Cardiovascular And Thoracic Anesthesia Billing

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Disclosures

- All material in presentation is based on CPT guidelines and ASA RVG and are true at the time of this presentation.
- No other disclosures to report
Covered Topics

- Cardiac Anesthesia Codes
- Thoracic Anesthesia Codes
- Invasive Line Placement
- TEE Rules For Billing
- Pacemaker, ICD
- Revascularization Codes
Cardiac Anesthesia

- CABG – on or off pump?
- Operating on a beating heart is off-pump and has a 25 base.
- Stopping the heart and lungs is on pump and has a 18-20 base.
- It is a 20 base if in addition to another heart procedure. (e.g. Valve), a re-do CABG if more than one (1) month after an original CABG.
- Remember if a graft is sewn during an off-pump procedure, anesthesiologist is due additional unit due to the increased risk.
Cardiac Anesthesia Continued:

- Key To Reimbursement is Documentation
- “Off-pump” must be documented to get the extra units, which would be an increase of about $85.00 for an average Medicare case
- That would be an increased of about $35,000 annually if the group did an average of 420 cases
- 33517-33523 are listed in the CPT as add on codes and the ASA crosswalk list as *Not A Primary Procedure Code.*
Qualifying Cardiovascular Circumstances

- 99100 Anesthesia for patient of extreme age, younger than 1 year and older than 70
- 99116 Anesthesia complicated by utilization of total body hypothermia
- 99135 Anesthesia complicated by utilization of controlled hypotension
- List all above codes separately in addition to code for primary anesthesia procedure
Qualifying Cardiovascular Circumstances Continued:

- Hypothermia is often included in the anesthesia code and should not be reported separately in those cases.
- When a anesthesiologist does deliberate hypotensive anesthesia it is often done as a safe and effective way to reduce blood lost and surgical time as well as reduces the need for blood transfusion during surgical procedure that the anesthesiologist anticipates excessive blood loss. (e.g. upper thorax or aneurysm)
Coding For CABG On/Off Pump What Code To Use?

- CABG Coding: 00562, 00566 & 00567
- On or off pump, redo of a prior CABG > than one month
  - Off pump = 00566 = 25 base units (do not separately bill 99116 or 99135)
  - On pump = 00567 = 18 base units (do not separately bill 99116 or 99135) but remember if with a valve, use 00562/20 base units
- On pump plus redo CABG > 1 month after original = 00562 = 20 base units
Non-CABG; Which Code To Use?

- On/off pump, age, hypothermic circulatory arrest.
- Off pump 1 code; **00560 = 15** base units
- On pump 3 codes; **00561 = 25** base units
  - units < 1 year old; **00562 = 20** base units
  - 1 year old or greater; **00563 = 25** base units (with hypothermic circulatory arrest)
- Remember do not report or bill separately for codes 99100, 99116 or 99135 with the above procedure.
Anesthesia Codes For Thoracic Cases

- 00528 = 8 base units; Closed chest procedures; mediastinoscopy and diagnostic thoracoscopy **not utilizing 1 lung ventilation**
- 00529 = 11 base units; Mediastinoscopy and diagnostic thoracoscopy **utilizing 1 lung ventilation**.
- 00540 = 12 base units; Thoracotomy procedures involving lungs, pleura, diaphragm and mediastinum (including surgical thoracoscopy) not otherwise specified
Anesthesia Codes For Thoracic Procedures Continued:

- 00541 = 15 base units; utilizing 1 lung ventilation
- 00546 = 15 base units; pulmonary resection with thoracoplasty
- 00548 = 17 base units; intrathoracic procedures on the trachea and bronchi
- Remember to make sure that one-lung ventilation is documented, (an extra 3 base unit); not documenting could lead to lost revenue in the thousands over a period of one year.
Invasive Lines

- What must you document to report for billing?
- Placement (because it could have been in situ)
- Who places it (because it may have been placed by other than the anesthesiologist)
- Where Placed-anatomically (because of coding issues)
Invasive Lines Continued:

- There is **No Separate** payment for multiple lumen placement.
- You may bill for both the CVP & a Swan-Ganz if they are 2 separate lines.
- You must document both line placement and monitoring.
- Remember that CRNAs can insert post-op block/invasive line under direction & the anesthesiologist can bill it.
- If central line and Swan-Ganz performed **no payment for central line that is used as introducer for Swan-Ganz**.
- You **can** get paid for central line if: second central line is medically necessary and if second central line is place in a different anatomical site. **Remember you MUST document this! (e.g. 2nd stick)**.
- **EXAMPLES GIVEN ON NEXT TWO SLIDES**.

Patient placed in Trendelenburg position for central venous catheter (CVC) placements and pulmonary artery catheter placement.

**Prep and technique per CDC protocol.**
CVC #1: 4 lumen 8.5 French catheter: Placed in Right internal jugular vein. All ports aspirated and flushed. Sutured. Dressed after surgery completed.

**Indications:** Need/potential for vasoactive infusions; need for multiport access; need for secure, reliable intravenous access; and surgeon requests for postoperative use.


Pulmonary artery catheter: Flushed. Balloon checked. Distal port flushed when placed in introducer. Floated to pulmonary artery at 42 cm.

**Indications:** Cardiac Output/Index; hemodynamic parameters (stroke volume, systemic vascular resistance, etc.); measurement of pulmonary artery pressures; and surgeon requests for postoperative use.

**Medicare PQRI #76**
- Cap__________ YES
- Mask__________ YES
- Sterile gown____ YES
- Sterile gloves___ YES
- Hand hygiene____ YES
- Antiseptic prep ___YES
- Large sterile drape__ NO
Patient identified. Consent obtained. Patient transferred to cardiac OR 3. Standard ASA monitors applied.

Pre-oxygenation. Arterial lines placed per anesthesia record. Induction per anesthesia record. Endotracheal intubation per anesthesia record.

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Hand hygiene___YES
Antiseptic_______YES
TEEs; Are You Getting Paid?

- Transesophageal Echocardiography (TEE) can be done either for monitoring and/or diagnostic purposes.
- TEEs when used to establish conditions such as myocardial ischemia or cardiac valve disorders are diagnostic and can and should be billed for.
- Must append a 59 to show that it is a separate and distinct procedural service. Will also need to append 26 for PC.
- The anesthesiologist must perform the placement, image acquisition, and interpretation (including a written report) in order to correctly bill for these services. Codes 93312 and 93315 are not bundled into the anesthesia services.
- Code 93318 is bundled into the anesthesia services.
- TEEs require special training and certification.
- Note: Make sure you use a diagnoses for the TEE and not the surgical procedure.
TEE Billing Form

Date: ___________________________  Indication: ___________________________
Surgeon: ________________________  Echocardiographer: _______________________

PROCEDURE CODE: (Check ONE; Congenital reimburses higher)
[] Basic Study (2-D imaging & report) 93312-26-59
[] Congenital Study (PFO, ASD, VSD, bicuspid aortic valve, etc) 93315-26-59

ADD-ON CODES: (check any that apply)
[] PW/CW Doppler 93320-26-  ||  3D w/out use of independent workstation 76376-26-59
[] Color Flow Doppler 93325-26-  ||  3D w/ use of independent workstation 76377-26-59
[] Abnormal findings; radiological & other exams - intrathoracic organs 793.2

ICD-9-CM CODES: (Check all that identify indication for TEE)

MITRAL VALVE DISORDERS
[] Rheumatic MS 394.0
[] Rheumatic MR 394.1
[] Rheumatic MS with MR 394.2
[] Non-rheumatic MR or Insuff. 424.0

AORTIC VALVE DISORDERS
[] Disorders AI, AR, AS 424.1

COMBINED MITRAL & AORTIC VALVE DISEASE
[] MS with AS 396.0
[] MS with AI 396.1
[] MR with AS 396.2
[] MR with AI 396.3
[] MS and/or MR with AS and/or AI 396.8

TRICUSPID VALVE
[] Rheumatic diseases of tricuspid valve 397.0
[] Non-rheumatic tricuspid valve disorder 424.2

PULMONARY VALVE/CIRCULATION DISORDERS
[] Rheumatic diseases of pulmonary valve 397.1
[] Non-rheumatic pulmonary valve disorder 424.3
[] Acute cor pulmonale 415.0
[] Chronic pulmonary embolism 416.2

ANEURYSM AND DISSECTION
[] Aneurysm of heart (wall) 414.10
[] Aneurysm (arteriovenous) of coronary vessels 414.11
[] Dissection of coronary artery 414.12
[] Other aneurysm of heart 414.19
[] Dissection of aorta, THORACOABDOMINAL 441.03
[] THORACIC aneurysm, ruptured 441.1
[] THORACIC aneurysm, unruptured 441.2
[] THORACOABDOMINAL aneurysm, ruptured 441.6
[] THORACOABDOMINAL aneurysm, unruptured 441.7
[] Aneurysm of pulmonary artery 417.1

ARTERIAL EMBOLISM and THROMBOSIS
[] Arterial embolism & thrombosis, abdominal aorta 444.0
[] Arterial embolism & thrombosis, thoracic aorta 444.1

OTHER HEART DISEASE & complications of
[] Cardiac tamponade 423.3
[] WITH DOCUMENTED UNDERLYING CAUSE
[] Hypertrophic Obstructive Cardiomyopathy 425.4
[] Functional disturbances following cardiac surgery 429.4

NOT DURING OR IMMEDIATELY FOLLOWING SURGERY
[] Rupture of chordae tendineae 429.5
[] Other disorders of papillary muscle 429.81
[] Acquired cardiac septal defect 429.71
Cardiac Procedures Using Robotic Assist

- There is no difference in how you code for Robotic Assisted cases.
- These cases are typically called minimally invasive cardiac surgery and have benefits over the traditional, open-chest procedures. Patient time in hospital is shorter, no splitting of the chest, as well as a smaller incision just to list a few of the benefits.
- Surgeon use a thin instrument with miniature cameras, along with a hybrid technique with coronary stenting to perform the operation.
- Remember you must use an unlisted code 93799 when a coronary sinus catheter following minimally invasive mitral valve surgery. You Know What That Mean!
Complications Causing A Return Trip To The OR

- A lot of carriers will deny your take back for complications as both procedure codes are in the same ASA codes range.
- **Remember; It Is A Billable Service** as they are two distinct anesthesia services done on the same patient at different times by the same or a different anesthesiologist.
- If denied, make sure you **APPEAL** and send the anesthesia records to show two separate services and some carrier will want you to append modifier 59.
Pacemakers

- **Temporary Pacemaker;** They are used to pace the heart when the normal conduction pathway is diseased or damaged. They are placed outside the body; transcutaneous – emergency transvenous epicardial

- **Permanent Pacemaker;** They are implanted within the body and can stimulate atrium, ventricles or both

- **ICD (implantable cardioverter defibrillator)** This device can detect and terminate life threatening episodes of tachycardia or fibrillation
Terms To Know

- **Pacemaker**: Implantable cardiac device that controls the heart’s rhythm and maintains regular beats by artificial electric discharges. This device consists of the pulse generator with a battery and the electrodes, or leads, which are placed in single or dual chambers of the heart, usually transvenously.

- **Cardioverter-defibrillator**: Device that uses both low energy cardioversion or defibrillating shocks and antitachycardia pacing to treat ventricular tachycardia or ventricular fibrillation.
Pacemaker Device Insertion

- >332512 = insertion or replacement of pacemaker pulse generator only, single chamber, atrial or ventricular
- >33213 = dual chamber
- (Epicardial placement of the electrode should be report separately; use 33202/33203 in conjunction with 33212/33213 as, appropriate.)
**Pacemaker Device Removed/Upgraded**

- **Removal** = 33233 (removal of permanent pacemaker pulse generator)
- **Upgrade** = 33214 implanted pacemaker system, conversion of single chamber to dual chamber (includes removal of previously place pulse generator, testing of existing lead, insertion of new lead, insertion of new pulse generator)
- **Note:** if epicardial electrode placement is performed, report 33214 in conjunction with 33202 or 33203)
Pacemakers Lead Removals

- 33234 = transvenous pacemaker electrode(s) removal; single lead, atrial or ventricular
- 33235 = transvenous pacemaker electrode(s) removal of dual leads
- 33236 = Permanent epicardial pacemaker and electrodes removal by thoracotony; single lead, atrial or ventricular
- 33237 = Dual lead
- 33238 = permanent transvenous electrode(s) removal by thoracotomy
ICD (Implantable Cardioverter Defibrillator)

- 93640 = Electrophysiologic evaluation of single or dual chamber pace cardioverter-defibrillation threshold evaluation (induction of arrhythmia, evaluation of sensing and pacing of arrhythmia termination) at time of initial implantation or replacement.

- 93641 = with testing on single or dual chamber pacing cardioverter-defibrillator pulse generator

- 93642 = Electrophysiologic evaluation of single or dual chamber-defibrillator (includes defibrillation threshold evaluation of sensing & pacing for arrhythmia termination & programming or reprogramming of sensing or therapeutic parameters)
ICD (Implantable Cardioverter Defibrillator) Coding Tips

- Codes 93640 & 93641 are reported in addition to the insertion codes at the time of implantation or replacement of the single or dual chamber pacing cardioverter-defibrillator electrode leads (93640) or pulse generator (93641). Induction of arrhythmia is included in 93640 & 93641. Do not report 93618 separately. Procedures 93640 & 93641 have both a technical and professional component. To report only the professional component, append modifier 26. To report only the technical component, append modifier TC. To report the complete procedure submit without a modifier. Moderate sedation performed with 93460 & 93641 is considered to be an integral part of the procedure and is not reported separately. However, anesthesia services (00100-01999) may be billed separately when performed by a physician (or other qualified provider) other than the physician performing the procedure.

- For subsequent or periodic electronic analysis and/or reprogramming of single or dual chamber pacing cardioverter-defibrillators, see 93282, 93283, 93289, 93292, 93295, and 93642.
Pacemaker Coding Tips Continued

- Document pacemaker generator inserted/replaced **with or without testing**.
- There is a 7 base unit difference. (e.g. ASA 00400 = 3 base units verses 00537 = 10 base units.
- 2011 changes in ASA Crosswalk
- > 33234 & 33235 for 2010, 00530 (4 base units) 2011, 00520 (6 base units)
EP Study (Intracardiac Electrophysiology Study)

- 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 aren’t done to determine if an arrhythmia is the cause of the patient’s clinical symptoms and to assess the mechanism of the cardiac arrhythmia. Intracardiac electrophysiology studies are coded using variety of CPT codes in the 93600 – 93662 range.
EP Study Description

- Introducer sheaths are inserted, in the femoral vein. Multiple electrode catheters are inserted into the sheaths and under fluoroscopic guidance, then they are advanced into the right atrium, His bundle region, and right ventricle. Once in position, the electrode catheters are attached to a recording device monitor which allows display of the intracardiac electrograms obtained from the catheter. Rt. Atrial pacing and recording, His bundle recording, and Rt. Ventricular pacing and recording are performed. The catheters may be repositioned a number of times and pacing and recording are done at various areas with the heart. If an arrhythmia is induced, it may be terminated by rapidly pacing the heart or by defibrillation or cardioversion. When all pacing and recording is completed, the catheters are withdrawn along with the sheaths. The physician documents the procedure and the results of the study and gives recommendations for treatment.
Revascularization New Codes for 2011

- A new series of endovascular revascularization codes replace the familiar codes for lower extremity stent placement, angioplasty, and atherectomy.
- Code Range is from 37220 – 37235
- One revascularization code is reported for each vessel that is treated. The coder will select the procedure code that represents the most intensive service that the physician performed.
Revascularization New Codes for 2011 Coding Tips

- These codes are based on the degree of progression where a code with more intensive procedures, includes less intensive procedures (i.e., angioplasty, stent placement). Stent placement includes angioplasty when performed by the physician.
 QUESTIONS ?
THANK YOU FOR ATTENDING

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