

# Medtronic

Reimbursement guide

# Cardiac catheter ablation and electrophysiology procedures

Hospital & physician coding, coverage, and payment

January 2024

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# Hospital & physician reimbursement guide

## Cardiac catheter ablation and electrophysiology procedures

This guide has been developed to help you understand coverage, coding, and Medicare payment for cardiac catheter ablation and electrophysiology procedures.

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# Overview

## Cardiac catheter ablation procedures

The scope of this document is coding, coverage, and Medicare payment for cardiac catheter ablation and electrophysiology procedures including:

- ✓ Transseptal puncture
- ✓ Intracardiac echocardiography (ICE)
- ✓ Mapping
- ✓ Comprehensive diagnostic electrophysiologic studies (EPS) and components
- ✓ Moderate (conscious) sedation

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# 2024 updates

## Introduction of irreversible electroporation in cardiac catheter ablation

### Pulsed Field Ablation (PFA)

Irreversible electroporation (IRE) in cardiac catheter ablation, also known as PFA, is a new form of treatment for atrial fibrillation (AF) that delivers rapid electrical pulses leading to cell death. PFA is used to achieve pulmonary vein isolation through a catheter. IRE is an alternative treatment modality to existing thermal technologies, radiofrequency and cryoablation.

### Reimbursement for PFA

- Existing reimbursement applies to cardiac catheter ablation procedures that utilize a PFA system.‡
- Medicare does not have any national or local policies for cardiac catheter ablation procedures, coverage is dependent on documented medical necessity. Private payer coverage varies by plan.
- Pulmonary vein isolation (PVI) AF ablations are classified by CPT® code 93656<sup>1</sup> for outpatient hospital and physician coding. Currently, all cardiac catheter ablations in the inpatient setting are reported with ICD-10-PCS code 02583ZZ.<sup>2</sup>
- A new ICD-10-PCS code, 02583ZF<sup>3</sup>, has been created to specify irreversible electroporation in cardiac ablation from other ablation modalities. The new ICD-10-PCS code for PFA is effective starting April 01, 2024. Providers should continue to use the current code, ICD-10-PCS code 02583ZZ<sup>2</sup>, to report any and all cardiac catheter ablations in the inpatient setting until the new code is effective.
- Payment rates for cardiac catheter ablation procedures are established and not differentiated by the energy source being used during the procedure.

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# 2024 updates

## ICD-10-PCS inpatient procedure coding changes for cardiac catheter ablation

### Change

A new ICD-10-PCS code, 02583ZF<sup>3</sup>, has been created to specify irreversible electroporation (IRE), also known as pulsed field ablation (PFA), in cardiac catheter ablation from other ablation modalities in the inpatient setting. The new ICD-10-PCS code for IRE in cardiac ablation is effective for inpatient discharges on or after April 01, 2024.

### Impact

Providers should continue to use the current code, 02583ZZ<sup>2</sup>, to report any and all cardiac catheter ablations in the inpatient setting until the new code is effective. Once effective, the new ICD-10-PCS code for IRE in cardiac ablation should only be reported for procedures that utilize an IRE/PFA technology.

Procedures that utilize radiofrequency or cryoablation technologies should continue to be reported with ICD-10-PCS 02583ZZ.

### For inpatient discharges from January 1, 2024 - March 31, 2024

ICD-10 procedure code <sup>2</sup>	Description
Percutaneous cardiac catheter ablation procedures	
<b>02583ZZ</b>	Destruction of conduction mechanism, percutaneous approach

### For inpatient discharges on or after April 1, 2024

ICD-10 procedure code <sup>2,3</sup>	Description
Percutaneous cardiac catheter ablation procedures	
<b>02583ZZ</b>	Destruction of conduction mechanism, percutaneous approach
<b>02583ZF</b>	Destruction of conduction mechanism using irreversible electroporation, percutaneous approach



Learn more about the new ICD-10-PCS code for irreversible electroporation in cardiac catheter ablation, [Coding corner: CY2024 cardiac catheter ablation coding update](#).

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# 2024 updates

## Procedure coding for cardiac catheter ablation procedures

There are **no changes to the primary procedure codes** for cardiac catheter ablation procedures in 2024.

The descriptions of the primary procedure codes for SVT, VT and PVI cardiac catheter ablations continue to include mapping, intracardiac echocardiogram (ICE), and left atrial (LA) pacing.

	Procedure	2021 Procedure Coding <sup>4</sup>	Current Procedure Coding <sup>1</sup>
SVT	Primary ablation	93653	<b>93653</b>
	3D mapping	+93613	
	LA Pacing	+93621-26	
VT	Primary ablation	93654	<b>93654</b>
	3D mapping	<small>3D mapping was bundled with VT prior to 2022</small>	
	LA pacing	+93621-26	
PVI	Primary ablation	93656	<b>93656</b>
	3D mapping	+93613-26	
	ICE	+93662-26	

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# 2024 updates

## Medicare physician fee schedule rate changes

### Change

The Centers for Medicare and Medicaid Services (CMS) finalized the 2024 physician fee schedule which is effective January 1, 2024.

### Impact

These changes impact physician work relative value units (RVU's) and payment rates for cardiac catheter ablation procedures.

Procedure	Current Procedure Coding <sup>1</sup>	2023 work RVU <sup>5</sup>	2023 National Unadjusted* Physician Rate <sup>6</sup>	2024 work RVU <sup>7</sup>	2024 National Unadjusted* Physician Rate <sup>8</sup>
<b>SVT</b>	93653 includes 3D mapping, LA pacing	15.00	\$837	15.00	\$799
<b>VT</b>	93654 includes 3D mapping, LA pacing	18.10	\$1,009	18.10	\$963
<b>PVI</b>	93656 includes 3D mapping, ICE	17.00	\$949	17.00	\$907

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# 2024 updates

## Medicare hospital outpatient rate changes

### Change

The Centers for Medicare and Medicaid Services (CMS) finalized updated payment rules for outpatient payment rates effective January 1, 2024.

### Impact

Nationally, outpatient payments for SVT, VT, and PVI cardiac catheter ablations are decreasing 3.5%.<sup>9,10</sup>

CPT® code <sup>1</sup>	Brief description	C-APC	FY2023 National Unadjusted* Rate <sup>9</sup>	FY2024 National Unadjusted* Rate <sup>10</sup>	% Change
93650	AV node ablation	5212	\$6,733	\$7,123	+5.7%
93653	SVT ablation and complete EPS				
93654	VT ablation and complete EPS	5213	\$23,481	\$22,653	-3.5%
93656	PVI ablation for AF with TS puncture and complete EPS				

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# 2024 updates

## Medicare hospital inpatient rate changes

### Change

The Centers for Medicare and Medicaid Services (CMS) finalized updated payment rules for inpatient payment rates, effective October 1, 2023.

### Impact

Nationally, inpatient payments for cardiac catheter ablations are decreasing (2.1%)<sup>11,12</sup>.

MS-DRG	Description	FY2023 National Unadjusted* Rate <sup>11</sup>	FY2024 National Unadjusted* Rate <sup>12</sup>	% Change
273	Percutaneous and other intracardiac procedures w/ MCC	\$27,527	\$27,285	-0.9%
274	Percutaneous and other intracardiac procedures w/o MCC	\$23,044	\$22,691	-1.5%

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# Coverage

## Medicare and Medicare Advantage



### Traditional Medicare coverage

For traditional Medicare patients, Medicare has not issued a national coverage determination nor have any contractors issued a local coverage determination for cardiac catheter ablation therapies. In the absence of formal coverage policy, the Social Security Act allows coverage and payment of only those services that are considered to be medically reasonable and necessary<sup>13</sup>. The medical necessity for services provided must be documented in the medical record.



### Medicare Advantage coverage

Medicare Advantage plans are required to cover at least what is covered by Traditional Medicare. Therefore, Medicare coverage policies apply to both traditional Medicare and Medicare Advantage plans<sup>14</sup>. Medicare Advantage plan administrators may have policies and additional requirements such as prior testing and prior authorization.

Medtronic recommends that you review the specific payer coverage policies applicable to your patient to verify all the criteria for coverage are met and/or to request a prior authorization. Requesting authorization after a procedure may result in unpaid claims, leaving both the hospital and the physician without compensation.

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# Coverage

## Non-Medicare payers and documentation best practices



### Non-Medicare payer coverage

Non-Medicare payers typically determine coverage for procedures based on applicable medical policies and prior authorization when required. Not all published policies apply to all patients covered by a particular payer.

Medtronic recommends that you review the specific payer coverage policies applicable to your patient to verify that all the criteria for coverage are met and to request a prior authorization. Requesting authorization after a procedure may result in unpaid claims, leaving both the hospital and the physician without compensation.



### Best practices for documentation

Documentation in the patient's medical record must support the medical necessity of all procedures being performed. Some factors to consider to include-in that documentation might be:

- Relevant medical history, physical examination, and results of pertinent diagnostic tests or procedures.
- Failure or intolerance of other therapies or preference for the procedure being performed.

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# Coding



The coding information below does not replace seeking coding advice from the payer and/or your own coding staff. The ultimate responsibility for correct coding lies with the provider of services. All diagnosis and procedure codes must be supported by clear documentation within the medical record.

**Click on the links below to access codes associated with cardiac catheter ablation procedures.**

- [✔ Cardiac catheter ablation procedure CPT® codes](#)
- [✔ Additional cardiac catheter ablation CPT® codes](#)
- [✔ Moderate \(conscious\) sedation CPT® codes](#)
- [✔ HCPCS codes](#)
- [✔ ICD-10-PCS \(procedure codes\)](#)
- [✔ ICD-10-CM \(diagnosis codes\)](#)
- [✔ MS-DRGs](#)

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# Coding

## Cardiac catheter ablation procedure CPT® codes

### CPT® codes

The following CPT® codes describe procedures associated with cardiac catheter ablation and other electrophysiology procedures. Services rendered will dictate the appropriate coding. These codes may be used by physicians for all services and may be used by facilities when services are rendered in the outpatient hospital setting. It is the physician's discretion as to what codes to report based on what procedures were performed.

CPT® code <sup>1</sup>	Description
<b>Cardiac catheter ablation primary procedures</b>	
93650	Intracardiac catheter ablation of atrioventricular node function, atrioventricular conduction for creation of complete heart block, with or without temporary pacemaker placement
93653	Comprehensive electrophysiologic evaluation with insertion and repositioning of multiple electrode catheters, induction or attempted induction of an arrhythmia with right atrial pacing and recording and catheter ablation of arrhythmogenic focus, including intracardiac electrophysiologic 3-dimensional mapping, right ventricular pacing and recording, left atrial pacing and recording from coronary sinus or left atrium, and His bundle recording, when performed; with treatment of supraventricular tachycardia by ablation of fast or slow atrioventricular pathway, accessory atrioventricular connection, cavo-tricuspid isthmus or other single atrial focus or source of atrial re-entry

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# Coding

## Cardiac catheter ablation procedure CPT® codes

CPT® code <sup>1</sup>	Description
<b>Cardiac catheter ablation primary procedures</b>	
93654	Comprehensive electrophysiologic evaluation with insertion and repositioning of multiple electrode catheters, induction or attempted induction of an arrhythmia with right atrial pacing and recording and catheter ablation of arrhythmogenic focus, including intracardiac electrophysiologic 3-dimensional mapping, right ventricular pacing and recording, left atrial pacing and recording from coronary sinus or left atrium, and His bundle recording, when performed; with treatment of ventricular tachycardia or focus of ventricular ectopy including left ventricular pacing and recording, when performed
93656	Comprehensive electrophysiologic evaluation including transseptal catheterizations, insertion and repositioning of multiple electrode catheters with intracardiac catheter ablation of atrial fibrillation by pulmonary vein isolation, including intracardiac electrophysiologic 3-dimensional mapping, intracardiac echocardiography including imaging supervision and interpretation, induction or attempted induction of an arrhythmia including left or right atrial pacing/recording, right ventricular pacing/recording, and His bundle recording when performed

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# Coding

## Additional cardiac catheter ablation and electrophysiology CPT® codes



## Additional cardiac catheter ablation and electrophysiology CPT®<sup>1</sup> codes

The following add-on codes may be used in addition to an appropriate primary procedure code when cardiac catheter ablation is performed after the treatment of the primary ablated mechanism during the same session.

The following add-on codes are not assigned to an APC because they are ancillary to the primary cardiac catheter ablation procedure. These codes are all classified by Medicare with a status indicator of “N” meaning that these services are not separately payable to hospitals. It is, however, important to report all codes for procedures performed for accuracy and cost accounting purposes.

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# Coding

## Additional cardiac catheter ablation CPT® codes

CPT® code <sup>1</sup>	Description	Status indicator
<b>Additional cardiac catheter ablation procedures</b>		
+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  (Use 93655 in conjunction with 93653, 93654, 93656)	N
+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  (Use 93657 in conjunction with 93656)	N

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# Coding

## Additional cardiac catheter ablation CPT® codes



### Transseptal puncture CPT®<sup>1</sup> codes

The following add-on code is reported when transseptal puncture is performed, however, it is included in the primary procedure code description for pulmonary vein isolation and therefore not separately reported for cardiac catheter ablation

CPT® code <sup>1</sup>	Description	Status indicator
<b>Transseptal puncture</b>		
	Left heart catheterization by transseptal puncture through intact septum or by transapical puncture	
+93462-26	(Use 93462 in conjunction with 33477, 93452, 93453, 93458, 93459, 93460, 93461, 93582, 93653, 93654)  (Do not report 93462 in conjunction with 93656)	N

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# Coding

## Additional cardiac catheter ablation CPT® codes



### Intracardiac echocardiography (ICE) CPT®<sup>1</sup> codes

Report the following when intracardiac echocardiography is performed

CPT® code <sup>1</sup>	Description	Status indicator
<b>Intracardiac echocardiography</b>		
	Intracardiac echocardiography during therapeutic/diagnostic intervention, including imaging supervision and interpretation	
+93662-26	(Use 93662 in conjunction with 92987, 93453, 93460-93462, 93532, 93580, 93581, 93582, 93583, 93620, 93621, 93622, 93653, 93654 as appropriate)  (Do not report 93662 in conjunction with 92961, 0569T, 0570T, 0613T)	N

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# Coding

## Additional cardiac catheter ablation CPT® codes



### 2-D Mapping CPT®<sup>1</sup> codes

Traditional (not 3-D) mapping is considered a distinct procedure and is separately reported when performed.

CPT® code <sup>1</sup>	Description	Status indicator
<b>Mapping</b>		
+93609-26	Intraventricular and/or intra-atrial mapping of tachycardia site(s) with catheter manipulation to record from multiple sites to identify origin of tachycardia  (Use 93609 in conjunction with 93620, 93653, 93656)  (Do not report 93609 in conjunction with 93613, 93654)	N

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# Coding

## Additional cardiac catheter ablation CPT® codes



### Comprehensive diagnostic electrophysiological studies (EPS) CPT®<sup>1</sup> codes

Report one of the following codes when a physician performs a diagnostic electrophysiologic study (EPS) on a different date of service prior to a cardiac catheter ablation procedure. When a comprehensive EPS is performed on the same date of service as the cardiac catheter ablation procedure, it is generally included in the description for the primary ablation procedure code and is not separately reportable.

CPT® code <sup>1</sup>	Description
<b>Comprehensive diagnostic electrophysiological studies</b>	
93619-26	Comprehensive electrophysiologic evaluation with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording, including insertion and repositioning of multiple electrode catheters, without induction or attempted induction of arrhythmia  (Do not report 93619 in conjunction with 93600, 93602, 93603, 93610, 93612, 93618, 93620, 93621, 93622, 93653, 93654, 93655, 93656,)
93620-26	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with right atrial pacing and recording, right ventricular pacing and recording, His bundle recording  (Do not report 93620 in conjunction with 93600, 93602, 93603, 93610, 93612, 93618, 93619, 93653, 93654, 93656, 93657)

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# Coding

## Additional cardiac catheter ablation CPT® codes



### Electrophysiology study (EPS) Components CPT®<sup>1</sup> codes

When a comprehensive EPS is not performed on the same date of service as the cardiac catheter ablation procedure, report additional components separately as appropriate according to parenthetical instructions and documentation in the medical record.

CPT® code <sup>1</sup>	Description	Status indicator
<b>Electrophysiology study components</b>		
93621-26	Comprehensive electrophysiologic evaluation; with left atrial pacing and recording from coronary sinus or left atrium (Use 93621 in conjunction with 93620, 93653, 93654) (Do not report 93621 in conjunction with 93656)	N
93622-26	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with left ventricular pacing and recording (Use 93622 in conjunction with 93620, 93653, 93656) (Do not report 93622 in conjunction with 93654)	N
93623-26	Programmed stimulation and pacing after intravenous drug infusion (Use 93623 in conjunction with 93610, 93612, 93619, 93620, 93653, 93654, 93656)	N

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# Coding

## Additional cardiac catheter ablation CPT® codes

A checkmark (✓) indicates which add-on codes may be reported by a primary ablation code, when performed and documented.

CPT® code <sup>1</sup>	Brief description	93653 SVT ablation	93654 VT ablation	93656 PVI for AF
+93609	Standard (2D mapping)	✓	Cannot use	✓
+93622	LV pacing/recording	✓	Cannot use	✓
+93623	Stimulation and pacing after IV drug infusion	✓	✓	✓
+93462	Left heart catheterization by transseptal puncture	✓	✓	Cannot use
+93655	Additional ablation of discrete mechanism of arrhythmia which is distinct from the primary ablation	✓	✓	✓
+93657	Additional linear or focal ablation of LA or RA for treatment of remaining AF after PVI	Cannot use	Cannot use	✓
+93662	Intracardiac echocardiography (ICE)	✓	✓	Cannot use

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# Coding

## Moderate (conscious) sedation CPT® codes



## Moderate (conscious) sedation CPT®<sup>1</sup> codes

Since 2017, moderate sedation is separately reportable from the cardiac catheter ablation procedure. Moderate sedation codes are time-based services. The codes are organized according to two factors: (1) whether it's the same or a different physician or qualified healthcare provider performing the sedation and also performing the therapeutic service, and (2) the age of the patient for whom the services are being provided.

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# Coding

## Moderate (conscious) sedation CPT® codes



### Same physician or qualified healthcare professional

Use the following codes when it is the same physician or other qualified healthcare professional performing the cardiac catheter ablation service and the sedation. Report either 99151 or 99152 depending on the age of the patient, and report additional unit(s) of add-on code +99153 as required depending on the intraservice time of moderate sedation.

CPT® code <sup>1</sup>	Description
<b>Moderate conscious sedation</b>	
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 intraservice time, patient younger than 5 years of age
99152	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 intraservice time, patient age 5 years or older
+99153	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; each additional 15 minutes intraservice time (Use 99153 in conjunction with 99151, 99152) (Do not report 99153 in conjunction with 99155, 99156)

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# Coding

## Moderate (conscious) sedation CPT® codes



### Different physician or qualified healthcare professional

Use the following services of codes when it is a different physician or other qualified healthcare professional performing the cardiac catheter ablation service and the sedation. Report either 99155 or 99156 depending on the age of the patient, and report additional unit(s) of add-on code +99157 as required depending on the intraservice time of moderate sedation.

CPT® code <sup>1</sup>	Description
<b>Moderate conscious sedation</b>	
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 intraservice time, patient younger than 5 years of age
99156	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 intraservice time, patient aged 5 years or older
+99157	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; each additional 15 minutes intraservice time (Use 99157 in conjunction with 99155, 99156) (Do not report 99157 in conjunction with 99151, 99152)

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# Coding

## HCPCS C-codes



### Hospital outpatient cardiac catheter ablation C-code listing

Medicare provides device C-codes for hospital use in billing Medicare for medical devices in the outpatient setting<sup>15</sup>. For a complete list of Medtronic cardiac catheter ablation products and their associated C-Codes, access our searchable, downloadable (Excel, CSV) C-Code finder found [here](#).

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# Coding

## ICD-10-PCS codes



The coding information below does not replace seeking coding advice from the payer and/or your own coding staff. The ultimate responsibility for correct coding lies with the provider of services. All diagnosis and procedure codes must be supported by clear documentation within the medical record.

## ICD-10-PCS procedure codes for percutaneous cardiac catheter ablation procedures

Hospitals assign ICD-10-PCS codes for procedures performed during an inpatient admission. The following ICD-10-PCS code describes all percutaneous cardiac catheter ablation procedures.

ICD-10 procedure code <sup>2,3</sup>	Description	Notes on Effective Dates for 2024
<b>Percutaneous cardiac catheter ablation procedures</b>		
02583ZZ	Destruction of conduction mechanism, percutaneous approach	<i>Use this code to report any and all cardiac catheter ablations until April 01, 2024. After April 01, 2024, continue to use this code to report any and all cardiac catheter ablations not utilizing IRE/PFA.</i>
02583ZF	Destruction of conduction mechanism using irreversible electroporation, percutaneous approach	<i>This code will be <b>effective for inpatient discharges on or after April 01, 2024.</b> Do not report this code until on or after the effective date.</i>

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## ICD-10-PCS codes

ICD-10 procedure code <sup>2</sup>	Description
<b>Transesophageal echocardiography (TEE)</b>	
B246ZZ4	Ultrasonography of right and left heart, transesophageal
<b>Intracardiac echocardiography (ICE)</b>	
B246ZZ3	Ultrasonography of right and left heart, intravascular
<b>Electrophysiologic study (EPS)</b>	
4A0234Z	Measurement of cardiac electrical activity, percutaneous approach
<b>Mapping</b>	
02K83ZZ	Map conduction mechanism, percutaneous approach

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# Coding

## ICD-10-CM codes



The coding information below does not replace seeking coding advice from the payer and/or your own coding staff. The ultimate responsibility for correct coding lies with the provider of services. All diagnosis and procedure codes must be supported by clear documentation within the medical record.

## ICD-10-CM diagnosis codes that may support cardiac catheter ablation procedures

The following is a list of diagnosis codes that may be associated with VT, SVT, and PVI ablation procedures. The list is for illustrative purposes only. Refer to the Instructions for Use supplied with a product for indications, contraindications, side effects, warnings, and precautions.

ICD-10-CM diagnosis code <sup>16</sup>	Description
<b>Cardiac catheter ablation procedures</b>	
147.0	Re-entry ventricular arrhythmia
147.1	Supraventricular tachycardia (Includes AVNRT)
147.20	Ventricular tachycardia, unspecified
147.21	Torsades de pointes
147.29	Other ventricular tachycardia
147.9	Paroxysmal tachycardia, unspecified

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# Coding

## ICD-10-CM codes

ICD-10-CM diagnosis code <sup>16</sup>	Description
<b>Cardiac catheter ablation procedures</b>	
I48.0	Paroxysmal atrial fibrillation
I48.11	Longstanding persistent atrial fibrillation
I48.19	Other persistent atrial fibrillation
I48.20	Chronic atrial fibrillation, unspecified
I48.21	Permanent atrial fibrillation
I48.3	Typical atrial flutter (type I)
I48.4	Atypical atrial flutter (type II)
I49.01	Ventricular fibrillation
I49.02	Ventricular flutter
I49.1	Atrial premature depolarization (premature atrial beats and contractions)
I49.2	Junctional premature depolarization
I49.3	Ventricular premature depolarization (premature ventricular contractions)

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# Coding

## ICD-10-CM codes

ICD-10-CM diagnosis code <sup>16</sup>	Description
<b>Cardiac catheter ablation procedures</b>	
149.40	Unspecified premature depolarization (unspecified premature beats)
149.49	Other premature depolarization (includes ectopic beats)
149.5	Sick sinus syndrome (tachycardia-bradycardia syndrome)
149.8	Other specified cardiac arrhythmias
149.9	Cardiac arrhythmia, unspecified
148.91	Unspecified atrial fibrillation
148.92	Unspecified atrial flutter

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# Coding

## MS-DRG assignments



The coding information below does not replace seeking coding advice from the payer and/or your own coding staff. The ultimate responsibility for correct coding lies with the provider of services. All diagnosis and procedure codes must be supported by clear documentation within the medical record.

## MS-DRG assignments (MS-DRG: Medicare Severity Diagnosis Related Groups)

Medicare reimbursement for inpatient hospital services is based on a classification system known as Medicare Severity Diagnosis Related Groups (MS-DRGs). MS-DRG assignment is determined by patient diagnoses and procedures. Only one MS-DRG is assigned per hospital admission, and one payment is made for all procedures and supplies related to that inpatient stay. MS-DRG assignment may be affected when one or more secondary diagnoses that are included in the major complication or comorbidity (MCC) or complication or comorbidity (CC) lists are present. MCC and CC lists are updated annually and maintained by CMS.

MS-DRG <sup>17</sup>	Brief description
<b>Percutaneous intracardiac procedures</b>	
273	Percutaneous and other intracardiac procedures w/ MCC
274	Percutaneous and other intracardiac procedures w/o MCC

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# Payment

## Physician

### Physician coding and payment

Effective January 1, 2024 - December 31, 2024

Physicians use CPT® codes to represent procedures and services performed in all places of service. Under Medicare’s methodology for physician payment, each CPT® code is assigned a value, known as a relative value units (RVU). RVU’s are part of how Medicare determines a payment amount.

CPT® code <sup>1</sup>	Description	FY2024 Medicare national unadjusted* physician rate <sup>8</sup>	FY2024 physician work RVU <sup>7</sup>	FY2024 total RVU <sup>7</sup>
<b>Cardiac catheter ablation procedures</b>				
93650	AV node ablation	\$557	10.24	17.00
93653	SVT ablation and complete EPS	\$799	15.00	24.42
93654	VT ablation and complete EPS	\$963	18.10	29.42
93656	PVI ablation for AF with TS puncture and complete EPS	\$907	17.00	27.69

\*Unadjusted rates do not include sequestration or any other local payment adjustments.

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# Payment

## Physician

CPT® code <sup>1</sup>	Description	FY2024 Medicare national unadjusted* physician rate <sup>8</sup>	FY2024 physician work RVU <sup>7</sup>	FY2024 total RVU <sup>7</sup>
<b>Additional cardiac catheter ablation procedures</b>				
93655	Additional catheter ablation of discrete mechanism	\$293	5.50	8.95
93657	Additional catheter ablation for remaining AF	\$293	5.50	8.96
<b>Transseptal puncture</b>				
93462	Left heart cath by transseptal puncture	\$198	3.73	6.06
<b>Intracardiac echocardiography (ICE)</b>				
93662-26	Intracardiac echocardiography (ICE)	\$67	1.44	2.05

\*Unadjusted rates do not include sequestration or any other local payment adjustments.

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# Payment

## Physician

CPT® code <sup>1</sup>	Description	FY2024 Medicare national unadjusted* physician rate <sup>8</sup>	FY2024 physician work RVU <sup>7</sup>	FY2024 total RVU <sup>7</sup>
<b>Mapping</b>				
93609-26	Intracardiac 2D mapping of tachycardia	\$260	4.99	7.93
<b>Complete diagnostic electrophysiologic studies (EPS)</b>				
93619-26	Comprehensive EP study without induction of arrhythmia	\$367	7.06	11.20
93620-26	Comprehensive EP study with induction of arrhythmia	\$588	11.32	17.97
<b>Electrophysiology study (EPS) components</b>				
93622-26	Comprehensive EP study with LV pacing and recording	\$161	3.10	4.93
93623-26	Programmed stimulation and pacing following IV drug infusion	\$65	0.98	1.98

\*Unadjusted rates do not include sequestration or any other local payment adjustments.

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# Payment

## Physician

CPT® code <sup>1</sup>	Description	FY2024 Medicare national unadjusted* physician rate <sup>8</sup>	FY2024 physician work RVU <sup>7</sup>	FY2024 total Facility RVU <sup>7</sup>
<b>Moderate (conscious) sedation - same physician</b>				
99151	Moderate sedation same physician initial 15 min. Patient under 5 years of age	\$23	0.50	0.71
99152	Moderate sedation same physician initial 15 min. Patient 5 years of age or older	\$12	0.25	0.36
+99153	Moderate sedation same physician each addl. 15 min intraservice time	NA	0.00	0.35
<b>Moderate (conscious) sedation - different physician</b>				
99155	Moderate sedation different physician initial 15 min. Patient under 5 years of age	\$80	1.90	2.45
99156	Moderate sedation different physician initial 15 min. Patient 5 years of age or older	\$73	1.65	2.22
+99157	Moderate sedation different physician each addl. 15 min intraservice time	\$58	1.25	1.76

\*Unadjusted rates do not include sequestration or any other local payment adjustments.

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# Payment

## Hospital outpatient coding & payment (APC)

### Hospital outpatient coding and payment

Effective January 1, 2024 - December 31, 2024

Hospital outpatient reimbursement is subject to various packaging rules, including comprehensive APCs (C-APCs). Under C-APCs, only one payment is made for all procedures and supplies provided during the outpatient episode of care.

CPT® code <sup>1</sup>	Brief description	2024 Medicare national unadjusted* hospital outpatient rate <sup>10</sup>	C-APC	Status indicator	C-APC description
<b>Cardiac catheter ablation procedures</b>					
93650	AV node ablation	\$7,123	5212	J1	Level 2 electrophysiologic procedures
93653	SVT ablation and complete EPS				
93654	VT ablation and complete EPS	\$22,653	5213	J1	Level 3 electrophysiologic procedures
93656	PVI ablation for AF with TS puncture and complete EPS				

\*Unadjusted rates do not include sequestration or any other local payment adjustments.

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# Payment

## Hospital outpatient coding & payment (APC)

The following add-on codes are not assigned to an APC because they are ancillary to the primary cardiac catheter ablation procedure. These codes are all classified by Medicare with a status indicator of “N” meaning that these services are not separately payable to hospitals. It is, however, important to report all codes for procedures performed for accuracy and cost accounting purposes.

CPT® code <sup>1</sup>	Description	Status indicator <sup>10</sup>
<b>Transseptal puncture</b>		
+93462	Left heart catheterization by transseptal puncture through intact septum or by transapical puncture (Use 93462 in conjunction with 33477, 93452, 93453, 93458, 93459, 93460, 93461, 93582, 93653, 93654) (Do not report 93642 in conjunction with 93656)	N
<b>Stimulation and pacing after IV drug infusion</b>		
+93623	Programmed stimulation and pacing after intravenous drug infusion (Use 93623 in conjunction with 93610, 93612, 93619, 93620, 93653, 93654, 93656) (Do not report 93623 more than once per day)	N

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# Payment

## Add-on codes

CPT® code <sup>1</sup>	Description	Status indicator <sup>10</sup>
<b>Mapping</b>		
+93609	Intraventricular and/or intra-atrial mapping of tachycardia site(s) with catheter manipulation to record from multiple sites to identify origin of tachycardia (Use 93609 in conjunction with 93620, 93653, 93656) (Do not report 93609 in conjunction with 93613, 93654)	N
<b>Additional ablation beyond primary ablation procedure</b>		
+93655	Additional ablation of discrete arrhythmia beyond primary ablation procedure, SVT or VT (Use 93655 in conjunction with 93653, 93654, 93656)	N
+93657	Additional ablation for remaining AF after PVI (Use 93657 in conjunction with 93656)	N

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# Payment

## Add-on codes

CPT® code <sup>1</sup>	Description	Status indicator <sup>10</sup>
<b>Electrophysiologic studies</b>		
+93621	Comprehensive EP evaluation; with left atrial pacing and recording from coronary sinus or left atrium (Use 93621 in conjunction with 93620, 93653, 93654) (Do not report 93621 in conjunction with 93656)	N
+93622	Comprehensive EP evaluation; with left ventricular pacing and recording (Use 93622 in conjunction with 93620, 93653, 93656) (Do not report 93622 in conjunction with 93654)	N
<b>Intracardiac echocardiography (ICE)</b>		
+93662	Intracardiac echocardiography during therapeutic/diagnostic intervention, including imaging supervision and interpretation (Use 93662 in conjunction with 92987, 93453, 93460-93462, 93532, 93580, 93581, 93582, 93583, 93620, 93621, 93622, 93653, 93654 as appropriate) (Do not report 93662 in conjunction with 92961, 0569T, 0570T, 0613T)	N

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# Payment

## Inpatient

### [Hospital inpatient coding and payment](#)

Effective October 1, 2023 – September 30, 2024

Medicare reimbursement for inpatient hospital services is based on a classification system known as Medicare severity diagnosis related groups (MS-DRGs). MS-DRG assignment is determined by patient diagnoses and procedures. Only one MS-DRG is assigned per hospital admission, and one payment is made for all procedures and supplies related to that inpatient stay. MS-DRG assignment may be affected when one or more secondary diagnoses that are included in the major complication or comorbidity (MCC) or complication or comorbidity (CC) lists, which are maintained by CMS. Each MS-DRG has a relative weight that is then converted to a flat payment amount. The MS-DRGs shown are those typically assigned to the following scenarios.

MS-DRG <sup>17</sup>	Brief description	2024 MS-DRG Medicare national unadjusted* payment rate <sup>12</sup>
<b>Percutaneous intracardiac procedures</b>		
273	Percutaneous and other intracardiac procedures w/ MCC	\$27,285
274	Percutaneous and other intracardiac procedures w/o MCC	\$22,691

\*Unadjusted rates do not include sequestration or any other local payment adjustments.

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# Frequently asked questions

01

## **How is an additional ablation of a different arrhythmia reported?**

When there is another separately identifiable arrhythmia ablated that is different from the initial arrhythmia ablation that would be reported with 93655.<sup>18</sup>

02

## **How many times may an add-on ablation code(s) be used?**

Medicare Medically Unlikely Edits (MUEs) allow for 2 units of both +93655 and +93657. In the event that an additional ablation(s) is performed beyond these edits, a payer denial may be appealed by submitting documentation supporting the medical necessity of the service.

03

## **Is all mapping now included in the ablation procedure codes?**

No, only 3-D mapping is included in the ablation procedure codes.<sup>18</sup>

04

## **Do the CPT codes change if a different energy source is used?**

No, the cardiac catheter ablation codes do not specify the energy source used.

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# Frequently asked questions

05

## How would an additional ablation done to treat atrial fibrillation remaining after PVI be reported

This would be reported with the add-on code 93657 which can only be reported with 93656.<sup>18</sup>

06

## When is 2D mapping billable?

2D mapping is only billable when there is no 3D mapping done during the procedure.

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# Resources



For questions on how to bill for CardiInsight Noninvasive 3D Mapping System, please refer to the Coding & Payment Guide: CardiInsight Noninvasive 3D Mapping System document for additional information. It can be found [here](#).



Learn more about the new ICD-10-PCS code for irreversible electroporation in cardiac catheter ablation, [Coding corner: CY2024 cardiac catheter ablation coding update](#).

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## For additional information



Visit our website: [www.Medtronic.com/crhfreimbursement](http://www.Medtronic.com/crhfreimbursement)



Email us: [rs.healthcareeconomics@medtronic.com](mailto:rs.healthcareeconomics@medtronic.com)



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# References

## References

- <sup>1</sup> CPT codes and descriptions only are copyright ©2023 American Medical Association. All rights reserved. No fee schedules are included in CPT. The American Medical Association assumes no liability for data contained or not contained herein.
- <sup>2</sup> 2024 ICD-10-PCS. cms.gov <https://www.cms.gov/medicare/coding-billing/icd-10-codes/2024-icd-10-pcs> Updated September 6, 2023. Accessed September 19, 2023
- <sup>3</sup> ICD-10 MS-DRGs Version 41.1 Effective April 1, 2024. (2023, November 29). cms.gov.<https://www.cms.gov/files/document/icd-10-ms-drgs-v411-effective-april-1-2024.pdf>
- <sup>4</sup> CPT codes and descriptions only are copyright ©2021 American Medical Association. All rights reserved. No fee schedules are included in CPT. The American Medical Association assumes no liability for data contained or not contained herein.
- <sup>5</sup> The Medicare Physician Fee Schedule (MPFS) 2023 Relative Value Unit (RVU) amounts are based on information in Addendum B from the MPFS final rule CMS-1770-F which was released on November 11, 2022 and updates from the legislation signed on December 29, 2022. PFS Federal Regulation Notices. cms.gov <https://www.cms.gov/medicare/medicare-fee-service-payment/physicianfeeschedpfs-federal-regulation-notices/cms-1770-f>
- <sup>6</sup> PFS 2023 Final Rule CMS-1770-F released November 2, 2022 and updates from the legislation signed on December 29, 2022. <https://www.cms.gov/medicare/medicare-fee-service-payment/physicianfeeschedpfs-federal-regulation-notices/cms-1770-f>
- <sup>7</sup> The Medicare Physician Fee Schedule (MPFS) 2024 Relative Value Unit (RVU) amounts are based on information in Addendum B from the MPFS final rule CMS-1784-F which was released on November 2, 2023. PFS Federal Regulation Notices. cms.gov <https://www.cms.gov/medicare/medicare-fee-service-payment/physicianfeesched/pfs-federal-regulation-notices/cms-1784-f>
- <sup>8</sup> The Medicare Physician Fee Schedule (MPFS) 2024 National payment rates based on information published in the MPFS final rule CMS-1784-F that was released November 2, 2023. PFS Federal Regulation Notices. cms.gov <https://www.cms.gov/medicare/medicare-fee-service-payment/physicianfeesched/pfs-federal-regulation-notices/cms-1784-f> Accessed December 13, 2023.
- <sup>9</sup> OPPTS/ASC 2023 final rule CMS-1772-FC released November 2, 2022 <https://www.cms.gov/medicare/medicare-fee-service-payment/hospitaloutpatientppshospital-outpatient-regulations-and-notices/cms-1772-fc>
- <sup>10</sup> The OPPTS 2024 National payment rates based on information published in the OPPTS/ASC final rule CMS-1786-FC and corresponding Addendum B and Addendum D1 tables which was released on November 2, 2023. Hospital Outpatient Regulations and Notices. cms.gov. <https://www.cms.gov/medicare/payment/prospective-payment-systems/hospital-outpatient/regulations-notices/cms-1786-fc> Accessed November 21, 2023”
- <sup>11</sup> Rates represent the volume-weighted average rates across relevant MS-DRGs representing these procedures. Source: Acute Inpatient PPS, CMS <https://www.cms.gov/medicare/medicare-fee-for-service-payment/acuteinpatientpps> IPPS 2023 final rule CMS-1771-F and corrected amendment CMS-1771-F2 released August 2, 2022 <https://www.cms.gov/medicare/acute-inpatient-pps/fy-2023-ipp-pps-final-rule-home-page>
- <sup>12</sup> The IPPS FY 2024 National payment rates based on information published in the IPPS final rule CMS-1785-F. IPPS Final Rule Home Page. cms.gov <https://www.cms.gov/medicare/acute-inpatient-pps/fy-2024-ipp-pps-final-rule-home-page> Updated November 30, 2022. Accessed December 7, 2023.
- <sup>13</sup> Social Security Act Section 1862 42 U.S.C. 1395y(a)(1)(A). Available at: [https://www.ssa.gov/OP\\_Home/ssact/title18/1862.htm](https://www.ssa.gov/OP_Home/ssact/title18/1862.htm) Accessed January 12, 2023
- <sup>14</sup> Centers for Medicare and Medicaid Services. Medicare Managed Care Coverage Manual – Chapter 4 section 10.7.1 and 10.7.3 <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/mc86c04.pdf> Accessed on January 12, 2023
- <sup>15</sup> HCPCS 2023 Level II Professional Edition. American Medical Association; 2022
- <sup>16</sup> ICD-10-CM The Complete Official Codebook. 2023 AAPC

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<sup>17</sup> MS-DRG v41 Definitions Manual. Cms.gov. [https://www.cms.gov/icd10m/fy2024-version41-fullcode-cms/fullcode\\_cms/p0001.html](https://www.cms.gov/icd10m/fy2024-version41-fullcode-cms/fullcode_cms/p0001.html) Accessed November 21, 2023

<sup>18</sup> American Medical Association. (2021). CPT professional 2022.

\* The following information reflects the Medicare national allowable amount published by CMS and does not include Medicare payment reductions resulting from sequestration adjustments to the amount payable to the provider, as mandated by the Budget Control Act of 2011. The Medtronic Healthcare Economics and Reimbursement teams can provide site-specific information reflective of sequestration upon request.

‡ A new ICD-10-PCS code, 02583ZF, has been created to specify irreversible electroporation in cardiac ablation from other ablation modalities. The new ICD-10-PCS code for pulsed field ablation is effective starting April 01, 2024.

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