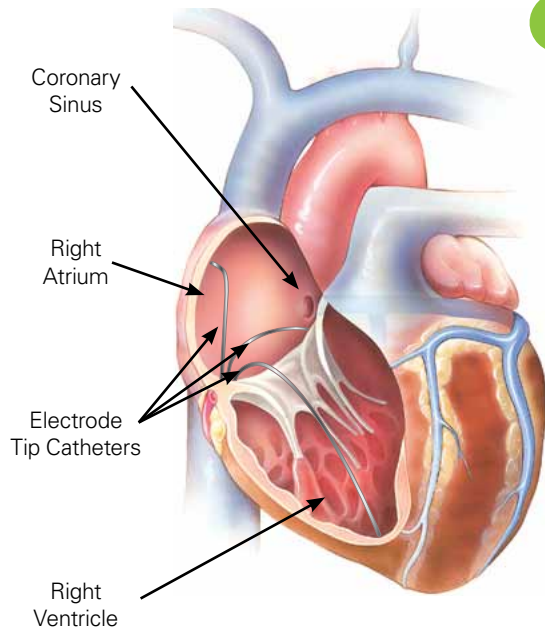


GuidePoint is simplifying reimbursement.



Updated: June 2009

Intracardiac Electrophysiological Study Coding Overview

Electrophysiologic (EP) studies are done to assess a patient's cardiac arrhythmias. These studies are invasive diagnostic medical procedures requiring the insertion of several electrode catheters. EP studies are done to determine if arrhythmia is the cause of the patient's clinical symptoms and to assess the mechanism of the cardiac arrhythmia.

EP studies "include the insertion and repositioning of electrode catheters, recording of electrograms before and during pacing or programmed stimulation of multiple locations in the heart, analysis of recorded information, and report of the procedure. Electrophysiologic studies are most often performed with two or more electrode catheters."¹

The studies are performed using ECG, blood pressure, and pulse oximetry monitoring. Signal processing and amplification equipment to display and assess the intracardiac electrical recordings is used.

Intracardiac electrophysiological studies are coded using a variety of CPT codes in the 93600–93652 CPT code range.

A step-by-step description of a typical comprehensive intracardiac electrophysiological study

1. Introducer sheaths are inserted in the femoral vein.
2. Multiple electrode catheters are inserted into the sheaths and under fluoroscopic guidance, are advanced into the right atrium, His bundle region, and right ventricle.
3. Once in position, the electrode catheters are attached to a recording device allowing depiction of the intracardiac electrograms obtained from the catheter.
4. Right atrial pacing and recording, His bundle recording, and right ventricular pacing and recording are performed. The catheters may be repositioned numerous times and pacing and recording done at various areas within the heart.
5. If an arrhythmia is induced, it may be terminated by rapidly pacing the heart or by defibrillation or cardioversion.
6. Once all pacing and recording is completed, the catheters are withdrawn and the introducer sheaths are removed.
7. The physician documents the procedure along with results of the study and recommendations for treatment.

Note: This document is for reference purposes only and does not replace physicians' medical documentation.

Commonly Billed Intracardiac Electrophysiological Study Procedures

Key

- + Add-on code.
- Moderate sedation (For these procedures, moderate [conscious] sedation is included and cannot be billed separately when provided by the same physician. See the AMA's Current Procedural Terminology 2009 for specific guidelines).

Comprehensive EP Study

Hospital Inpatient ICD-9-CM Codes ¹	Hospital Outpatient* CPT® Codes ^{2,3}	Physician* CPT® Codes ^{2,3}
<p>37.26 Catheter based invasive electrophysiologic testing</p> <ul style="list-style-type: none"> • Electrophysiologic studies [EPS] • Code also any concomitant procedure <p>Excludes:</p> <ul style="list-style-type: none"> • Device interrogation only without arrhythmia induction (bedside check) (89.45 – 89.49) • His bundle recording (37.29) • Non-invasive programmed electrical stimulation (NIPS) (37.20) • That as part of intraoperative testing — omit code 	<p>• 93620</p> <p>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</p>	<p>• 93620-26**</p> <p>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</p>

Comprehensive EP study with pacing and recording of multiple site In the right atrium, right ventricle, His Bundle and left atrium

Hospital Inpatient ICD-9-CM Codes ¹	Hospital Outpatient* CPT® Codes ^{2,3}	Physician* CPT® Codes ^{2,3}
<p>37.26 Catheter based invasive electrophysiologic testing</p> <ul style="list-style-type: none"> • Electrophysiologic studies [EPS] • Code also any concomitant procedure <p>Excludes:</p> <ul style="list-style-type: none"> • Device interrogation only without arrhythmia induction (bedside check) (89.45 – 89.49) • His bundle recording (37.29) • Non-invasive programmed electrical stimulation (NIPS) (37.20) • That as part of intraoperative testing – omit code 	<ul style="list-style-type: none"> • 93620 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 • +93621 Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with left atrial pacing and recording from coronary sinus or left atrium (List separately in addition to code for primary procedure) 	<ul style="list-style-type: none"> • 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 • +93621-26** Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with left atrial pacing and recording from coronary sinus or left atrium (List separately in addition to code for primary procedure)

+ Add-on code • Moderate sedation

Partial (Limited) EP Study - Pacing and recording in the RA and His Bundle

Hospital Inpatient ICD-9-CM Codes ¹	Hospital Outpatient* CPT® Codes ^{2,3}	Physician* CPT® Codes ^{2,3}
<p>37.29 Other diagnostic procedures on heart and pericardium</p> <p>Excludes:</p> <ul style="list-style-type: none"> • Angiocardiology (88.50-88.58) • Cardiac function tests (89.41-89.69) • Cardiovascular radioisotopic scan and function study (92.05) • Coronary arteriography (88.55-88.57) • Diagnostic pericardiocentesis (37.0) • Diagnostic ultrasound of heart (88.72) • X-ray of heart (87.49) 	<p>93600 Bundle of His Recording</p> <p>93602 Intra-Atrial Recording</p> <p>93624 Intra-Atrial Pacing</p>	<p>93600-26** Bundle of His Recording</p> <p>93602-26** Intra-Atrial Recording</p> <p>93624-26** Intra-Atrial Pacing</p>

Follow-up EP study to assess the efficacy of medication for suppression of arrhythmia

Hospital Inpatient ICD-9-CM Codes ¹	Hospital Outpatient* CPT® Codes ^{2,3}	Physician* CPT® Codes ^{2,3}
<p>37.26 Catheter based invasive electrophysiologic testing</p> <ul style="list-style-type: none"> • Electrophysiologic studies [EPS] • Code also any concomitant procedure <p>Excludes:</p> <ul style="list-style-type: none"> • Device interrogation only without arrhythmia induction (bedside check) (89.45 – 89.49) • His bundle recording (37.29) • Non-invasive programmed electrical stimulation (NIPS) (37.20) • That as part of intraoperative testing – omit code 	<p>• 93624 Electrophysiologic follow-up study with pacing and recording to test effectiveness of therapy, including induction or attempted induction of arrhythmia</p>	<p>• 93624-26** Electrophysiologic follow-up study with pacing and recording to test effectiveness of therapy, including induction or attempted induction of arrhythmia</p>

• Moderate sedation

¹ Ingenix. Updatable 2009 ICD-9-CM Expert for Hospitals, Volumes 1, 2 and 3. 6th Revision. Salt Lake City, UT: 2008

² Heart Rhythm Society. CPT Coding Guide for Heart Rhythm Procedures and Services, 2008. Washington D.C.: 2008.

³ American Medical Association. Current Procedural Terminology (CPT) 2009. Professional Edition. Chicago, IL: 2008. Current Procedural Terminology (CPT) is copyright 2008 American Medical Association (AMA). All Rights Reserved. No fee schedules, basic units, relative values, or related listings are included in CPT. The AMA assumes no liability for the data contained herein. Applicable FARS/DFARS restrictions apply to government use. CPT is a registered trademark of the American Medical Association.

* As of January 1, 2005, the Centers for Medicare and Medicaid Services (CMS) requires hospitals to report all device category codes (C-codes) on Medicare outpatient claims when medical devices are used in conjunction with procedure(s) billed. If C-codes are not identified on submitted Medicare outpatient claims, the claim(s) will be returned to the hospital for correction. Find C-codes for CRM devices at <http://www.bostonscientific.com/crm/reimbursement>. Also find C-codes for CRM devices and related accessories (e.g., introducers, catheters, sheaths) at <http://www.cms.hhs.gov/transmittals/downloads/A03076.pdf> and http://www.cms.hhs.gov/HospitalOutpatientPPS/04_passthrough_payment.asp.

** Modifiers 26 (professional component) and 51 (multiple procedures) are for physician billing only. See the *AMA Current Procedural Terminology 2009* for complete descriptions. Historically, third-party payers have used –51 modifier in various ways that may affect payment. Always verify appropriate usage with payers.

Note: *The CPT coding scenarios in this document are from the Heart Rhythm Society's (HRS) CPT coding guide. The ICD-9-CM scenarios are not from the HRS coding guide. However, they were formulated using 2009 ICD-9-CM terminology and following Medicare coding guidelines.*

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