENT OF LEFT ATRIAL APPENDAGE CLOSURE DEVICE	CPT <sup>®</sup> CODES	DESCRIPTION	WORK RVU	TOTAL RVU
An echocardiographer performs transesophageal echocardiography (TEE) throughout the procedure to provide guidance for transseptal puncture, LAA imaging, and device placement. Percutaneous access is obtained via the femoral vein, through which a catheter and transseptal needle is advanced to the fossa ovalis in the interatrial septum. Another catheter is percutaneously inserted via the femoral artery and positioned just above the aortic valve. Transseptal puncture is performed with intracardiac echocardiography guidance and dilated. LAA angiography is performed to assess the anatomy of the LAA, while TEE is used to measure the LAA ostium width and length in multiple views. An appropriately sized implant is advanced under fluoroscopic guidance into the left atrial appendage and deployed. Implant release and stability are confirmed by fluoroscopy and independently by the TEE	93355-26	Transesophageal echocardiogram for guidance of intracardiac structural intervention (when reported by a separate physician)	4.66	6.62
	33340	Percutaneous transcatheter closure of left atrial appendage with endocardial implant, including fluoroscopy, transseptal puncture, catheter placement(s), left atrial angiography, left atrial appendage angiography, when performed, and radiological S&I	14.00	23.13
	+93662-26	Intracardiac echocardiography	1.44	2.67
<b>TOTAL RVU</b>			<b>20.10</b>	<b>32.42</b>

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## HOSPITAL INPATIENT SERVICES

For transcatheter ablation procedures performed on an inpatient basis, the hospital will typically be reimbursed under MS-DRG 273 or 274, which is determined by the presence or absence of significant underlying comorbidities or complications, not the extent of the EP services performed. MS-DRG payment amounts may be adjusted by multiple hospital-specific factors.

MS-DRG	DESCRIPTOR
273	Percutaneous and Other Intracardiac Procedures with MCC
274	Percutaneous and Other Intracardiac Procedures without MCC

## ASSIGNMENT OF CPT® CODES TO APC CATEGORIES

The descriptors applied to each Ambulatory Payment Classification are brief and intentionally generic, indicating that these categories may reflect the reimbursement level for one, a few, or a large number of individual services; the names of the APCs do not necessarily identify everything which may be included in them. See the Table below for relationships of CPT® code to APC for electrophysiology procedures. This reference is intended to assist in “matching” APCs to their relevant CPT® procedure codes. The HOPPS payments are updated at least annually, and adjusted geographically. All procedures reported with CPT® codes must be clinically appropriate for the individual patient, and documented accordingly.

APC	OFFICIAL DESCRIPTOR	STATUS	RELATED CPT® CODES	NOTES
5211	Level 1	J1	Ventricular recording (93603) Esophageal ECG (93615, 93616) Induction of arrhythmia (93618) EP evaluation of ICD (93642)	Only the primary J1 procedure will be reimbursed and the others bundled.
5212	Level 2	J1	Individual diagnostic EP services (93600, 93602, 93610, and 93612) Comprehensive EP studies (93619, 93620, and 93624) AV node ablation (93650)	Reimbursed as APC 5212 when performed as a stand-alone; otherwise, J1 status indicates multiples will be bundled.
5213	Level 3	J1	Ablation procedures (93653, 93654, and 93656) AV node ablation (93650) plus a comprehensive EP study (93619, 93620)	These CPT® codes include both a diagnostic study and ablation in a single code. These also have a status of J1, and will typically be the primary code in a case.
5723	Level 3 Diagnostic Tests and Related Services	S	Tilt table evaluation (93660)	
5524	Level 4 Imaging without Contrast	S	Transesophageal echo (93312) Transesophageal echo, congenital anomaly (93315)	Beginning in 2016, all TEE procedures are assigned to a single APC.
5194	Level 4 Endovascular Procedures	J1	Septal defect closures (93580, 93581) PDA closure (93582)	This APC is assigned for percutaneous atrial or ventricular septal defect closures (93580, 93581) and closure of patent ductus arteriosus (93582).

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N/A		N Mapping (93609, 93613) Left heart EP (93621, 93622) Drug study (93623) Intracardiac echo (93662) Transseptal puncture (93462) Add-on ablations (93655, 93657) Doppler echo add-on (93320, 93321, 93325) TEE guidance (93355)	These procedures are not assigned to an APC, but are ancillary to the primary procedures.
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Status Indicators referenced identify a payment mechanism under the Ambulatory Payment Classifications. Definitions for status indicators are derived from Table D1 of the Medicare Hospital Outpatient Prospective Payment System Final Rule (CMS-1753-FC) issued by CMS on 11/2/21 and published in the Federal Register (Vol. 86, Issue 218) on 11/16/21.

- J1 - Paid through a comprehensive APC; all covered Part B services on the claim are packaged with the primary “J1” service for the claim, with some exceptions
- N - No separate APC payment is made
- S - Paid separately in full
- T - Paid separately, 50% multiple procedure reduction applies

Both APCs 5723 and 5524 have a status indicator of “S”, indicating separate reimbursement, not subject to multiple procedure discount, although they are bundled when reported with a procedure of status J1, which is most of the electrophysiology procedures.

## GLOSSARY AND ACRONYMS

There are many key terms and acronyms used in medical reimbursement literature. There can be varying definitions of terms per insurance contract. Note: This list contains some key terms and is not meant to be all-inclusive.

**Actual Charge:** The charge actually submitted by a physician or hospital for a service rendered.

**Allowable / Allowed Amount / Approved Amount:** An insurer-determined amount for a service per CPT® code. Medicare's payment methodology often can be part of this determination. See Medicare Fee Schedule (MFS).

**Appeal / Review:** Mechanism for contact with a payor for denied claims when there appears to be a possible oversight in determining benefits.

**Audit:** The act of comparing a physician's or facility's medical documentation against the billing records and claims submitted to verify accuracy and appropriateness. Audits may be conducted by a variety of payors, or internally by the entity as part of compliance activities. Note: Prepayment or prospective audit appears to be a growing trend among payors, including Medicare.

- **Prospective Review (Prepayment Audit):** Where documentation is requested for review prior to reimbursing a claim. Many facilities and practices conduct internal audit as a preventive tool to improve accuracy and reduce the possibility of unintended overpayment.

With a goal of efficiency overall and accuracy in the initial payment of claims, Medicare now engages private entities regionally to serve as recovery audit contractors (RACs), in addition to its internal audit staff. Commercial plans may also outsource review functions to third parties.

- **Retrospective Review (Postpayment Audit):** This original method of payor audit reviews paid claims. This is the method most likely performed by a payor investigating the possibility of overpayments.

Audit can result in overpayments to be refunded, and also in potential fines, penalties and sanctions such as loss of provider status in government-based insurance programs. Commercial payors may also conduct some form of audit.

**CMS:** The Centers for Medicare and Medicaid Services, part of the federal Department of Health and Human Services (HHS), the division overseeing these programs.

**Coding and Billing Compliance Guidance:** Published by the HHS Office of Inspector General to encourage coding and billing accuracy in claims submitted on behalf of Medicare and Medicaid beneficiaries. While adoption of a 'corporate compliance program' is stated as voluntary, most facilities and physicians implement at least some of the program elements. To verify compliant billing and coding, a facility or physician can be identified for review (audit).

**Cost Sharing:** Common payor methodology in which the insured individual must pay out-of-pocket a portion of the costs associated with receiving care, e.g., copayment, coinsurance and deductible.

**Covered Service / Medical Necessity:** A service or supply that is part of the benefit plan and eligible for reimbursement. Criteria are set forth by payors per CPT® code to determine parameters of coverage. Frequently, these involve medical conditions identified with ICD-10-CM diagnosis codes.

**Coding:** A “language” of numeric and alpha-numeric code sets intended to translate medical conditions and medical services for electronic submission of claims data by physicians and facilities on behalf of the insured individual:

- CPT<sup>®</sup>** Current Procedural Terminology (CPT<sup>®</sup>) is the primary codebook for reporting physician or outpatient.
- HCPCS** Healthcare Common Procedural Coding System. The HCPCS system includes the CPT<sup>®</sup> as Level I codes, and also the Level II National Codes – which are commonly referred to as “HCPCS codes.” CMS maintains Level II codes, to report a diverse range of services and items not included in CPT<sup>®</sup> – supplies, devices, injectable drugs, ambulance transport, DME, etc. Level II National codes are often more limited in use, applying only to a specific payor or provider type; for example, C-codes for devices may only be reported with outpatient hospital claims. Not every supply or device will have a specific assigned HCPCS code, and multiple products may fall into a single code descriptor.
- ICD-10** The next iteration of the International Classification of Diseases, 10th Revision. ICD-10-CM has replaced ICD-9-CM, Volumes 1 and 2; ICD-10-PCS was developed by CMS to replace ICD-9-CM Volume III. Specific revisions in ICD-10 include: the addition of information relevant to ambulatory and managed care encounters; expanded injury codes; the creation of combination diagnosis/symptom codes to reduce the number of codes needed to fully describe a condition; the addition of sixth and seventh characters; incorporation of common 4th and 5th digit subclassifications; laterality; and greater specificity in code assignment. The new structure allows further expansion than was possible with ICD-9-CM. Volume III of the ICD-9-CM was previously used by hospitals to report inpatient procedure codes, instead of the CPT<sup>®</sup> or HCPCS Level II codes, which is now ICD-10-PCS. It should be noted that there is not a one-to-one correlation between these two procedural coding systems.
- CCI** National Correct Coding Initiative (also NCCI). These are claims processing edits implemented by the Medicare program and also sometimes used by commercial plans. There are two types: Comprehensive/component, or Column 1/Column 2 edits, indicate bundling – the procedure in column 2 is a component of the more comprehensive procedure in column 1, and not typically reimbursed separately. Mutually Exclusive edits indicate that either service may be reported, but usually not both together, as the procedure descriptors are contradictory (eg, “with” vs. “without”; “unilateral” vs. “bilateral”; or “limited” vs. “complete”). CCI edits apply to physician claims, and are also incorporated into the Outpatient Code Editor (OCE) for outpatient facility services. The CCI edit tables include both effective and, if applicable, a deletion date, to allow referencing an earlier date of service, as well as modifier indicators. If the modifier indicator is “1”, then a modifier may be used to override the bundling when a service is truly distinct and separate.
- MUE** Medically Unlikely Edits. An MUE for a HCPCS/CPT<sup>®</sup> code is the maximum units of service that a provider would report under most circumstances for a single beneficiary on a single date of service. Not all HCPCS/CPT<sup>®</sup> codes have an MUE. These edits may be appealed in special circumstances.

**Edits:** Payors’ prepayment “screens” used to identify potential conflicts affecting coverage, e.g., CCI.

**Place of Service (POS):** CMS has designated a series of two-digit indicators for the place of service. The place of service may affect reimbursement of certain procedures.

**Prior Authorization:** Permission may be required by insurers prior to scheduling or paying for particular medical services recommended by providers. May be referred to as precertification or prior approval.

## REIMBURSEMENT METHODOLOGIES

A payor's mechanism for determining payment rates. Many of these acronyms used relate to the Medicare program. While a number have been adopted by commercial insurances plans, some utilize other reimbursement methods according to contractual agreement and/or state statutes. Actual reimbursement will vary based on geographic adjustments and other facility-specific variables, and for commercial insurance plans according to contract.

**MS DRG** Medicare reimburses inpatient hospital services under the Inpatient Prospective Payment System (IPPS), which bases payment on diagnosis-related groups (DRGs), now MS-DRGs (Medicare Severity Diagnosis Related Group). The MS-DRG payment system groups similar diagnoses into a single payment level, and reimburses the hospital according to the extent of resources typically required to treat patients with similar diagnoses undergoing similar treatments. All services and supplies provided during the inpatient admission are bundled into a single MS-DRG reimbursement rate, regardless of the length of the inpatient stay, the intensity of treatments, or the number of procedures performed for the specific individual. Hospitals will receive one global MS-DRG payment rate per patient admission, and the MS-DRG assignment is primarily determined by the patient's principle diagnosis and/or principal procedure performed.

MS-DRGs categories and payment amounts are published annually in the Medicare Inpatient Prospective Payment System Final Rule, which is effective October 1st of each year. Each MS-DRG is assigned a relative weight, which is multiplied by each hospital's blended rate. Actual payment will vary based on multiple hospital-specific factors, including geographic wage indices; disproportionate share hospitals (DSH) who provide a large amount of indigent care; graduate medical education (GME) programs; and individual hospital cost reports. Some providers may be paid based on a methodology which differs from the standard MS-DRG calculation (i.e., rural referral centers, hospitals in the state of Maryland).

**CC or MCC** The MS-DRG reimbursement methodology identifies many secondary diagnoses as either complications and comorbidities (CCs) or major complications and comorbidities (MCCs).

Complications - conditions that develop after inpatient admission

Cormorbidities - conditions which pre-exist at the time of admission.

Presence of CCs or MCCs may lead to a different MS-DRG assignment, which are stratified to better recognize increased hospital resource use based on secondary diagnoses. These conditions generally correspond to longer and more complicated inpatient stays due to a need for services such as intensive monitoring, expensive and technically complex procedures, and/or extensive nursing care. Secondary conditions documented in a patient's medical record may impact the reimbursement a hospital receives, if the diagnosis is considered to be either a CC or MCC.

**HACs /POAs** CMS has identified a list of Hospital-Acquired Conditions (HACs) to provide financial incentives for hospitals to reduce the incidence of serious adverse events during inpatient stays that are reasonably preventable. Since October 1, 2008, these identified secondary conditions, which would normally be considered a CC or MCC for MS-DRG assignment, will not qualify for the higher reimbursement level if the patient acquires them after admission. With a few specified exceptions, all secondary diagnoses must be reported with a Present on Admission (POA) indicator to state whether or not this diagnosis was already present. This concept presently only applies to hospital inpatient stays, but may be expanded to outpatient services in future.



<b>APC</b>	Ambulatory Payment Classification is the Medicare reimbursement methodology under the Hospital Outpatient Prospective Payment System (HOPPS). Similar to MS-DRGs, procedures which require similar resources are assigned to an APC category for a lump sum payment. However, multiple outpatient APCs may potentially be paid to a facility on a single case. CMS publishes national average payment amounts for each APC annually in the Medicare Hospital Outpatient Prospective Payment System Final Rule, Addendums A and B. These national base rates are then adjusted geographically according to the hospital wage index for the area.
<b>MFS or MPFS</b>	Medicare Fee Schedule or Medicare Physician Fee Schedule – the payment amounts for physician services under the Medicare program. These amounts are revised at least annually, and can also be a component included in payment calculation by commercial insurance plans.
<b>RBRVS</b>	Resource-Based Relative Value Scale. The methodology by which the Medicare physician fee schedule is calculated. RBRVS has been in use since 1992. Instead of basing payments on charges, the federal government established a standardized physician payment schedule based on a resource-based relative value scale (RBRVS). In the RBRVS system, payments for services are determined by the resource costs needed to provide them.
<b>RVU</b>	Relative value unit. The numeric values assigned to each CPT® code in RBRVS. Each procedure code is assigned a relative value based upon resources needed to provide it, which has three components: physician work, practice expense, and malpractice liability. Although CMS indicates an average percentage of the total RVU for each of these components (physician work 52%, practice expense 44%, malpractice liability 4%), this is not a fixed ratio, and will vary according to the specific resources relevant for different types of procedures. Each of these component relative weights will be adjusted geographically, and then the sum multiplied by a conversion factor (dollar-per-unit) to arrive at the final allowed amount.

## CODING RESOURCES AND REFERENCES

The following are some of the coding resources which are available to assist in accurately reporting electrophysiology services, procedures, and devices. These resources also informed the responses to the FAQs in this document.

### Biosense Webster, Inc. Resources:

#### C-Codes for Biosense Webster, Inc. products may be found:

- Online at <http://www.biosensewebster.com/reimbursement>
  - Enter Biosense Webster, Inc. product number into On-line C-Code Finder.
- For other products, review the HCPCS Level II codebook or contact the manufacturer.

#### 2022 Reimbursement and Coding Guide for Physicians and Facilities.

Download a copy at <http://www.biosensewebster.com/reimbursement>

**The Heart Rhythm Society publishes a resource book and offers additional educational information on their website:** [www.HRSonline.org](http://www.HRSonline.org)

#### American Medical Association: [www.ama-assn.org](http://www.ama-assn.org)

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#### The ICD-10 updates for the Fiscal Year (FY) 2022 reflect continued refinement of the system.

- 2022 ICD-10-CM contains 72,748 codes, with 165 additions, 32 deletions, and 20 revisions from 2021.
- 2022 ICD-10-PCS code set has a total of 78,220 procedure codes, including 191 new codes, 63 revisions, and 107 deletions.

These numbers do not include changes to notes and other instructions. The changes in the code sets are many, and vary from simple to complex, but getting to know them is essential to accurate claims.

#### Medicare Program website: [www.cms.gov](http://www.cms.gov)

Provides a wide range of information and resources, including:

- 2022 Medicare Physician Fee Schedule (MPFS).
- APC payment amounts and CPT® assignment - 2022 Medicare Hospital Outpatient Prospective Payment System Final
- Rule, Addendums A and B.
- MS-DRG categories and payment amounts - 2022 Medicare Inpatient Prospective Payment System Final Rule. Actual payment will vary based on various hospital-specific factors. Some providers may be paid based on a methodology which differs from the standard MS-DRG calculation reflected in the amount shown (i.e. rural referral centers, hospitals in the state of Maryland).

#### Medicare Coverage Database

Resources provided for informational purposes only. No sponsorship or endorsement implied.

FOR ADDITIONAL QUESTIONS OR INFORMATION PLEASE CONTACT  
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