AAPC

CCVTC™

Certified Cardiovascular & Thoracic Surgery Coder

STUDY GUIDE

2026

2026

Specialty Study Guide: CCVTC™

CARDIOVASCULAR AND THORACIC SURGERY

Contents

2026 Specialty Study Guide: CCVTC™ Introduction 1

ICD-10-CM Coding 1
Evaluation and Management Coding 1
CPT® Coding 1
Top 10 Missed Coding Concepts 1
Practice Exam 1
Test Answers and Rationales 2
About AAPC 2
AAPC Member Code of Ethics 2

ICD-10-CM Coding Guidelines 3

Introduction to ICD-10-CM Coding Guidelines 3
General Tips for Using ICD-10-CM 3
General ICD-10-CM Guidelines 4
Chapter Specific ICD-10-CM Guidelines 5
What Determines Coverage? 10

Evaluation and Management Coding for Cardiovascular and Thoracic Surgery 11

An Introduction to the Documentation Requirements Associated with E/M Services 11
Documentation Guidelines 11
E/M Categories and Subcategories 22
Patient Returning to the Office on the Same Date of Service 25
Incident-to Guidelines 25
Standby Services 25
Shared/Split Visits 25
Teaching Physician Guidelines 26
Advance Beneficiary Notice (ABN) 26

Cardiovascular and Thoracic Surgery CPT® Coding 27

Modifiers 27
Bronchoscopy 29
Thoracentesis 29
Video-assisted Thoracoscopy Surgery (VATS) 29
Thoracotomy 30
Lung Transplant 30
Clagett Procedure 31
Pericardiocentesis 31
Decortication 31

Pacemakers . . . 31
Maze Procedure . . . 31
Cardiac Valves . . . 32
Coronary Artery Bypass Graft . . . 32
Thoracic Aneurysm Repair . . . 33
Repair of Cardiac Anomalies . . . 33
Heart Transplants . . . 33
Embolectomy/Thrombectomy . . . 33
Endovascular Repair of Abdominal Aortic Aneurysm and/or Iliac Arteries . . . 33
Open Aneurysm Repair . . . 34
Repair of Blood Vessels . . . 34
Endarterectomy . . . 34
Bypass Grafts Other than Heart . . . 34
Dialysis Access . . . 35
Dialysis Access Repair . . . 35
Distal Revascularization and Interval Ligation (DRIL) . . . 35
Varicose Vein Treatment . . . 35
Carotid Stent . . . 35
IVC Filter Placement and Removal . . . 36
Thymectomy . . . 36
Gastrointestinal Reconstruction . . . 36
Arthrocentesis Removal . . . 36
Radiology Services . . . 36

Top 10 Missed Coding Concepts on CCVTC™ Exam . . . 37

CCVTC™ Practice Examination . . . 39

Version A . . . **39**

Version B . . . **50**

CCVTC™ Practice Examination—Answers and Rationales . . . 63

2026 Specialty Study Guide: CCVTC™ Introduction

The *Specialty Study Guide: CCVTC™* helps cardiovascular and thoracic coders, billers, and other medical office professionals prepare for the CCVTC™ examination. This guide is by no means comprehensive. Your primary resource for the exam will be your years of hands-on experience in coding for cardiovascular and thoracic.

Healthcare in the 21st century is complex and requires expertise in proper coding to obtain payment for procedures, services, equipment, and supplies. Becoming a CCVTC™ is the best defense for you and helps your employer. Membership in AAPC lends integrity to your credentials, provides a large network of coders for support, and allows you access to continuing education opportunities. The *Specialty Study Guide: CCVTC™* provides an overall review of coding and compliance information for the more experienced coder, as well as for someone preparing for the CCVTC™ examination.

We will review the importance of using the coding guidelines within ICD-10-CM and CPT® and emphasize the importance of correct Evaluation and Management (E/M) leveling. You will need 2026 versions of ICD-10-CM, CPT®, and HCPCS Level II code books for the study guide and the CCVTC™ exam, as well.

ICD-10-CM Coding

Proper diagnostic coding not only reports the medical necessity of procedures performed, but also contributes to data that determines health policies for tomorrow. Because physicians have traditionally been paid by CPT® code values, coders have sometimes given little importance to correct ICD-10-CM coding. Regulatory trends show diagnoses will play a larger role in reimbursement in the future. It is important to code correctly so you are prepared for that day.

In the ICD-10-CM chapter, we will discuss the major topics of diagnosis coding for cardiovascular and thoracic. The examinee must become familiar with the ICD-10-CM Official Guidelines for Coding and Reporting. The examinee must know how to select the appropriate ICD-10-CM codes as well as the proper sequencing of diagnosis codes when more than one diagnosis code is required to report a patient's condition(s). This year's guidelines can be found at https://www.cms.gov/files/document/fy-2026-icd-10-cm-coding-guidelines.pdf. You must understand the conventions, general coding guidelines, and chapter specific guidelines in the ICD-10-CM code book.

Evaluation and Management Coding

Office visits consume a lion's share of the physician's time in most practices, and consequently represent the largest revenue source. Compliance is an increasing concern at practices, and the material in the E/M chapter will focus on the E/M services for cardiovascular and thoracic and underscore the importance of modifier use. An understanding of the AMA E/M guidelines and subsection notes is an important foundation for accurate code selection that is provided in your CPT® code book.

An E/M calculator is provided for the online exam (https://www.aapc.com/codes/em-calculator) and your CPT® code book provides a Medical Decision Making (MDM) table to level an E/M service.

CPT® Coding

Surgical procedures specific to cardiovascular and thoracic will be discussed in the chapter on CPT® coding. Special attention will be given to the guidelines and parenthetical phrases associated with procedures. Understanding CPT® coding conventions will be helpful as well. The examinee must be able to select the appropriate CPT® codes and sequence the codes correctly when multiple procedures are performed. CPT® codes are sequenced based on the most complex or labor-intensive procedures. The codes with the highest relative value units (RVUs) are sequenced first.

Top 10 Missed Coding Concepts

In this chapter, we review the Top 10 Missed Coding Concepts for the CCVTC™ certification exam. The list is not presented in any specific order. The information is determined after an evaluation by the AAPC exam department of the commonly missed questions on the exam.

Practice Exam

The practice exam and the exam itself were written by coders with extensive experience in cardiovascular and thoracic coding. The practice exam mimics the format and structure of the CCVTC™ certification exam.

AAPC has developed specialty credentials to enable coders to demonstrate superior levels of expertise in their respective specialty disciplines. Here is information on the CCVTC™ credential:

- CCVTC™ stands alone as a certification with no prerequisite if the examinee holds a CPC®, COC®, or CIC® credential.
- Exams aptly measure preparedness for real world coding by being entirely operative/physician-note based. These operative (op) notes are redacted op notes from real cardiovascular and thoracic practices.

The CCVTC™ examination tests your knowledge of coding concepts, anatomic principles, and coding guidelines only. When you sit for this exam, remember that individual payer rules are not a consideration when choosing the right answer. Unless it is specifically stated in the case note or exam question that the patient is covered by Medicare, you should follow the CPT® coding guidelines.

The exam tests competency. The candidate most qualified to pass the exam will be proficient in understanding:

- Medical terminology and anatomy
- Medical physiology
- Teaching physician guidelines
- Incident-to guidelines
- Shared/Split services
- HIPAA regulations
- Proper use of Advance Beneficiary Notice (ABN)
- ICD-10-CM coding
- E/M code selection using the AMA CPT® E/M guidelines
- CPT® coding for common procedures
  - 30000 Series
  - 40000 Series
  - 60000 Series
  - Laboratory and Pathology
  - Radiology
  - Medicine
  - Category III codes
- CPT® and HCPCS Level II modifier usage
- HCPCS Level II coding

Familiarity with practical coding and the code books is essential, as time is an important element in successfully completing the exam. You should approach the exam as you would approach your work—by demonstrating coding abilities essential to success. This is not a general aptitude test, and each question has a specific goal for measuring your competency. The practice exam within the *Specialty Study Guide: CCVTC™* course is highly representative of the subject matter and level of difficulty you will encounter in the full-length exam.

Test Answers and Rationales

The final chapter in the book contains the answers to the practice exam. Accompanying each answer is a rationale that explains the coding guidelines contributing to selecting the right answer. These rationales should help you understand what is needed to successfully approach and answer questions on the real exam because they allow you a glimpse into the minds of the test's creators.

Examinees that pass the CCVTC™ certification examinations will receive recognition in AAPC's monthly magazine, *Healthcare Business Monthly,* and receive a diploma suitable for framing.

About AAPC

AAPC was founded in 1988 in an effort to elevate the standards of medical coding by providing training, certification, ongoing education, networking, and recognition.

AAPC provides medical coding certification exams for coders in physician practices and the outpatient/facility environment. AAPC has expanded beyond outpatient coding to include training and credentials in documentation and coding audits, inpatient hospital/facility coding, regulatory compliance, and physician practice management. The purpose of AAPC coding certifications is to test an examinee's knowledge of coding principles and proficiency in coding accurately and efficiently. AAPC examinations measure a coder's skill of both coding accuracy and efficiency.

AAPC Member Code of Ethics

Members of AAPC shall be dedicated to providing the highest standard of professional service for the betterment of healthcare to employers, clients, vendors, and patients. Professional and personal behavior of AAPC members must be exemplary.

It shall be the responsibility of every AAPC member, as a condition of continued membership, to conduct themselves in all professional activities in a manner consistent with ALL of the following ethical principles of professional conduct:

- Integrity
- Respect
- Commitment
- Competence
- Fairness
- Responsibility

Adherence to these ethical standards assists in assuring public confidence in the integrity and professionalism of AAPC members. Failure to conform professional conduct to these ethical standards, as determined by AAPC's Ethics Committee, may result in the loss of membership with AAPC.

Evaluation and Management Coding for Cardiovascular and Thoracic Surgery

This chapter examines the documentation requirements for the evaluation and management (E/M) codes used by physicians and non-physician practitioners (NPPs) to bill for their services.

The E/M documentation requirements chapter is designed to provide a detailed approach to the accurate identification of documentation elements as they are defined by the American Medical Association (AMA) Guidelines for E/M services. The goal of this material is to offer the necessary insight to develop proficiency and correct technique to accurately select levels of E/M services for the exam. This material is not meant to influence policy, rather to refer to as coding guidelines for the CCVTC™ exam.

This chapter should be reviewed with the CPT® guidelines for E/M services found in the current CPT® code book. This guide is a general summary that explains commonly accepted aspects of selecting E/M codes. The goal is that, after completing your training, you will be confident that you will not under or over code a visit.

An Introduction to the Documentation Requirements Associated with E/M Services

The E/M Documentation Guidelines (DGs) have perhaps inspired more discussion than any other non-clinical topic based in the industry. In an ever-increasing effort to ensure that correct payments are made for visits and consultations, Medicare and the AMA have been working together for well over a decade. In 1992, Medicare transitioned to the Resource-Based Relative Value Scale (RBRVS) physician payment system and the AMA introduced E/M codes in CPT® to report visits and consultations.

By 1994, in response to confusion and the inaccurate interpretation of the codes, the Office of Management and Budget mandated that Medicare adopt DGs to expand the definition that was, at that time, only provided by CPT®. Medicare and the AMA jointly developed this initial set of E/M DGs which were deployed in 1995 and became known as the 1995 Documentation Guidelines or DGs. As auditing showed a pattern of continued misuse of the E/M Codes, the 1995 DGs were criticized as unfair to specialists because they seem to account for extended single system examinations with as much weight as limited multiple system exams.

Within two years, the E/M DGs were revised to improve physician and provider understanding and payment accuracy by extending the definitions to include specialty specific guidance. This set of DGs was scheduled to replace the 1995 DGs and became known as the 1997 DGs. The only problem was that the physician community loudly objected to the 1997 DGs. They were criticized as burdensome with documentation requirements that were too detailed and very difficult to achieve. Medicare decided to not replace the 1995 DGs but to instead allow physicians and providers to choose between the 1995 and the 1997 DGs.

In 2021, in an attempt to simplify the guidelines, the AMA changed the descriptions of the Office or Other Outpatient E/M Services codes 99202-99215. In addition, guidelines for the use of these codes were printed in the CPT® code book. The guidelines added in the 2021 CPT® code book were specific to Office or Other Outpatient E/M Services. In 2023, the AMA expanded the use of the guidelines introduced in 2021 to other E/M categories, eliminating the need for the 1995 and 1997 DGs.

Documentation Guidelines

There are three general principles regarding documentation to ensure credit can be thoroughly verified. It is important to follow these rules of thumb:

1. Documentation should be legible to someone other than the documenting physician or provider and their staff.
2. The date of service, name of the patient, and the name of the provider of service should be easily demonstrated by the documentation.
3. The documentation should support the nature of the visit and the medical necessity of the services rendered.

For most E/M visits, the provider performs three main components: history, exam, and medical decision making (MDM). The history directs the provider to troubleshoot the chief complaint based on an interview with the patient. The exam portion is the provider's physical exam and evaluation of the patient. The MDM includes the provider's assessment and plan.

The guidelines for E/M Services, along with the code descriptors, indicate that a "medically appropriate history and/or physical examination, when performed" is included in the service. While the history and exam should be documented, they are not used in the determination of the level of the code.

The guidelines also include pertinent definitions for terms necessary to understand when determining the level of MDM. You should read through the definitions provided in your CPT® code book and refer back to them as we go through the MDM components below.

The E/M guidelines provide instructions for selecting the appropriate level of service based on either of the following:

1. The level of the MDM as defined for each service; or
2. The total time for E/M services performed on the date of the encounter.

The provider can determine to support the E/M level of the visit based on MDM or time on a case-by-case basis. Regardless of which element is used to determine the level of visit, documentation should support the medical necessity of the visit. Payers may also have regulations on when MDM or total time is used.

Determining the Medical Decision Making (MDM)

The MDM most accurately reflects the amount of work a provider performs during an E/M service. Four levels of MDM are recognized: straightforward, low, moderate, and high. The level of MDM directly correlates to a level of service.

EXAMPLE: OFFICE VISIT MDM TO CODE CORRELATION

New Patient Code	Established Patient Code	Level of MDM
	99211	N/A 99211 is reported for services that typically do not require the presence of a provider. As such, the concept of MDM does not apply to code 99211.
99202	99212	Straightforward
99203	99213	Low
99204	99214	Moderate
99205	99215	High

To adequately determine the level of visit, the MDM is selected based on three components:

1. The number and complexity of problems addressed at the encounter;
2. The amount and complexity of data to be reviewed and analyzed; and
3. The risk of complications and/or morbidity or mortality of patient management.

To determine the levels of these components appropriately, the definitions provided in your CPT® code book must be understood. Using a grid method, we will discuss each component. Be sure to refer back to the definitions listed in the E/M Guidelines as needed.

Number and Complexity of Problems

The number and complexity of problems identifies the nature of the presenting problem and is based on the relative difficulty level in making a diagnosis. For the problem to be considered in the number of problems, the problem must be addressed within that encounter.

Per CPT®, symptoms may cluster around a specific diagnosis and each symptom is not necessarily a unique condition. Comorbidities/underlying diseases, in and of themselves, are not considered in selecting a level of E/M services unless they are addressed, and their presence increases the amount and/or complexity of data to be reviewed and analyzed or the risk of complications and/or morbidity or mortality of patient management. The final diagnosis for a condition does not, itself, determine the complexity or risk, as extensive evaluation may be required to reach the conclusion that the signs or symptoms do not represent a highly morbid condition. Multiple problems of lower severity may, in aggregate, create higher risk due to interaction.

The final diagnosis alone does not determine the complexity or risk to the patient. The documentation should be reviewed for comorbidities or underlying diseases that are addressed that increase the level of risk to the patient. Simply listing a chronic illness in the documentation is not sufficient. The documentation should indicate that the provider addressed the conditions during the encounter or that the condition contributed to the severity of the case.

When a patient sees multiple providers for different aspects of their care, you may see a physician document the condition is being managed by another provider. When the documentation only states that the patient has the condition and that it is being treated by another provider, it is not considered for the leveling of the visit. If there is additional documentation showing assessment or care coordination regarding that diagnosis, other than the statement of the condition being treated by another provider, it is then considered toward the level of service.

TESTING TECHNIQUE

Read through the entire note to get an understanding of the conditions that are addressed and analyzed during the visit. Simply relying on the chief complaint will not always give an accurate description of the number and complexity of problems for the encounter.

There are four levels identified under the number and complexity of problems addressed; minimal, low, moderate, and high. As demonstrated by the table below, the level of Number/Complexity of Problems Addressed increases as the difficulty of the patient's health increases.

Top 10 Missed Coding Concepts on CCVTC™ Exam

The concepts discussed are not in a particular order. The tips provided below are based on the AAPC exam department observations of the most missed coding concepts. The most missed concepts are based on the prior year's exam results.

1. **Proper ICD-10-CM code selection for NOS versus NEC:** Not Otherwise Specified (NOS) is selected when there is not enough documentation to select a more specific code. Not Elsewhere Classifiable (NEC) is selected when specific information is documented for the diagnosis, but there is not an existing ICD-10-CM code to report it.

2. **Proper ICD-10-CM code selection for neoplasms:** Review the postoperative diagnosis and findings to determine if the histology of the neoplasm is identified. For example, the postoperative diagnosis states neoplasm in the upper left lobe of the lung. After review of the findings, the neoplasm is determined to be benign. Carefully review the entire operative note to make sure you are reporting the most specific diagnosis. If mass is the final diagnosis, look under the main term Mass in the ICD-10-CM Alphabetical Index to find the appropriate code.

3. **AMA E/M Guidelines for Selecting the Level for the Amount and/or Complexity of Data to be Reviewed:** Extensive level needs 2 out of 3 categories:
   - Category 1
   - Category 2
   - Category 3

   For example, if the provider orders/reviews 3+ unique tests (Category 1) and discusses treatment/management of the patient with another provider (Category 3) you meet the requirements to report an extensive level.

4. **Transcatheter placement of stent(s):** For open or percutaneous transcatheter placement of extracranial vertebral artery stent(s) refer to Category III codes 0075T and 0076T. These codes include imaging for determination of the need for stenting along with radiological supervision and interpretation of same.

5. **When an E/M visit is not reported:** If the primary reason of an established patient's visit is to undergo a procedure, like an injection, you should only report the code for that procedure. You should not report an E/M visit separately, as a physical examination is required to validate the E/M level.

6. **Global Period for VATS procedure:** A diagnostic VATS (video-assisted thoracoscopic surgery) typically carries either a 0-day or 10-day global period, depending on the specific CPT® code used, and most diagnostic thoracoscopy procedures fall under a 0-day global. This means the global period ends immediately or very quickly, so when the patient returns for another procedure—even if it is related to the condition that prompted the VATS—global modifiers such as 58 or 78 are not reported, because these modifiers only apply when the subsequent procedure occurs *during* the original procedure's global period. Once the global period has expired, no global modifiers are required, regardless of whether the services are related or unrelated to the previous procedure.

7. **AMA E/M Guidelines for Selecting Number/Complexity of Problems Addressed:** The complexity of problems addressed is for the risk of the presenting symptoms the patient has for the visit. For example, the patient coming in with a traumatic injury such as laceration of an internal organ or an intracranial hemorrhage is a high level, because it poses a threat to life or bodily function in the near term without treatment.

8. **Codes 93925–93931** are reported for scans preformed on the arteries in the upper or lower extremities to check the blood flow for any blockages. An ultrasound of the extremities, codes 76881–76882, is reported for scans that examine the muscles, tendons, joint, or other soft tissue structures in the extremity to identify any abnormalities.

9. **Consultation rules according to CPT® and CMS:** According to CPT® guidelines, a consultation requires three essential elements: (1) a documented request from a physician or other qualified source; (2) an evaluation performed to provide advice regarding a specific condition or to determine whether the consultant will assume responsibility for all or part of the patient's ongoing care; and (3) a written report sent back to the requesting provider. If any of these requirements are not met, such as when the documentation does not include a report back to the requesting provider, the service may not be billed as a consultation. Since CMS no longer reimburses consultation codes, providers must instead report office or outpatient E/M services or hospital care codes when the patient is a Medicare beneficiary. You should not assume Medicare coverage based solely on

patient age; in exam scenarios, Medicare status is always explicitly stated.

10. **Modifier 78:** Modifier 78 is appended when the surgeon must perform a subsequent procedure due to complications or conditions directly related to the initial surgery. This subsequent procedure must take place during the global period of the original operation and must require the patient to return to the operating room. Modifier 78 should not be used when the complication is managed in the office rather than in an operating room setting.

AAPC continuously evaluates and enhances our certification exams throughout the year. As AAPC continues to enhance the certification exams, we are beta testing the inclusion of a fill-in-the-blank item type on our certification exams. To prepare you for both item types (multiple choice and fill-in-the-blank), we have provided two versions of this practice exam. The same questions are on both versions of the Test Your Knowledge practice exam; however, the last three cases on this version of the practice exam are fill-in-the-blank. If you prefer to test using the multiple-choice item type for all the cases, use practice exam B.

The following questions will test your comprehension of the information covered in this study guide. The answer key is used for both versions of the Test Your Knowledge practice exams.

Version A

CASE 1

S: Seen today in the office for follow up to recheck right internal carotid artery stenosis. On 08/23/xx, had normal left internal carotid artery and 50-60% right internal carotid artery stenosis which is asymptomatic. Today, no symptoms of TIA, CVA or amaurosis fugax. Denies headaches.

O: General: No acute distress, pleasant, alert, and oriented times 3. Speech is normal. Voice is normal. WT: 129. BP: Right arm 175/69, left arm 168/62. HR: 84. TEMP: 97.8. Chest: Clear to auscultation bilaterally, normal effort. Heart: RRR. Easily palpable bilateral carotid pulses with no jugular venous distention. Pedal pulses normal. Moves all extremities with 5/5 strength. No edema. Skin: WNL. VASCULAR STUDIES: Duplex examination of right carotid artery on 03/17/xx reveals 50-60% stenosis right internal carotid artery.

A: Per ultrasound increase from 30% to 50-60% stenosis which is asymptomatic.

P: I would like to get an MRA of the neck and see the pt back in one week to review results.

Billing information: This physician labeled his documentation with complete DOS, patient, and signature requirements met. He has seen this patient before. He billed a commercial payer for this service.

1. What is the E/M level of service for this encounter?

   A. 99211
   B. 99212
   C. 99213
   D. 99214
   E. 99215

2. If this physician was also "standing by" during this office visit for a possible surgical procedure at the hospital, what would the auditor consider?

   A. Standby services cannot be conducted while seeing other patients
   B. Many payers do not recognize standby services
   C. A and B
   D. None of the above

3. What is the appropriate ICD-10-CM code selection for this encounter?

   A. I63.23, I65.21

   B. I67.2, I65.23

   C. I65.21, I65.8

   D. I65.21

CASE 2

DOS: October 21

INDICATIONS FOR PROCEDURE: The patient is a 58-year-old white male, one-year status post pneumonectomy due to non-small cell carcinoma. He had a post pneumonectomy empyema treated with tube thoracostomy, chronically draining tube which is having very little output; he, therefore, is a reasonable candidate for a Clagett procedure.

PREOPERATIVE DIAGNOSIS: Chronic post pneumonectomy empyema.

POSTOPERATIVE DIAGNOSIS: Chronic post pneumonectomy empyema.

PROCEDURE: Stage I Clagett to include placement of irrigation and drainage catheters as well as cultures.

FINDINGS AT TIME OF OPERATION: Cavity fairly clean with no evidence of pus or debris.

DESCRIPTION OF PROCEDURE: The patient was brought to the Operating Room and placed in the supine position, placed under adequate general endotracheal anesthesia. Chest tube was removed. He was prepped and draped in the usual sterile fashion. The cavity was irrigated with Tobramycin solution. An incision is made to the chest to reach the chest cavity and was examined along with removing a small part of the rib using ribcutters. There was some debris, which was irrigated. The cavity appeared clean. There was no evidence of bronchial fistula. An irrigation catheter was then placed along the posterior edge and placed to the superior portion of the cavity. A Latex drainage tube was then placed in the inferior portion of the cavity, sutured in place with Nylon suture after the cavity was irrigated copiously with one liter of Tobramycin solution. An Eloesser flap is created. They were attached to irrigation and drainage devices. Sterile dressings were placed. The patient was turned over to Anesthesia for extubation.

DOS: November 29

PREOPERATIVE DIAGNOSIS: Post pneumonectomy empyema.

POSTOPERATIVE DIAGNOSIS: Post pneumonectomy empyema.

PROCEDURE: Stage II Clagett procedure.

INDICATION FOR PROCEDURE: The patient is a 58-year-old white male who has a post pneumonectomy empyema. He has been irrigating cavity for one month. Drainage is clear. He has had no evidence of a block or pleural fistula; therefore, he requires Clagett procedure.

PROCEDURE: The patient was brought to the operating room and placed in the supine position. He was placed under adequate general endotracheal anesthesia. He was turned to the left lateral decubitus position. The right chest was prepped and draped in usual sterile fashion. After tubes were removed, flap is closed, the sinus tract was then excised in elliptical fashion and carried down to the chest wall. The area was irrigated copiously as was the cavity with Tobramycin solution. The cavity was then filled with Tobramycin solution and the incision closed in layers of Vicryl suture, Monocryl suture and then skin glue. The patient tolerated the procedure well.

After reviewing the answers and rationales, if you have further questions, please send them to: mct@aapc.com

CASE 1

S: Seen today in the office for follow up to recheck right internal carotid artery stenosis. [1] On 08/23/xx, had normal left internal carotid artery and 50-60% right internal carotid artery stenosis which is asymptomatic. Today, no symptoms of TIA, CVA or amaurosis fugax. Denies headaches.

O: General: No acute distress, pleasant, alert, and oriented times 3. Speech is normal. Voice is normal. WT: 129. BP: Right arm 175/69, left arm 168/62. HR: 84. TEMP: 97.8. Chest: Clear to auscultation bilaterally, normal effort. Heart: RRR. Easily palpable bilateral carotid pulses with no jugular venous distention. Pedal pulses normal. Moves all extremities with 5/5 strength. No edema. Skin: WNL. VASCULAR STUDIES: Duplex examination of right carotid artery on 03/17/xx reveals 50-60% stenosis right internal carotid artery.

A: Per ultrasound increase from 30% to 50-60% stenosis which is asymptomatic. [2]

P: I would like to get an MRA of the neck [3] and see the pt back in one week to review results.

Billing information: This physician labeled his documentation with complete DOS, patient, and signature requirements met. He has seen this patient before. He billed a commercial payer for this service.

[1] This is an established patient.

[2] Review of ultrasound.

[3] The provider ordered an MRA.

1. **Answer:** C. 99213

   Rationale: This is an established patient. The level of MDM is based on 2 of the 3 elements:

   Number/Complexity of Problems Addressed at the Encounter: Moderate (chronic illness that is progressing).

   Amount and/or Complexity of Data to Be Reviewed and Analyzed: Low (MRA ordered, view of previous ultrasound).

   Risk of Complication and/or Morbidity or Mortality of Patient Management: Low.

   The correct code is 99213 based on 2 of the 3 elements of MDM.

2. **Answer:** C. A and B

   Rationale: According to CPT® guidelines, standby services (reported with CPT® code 99360) require prolonged physician or other qualified healthcare professional attendance without direct patient contact. No other patients can be serviced during this time. Many payers do not recognize this service as payable.

3. **Answer:** D. I65.21

Rationale: The patient has a diagnosis of right internal carotid artery stenosis, which has worsened since the last test. There was no mention of cerebral infraction, so code I63.23 is not correct, (*see also Stricture).* Look in the ICD-10-CM Alphabetic Index for Stricture/artery/carotid referring you to *see* Occlusion/artery/carotid referring you to I65.2-. This code requires a 5th character 1 for the right side. Verify code selection in the Tabular List. This involves the right internal carotid. The subcategory I65 indicates occlusion and stenosis of precerebral arteries not resulting in cerebral infarction, which includes the internal carotid artery.

CASE 2

DOS: October 21

INDICATIONS FOR PROCEDURE: The patient is a 58-year-old white male, one-year status post pneumonectomy due to non-small cell carcinoma. [1] He had a post pneumonectomy empyema treated with tube thoracostomy, chronically draining tube which is having very little output; he, therefore, is a reasonable candidate for a Clagett procedure.

PREOPERATIVE DIAGNOSIS: Chronic post pneumonectomy empyema.

POSTOPERATIVE DIAGNOSIS: Chronic post pneumonectomy empyema. [2]

PROCEDURE: Stage I Clagett to include placement of irrigation and drainage catheters as well as cultures.

FINDINGS AT TIME OF OPERATION:

Cavity fairly clean with no evidence of pus or debris.

DESCRIPTION OF PROCEDURE: The patient was brought to the Operating Room and placed in the supine position, placed under adequate general endotracheal anesthesia. Chest tube was removed. He was prepped and draped in the usual sterile fashion. The cavity was irrigated with Tobramycin solution. An incision is made to the chest to reach the chest cavity and was examined along with removing a small part of the rib using ribcutters. There was some debris, which was irrigated. The cavity appeared clean. There was no evidence of bronchial fistula. An irrigation catheter was then placed along the posterior edge and placed to the superior portion of the cavity. A Latex drainage tube was then placed in the inferior portion of the cavity, sutured in place with Nylon suture after the cavity was irrigated copiously with one liter of Tobramycin solution. An Eloesser flap is created. They were attached to irrigation and drainage devices. [3] Sterile dressings were placed. The patient was turned over to Anesthesia for extubation.

DOS: November 29

PREOPERATIVE DIAGNOSIS: Post pneumonectomy empyema.

POSTOPERATIVE DIAGNOSIS: Post pneumonectomy empyema. [4]

PROCEDURE: Stage II Clagett procedure.

INDICATION FOR PROCEDURE: The patient is a 58-year-old white male who has a post pneumonectomy empyema. He has been irrigating cavity for one month. Drainage is clear. He has had no evidence of a block or pleural fistula; therefore, he requires Clagett procedure.

PROCEDURE: The patient was brought to the operating room and placed in the supine position. He was placed under adequate general endotracheal anesthesia. He was turned to the left lateral decubitus position. The right chest was prepped and draped

Join the biggest team in healthcare information management.

As an AAPC member, you'll be part of a global network of 250,000+ career learners and working professionals. Our credentials are among the most highly sought after in the industry — in part because AAPC members are trained for more than passing an exam. They are trained to succeed on the job from day one.

"If you want to rise in the ranks of the Healthcare business portion of the medical field, I highly suggest that you become a member of AAPC and obtain your certifications through them. They will help you to advance and open the door of opportunity for you."

- Latisha Booker, CPC

"APPC has not only provided me with the opportunity to earn multiple credentials but has also opened important doors for me in my career."

- Mary Arnold, CPC, CPMA, CRC, RMA, HR-C

"While taking classes, I was introduced to AAPC. I became a member to help boost my career, and more than 20 years later, I'm still an AAPC member."

– Bradley Miller, CPC, CRC, CDEO

Whether you're just getting started or a seasoned pro, AAPC membership will give you the support, training, tools, and resources to help you launch and advance your career successfully,

Learn more at **aapc.com**

AAPC