AAPC

COC®

Certified Outpatient Coder

STUDY GUIDE

2026

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Clinical Examples Used in this Study Guide

AAPC believes it is important in training and testing to reflect as accurate a coding setting as possible to students and examinees. All examples and case studies used in our study guides and exams are *actual, redacted* office visit and procedure notes donated by AAPC members.

To preserve the *real-world* quality of these notes for educational purposes, we have not re-written or edited the notes to the stringent grammatical or stylistic standards found in the text of our products. Some minor changes have been made for clarity or to correct spelling errors originally in the notes, but essentially, they are as one would find them in a coding setting.

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Introduction

Welcome to the AAPC COC® Examination Study Guide. This material will help coders and other medical professionals review for the COC® examination, which tests mastery of outpatient hospital coding. The COC® does not test for inpatient coding ability; however, it requires an understanding of inpatient coding concepts and reimbursement.

Healthcare in the 21st century is complex and requires expertise in proper coding for the payment for procedures, services, equipment, and supplies provided to patients. Becoming a COC® is the best way to ensure accurate coding for the employee, and hiring certified coders is the best defense against improper payment for employers. AAPC's unique system of more than 500 chapters nationwide provides education and networking. This study guide provides an overall review of coding and compliance for the more experienced coder and highlights topics that need to be mastered in preparation for the (COC®) exam.

This book alone cannot prepare a coder for the COC® exam. Each student should also have the following publications on hand:

- Anatomy book
- Medical terminology
- ICD-10-CM (current year)
- American Medical Association's CPT® *Professional Edition* (current year), *Professional Edition* recommended.
- HCPCS Level II (current year)

Different vendors publish these products. Choose the publications you are comfortable using for study and professional purposes. It should be noted that the COC® examination evaluates the coder's knowledge of coding concepts and coding principles only. For examination purposes, **ICD-10-CM;** AMA's **CPT® *Professional Edition;*** and **HCPCS Level II** code books are the only publications allowed when taking the certification examination. All code books should be the current year version.

Preface

A COC® is a member of the AAPC who has passed an examination that evaluates mastery of CPT®, ICD-10-CM, and HCPCS Level II codes used for billing outpatient hospital and ASC facility services to government and private payers. Once certified, a COC® must obtain a total of 36 continuing education units (CEUs) over the course of two years. If a successful examinee does not have two years' coding experience, he or she will be an apprentice, COC-A®, until that requirement is met. A letter to the AAPC from your employer attesting to your time spent in coding duties is the evidence required to remove the "A" from your certification. More information on this process is available on AAPC's website.

A certified coder's responsibilities regarding outpatient facility services may include:

1. Determining accurate codes for diagnoses and procedures and/or verifying software choice for assignment of the CPT®, ICD-10-CM, and HCPCS Level II codes for services performed in the outpatient facility and freestanding ASC.
2. Coding all outpatient hospital diagnoses by applying *Coding Clinic* and ICD-10-CM guidelines and using ICD-10-CM effectively.
3. Coding other outpatient services (ancillaries, supplies) using CPT® and HCPCS Level II codes.
4. Determining and applying the proper modifiers to codes on outpatient hospital claims.
5. Having a working knowledge of Ambulatory Payment Classifications (APCs) including payment status indicators and MS-DRGs.
6. Understanding the UB-04 billing form and its proper use.
7. Keeping current with changes, additions, or deletions that may apply to the field locators (FL) on the UB-04.
8. Understanding what the Charge Description Master (CDM) is, how it works, and how to update it periodically.
9. Being familiar with the outpatient flow of data through the facility pertaining to patient encounters and procedures and understanding the importance of each step from the order to accounts receivable management.
10. Reviewing the acuity forms used to determine levels of facility evaluation and management (E/M) services for comparison with documentation to make sure the appropriate level of service for the facility was chosen.
11. Keeping current with outpatient compliance and reimbursement policies, including medical necessity issues and correct coding issues.
12. Performing various auditing duties related to outpatient facility coding to promote and maintain compliance with payer reimbursement policies and governmental regulations as well as the Centers for Medicare & Medicaid Services (CMS) guidelines.
13. Monitoring progress resulting from periodic internal audits.
14. Providing training in coding and compliance issues to facility coders and departmental coders, if applicable, on an ongoing basis.
15. Providing coding staff with up-to-date coding information from reliable, accurate sources.
16. Implementing new codes and new coding guidelines in a timely manner within the facility.
17. Updating patient information forms, as necessary, from time to time in keeping with effective records management.

The COC® examination is designed to evaluate a hospital outpatient coder's knowledge of:

- Medical Terminology
- Outpatient Hospital Facility
- CPT® Coding Guidelines
- ICD-10-CM Diagnostic Coding
- HCPCS Level II
- Anatomy
- Medicare Guidelines

COC® Examination Format

The COC® examination is a 4-hour timed test.

The test is open book, allowing for use of CPT®, ICD-10-CM, and HCPCS Level II code books. The test has 100 questions. The COC® examination contains questions specific to CPT® coding for the outpatient hospital and ASC facilities, ICD-10-CM, revenue codes, and APCs. The parentheses ( ) indicate the estimated number of questions for each topic tested.

- Medical Terminology (7)
- Anatomy (7)

- Coding Guidelines (3)
- Payment Methodologies (13)
- Compliance (3)
- ICD-10-CM Coding (15)
- CPT® Coding (13)
- HCPCS Level II Coding (7)
- Surgery and Modifiers (22)
- Cases (10)

Preparing for Your Exam

The COC® exam is open book. The code books allowed during the exam include AMA CPT® Professional, HCPCS Level II, and ICD-10-CM code books. You must use the current year version of all code books. Please visit AAPC's website for the list of approved code books.

The best strategy to prepare for the exam is reading your code books cover to cover. Examinees should review all coding guidelines found within each section and subsection of the CPT® code book, the Official Coding Guidelines in the ICD-10-CM code book, and all coding guidelines in the HCPCS Level II code book. This study guide should be used along with your code books as you prepare for the exam but is not allowed while taking the certification exam.

Successful examinees have well-thumbed code books. Become familiar with all parts of your CPT®, ICD-10-CM, and HCPCS Level II code books, and know how to locate the codes, guidelines, tables, and instructions within them quickly.

Points to keep mind of:

ICD-10-CM code book in the Tabular List pay attention to:

- Code first notes
- Use additional code notes
- Codes that are excluded from a category

CPT® code book pay attention to:

- To section and subsection guidelines given for code ranges, such as:
  - Guidelines for repair (Closure) codes that define simple, intermediate, or complex repairs.
  - Guidelines for Adjacent Tissue Transfer or Rearrangement procedures.
  - Musculoskeletal System guidelines defining surgical procedures, such as closed, opened, percutaneous skeletal fixation, or manipulation.
- All parenthetical instructional notes that are usually found following the code or stated under subsection guidelines .
- Make note of any symbols placed before a procedure code, for example the + symbol indicating the procedure is an add-on code (+13122).
- Make note of procedures performed percutaneously, with any type of scope (endoscope, laparoscope, etc.), or by open technique (meaning the doctor had to cut into the patient to perform the procedure).

If you need additional coding practice, AAPC's electronic online COC® Practice Exams are excellent test simulation tools. These online exams will give you an excellent preview of what questions to expect and providing the format with the resources that is given on the same online testing platform as the COC® certification exam. The practice exams provide the rationales for the questions you answer once you submit it, and you can review what you missed and why the answer is correct. The AAPC has three 50-question Practice Exams available, which are a great way to supplement your study guide preparation. The practice tests are available at https://www.aapc.com/shop2/practice-exams.aspx#coc.

Exam Registration

Purchase your COC® exam voucher on AAPC's website (https://www.aapc.com/certifications/exams). Once you purchase an exam, make sure to go through any emails sent to you. These emails provide important details such as what is permitted and what is not during the exams, instructions on how to begin the exam, and other general information for the day of the exam.

Electronic Exams (Testing Center)

Scheduling Your Exam

Once you purchase your electronic exam, the exam voucher will be applied to your AAPC account and you will receive a Notice to Schedule email through our partner, Meazure Learning. This email will provide detailed information and videos on how to schedule your exam. Follow the instructions to create a Meazure Learning profile and selecting a date and time for your exam.

Taking Your Exam

On the day of your exam, arrive 15 minutes early and be sure to have your valid government issued photo ID (temporary and paper copies are not permitted), to complete the check-in process at the exam facility. You will need to bring your photo ID with you every time you take an exam with AAPC for verification purposes. Please ensure that your first and last name on the valid, government-issued photo ID EXACTLY match your first and last name you used to register for the exam. If you show up to the exam without the correct information or correct documents, you will be considered a no-show and will need to purchase the exam attempt again.

Chapter 1

Medical Terminology

Introduction

Every professional field has a language of its own common to its participants. The language of medicine must be understood by the professional coder. You will encounter anatomical, conditional, and procedural terms, in addition to many acronyms, symbols, and abbreviations. Mastery of this language is vital to coding.

The best way to learn medical terminology is by understanding word parts or elements of medical language.

When a person understands the meanings of word roots, suffixes, and prefixes, it gives him or her access to the meaning of tens of thousands of complex medical terms. Below is a review of terminology prefixes, suffixes, word roots, and terminology rules.

Word Root

A root word is the foundation of the medical term and its meaning. Each body system has a core of root words associated with it. A root word is combined with a suffix to form most medical terms.

The word root is the foundation of the word. To link word roots to other word roots or suffixes, most words use a combining vowel, usually an "o." The word root + combining vowel = combining form:

- gastr/o: stomach
- cardi/o: heart
- derm/o: skin
- arthr/o: joint

Rule #1: A single word root (combining form) part cannot stand alone. A suffix must be added to complete the term. A combining vowel is not used when the suffix begins with a vowel.

EXAMPLE

Neuro (nerve) joined with suffix itis (inflammation), the combining vowel is not used because it begins with a vowel.

Neuritis = Inflammation of a nerve.

Rule #2: A combining vowel is used when the suffix begins with a consonant.

EXAMPLE

Neuro (nerve) joined with suffix plasty (surgical repair), the combining vowel.

Neuroplasty = Surgical repair of the nerve.

Rule #3: A combining vowel is always used when two or more root words are joined.

EXAMPLE

Gastro (stomach) joined with entero (small intestine) along with suffix itis (inflammation). The combining vowel "o" is not used with entero because it begins with a vowel.

Gastroenteritis = Inflammation of the stomach and small intestine.

Some medical terms contain more than one root. Additional root words function the same as the first root. They may be an equal part of the foundation of the term or contribute to the meaning of the original root. The order in which the root words appear does not always indicate the translation of the term.

EXAMPLE

Tracheobronchitis

Trache = trachea + bronch = bronchus + itis = inflammation

Tracheobronchitis = Inflammation of the trachea and bronchus

EXAMPLE

Electrocardiogram

Electr = electric + cardi = heart + gram = to record

Electrocardiogram = Recording of the electrical activity of the heart

Adding a combining vowel to a root word creates a combining form. Combining vowels such as "o" or "i" make it easier to spell and pronounce. Combining vowels may be used to connect or join a root word and a suffix.

Abbreviations

Medical abbreviations are used in both written and oral communication by healthcare professionals to save time. The most effective way to memorize abbreviations is by practicing writing the definition with the abbreviation.

Review some common abbreviations below:

a = before

a.c. = before meals

abd = abdomen

ABG = arterial blood gas

ABS = active bowel sounds

AD = right ear

ad lib = as desired

ADH = antidiuretic hormone

AK = above the knee

AKA = also known as; or above the knee amputation

alt. h. = alternate hours

AMA = against medical advice; or American Medical Association

APTT = activated partial thromboplastin time

aq. = water

AS = left ear

ASHD = arteriosclerotic heart disease

AU = both ears

b.i.d. = twice a day

b.i.n. = twice a night

BK = below the knee

BKA = below the knee amputation

BP = blood pressure

BPH = benign prostatic hypertrophy

bpm = beats per minute

BRP = bathroom privileges

BS = blood sugar

BSA = body surface area

BUN = blood urea nitrogen

Bx = biopsy

C = Celsius

c = with

CAD = coronary artery disease

CAO = conscious, alert & oriented

cap = capsule

CC = chief complaint

cc = cubic centimeter (= milliliter)

CCU = coronary care unit

cm = centimeter

CO = cardiac output

CPK = creatinine phosphokinase

D&I = dry & intact

DC or D/C = discharge, discontinue

DM = diabetes mellitus

DOA = dead on arrival

DP = dorsalis pedis

dsg = dressing

ECU = emergency care unit

ED = emergency department

ER = emergency room

ETOH = ethyl alcohol

F = Fahrenheit

FHT = fetal heart tones

fl oz = fluid ounce

fx = fracture

g = gram

gr = grain

gtt = drops

H&H = hematocrit & hemoglobin

H. = hypodermically

h. or hr = hour

h.s. = hour of sleep

Hct = hematocrit

Hgb = hemoglobin

HNV = has not voided

HOB = head of bed

HR = heart rate

Ht = height

I&D = incision and drainage

I&O = intake & output

ICU = intensive care unit

ID = intradermally

IM = intramuscularly

IS = incentive spirometry

IT = intrathecal (inside the spinal canal); or information technology

kg = kilogram

KO = keep open

KVO = keep vein open

L = liter

lb = pound

LLE = left lower extremity

LLL = left lower lobe

LLQ = left lower quadrant

LOC = level of consciousness

LUL = left upper lobe

m = meter

MAP = mean arterial pressure

mcg = microgram

mEq = milliequivalent

mg = milligram

ml = milliliter

mm = millimeter

N&V = nausea & vomiting

NKA = no known allergies

NKDA = no known drug allergies

noc = night

NPO = nothing by mouth

NTG = nitroglycerine

o.d. or q.d. = once a day

OD = right eye

OOB = out of bed

OP = outpatient

OR = operating room

OS = left eye

OU = both eyes

oz = ounce

P = pulse

p or = after, per

p.c. = after meals

p.o., per os = by mouth

p.r.n. = as needed

PAM = pulmonary artery mean pressure; also, sometimes called PAMP

PAWP = pulmonary artery wedge pressure

PCN = penicillin

per = by or through

PERRLA = pupils equal round & reactive to light & accommodation

PR = per rectum

pt = patient

ICD-10-CM Conventions and Terms

To apply the diagnosis coding system correctly, coders need to understand and apply the various conventions and terms. Section I of the official guidelines include conventions, general coding guidelines, and chapter specific guidelines.

Conventions

Punctuation	
Brackets [ ]	Used in the Tabular List to enclose synonyms, alternate wording, or explanatory phrases. Used in the Alphabetic Index to indicate multiple codes are required.
Parentheses ( )	Used to enclose supplementary words that may be present or absent in the statement of a disease or procedure without affecting the code number to which it is assigned. The terms in the parentheses are referred to as nonessential modifiers.
Colon :	Used after an incomplete term which needs one or more of the modifiers following to make it assignable to a given category.
Abbreviations	
NEC	Not elsewhere classifiable. NEC identifies diseases or disorders for which unique codes are not available. Use these codes when the physician has documented a specific disease.
NOS	Not otherwise specified. NOS identifies a nonspecific disease or disorder. Use these codes when the documentation has insufficient data to code more specifically. This abbreviation is the equivalent of unspecified.
Other Conventions	
Bold Face	Boldface type is used for all codes and titles in the Tabular List and main terms in the Alphabetic Index.
Instructional Notes	
Excludes1	A type 1 excludes note represents that the condition is not coded here. This note indicates that the code excluded should not be used at the same time as the code above the Excludes1 note if the conditions are related. An Excludes1 note can indicate when two conditions should not be reported together, such as a congenital form versus an acquired form of the same condition. An example, category code H26 *Other cataract* has the Excludes1 note that lists the condition congenital cataract (Q12.0). Because the codes are for the same condition, cataracts, you should not report a code from H26 (acquired condition) with code Q12.0 (congenital condition). If the patient has congenital cataracts report code Q12.0, not a code from category H26. In some cases, the conditions listed may be used together when the conditions are unrelated to one another. For example, the Excludes1 note at subcategory code S02.8-, indicates codes from S02.3- (fracture of orbital floor) and S02.1- (fracture of orbital roof) should be reported for those types of fractures and not to use code S02.8-. If there was a fracture of the orbit of the left eye and a fracture of the orbital roof of the right eye, both codes may be used together.
Excludes2	A type 2 excludes note represents that the condition is not included here. A type 2 excludes note indicates that the condition excluded is not part of the condition represented by the code, but a patient may have both conditions at the same time. When a type 2 excludes note appears under a code, it is acceptable to use both the code and the excluded code together.
Includes	This note appears immediately under a three-character code title to further define or give an example of the contents of the category.
See	Directs you to a more specific term under which the correct code can be found.
See Also	Indicates additional information is available providing an additional diagnostic code or additional information.
See Category	See category indicates you should review the category specified before assigning a code.
Use Additional Code	This instruction signals the coder an additional code should be used, if the information is available, to provide a more complete picture of the diagnosis.

Code first underlying disease	Used for codes not intended to be used as a first listed or principal diagnosis and should be sequenced before the underlying disease. This note requires the underlying disease (etiology) be reported first and the manifestation is reported secondarily.
Combination Code	This is when a single code is used to classify two diagnoses, a diagnosis with an associated secondary process (manifestation), or a diagnosis with an associated complication.
Other Terms	
Eponym	This term indicates the code describes a disease or syndrome named after a person. An example is Lou Gehrig's disease. Lou Gehrig was a famous baseball player who was diagnosed with what is also known as amyotrophic lateral sclerosis (ALS).
Essential Modifiers	Essential modifiers are subterms listed in the Alphabetic Index below the main term in alphabetical order and are indented two spaces. Nonessential modifiers are subterms that follow the main term and are enclosed in parentheses; they can clarify the diagnosis but are not required.
Nonessential Modifiers	Phrases in parentheses following the main term; they can clarify the diagnosis, but the presence of these parenthetical symptoms are not required to use the code they describe.
Brace { }	Used to enclose a series of terms, each of which is modified by the statement to the right of the brace.
Notes	Used to define terms, clarify information, or list choices for additional characters.
With	Terms indented under the term 'with' in the Alphabetic Index are presumed to have a causal relationship between the two conditions. Only if the documentation specifically states the conditions are not related, the conditions would be reported separately and a causal relationship is reported.

ICD-10-CM Coding Process

To successfully code diagnoses, follow these guidelines:

1. Use both the Alphabetic Index and the Tabular List. To determine the main term in the Index to Diseases and Injuries (Alphabetic Index), use the following key terms: condition (disease, failure, sprain), organ, or anatomic site modifier (chronic or acute). The documentation in the medical record should describe the patient's condition using terminology including specific diagnoses as well as symptoms, problems, and reason(s) for the encounter.
2. Locate the main term in the Index to Diseases and Injuries (Alphabetic Index):
   - Refer to any notes under the main term
   - Read any terms enclosed in parentheses following the main term
   - Refer to any modifiers of the main term
   - Do not skip over any subterms indented under the main term
   - Follow any cross-reference instructions
3. Verify the code number in the Tabular List. Never code directly from the Index to Diseases and Injuries as important instructions often appear in the Tabular List.
4. Use a medical dictionary at any one of the preceding stages to aid in accurate coding.

EXAMPLE

GERD: Using a medical dictionary helps the coder understand GERD is an acronym for gastroesophageal reflux disease. With this information, the coder can identify the key term in the Index to Diseases and Injuries (Alphabetic Index). This diagnosis can be found in the ICD-10-CM Alphabetic Index under GERD or under Disease, diseased/gastroesophageal reflux (GERD) K21.9.

The correct diagnosis code is K21.9 *Gastroesophageal reflux disease without esophagitis*.

5. Code to the highest degree of specificity: A three-character code may be used only when the diagnostic statement cannot be further subdivided. When a three-character code has subdivisions, the appropriate subdivision must be coded to report the appropriate level of specificity. A code is invalid if it has not been coded to the full number of characters available.

EXAMPLE

Maternal care for excessive fetal growth, second trimester, single gestation. Code category O36 identifies Maternal care for other fetal problems. Subdivision O36.6 identifies Maternal care for excessive fetal growth. An additional subdivision, O36.62 identifies the second trimester. There is an icon indicating this code requires a seventh character. Seventh character 0 is reported for a single gestation. Because the code is only five characters in length, placeholder X is reported in the sixth character position to keep the seventh character in the seventh position.

The complete code is O36.62X0 for *Maternal care for excessive fetal growth, second trimester, single gestation.*

A combination code is used to fully identify an instance in which two diagnoses, or a diagnosis with an associated secondary process (manifestation) or complication, are included in the description of a single code. Assign a combination code only when that code fully identifies the diagnostic conditions involved or when instructed in the Alphabetic Index.

EXAMPLE

Nausea with vomiting: In the Alphabetic Index, Nausea is coded as R11.0 *Nausea alone,* Vomiting is coded as R11.10 *Vomiting alone*, and Nausea with vomiting is coded as R11.2. Which code(s) is correct? When you look in the Tabular List, R11.0 and R11.10 have a code descriptor that includes NOS. This is because these codes are only used when these diagnoses are independent of each other. It is incorrect to code both R11.0 and R11.10 at the same instance. Instead use a more specific combination code describing both. The correct diagnosis code is R11.2 *Nausea with vomiting.*

6. Multiple coding of diagnoses is required for certain conditions not subject to the rules for combination codes.
   a. Index to Diseases and Injuries (Alphabetic Index): Codes for both etiology and manifestation of a disease appear following the subentry term, with the second code italicized and in slanted brackets. Assign both codes in the same sequence in which they appear in the index.
   b. Tabular List: Instructional notes indicate when to use more than one code:
      - Code first underlying condition
      - Code also
      - Use additional code for any manifestation

EXAMPLE

Congenital Syphilitic Endarteritis: When you look this up in the Alphabetic Index, you notice two codes on the same line: A50.54 *[I79.8].* This means that both codes are required to describe this diagnosis, but which one goes first? When verifying I79.8 *Other disorders of arteries, arterioles and capillaries* in diseases classified elsewhere in the Tabular List, notice the statement code first underlying disease, such as:

This statement indicates I79.8 is a manifestation code and is coded second.

The correct diagnoses codes are: A50.54 *Late congenital cardiovascular syphilis* as the first listed diagnosis, and I79.8 *Other disorders of arteries, arterioles, and capillaries in diseases classified elsewhere* as the second.

7. Uncertain diagnosis, do not code when documented as:
   - Probable
   - Suspected
   - Likely
   - Questionable
   - Possible
   - Rule out
   - Compatible with
   - Consistent with

   Instead, code the signs, symptoms, and abnormal test result(s) or other reasons for the visit.

EXAMPLE

Fatigue, suspect iron deficiency anemia: In this instance, it is only necessary to code for fatigue.

The correct diagnosis code is R53.83 *Other fatigue.*

8. Sequence codes correctly when using multiple diagnoses: The first-listed diagnosis should always be the condition or reason causing a patient to seek medical care. In addition to correct sequencing of codes, list any additional codes to describe any co-existing conditions managed by the physician that day.
9. Codes for symptoms, signs, and ill-defined conditions are not used as first listed when a related definitive diagnosis has been established. Symptoms inherent to a disease should not be reported; for example, chest pain as a symptom is not reported secondarily with a myocardial infarction.

This is how the claim would be processed and paid within the Comprehensive APCs payment structure:

Service	CPT®	Charge	SI	APC	Estimated Allowance
Supplies	------	$200		-----	Packaged into primary APC
Pharmaceutical	------	$375		-----	Packaged into primary APC
X-ray	73120	$150	Q1	5522	Packaged into primary APC
X-ray	73590	$150	Q1	5521	Packaged into primary APC
Clinical lab	85025	$45	Q4	-----	Packaged into primary APC
Medical visit	99283-25	$350	J2	5023	Packaged into primary APC
Leg fracture repair	27827	$14,000	J1	5115	$13,269.40
Hand fracture repair	26607	$4,200	J1	5113	Packaged into C-APC
Laceration repair	12046	$700	T	5051	Packaged into primary APC
Anesthesia	-------	$600		-----	Packaged into primary APC
Total		**$20,770**			**$13,269.40**

Rationale:

1. Because one of the fracture repairs (code 27827) has a status indicator of J1, the payment will be packaged as a comprehensive APC.
2. Because status indicators Q1, Q4, and T are not listed as excluded from comprehensive APC packaging, these will be packaged into the Comprehensive APC reimbursement. The status indicators that are excluded from C-APC packaging are F, G, H, L and U.
3. Follow status indicator definitions for J2 to see how to reimburse the medical visit.
   a. If there was no J1 procedure, all the procedures would be packaged into the J2 C-APC.
   b. Because there is a J1 procedure, the J2 is comprehensively packaged into the J1 procedure.
4. When there is more than one J1 service (27827 and 26607), use addendum J to determine payment (see Complexity Adjustment later in this chapter):
   a. Go to this link: https://www.cms.gov/medicare/medicare-fee-service-payment/hospitaloutpatientpps/hospital-outpatient-regulations-and/cms-1786-p.
   b. Next click on the link 2024 NPRM OPPS Addenda.
   c. Click Accept to accept the end user agreements and disclaimers.
   d. Identify the location on your computer where you want to save the file and click save.
   e. Locate the file on your computer and extract the zip file (right click on the file name and select extract all).
   f. Open the extracted folder.
   g. Click on Excel file 2024 NPRM Addendum J.
   h. Determine the rank by using the tab labeled Rank for Primary Assignment. Code 27827 ranks 191 and code 26607 ranks 1,945 making 27827 the primary code.
   i. Look to see if the code pair 27827, 26607 qualifies for a complexity adjustment by using the Complexity Adj. Evaluation tab. Code 27827 and code 26607 are not listed as a code pair in the table. The claim is paid at the rate for 27827 because it has a higher rank.

4. CPT® code 77431 is reported with the quantity billed regardless if one or two fractions are used. 77431 is not used to fill in the last week of a long course of therapy.
5. CPT® code 77435 is used for stereotactic body radiation therapy treatment management per treatment course, to one or more lesions, including image guidance, and the entire course does not exceed five fractions. Do not report CPT® code 77435 in conjunction with 77427–77432.

When treatment management is performed intraoperatively, CPT® code 77469 should be reported.

Proton Beam Treatment Delivery (77520–77525)

Proton beam is a radiation treatment modality using proton therapy as opposed to more conventional photon radiation treatment delivery. Proton beam delivery is reported based on the number of treatment areas or ports. CPT® code 77522 is reported for a simple proton treatment delivery to a single treatment area utilizing a single non-tangential/oblique port custom block with compensation. To report the simple treatment area without compensators, use CPT® code 77520. Intermediate treatment delivery utilizes two or more ports or one or more tangential/oblique ports with custom blocks and compensators and is reported with CPT® code 77523. The complex proton delivery treatment is reported with 7 CPT® code 7525 and involves two or more treatment areas utilizing two or more ports per treatment area with matching or patching fields and/or multiple isocenters, with custom blocks and compensators.

Hyperthermia (77600–77615)

Hyperthermia is the use of heat. Hyperthermia used with radiation therapy is under investigation. Some insurance carriers currently only allow for deep hyperthermia and some do not allow hyperthermia at all. Make sure you review your insurance carrier contracts and guidelines.

Clinical Brachytherapy (77750–77799)

Clinical brachytherapy uses radioactive material sealed in needles, seeds, wires, or catheters. The sealed radioactive material is placed in or near a tumor. You also may hear this referred to as internal or implant radiation therapy. Interstitial brachytherapy are seeds, or other sealed radioactive material inserted into tissue at or near the tumor site. Intracavitary brachytherapy is when it is inserted into a body cavity with an applicator. Remote high dose rate (HDR) afterloading brachytherapy involves the precise insertion of catheters into the tumor. The catheter(s) are then connected to a remote afterloading brachytherapy unit, which delivers radiation.

Nuclear Medicine (78012–79999)

Nuclear medicine involves injecting a radiopharmaceutical (for example, radionuclides) absorbed by specific organs. The radiation emitted is detected by a sensitive gamma camera. Each body organ picks up different types of isotopes and different contrast materials are used for many of the organs. The patient is not exposed to general external radiation. The images are revealed by the contrast material and detected by the gamma camera.

Other radiation services may use ionizing radiation. Ionizing radiation emits radiation outside the body, through the body parts, and exposes the film to create the image.

Chapter 8

Pathology and Laboratory

Introduction

Pathology and laboratory CPT® coding includes services primarily reported to evaluate specimens obtained from patients (body fluids, cytological specimens, or tissue specimens obtained by invasive/surgical procedures) to provide information to the treating physician. This information, coupled with information obtained from history and examination findings and other data, provides the physician with the background for the decision-making component of the evaluation and management codes.

Pathology and laboratory services are broken down into distinct category groupings according to procedure classification, and coders should become familiar with the various subcategories contained in CPT®. As with any other sections of CPT®, all introductory paragraphs and parenthetical notes should be carefully reviewed prior to code assignment. In general, clinical laboratory services are considered technical only and should be coded and billed by the facility. Very few modifiers are required for reporting clinical laboratory services.

CPT® laboratory services are delineated into distinct category groupings according to procedure classification. When locating or identifying a specific lab test for coding accuracy, it is essential to be familiar with the various lab subgroupings. They are listed as follows:

- Organ/Disease Panels
- Drug Assay
- Therapeutic Drug Assays
- Evocative/Suppression Testing
- Consultations (Clinical Pathology)
- Urinalysis
- Molecular Pathology
- Genomic Sequencing (GSPs) and Other Molecular Multianalyte Assays
- Multianalyte Assays with Algorithmic Analyses
- Chemistry
- Hematology and Coagulation
- Immunology
- Transfusion Medicine
- Microbiology
- Anatomic Pathology
- Cytopathology
- Cytogenetic Studies
- Surgical Pathology
- In Vivo Laboratory Procedures
- Other Procedures
- Reproductive Medicine Procedures
- Proprietary Laboratory Analyses

Pathology and laboratory procedures are typically paid based on a fee schedule (status indicator A) or not paid under Outpatient Prospective Payment System (OPPS) for hospital facilities when services are performed in the hospital (status indicators B, E, and M). Some procedures in this section of CPT® are paid if they are not reported with another code that has a status indicator of S, T, or V with a status indicator of Q1. Other procedures in this section are paid under the Clinical Laboratory Fee Schedule when not reported with another code that has a status indicator of J1, J2, S, T, V, Q1, Q2, or Q3 with a status indicator of Q4 or packaged under a more extensive procedure with a status indicator of N.

Modifiers Used in Laboratory and Pathology Services

Modifier 59—Appended to the procedure code to indicate a procedure was independent from other services performed on the same day

Modifier 90—Appended to the procedure code when an entity other than the treating or reporting physician performs an outside laboratory procedure

Modifier 91—Appended to the procedure code when it is necessary to repeat the same laboratory test on the same day to obtain subsequent (multiple) test results

Modifier 92—Alternative Laboratory Platform Testing

Code Location

When determining the correct code for a specific laboratory assay, use the CPT® Index to locate the procedural code if the formal name, condition, or abbreviation of the procedure is known. See the following examples for reference:

While these codes will be assigned by hospital coders when the services described are provided, some Category III codes equate to an Ambulatory Payment Classification (APC) reimbursement.

Other Category III CPT® codes will not result in direct APC reimbursement, although some facilities may be paid as part of a Category B IDE (Investigational Device Exemption) clinical trial.

Section Review 9.4

Provide the appropriate CPT® code(s) for the following scenarios

1. An established patient is seen in the outpatient clinic for dehydration. The physician orders an infusion of D5W with electrolyte supplement. Patient was infused more than three hours.

   CPT®/HCPCS Level II Code(s) _____

2. Percutaneous transluminal balloon angioplasty of the left anterior of the pulmonary artery performed on two vessels.

   CPT®/HCPCS Level II Code(s) _____

3. Sharp selective debridement of a sacral pressure ulcer with black eschar surrounded by chronic inflammation with dark pigmentation. The total wound surface area selectively debrided is 25 sq. cm in the hospital outpatient wound care center. The service was provided by the RN under direct physician supervision on a 68-year-old diabetic patient.

   CPT®/HCPCS Level II Code(s) _____

4. A spectral Doppler ECHO, complete transthoracic with color flow-velocity mapping was performed in the outpatient hospital radiology department.

   CPT®/HCPCS Level II Code _____

5. Right and left heart catheterization with injection procedures for coronary angiography, pulmonary angiography, and left atrial angiography, including imaging supervision, interpretation, and report.

   CPT®/HCPCS Level II Code _____

6. A patient is known to be allergic to two kinds of bees and hornets. The patient is seen in the outpatient hospital allergy clinic for an injection. The clinic nurse under direct physician supervision gives the patient the injection.

   CPT®/HCPCS Level II Code _____

7. A 68-year-old patient had an analysis of her cochlear implant with programming a few days following outpatient surgery in the outpatient hospital ENT department.

   CPT®/HCPCS Level II Code _____

8. A patient with a dual lead pacemaker visited the cardiology clinic in the hospital for evaluation and reprogramming of her pacemaker.

   CPT®/HCPCS Level II Code _____

9. A patient underwent a diagnostic gastroesophageal reflux test with a nasal catheter, intraluminal with electrode placement for 1 hour and 45 minutes.

   CPT®/HCPCS Level II Code _____

10. A patient underwent a gonioscopy in the outpatient surgery department under general anesthesia.

    CPT®/HCPCS Level II Code _____

Answer Sheet

Medical Terminology

1. (A) (B) (C) (D)
2. (A) (B) (C) (D)
3. (A) (B) (C) (D)
4. (A) (B) (C) (D)
5. (A) (B) (C) (D)
6. (A) (B) (C) (D)
7. (A) (B) (C) (D)
8. (A) (B) (C) (D)
9. (A) (B) (C) (D)
10. (A) (B) (C) (D)

ICD-10-CM

11. (A) (B) (C) (D)
12. (A) (B) (C) (D)
13. (A) (B) (C) (D)
14. (A) (B) (C) (D)
15. (A) (B) (C) (D)
16. (A) (B) (C) (D)
17. (A) (B) (C) (D)
18. (A) (B) (C) (D)
19. (A) (B) (C) (D)
20. (A) (B) (C) (D)

Payment Methodologies

21. (A) (B) (C) (D)
22. (A) (B) (C) (D)
23. (A) (B) (C) (D)
24. (A) (B) (C) (D)
25. (A) (B) (C) (D)
26. (A) (B) (C) (D)
27. (A) (B) (C) (D)
28. (A) (B) (C) (D)
29. (A) (B) (C) (D)
30. (A) (B) (C) (D)

General CPT®

31. (A) (B) (C) (D)
32. (A) (B) (C) (D)
33. (A) (B) (C) (D)
34. (A) (B) (C) (D)
35. (A) (B) (C) (D)
36. (A) (B) (C) (D)
37. (A) (B) (C) (D)
38. (A) (B) (C) (D)
39. (A) (B) (C) (D)
40. (A) (B) (C) (D)
41. (A) (B) (C) (D)
42. (A) (B) (C) (D)
43. (A) (B) (C) (D)
44. (A) (B) (C) (D)
45. (A) (B) (C) (D)
46. (A) (B) (C) (D)
47. (A) (B) (C) (D)
48. (A) (B) (C) (D)

Surgical Procedures

49. (A) (B) (C) (D)
50. (A) (B) (C) (D)
51. (A) (B) (C) (D)
52. (A) (B) (C) (D)
53. (A) (B) (C) (D)
54. (A) (B) (C) (D)
55. (A) (B) (C) (D)
56. (A) (B) (C) (D)
57. (A) (B) (C) (D)
58. (A) (B) (C) (D)
59. (A) (B) (C) (D)
60. (A) (B) (C) (D)
61. (A) (B) (C) (D)
62. (A) (B) (C) (D)
63. (A) (B) (C) (D)
64. (A) (B) (C) (D)
65. (A) (B) (C) (D)
66. (A) (B) (C) (D)
67. (A) (B) (C) (D)

Miscellaneous

68. (A) (B) (C) (D)
69. (A) (B) (C) (D)
70. (A) (B) (C) (D)
71. (A) (B) (C) (D)
72. (A) (B) (C) (D)
73. (A) (B) (C) (D)
74. (A) (B) (C) (D)
75. (A) (B) (C) (D)

40. **Answer:** C. 23044-78-RT, M00.9, T81.42XA

Rationale: The patient was returned to the operating room for incision and drainage of a postoperative infection of the acromioclavicular joint. An incision into a joint is referred to as an arthrotomy. Look in the CPT® Index for Incision and Drainage/Shoulder/Arthrotomy/Acromioclavicular Joint and you are referred to 23044. Verify in the numeric section. Modifier 78 is appended to indicate it was an unplanned return to the operating room by the same provider for a replated procedure during the post operative period. Modifier RT is appended to indicate the procedure was performed on the right side.

The diagnosis is a postoperative infection of the acromioclavicular joint. Look in the ICD-10-CM Alphabetic Index for Infection/acromioclavicular and you are referred to M00.9. This is a postoperative infection. Look for Infection/postoperative wound/surgical site/deep incisional and you are referred to T81.42-. In the Tabular List, T81.42XA is reported for initial encounter.

41. **Answer:** B. 56501, N90.1

Rationale: The patient has a destruction of a vulvar lesion. Look in the CPT® Index for Vulva/lesion/destruction and you are referred to 56501-56515. In the numeric section, 56501 is reported for a simple procedure.

The patient has vulvar intraepithelial neoplasia II. Look in the ICD-10-CM Index to Diseases and Injuries for Neoplasia/intraepithelial/vulva/grade II and you are referred to N90.1. Verify in the Tabular List.

42. **Answer:** B. 10060, L02.11

Rationale: The patient has an incision and drainage of an abscess in the neck. The incision was only in the skin. Although a Q-tip was used to open to deeper levels, there was no mention of cutting through the fascia; therefore, this is reported as an incision and drainage of the skin. Look in the CPT® Index for Incision and Drainage/Abscess/Skin and you are referred to 10060, 10061. 10060 is reported for simple or single.

The diagnosis is an abscess in the neck. Look in the ICD-10-CM Index to Diseases and Injuries for Abscess/neck (region) and you are referred to L02.11. Verify in the Tabular List.

43. **Answer:** D. 58671, Z30.2

Rationale: The provider performs a fallopian tube occlusion by a Filshie Clip. Look in the CPT® Index for Fallopian Tube/Occlusion/by Device and you are referred to 58615, 58671. 58615 is an open procedure and 58671 is laparoscopic making 58671 the correct code.

The patient is being seen for sterilization. Look in the ICD-10-CM Index to Diseases and Injuries for Encounter (for)/Sterilization and you are referred to Z30.2. Verify in the Tabular List.

44. **Answer:** A. 37722-LT, 37700-RT, I83.93

Rationale: The patient has treatment of varicose veins by stab phlebectomy and ligation and division. Look in the CPT® Index for Division/Saphenbous Vein and you are referred to 37700, 37722, and 37735. For the left leg, the greater saphenous vein was ligated, divided, and stripped making 37722-LT the correct code. For the right leg, the long saphenous vein was ligated and divided at the saphenofemoral junction making 37700-RT the correct code for the right leg.

The diagnosis is varicose veins. Look in the ICD-10-CM Index to Diseases and Injuries for Varix/leg and you are referred to I83.9-. In the Tabular List I83.93 for both legs.

45. **Answer:** B. 39402, C34.01

Rationale: The provider takes lymph node biopsies through a mediastinoscope. Look in the CPT® Index for Mediastinoscopy/Biopsy/Mediastinal Lymph Node and you are referred to 39402. Verify in the numeric section.

The diagnosis is right hilar lung cancer. Look in the Table of Neoplasms for Neoplasm, neoplastic/lung/hilus. Use the code from the primary malignancy column which refers you to C34.0-. In the Tabular List, C34.01 is reported for the right lung.

Cases

46. **Case 1**

Preoperative Diagnosis: Pelvic mass, possible adnexal neoplasm

Procedure: Laparoscopic excision of ovarian tumor

Postoperative Diagnosis: Neurofibroma of the retroperitoneum [1]

Anesthesia: General endotracheal

Findings: Uterus, tubes and ovaries were unremarkable bilaterally; the left ureter was distorted in the direction of the retroperitoneal mass. Mass oval shaped, 2.2 x 3 cm adjacent to the left adnexa, extending inferiorly into the pelvis.

Estimated Blood Loss: 25 cc.

Indications: Pelvic pain, pelvic mass. Patient had increasing pelvic pain, ultrasound revealed a homogeneous pelvic mass in the left adnexa region, 2.0 x 2.5 cm. Patient aware of malignant potential preoperatively, consented for laparoscopy with frozen section, possible laparotomy if malignant.

Description of procedure: The patient was taken to the operating room and placed on the operating table. She was intubated under general tracheal anesthesia. She was prepped and draped in the usual sterile fashion. A Foley catheter was placed in the bladder under sterile conditions. A small infraumbilical incision was made, the periumbilical tissue was grasped bilaterally with towel clips, elevated and the Verres needle was inserted. The abdomen was insufflated with carbon dioxide gas, the Verres needle was removed and a 12 mm trocar was placed infraumbilically in the incision. The laparoscope was placed through the trocar and under direct visualization, a second 12 mm trocar was placed suprapubically in the midline. Two 5 mm trocars were placed laterally under direct visualization. A blunt probe was placed through the right lateral trocar and a suction/irrigation catheter was placed through the left lateral trocar. [2]

The pelvic contents were then visualized; the uterus and right adnexa appeared normal, there was no evidence of endometriosis or endometrial implants. In the area of the left adnexa, there was a mass approximately 2 to 3 cm in diameter with filmy appearing adhesions to the left ovary. The oval shaped mass was retroperitoneal extending inferiorly into the pelvis.

The peritoneum over the mass was incised and the retroperitoneal space was entered. The filmy adhesions to the left ovary were easily lysed with light blunt dissection and gentle traction. Upon inspection of the mass, the left ureter was noted to be distorted and coursing 2 cm from the mass inferiorly. Using traction, the mass was elevated superiorly; several small vessels were noted laterally coming into the mass from the left pelvic sidewall. These vessels were cauterized with bipolar cautery and cut sharply thus freeing the mass. [3] Care was taken to observe the ureter which fell laterally away from the mass with this dissection. The left ureter was further observed at this time and normal peristalsis of the ureter was noted. The pelvis, including the operative site was irrigated and inspected; hemostasis was noted to be good.

An Endo catch bag was inserted through the lower trocar; the mass was placed inside the Endo catch bag. The mass was then removed from the pelvis through this lower trocar site with gentle traction, it was necessary to extend the lower trocar incision site to approximately 2 cm to remove the surgical specimen in the Endo catch. [4] The mass was sent for a frozen section, found to be benign, consistent with a neurofibroma. Permanent sections confirmed this diagnosis.

The pelvis was again inspected and irrigated; hemostasis was good. The lateral and suprapubic trocars were removed under direct visualization and the gas was allowed to escape; the infraumbilical trocar was removed. The midline trocar sites (suprapubic and infraumbilical) fascia was closed with 0 Vicryl; a subcuticular suture was applied to all four skin incisions, Steri Strips and a dressing were placed. Sponge and needle counts were correct. The patient was taken to the recovery in stable condition. Blood loss was 25 cc.

[1] The postoperative diagnosis is used for reporting.

[2] Supporting documentation of a laparoscopic procedure.

[3] Freeing of the tumor.

[4] Removal of the tumor.

crossing the ulnar neurovascular bundle and proximally under vision in the antebrachial fascia of the forearm. The median nerve was adherent and an epineurotomy was carried out. The thenar branch was carefully protected and the wound was irrigated carefully. Hemostasis was achieved and closure was accomplished with 5-0 nylon sutures applied to the skin to ensure good coaptation of the skin edges. A sterile compressive dressing was applied with antibiotic laden, nonadherent gauze. A volar cock-up wrist splint was applied with the thumb and digits free and the wrist in a moderate dorsiflexion position.

All sponge, needle, and instrument counts were correct. There were no operative complications. The tourniquet was deflated and the patient was returned to the recovery room in good condition. Estimated blood loss was less than 50 cc.

Version A:

There is one CPT® code reported for this case. What CPT® coding is reported?

50. A. 64721-LT

There is one ICD-10-CM code reported for this case. What ICD-10-CM coding is reported?

50. AA. G56.02

Version B:

Answer: B. 64721-LT, G56.02

Rationale: A carpal tunnel release is performed. Look in the CPT® Index for Release/Carpal Tunnel or Carpal Tunnel Syndrome/Decompression (64721). The epineurolysis is included in the carpal tunnel release. LT is appended to indicate it is the left side.

Carpal tunnel syndrome for the left upper limb is reported with G56.02. Look in the ICD-10-CM Alphabetic Index for Syndrome/carpal tunnel G56.0-. In the Tabular List, fifth character 2 is reported for the left side.

Index

D

E

F

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