2014 Coding Changes and Compliance Update for Electrophysiology Services

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Sheila Sylvan
Laura Driscoll
IMPACT Medical Consulting

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Conduction System of the Heart

1. Sinoatrial (SA) Node
2. Atrioventricular (AV) Node
3. Right Bundle Branch
4. Purkinje Fibers
5. Left Bundle Branch
6. His Bundle

Diagnostic Electrophysiology Procedures

37.20 Noninvasive programmed electrical stimulation [NIPS]
37.26 Catheter-based invasive electrophysiologic testing [EPS]
37.27 Cardiac mapping
37.28 Intracardiac echocardiography [ICE]
37.29 Other diagnostic procedures on heart and pericardium

Items coded additionally:
- Any concomitant procedures
- Synchronous Doppler flow mapping (88.72) with ICE
Diagnostic Intracardiac Electrophysiology Procedures / Studies

Electrophysiological Study:

- **Individual measurements**
  - 93600 – His bundle recording
  - 93602 – Intra-atrial recording
  - 93603 – Right ventricular recording
  - 93610 – Intra-atrial pacing
  - 93612 – Right ventricular pacing

- **Comprehensive study**
  - 93619

- **Arrhythmia induction**
  - 93618 vs. 93620

- **Add-on codes**
  - +93621 – with left atrial pacing / recording
  - +93622 – with left ventricular pacing / recording

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Mapping

+93609 vs. +93613

Programmed stimulation after IV drug infusion

+93623

Other Electrophysiological Services

- Follow-up Study – 93624
- Intra-operative – 93631
- Evaluation of ICD – 93640 – 93642
- Tilt table evaluation – 93660
- Intracardiac echocardiography – 93662

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Electrophysiology Procedures

Please Note:

The case study examples are provided only to illustrate possible coding and reimbursement scenarios. They are not intended as direction on how to conduct a procedure. Individual procedures will vary based on the physician’s medical judgment. Medical necessity and appropriateness of any procedure is always specific to the facts of the individual case and as determined by the physician.

The following case studies are derived from de-identified actual patient procedure documentation, and are therefore sometimes lengthy. The full text is included as examples of types of documentation which could be encountered; however, this presentation will focus on identification of key terms for coding purposes, not line-by-line review or clinical evaluation.

Case #1: Diagnostic Electrophysiology Study

**HISTORY:** The patient is a pleasant, middle-age male who has had near syncopal events associated with palpitations. He has thus far had extensive evaluation, including echocardiogram and cardiac MRI showing structurally normal heart. He has had an equivocal tilt table testing showing vasodepressive response but not clinically matching his episodes. He has had prior event monitoring, which has shown wide complex sinus tachycardia that looked to be artifactual on analysis, with no clear correlation to symptoms. Given frequency of symptoms and the fact that the patient is a public transit driver we proceeded to do further evaluation with cardiac electrophysiology testing to see if he has any atrial or ventricular arrhythmias and assess his sinus node, AV node function. His baseline QT interval is 390-400 msec, and there is no family history of any type of arrhythmias.

**PROCEDURE:** We brought patient to cardiac electrophysiology lab. Extensive risk and benefit discussion provided, informed consent obtained. Access was gained in the right femoral vein x3. Advanced a quadripolar catheter to the RA, His and RV positions.
**Case #1: Diagnostic Electrophysiology Study**

Baseline numbers are as follows: AH interval 160 msec, HV interval 48 msec, PR interval 200 msec, QRS duration of 89 msec, QT interval 390 msec. *Sinus node recovery time at 500 msec was 1260 msec*, at 600 msec drive train was 389 msec, at 700 msec drive train was 1400 msec. AV block cycle length 410 msec above the AV node, AV node EPT 350 msec at 700 msec at baseline. No evidence of dual AV node physiology.

The patient had interatrial echoes 1-2 beats. No sustained arrhythmias, even after isoproterenol administration, and repeat of the AV node ERP. VA block cycle length at baseline was greater than 600 msec. We did triple *extrastimulation in the ventricle* on isoproterenol at 3 drive trains. We had no induction of any ventricular arrhythmia. Straight ventricular *pacing* with isoproterenol administration did not induce any ventricular arrhythmias.

**CONCLUSION:** This is a negative EP study, normal conduction system, normal AV node function, normal HV function, and no significant arrhythmias. At this point, we are going to continue to monitor the patient. Will make a reassessment over time.

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**Case #1: Diagnostic Electrophysiology Study**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Procedure Coding</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive EP study with induction of arrhythmia</td>
<td>93620-26/TC</td>
<td>780.2</td>
</tr>
<tr>
<td>Programmed stimulation and pacing with IV drug</td>
<td>93623-26/TC</td>
<td>785.1</td>
</tr>
</tbody>
</table>

**Notes:** Although no arrhythmias were induced, the descriptor for 93620 states, “induction *or attempted* induction of arrhythmia.” Therefore, this code is appropriate even when an attempt is not successful.
Case #2: Diagnostic Electrophysiology Study

**Procedure:** Electrophysiological evaluation with ventricular stimulation to evaluate for ventricular tachycardia.

**History of Present Illness:** The patient is a pleasant male who has a history of chronic atrial flutter, pacemaker dependent with dual-chamber pacemaker in place. He had presented with altered mental status and episodes of near syncope. He had extensive neurological evaluation and cardiac evaluation including ischemic evaluation, which shows inferior scar, apical scar, and ejection fraction of 40%. He has had nonsustained ventricular tachycardia observed on telemetry. His pacemaker had not shown profound episodes of ventricular tachycardia, but given the recurrent episodes and the risk in this setting we wanted to do further electrophysiological evaluation.

After extensive risk and benefit discussion, he was brought to the EP laboratory. His device was checked preoperatively and found to be functioning appropriately. The leads are in good positioning.

We then gained access in the right femoral vein, advanced quad catheters to the RVOT position and RV apex position. We had administered isoproterenol up to 4 mcg, limited by the drop in blood pressure as we advanced the isoproterenol. We then did triple-extrastimulation at drive trains of 350, 400, and 600 to ERP, which was less than 250 at both sides. We did not have any inducible ventricular tachycardia. I do not believe that there was any ventricular arrhythmias contributing to this patient’s episode of near-syncope, and therefore it maybe related to blood pressure orthostatics.

Certainly if he continues to have drop in ejection fraction to less than 35%, he could at that time be considered for potential benefits for an ICD upgrade, so I would continue to monitor his LV function. He is chronically RV paced, he has no signs of heart failure at this time, and if his ejection fraction were to continue to drop, he would also be an appropriate candidate for cardiac resynchronization therapy.
### Case #2: Diagnostic Electrophysiology Study

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Procedure Coding</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right ventricular recording</td>
<td>93603-26/TC</td>
<td></td>
</tr>
<tr>
<td>Intraventricular pacing</td>
<td>93612-26/TC</td>
<td></td>
</tr>
<tr>
<td>Induction of arrhythmia by electrical pacing</td>
<td>93618-26/TC</td>
<td>427.32</td>
</tr>
<tr>
<td>Programmed stimulation and pacing with IV drug</td>
<td>93623-26/TC</td>
<td>37.26</td>
</tr>
<tr>
<td>Peri-procedural pacemaker evaluation</td>
<td>93286-26/TC</td>
<td>89.45</td>
</tr>
</tbody>
</table>

**Case Notes**: Arrhythmia induction was attempted, even if not successful, so study is considered with induction. It appears to be limited to ventricular sites, so it is more appropriate to report as 93603, 93612, and 93618.

Isoproterenol and programmed extrastimulation is also performed during study. In previous years, 93623 could only be reported in combination with 93619 or 93620; it was necessary to report comprehensive EP study reduced, plus 93623.

However, 2014 revisions to parenthetical notes following 93623 now permit reporting programmed stimulation with IV drug in conjunction with 93610 or 93612, as well as comprehensive study codes (93619, 93620) and ablation package procedures (936953, 93654, 93656).
2014 Coding Changes and Compliance Update for Electrophysiology Services

Therapeutic Electrophysiology Procedures

37.33  Excision or destruction of other lesion or tissue of heart, open approach

37.34  Excision or destruction of other lesion or tissue of heart, endovascular approach

37.37  Excision or destruction of other lesion or tissue of heart, thoracoscopic approach

99.6x  Conversion of cardiac rhythm

  99.61  Atrial Cardioversion

  99.62  Other electric countershock of heart

2013 Ablation Procedure Coding Revisions

Significant Revisions in CPT® 2013

As a result of the Joint CPT® / RUC screen for procedures inherently performed together, changes were made to bundle electrophysiological (EP) evaluation and intracardiac ablation procedures.

2 Deleted Codes:

  93651  –  Ablation for treatment of supraventricular tachycardia

  93652  –  Ablation for treatment of ventricular tachycardia

5 New Codes:

  93653  –  Comprehensive EPS with atrial ablation

  93654  –  Comprehensive EPS with ventricular ablation, includes 3-D mapping, LV pacing & recording

  + 93655  –  Ablate additional discrete arrhythmia focus

  93656  –  Comprehensive EPS with pulmonary vein isolation for Afib, includes transseptal access, LA pacing & recording

  + 93657  –  Ablate additional left or right atrial focus for Afib

No Change:

  93650  –  AV node ablation

ThermoCool® Navigation Catheters are approved for drug refractory recurrent symptomatic paroxysmal atrial fibrillation, when used with CARTO® Systems (excluding NaviStar® RMT ThermoCool® Catheters).
2014 CPT® Clarifications

Significant revisions were made to instructional and parenthetical notes, clarifying issues from 2013.

- Mapping codes 93609 or 93613 may be reported separately with 93620, 93653, and 93656.
- Code 93621 may be reported separately with 93620, 93653 and 93654.
- Code 93622 may be reported separately with 93620, 93653 and 93656.
- Code 93623 may be reported separately with 93610, 93612, 93619, 93620, 93653, 93654, and 93656.
- Code 93662 may be reported separately with 93620.

**Note:** There is a new 2014 inconsistency with parenthetical notes: new codes 93582 and 93583 reference using intracardiac ultrasound (93662), but these codes have not been added to the parenthetical following 93662.

Additionally, revisions were made to several code descriptors, which allows greater flexibility in reporting.

- Codes 93653 and 93654 include right ventricular pacing and recording and His bundle recording *when clinically indicated*.
- Code 93656 includes each of left atrial pacing/recording, right ventricular pacing/recording, and His bundle recording *when clinically indicated*.

When performance of one or more components is not possible or indicated, document the reason for not performing. (Modifier -52 not required.)
Therapeutic Electrophysiology Procedures

- Operative EP Interventions
  - Open
  - Endoscopic
  - 93631 – Intraoperative EP study

- Cardioversion

  **Note:** Cardioversion for an arrhythmia which is intentionally induced (e.g., as part of a diagnostic EP study) is not reported.

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Case #3: Electrophysiology Study and Radiofrequency Ablation

**INDICATION:** Atrial flutter

**PROCEDURE:** The patient was brought to the Electrophysiology Laboratory in the fasting state and continuous electrocardiographic monitoring was instituted. Conscious sedation was performed with incremental doses of intravenous (medications). The right groin was prepared and draped in the usual sterile fashion and 1% lidocaine was instilled for local anesthesia.

Using Seldinger technique, a 7 French introducer sheath and an 8 French introducer sheath were placed in the right femoral vein. Via the 7 French introducer sheath, a 20 pole catheter was advanced into the **high right atrium and coronary sinus**. The 8 French sheath was exchanged for a (brand) sheath. An 8 French 8mm tip curved ablation catheter was advanced to the **right ventricle and right atrium** for electrophysiologic evaluation, mapping, and ablation. Catheters were positioned utilizing fluoroscopy. Electrophysiology evaluation, mapping, and ablation were performed as detailed below and stored on disk.
Case #3: Electrophysiology Study and Radiofrequency Ablation

After the procedure, was completed, the heparin was discontinued, the catheters and sheaths were removed, and hemostasis was obtained by manual compression. The patient tolerated the procedure well and was transported to a telemetry bed in good condition.

RESULTS AND FINDINGS:

1. Baseline intervals: AA 247 ms
   QRS 175 ms
   QT 339 ms
2. The baseline rhythm was atrial flutter at 247 ms.
3. Intracardiac mapping revealed typical counterclockwise atrial flutter.
4. Radiofrequency ablation (65 degrees, 70 watts, up to 120 seconds) was applied to the cavotricuspid isthmus, beginning at the tricuspid valve annulus and extending to the coronary sinus os and then to the inferior vena cava. Bidirectional block was achieved as demonstrated by lateral RA and coronary sinus pacing. After 20 minutes the isthmus had recovered conduction. Additional lesions were applied as necessary to achieve block. A total of 11 applications were required.
5. 20 minutes after the last ablation lesion, bidirectional block persisted.
6. Post procedure intervals: PR 197 ms
   QRS 172 ms
   QT 398 ms
   AH 90 ms
   HV 62 ms

IMPRESSION:

1. Successful ablation of typical counterclockwise atrial flutter.
2. Normal atrioventricular nodal function.
3. Normal sinus rhythm conduction intervals.

RECOMMENDATION: Observation and bedrest for 4 hours on telemetry. Start (medication) 150mg bid for 1 month. Follow-up in 1 month.
Case #3: Electrophysiology Study and Radiofrequency Ablation

<table>
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<tr>
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<td>Comprehensive EP Study with induction of arrhythmia</td>
<td>93653</td>
<td>37.26</td>
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<tr>
<td>Intracardiac atrial ablation</td>
<td></td>
<td>37.34</td>
</tr>
<tr>
<td>Intracardiac mapping</td>
<td>93609-26/TC</td>
<td>37.27</td>
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<tr>
<td>Injection/infusion of anticoagulant</td>
<td>Bundled</td>
<td>99.19</td>
</tr>
</tbody>
</table>

**Case Notes:** Intracardiac mapping is not stated to be 3D. Most of the electrophysiology procedures in CPT® included conscious sedation when performed, as indicated by the ☼ symbol.

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Case #4: Electrophysiology Study and Radiofrequency Ablation

**PROCEDURE:**
1. Complete electrophysiology study, diagnosis of typical AV nodal reentrant tachycardia, with successful ablation of the slow pathway. **427.89**
2. Additional diagnosis of atrial tachycardia, mitral annular atrial tachycardia, with successful ablation. **780.2**

**HISTORY:** The patient is a pleasant 69-year-old female who has been having recurrent episodes of SVT, at times having near syncopal events with her tachycardia, which is unusual. She has a structurally normal heart. She has had documented narrow complex tachycardia. She has tried medications without success and the patient prefers not to be on medications long term.

**PROCEDURE:** After risk and benefit discussion, the patient was brought to the Cardiac Electrophysiology Laboratory. With the help of our colleagues she was sedated. Access was gain to right femoral vein without difficulty. Quadrupolar catheters were advanced to the RA, His and RV position.
Case #4: Electrophysiology Study and Radiofrequency Ablation

These are the baseline numbers: HV interval of 58 msec, AH interval of 140 msec. At baseline the patient interchanged between long AH and short AH, suggestive of presence of a slow pathway. AV block cycle length at baseline was 340 msec. The patient conducted over the slow pathway for the QRS and maintained this. AV nodal ERP was evaluated. Fast pathway ERP 380 at 600 msec. Large window with slow pathway blocking at 260 at 650 msec. VA block cycle length was 440 msec. There was notation of a retrograde jump and VA ERP was decremental concentric, less than 300 at 500 msec. Narrow complex tachycardia VA timing of 67 msec.

Was induced on isoproterenol 2 mcg, reproducibly with straight atrial pacing to conduction over the slow pathway. We entrained the tachycardia, obtained a V-A-V response with a PPI of greater than 120 msec, confirming the diagnosis of typical AV nodal reentrant tachycardia. After this we proceeded to use 3 dimensional mapping and marked the His region. We then under electroanatomic guidance and electrophysiological guidance proceeded to the slow pathway region. Ablation in the slow pathway led to junctional beats with 1:1 conduction. After ablation of the slow pathway we no longer had conduction over the slow pathway, could no longer sustain over the slow pathway with straight atrial pacing and we had non-inducibility.

Case #4: Electrophysiology Study and Radiofrequency Ablation

We again attempted the ventricular single extrastimulation, did induce another tachycardia with slower cycle length. The tachycardia cycle length for the AVNRT was 320 msec. The slower tachycardia was at a rate of 120 beats per minute. P-waves are noted to be negative in I and a VL suggestive of the left-sided focus. Initially we mapped the coronary sinus. Ablation in the distal coronary sinus was unsuccessful. With suggestion of potential mitral annular tachycardia reproducibly induced on isoproterenol, we then proceeded to make a transseptal puncture at the 4 o’clock position, using fluoroscopic guidance and pressure guidance without difficulty. We then proceeded to use early mapping and activation mapping using 3-D mapping system, found an area of -58 msec from the surface P-wave. Ablation in this area led to acceleration of the a1 tachycardia and break. We then continued to test on isoproterenol and had no induction of atrial tachycardia or AVNRT. This should portend good long-term prognosis.

In so far as AVNRT, she should have a <5% chance of recurrence. In so far as atrial tachycardia, there is a 10-20% chance of recurrence at times. The patient tolerated the procedure well. There were no immediate complications.
## Case #4: Electrophysiology Study and Radiofrequency Ablation

<table>
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<tr>
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<td>93653</td>
<td>37.26</td>
</tr>
<tr>
<td>Intracardiac atrial ablation</td>
<td></td>
<td>37.34</td>
</tr>
<tr>
<td>Programmed stimulation after IV drug</td>
<td>93623-26/TC</td>
<td>Included in 37.26</td>
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<tr>
<td>3-D intracardiac mapping</td>
<td>93613-26/TC</td>
<td>37.27</td>
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<tr>
<td>Transseptal puncture</td>
<td>93462</td>
<td>N/A</td>
</tr>
<tr>
<td>Ablate discrete arrhythmia mechanism</td>
<td>93655</td>
<td>Included in 37.34</td>
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</table>

**Case Notes:** Code 427.89 is most accurate diagnosis code to report both AV nodal re-entrant tachycardia (AVNRT) and other atrial tachycardia not documented as paroxysmal, as noted in study findings.

Documentation describes well that there are two distinct pathways and cycle lengths, thereby supporting 93655 for ablation of a discrete mechanism, even with only a single ICD-9-CM diagnosis code.

Statements regarding the coronary sinus and left atrial evaluation all use the term "mapping", rather than pacing and recording, so 93621 is not clearly supported; clarification with physician to confirm would be appropriate.
Case #5: Electrophysiology Study and Radiofrequency Ablation

INDICATIONS: The patient is a 38-year-old female, who presented 3 months ago with episodes of sustained ventricular tachycardia.

EKG suggestive of idiopathic RVOT tachycardia. She has undergone extensive evaluation including echocardiogram and cardiac MRI showing essentially a normal cardiac function and cardiac structure. She has been on beta blockers and having significant symptoms of fatigue and tiredness, additionally to having breakthrough palpitations. We discussed risks and benefits of an ablation procedure. After extensive discussion, she opted to proceed with ablation.

PROCEDURE IN DETAIL: She was brought to the cardiac electrophysiology laboratory. We initially placed the patient on the table, placed her on isoproterenol upwards of 6 mcg, where we induced sustained tachycardia. Again the 12-lead matching her prior clinical tachycardia and suggestion of a septal RVOT tachycardia.

We then gained access in the right femoral vein x3. Quad catheter advanced to the RV apex. Decapolar catheter placed in the coronary sinus to serve as a reference catheter for 3-D mapping.

We then used a 4 mm large curved catheter, created the shell of the RV outflow tract, and began to pace map in sinus rhythm off isoproterenol. We found 12/12 pace map match in the lower septal region of the RVOT. We then placed the patient on isoproterenol and we performed activation mapping, which showed us to be in this region 40 msec ahead of the QRS initiation, suggesting a good site for ablation.

We turned isoproterenol off, ablated in this region where we obtained essentially bigeminy pattern with the same PVC morphology. We created a small cloud around this lesion and where we had good pace maps. We then placed the patient again on isoproterenol, upwards of 6 mcgs, and at the critical heart rate of 120 where she had had before ventricular tachycardia. She did not have any further episodes of ventricular tachycardia or PVCs.

We observed the patient on isoproterenol. Again, no sustained tachycardia at the end of the procedure. This portends a good prognosis and good long term outcome. We then pulled the sheath out without difficulty. The patient is to taper down her beta blocker therapy, to follow up with me in 1-2 weeks after the procedure.
### Case #5: Electrophysiology Study and Radiofrequency Ablation

**Procedure Coding**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Procedure Coding</th>
<th>Diagnosis</th>
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<th>2014</th>
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<tr>
<td>Comprehensive EP Study with induction of arrhythmia, reduced</td>
<td>93654(-52)</td>
<td>37.26</td>
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<tr>
<td>Intracardiac ventricular ablation</td>
<td>93654(-52)</td>
<td>37.34</td>
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<tr>
<td>3-D intracardiac mapping</td>
<td>93613</td>
<td>427.69</td>
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<tr>
<td>Programmed stimulation after IV drug</td>
<td>93623-59-26/TC</td>
<td>37.27</td>
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</table>

**Case Notes**: With the 2013 revisions, ventricular ablation code 93654 includes both comprehensive EP study and 3-D mapping, so 93613 is not reported additionally. Parenthetical note also indicates 93609 would be bundled, if performed.

**Case Notes Continued**: Per 2013 CPT® parenthetical notes, isoproterenol stimulation (93623) could only be reported in combination with 93619 or 93620. This note has been revised for 2014, initially appearing in CPT® Errata and Technical Corrections on July 9, 2013, retroactive to January 1, 2013. Similar limitations were also retroactively revised in the CCI, eliminating the need for modifier -59.

However, documentation discusses findings of ventricular only, so comprehensive study may be more appropriately reported with modifier –52.

- 2012 alternative to 93620-52 was 93603, 93612, and 93618, which prevented reporting of 93623.
- For 2014, language revisions to ablation package codes allow more flexibility, but as 93654 is an indented code to 93653, the descriptor reads “with right atrial pacing and recording, right ventricular pacing and recording (when necessary), and His bundle recording (when necessary)” – implying that while ventricular measurements are optional, atrial measurements are required for both 93653 and 93654.
Case #5: Electrophysiology Study and Radiofrequency Ablation

Case Notes Continued: CPT® Network guidance recommends reporting a comprehensive study code 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:

<table>
<thead>
<tr>
<th>Prompts for Narrative Input of Data</th>
<th>Tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 ___.</td>
<td>Baseline Intervals</td>
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<tr>
<td>R-R</td>
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<td>QRS</td>
<td>HV</td>
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<td>AV block cycle</td>
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<td>Slow pathway ERP</td>
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<tr>
<td>Fast pathway ERP</td>
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</tbody>
</table>

Case #6: Electrophysiology Study and Radiofrequency Ablation

PROCEDURE: Pulmonary vein isolation for paroxysmal atrial fibrillation.

INDICATIONS: The patient is a pleasant 61-year-old female who developed atrial fibrillation about 2 months ago, had rapid ventricular response and development of cardiomyopathy. She failed cardioversion and subsequently was on (medication) for a period of time. However, she had a delayed reaction to (medication) with torsade. Having failed antiarrhythmic therapy and persistent symptoms, we attempted rate control strategy with (medications) for rate control. Her LV function is somewhat improved to about 40%. She persisted to have significant symptomatology, especially with exertion and this is believed to be related to atrial fibrillation and tachy myopathy. Therefore, discussed the option of proceeding with an ablation strategy.

PROCEDURE: We brought the patient after extensive risk and benefit discussion for ablation procedure. With the help of our anesthesia colleagues she was sedated.
Case #6: Electrophysiology Study and Radiofrequency Ablation

Access was gained in the right femoral vein x 1 and 3 access points in the left femoral vein x 3 without difficulty. A duodecapolar catheter was advanced to the distal coronary sinus to serve as a reference for 3-D mapping. Intracardiac ultrasound catheter used for our transseptal puncture. We placed a decapolar catheter for pacing of the phrenic in the setting of pulmonary vein ablation. We then crossed in the 4 o’clock position using a (brand) system, crossed without difficulty.

We then proceeded to create a small shell of the pulmonary veins and merged with a prior obtained CT angiogram of the pulmonary veins. We then isolated all 4 pulmonary veins, confirming isolation of the veins. There was some organization of atrial fibrillation. At this point, I had made a decision that having isolated all 4 pulmonary veins we would cardiovert the patient, and see if she would have any triggers on maximal isoproterenol, before making the decision about more extensive ablation that would include the posterior wall and coronary sinus. This is her first ablation procedure and I would like to target her pulmonary vein and antral regions, which were very well targeted with (brand) ablation.

We then converted the patient after having isolated all 4 pulmonary veins, place her on isoproterenol up to 20 mcg. She had no significant ectopy that would be of concern for triggers. I am going to start the patient on very low dose of (medication, dosage) in addition to her (medication). If she has recurrence of atrial fibrillation, she will need much more extensive substrate modification at that time. Prior to the procedure, I want to make a note, she had a transesophageal echocardiogram that showed no evidence of left atrial appendage thrombus. She had mild to moderate mitral regurgitation and she does have left atrial enlargement that is mild to moderate. ACTs were over 350 throughout the entirety of the procedure. Protamine sulfate reversal was done, sheaths were pulled, there were no immediate complications. The patient tolerated procedure well.

Again successful pulmonary vein isolation of all 4 pulmonary veins, cardioversion 200 joules, subsequent administration of isoproterenol up to 20 mcg with no significant atrial ectopy. The patient has maintained sinus rhythm. We had in the past failed to maintain sinus rhythm with just cardioversion and no antiarrhythmic therapy. This certainly encourages me and I am hoping she will have good success with this procedure.
Case #6: Electrophysiology Study and Radiofrequency Ablation

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Procedure Coding</th>
<th>Physician / Outpatient</th>
<th>Inpatient</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intracardiac atrial ablation, pulmonary vein isolation</td>
<td>93656</td>
<td></td>
<td>37.34</td>
<td>427.31</td>
</tr>
<tr>
<td>Transseptal puncture</td>
<td></td>
<td></td>
<td>N/A</td>
<td>425.9</td>
</tr>
<tr>
<td>Follow-up EP study to test effectiveness of therapy</td>
<td></td>
<td></td>
<td>37.26</td>
<td>995.29</td>
</tr>
<tr>
<td>Programmed stimulation with IV drug</td>
<td>93623-26/TC</td>
<td></td>
<td>37.27</td>
<td>427.31</td>
</tr>
<tr>
<td>3-D intracardiac mapping</td>
<td>93613-26/TC</td>
<td></td>
<td>37.28</td>
<td></td>
</tr>
<tr>
<td>Intracardiac ultrasound</td>
<td>93662-26/TC</td>
<td></td>
<td>37.28</td>
<td></td>
</tr>
<tr>
<td>External cardioversion</td>
<td>92960-59</td>
<td></td>
<td>99.61</td>
<td>427.31</td>
</tr>
<tr>
<td>Transesophageal echocardiogram</td>
<td>93312-26/TC</td>
<td></td>
<td>88.72</td>
<td>427.31 424.0</td>
</tr>
</tbody>
</table>

Case Notes: The U.S. Food and Drug Administration (FDA) announced on February 6, 2009, that it had approved the first ablation catheters — Biosense Webster’s NAVISTAR® THERMOCOOL® and EZ STEER® THERMOCOOL® NAV Catheters — for the treatment of drug refractory symptomatic paroxysmal atrial fibrillation (AF).

NAVISTAR® THERMOCOOL® Navigation Catheters are approved for the treatment of drug refractory recurrent symptomatic paroxysmal atrial fibrillation, when used with CARTO® Systems (includes EZ STEER® THERMOCOOL® NAV Catheters. Excludes all RMT THERMOCOOL® Catheters).

Although specific codes were added to CPT® in 2013, individual payor coverage policy should be confirmed. Currently, ICD-9-CM procedure coding for any catheter ablation will be 37.34. Coverage and reimbursement will likely vary between plans.

There is no particular discussion of baseline pacing or recording in this note. The CPT® ablation procedure for atrial fibrillation states that it includes a comprehensive EP evaluation.
Case #6: Electrophysiology Study and Radiofrequency Ablation

Case Notes Continued: CPT® Network information notes that "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 code for a complete electrophysiologic study can be reported." Therefore, measurements recorded following ablation may also serve to document diagnostic EP studies performed. Clarifying with the physician the extent of pacing/recording performed, both before and after ablation, is recommended.

Cardioversion addresses the underlying native arrhythmia, which was not induced, so may be reported additionally with modifier -59.

Although brief findings for the transesophageal echocardiogram are noted, a formal written interpretation report would be expected in the patient's record.

Case #7: Electrophysiology Study and Radiofrequency Ablation

PROCEDURE: Pulmonary vein antral isolation and a cavotricuspid isthmus flutter ablation.

HISTORY: The patient is a pleasant 44-year-old male who has had refractory atrial fibrillation to maximal doses of Class 1C antiarrhythmic (medication) in addition to recent initiation of sustained typical counterclockwise looking atrial flutter on EKG. After extensive risk and benefit discussion, the patient wants to proceed with an ablation.

PROCEDURE: The patient was brought to the cardiac electrophysiology laboratory ad with the help of our anesthesia colleagues he was sedated. Access was gained x3 in the right femoral vein. A decapolar catheter was advanced to the mid to distal coronary sinus to serve as a reference. We then advanced the intracardiac ultrasound to visualize the fossa in the 4 o'clock position using a (brand) transseptal system without difficulty after having crossed foramen. We then gave a bolus of heparin and maintained ACT therapeutic, greater than 350 throughout the entirety of the procedure.
Case #7: Electrophysiology Study and Radiofrequency Ablation

We then created a three-dimensional shell of the left atrium, pulmonary veins and appendage and in addition merged this with prior obtained CT imaging. We then proceeded to antrally isolate the pulmonary veins using irrigated 4 mm catheter. All 4 antral pulmonary vein isolations were performed and subsequent to this, we confirmed that pulmonary veins were isolated. With elimination of pulmonary vein potentials we waited up to 50 minutes and there was no recurrence of pulmonary vein connections.

We then proceeded to the right side and ablated the cavitricuspid isthmus, and ablation led to bidirectional block of the cavitricuspid isthmus, greater than 120 msec block. The patient tolerated the 2 and ½ hour procedure well. There were no immediate complications. He was therapeutic on his heparin throughout the entirety of the procedure. He is to be on anticoagulation for at least 3 months post procedure. He will be maintained on low dose of (medication) post procedure for 3 months and then hopefully he will have good long-term success from his atrial fibrillation ablation.

Case #7: Electrophysiology Study and Radiofrequency Ablation

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Procedure Coding</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive EP Study with induction of arrhythmia, reduced</td>
<td>93656</td>
<td>37.26</td>
</tr>
<tr>
<td>Intracardiac atrial ablation, extensive</td>
<td>93655</td>
<td>37.34</td>
</tr>
<tr>
<td>Transseptal puncture</td>
<td>N/A</td>
<td>427.31, 427.32</td>
</tr>
<tr>
<td>Right atrial ablation</td>
<td>93655</td>
<td>37.34</td>
</tr>
<tr>
<td>3-D intracardiac mapping</td>
<td>93662-26/TC</td>
<td>37.28</td>
</tr>
<tr>
<td>Intracardiac ultrasound</td>
<td>93662-26/TC</td>
<td>37.19</td>
</tr>
<tr>
<td>Injection/infusion of anticoagulant</td>
<td>Bundled</td>
<td>99.19</td>
</tr>
</tbody>
</table>

NAVISTAR™ THERMOCOOL® Navigation Catheters are approved for the treatment of drug refractory recurrent symptomatic paroxysmal atrial fibrillation, when used with CARTO® Systems (includes EZ STEER™ THERMOCOOL™ NAV Catheters. Excludes all RMT THERMOCOOL® Catheters).
Case #7: Electrophysiology Study and Radiofrequency Ablation

**Case Notes:** This record only briefly describes diagnostic EP measurements, with any findings focused on atrial sites. When the new ablation procedure for atrial fibrillation was introduced in 2013, it stated that it included a comprehensive EP evaluation, which led to a conservative interpretation that the procedure would need to be reported with modifier -52 if all components were not documented.

- Revisions for CPT® 2014 define 93656 to include “left or right atrial pacing/recording when necessary, right ventricular pacing/recording when necessary, and His bundle recording when necessary”, allowing flexibility and reporting without modifier -52.
- 2014 instructional notes state “When performance of one or more components is not possible or indicated, document the reason for not performing.”
- Confirm with physician and via ancillary documents for complete information regarding extent of pacing/recording performed, both before and after ablation, as well as documentation of clinical decision for omission of any components.

**Update on Recovery Audit Contractor (RACs) Activity and Other Payor Reviews**
Recovery Audit Program Activity

<table>
<thead>
<tr>
<th></th>
<th>Demo</th>
<th>National Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overpayments Collected</td>
<td>$992.7</td>
<td>$75.4</td>
</tr>
<tr>
<td>Underpayments Returned</td>
<td>$37.8</td>
<td>$16.9</td>
</tr>
<tr>
<td>Total Corrections</td>
<td>$1,000.3</td>
<td>$92.3</td>
</tr>
</tbody>
</table>

- All organizations, including facilities and physician practices, continue to report significant increases in RAC denials and medical record requests.
- Nearly two-thirds of medical records reviewed by RACs did not contain an improper payment.


Prepayment Review: RAC Demonstration Project and MAC Activity

During 2012, CMS initiated a demonstration project in a few areas to allow RACs to review claims before they are paid to ensure compliance. The Florida MAC, First Coast, began prepayment review on the following MS-DRG January 1, 2012:

**MS-DRG 251 -- Percutaneous cardiovascular procedure w/o coronary artery stent w/o MCC**

While First Coast has ceased MS-DRG prepayment reviews as of October 1, 2013, due to implementation of prepayment review by the RAC, other MACs are also performing prepayment review of select MS-DRGs.

Several MACs performing MS-DRG review are linking Part A and B claims, and subsequently recouping Part B physician reimbursements if the admission is denied.
Definition of an Inpatient

- Physicians should order admission for patients who are expected to need hospital care for 24 hours or more, and treat other patients on an outpatient basis. However, admissions of particular patients are not covered or noncovered solely on the basis of the length of time the patient actually spends in the hospital.
- The decision to admit a patient is a complex medical judgment which can be made only after the physician has considered a number of factors:
  - The patient's medical history and the severity of the signs and symptoms which impact the medical needs of the patient and influence the expected length of stay (LOS).
  - The medical predictability of something adverse happening to the patient;
  - The need for diagnostic studies that appropriately are outpatient services and the availability of diagnostic procedures at the time when and at the location where the patient presents.

(Source: Medicare Benefit Policy Manual, Chapter 1, Section 10)

2014 Medicare Hospital Inpatient Prospective Payment System Final Rule: New Guidelines for Hospital Inpatient Admission Order and Certification

- Certification begins with the signed/dated physician order (verbal allowed if later authenticated)
- The order must specify the admitting practitioner’s recommendation to admit ‘to inpatient,’ ‘as an inpatient,’ ‘for inpatient services,’ or similar language
- Indicate the reason for inpatient services
- Estimated time the beneficiary requires or required in the hospital – new “two-midnight” benchmark
Part B Resubmission

The 2014 Hospital Final Rule allows payment to hospitals under Medicare Part B for hospital inpatient admissions denied as not medically necessary under Part A.

The timely filing deadline for these Part B claims is one year from the date of service. Hospitals will be permitted to follow the Part B billing timeframes established in a CMS Administrator Ruling — issued March 13 — if (1) the Part A inpatient claim denial was one to which the Ruling originally applied, or (2) the Part A inpatient claim has a date of admission before October 1, 2013, but is denied after September 30, 2013, on the grounds that while the medical care was reasonable and necessary, the inpatient admission was not.

A hospital also can submit a revised claim and be paid for these inpatient services under Part B if — after the patient has been discharged — it determines through self-audit (utilization review) that the patient should not have been admitted as an inpatient.

RAC Audit Readiness

RAC Preparation

- Identify a point person / team
- Stay up to date by reviewing the RAC website frequently
- Implement procedures to promptly respond to RAC requests and to effectively track records submissions and RAC responses
- Develop procedures to monitor RAC findings and file appeal before 120 deadline when appropriate
- Determine any corrective actions to be taken
- Conduct an internal assessment to ensure that submitted claims meet Medicare rules
- Review documentation and processes for appropriateness

While RAC reviews Medicare Part A & B only, other entities will also audit records so setting up appropriate practices will minimize issues and downtime over the long run
RACTrac Data

Healthcare providers have only appealed about one third of RAC denials, even though most appeals are successful.

![Chart showing healthcare providers' appeal rates by region and nationwide.]

Why Did We Not Appeal?

1. Agree with the RAC determination
2. Do not agree with the RAC determination but are unable to meet the appeal deadline
3. Do not agree with the RAC determination but do not have staff and resources to appeal
4. Do not agree with the RAC determination, but do not have expertise in appeals
5. Do not agree with the RAC determination but it is too expensive to appeal
6. Other
## Coding and Documentation Improvement

Proper coding – and everything which flows from it - is based upon documentation in the medical record.

Therefore, the record should:

- Capture a concise and specific description of services.
- Implement a standard dictation format to ensure complete data capture.
- Strive for clinical clarity for accurate procedure and diagnosis code selection.
- Ensure all records are:
  - Legible, dated, timed, signed, and timely
  - Consistent and without internal contradictory statements
- Recognize the EP lab procedure log as supportive procedure information only. The physician’s dictation ultimately determines the ability to assign codes.
- Maintain policy that no changes are made to documentation unless approved by the physician.

## Tips for Coding and Billing

Make sure key elements are included in the case documentation:

- Provide clear description of all techniques used:
  - Specify 3-D mapping when used
  - Transseptal puncture, if performed
  - Ultrasound, including key terms for TEE or ICE
  - Ablation site(s), energy source, and results

- Document clinical indications to level of specificity appropriate to procedure:
  - Paroxysmal AF refractory to medication management.
  - Ischemic dilated cardiomyopathy (IDCM), documented prior MI, NYHA Class II and III heart failure, and measured LVEF < 35%.

- Identify all pacing and recording sites in body of report
- State specific services when less than a comprehensive study is performed
- Include all diagnoses, both primary and secondary (co-morbid conditions)

Clinical documentation improvements support accurate capture of all appropriate charges and codes.
**Tips for Coding and Billing**

<table>
<thead>
<tr>
<th>Invest in Your Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Meet with the hospital’s coders and billers regularly</td>
</tr>
<tr>
<td>✓ Explain EP terminology and procedures or invite the coders to observe a procedure</td>
</tr>
<tr>
<td>✓ Keep the staff, coders and billers abreast of these new techniques and technologies</td>
</tr>
<tr>
<td>✓ Make sure the charge description master is current and accurate</td>
</tr>
<tr>
<td>✓ Regular auditing - before or after coding - can help to improve accuracy</td>
</tr>
</tbody>
</table>

*Coders may cover multiple specialties – continuous advances in technology and techniques make it difficult to keep up. Better understanding of terms improves billing accuracy.*

**Coding and Documentation Improvement**

- Health care is increasingly data driven
- Cross functional skill sets support evolving activities
- Enhanced roles of HIM and Coding Department staff in quality of information
- Maintain open lines of communication between clinicians and coding staff
- **Education is the key**
- Work Smart
Questions?

Provider Education and Reimbursement Resources
2014 Coding Changes and Compliance Update for Electrophysiology Services

Coding and Reimbursement Resources

- Reimbursement and Coding Guide for facilities and physicians
- Email Coding Questions: Trained coding experts available Monday thru Friday and will respond within one business day
- Online C-Code Finder to find HCPCS codes

Coding and Reimbursement Resources

- EP Procedure Documentation Best Practices
- Electrophysiology Services Coding Checklist
- EP Coding and Reimbursement Frequently Asked Questions
Coding and Reimbursement Provider Education

Comprehensive overview of coding and billing for EP catheter ablation:

Coding Webcasts:
Recorded sessions also available
on-line at biosensewebster.com/reimbursement

Thank You for Participating!
presented by Sheila Sylvan

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