CPC®
Certified Professional Coder
Certification Preparation

2022
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Regarding HCPCS Level II
HCPCS Level II codes and guidelines discussed in this book are current as of press time.

Clinical Examples Used in this Book
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, exams, and workbooks are actual, redacted office visits 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**

The Official CPC® Certification Study Guide, (2022 edition) is organized to help you prepare for the exam certifying you as a professional medical coder. The Certified Professional Coder (CPC®) credential is awarded by AAPC, the primary organization of more than 200,000 members working in medical coding, billing, auditing, clinical documentation, compliance, and physician practice management.

This study guide, developed in cooperation with AAPC staff and members, can help you understand and practice the concepts, elements, and rules of medical coding. Throughout the Official CPC® Certification Study Guide are easy-to-understand explanations, examples, coding tips, and exercises meant to help you prepare for your exam.

Medical coding continues to grow and mature as a profession. Medical coders report the diagnoses, procedures, and supplies reported by physicians and other medical professionals to commercial and federal payers, such as Aetna or Medicare. They work closely with medical staff and must master medical terminology, anatomy, and physiology and apply this to healthcare providers’ notes or operative reports.

As healthcare evolves so does medical coding. Medical coders perform in a variety of situations for physicians and facilities. They may participate in the actual billing process or audit claims sent to payers. They may code in independent billing companies. Medical coders often become the officers in charge of compliance with federal and state medical billing and coding regulations. They may work for the payers themselves as auditors or auditors. Experienced coders often become consultants, serving clients who need coding, billing, auditing, or compliance assistance.

Medical coders will prove even more important as elements of healthcare reform and standardized electronic medical records are implemented. Coders will be instrumental as advisers, decision makers, technicians, medical coders, and auditors in the coming years.

**CPC® Confirms Credibility**

The CPC® credential (and its derivative credentials: COC®, for example) illustrates to employers and colleagues that you understand the many facets of coding. A CPC® possesses the following:

- Knowledge of anatomy, physiology, and medical terminology necessary to correctly code provider diagnoses and services
- Skill in accurate medical coding for diagnoses, procedures, and services in physician-based settings
- Proficiency across a wide range of services, which include evaluation and management, anesthesia, surgical services, radiology, pathology, and medicine
- Sound knowledge of medical coding rules and regulations including compliance and reimbursement
- Understanding of issues such as medical necessity, claims denials, bundling, and charge capture
- Expertise of how to integrate medical coding and reimbursement rule changes into a practice's reimbursement processes

**The Study Guide**

The Official CPC® Certification Study Guide begins with a view of the business of medicine to help you understand the overall view of the medical office and how the coder fits in. After a review of anatomy, you will learn about ICD-10-CM guidelines with real life examples of how to apply them. Each body system is reviewed in its entirety, includes a review of the anatomy, related ICD-10-CM diagnosis coding, CPT® coding, HCPCS Level II coding, and modifiers. End of chapter reviews provide certification questions similar to those you will find on the exam, along with operative notes for each section for you to code. The study guide concludes with testing techniques and a 50-question review to test your knowledge for the CPC® certification exam.

Unlike most coding certification study guides that focus on each code set, this one more realistically prepares the coder not only for the examination but for the field, where each case more likely will include at least two code sets and require the use of modifiers. Each chapter addresses specifically the particular issues associated with each body area or service offered by the healthcare provider.

**Clinical Examples Used in this Book**

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...
Hair

Hair has two separate structures:

1. The follicle contains several layers. At the base is a bulb-like projection, called a papilla. Capillaries nourish the bulb. Inner and outer sheaths protect and mold the growing hair shaft surrounding the follicle. The inner sheath ends at the opening of the sebaceous gland, which secretes sebum that may pocket to cause benign lesions on the scalp. Muscles, called the arrector pili, attaches to the outer sheath and causes the hair to stand up when it contracts.

2. The shaft is composed of keratin in three layers: the medulla, cortex, and cuticle. Pigment cells in the cortex and medulla give hair its characteristic color.

Nails

Source: DOI:10.15347/wjm/2014.010. ISSN 20018762. (Own work) [CC BY 3.0 (http://creativecommons.org/licenses/by/3.0)], via Wikimedia Commons
Chapter 3  Introduction to ICD-10-CM

Code first
This instruction is used in categories not intended to be the principal diagnosis. The note requires the underlying disease (etiology) be recorded first and the manifestation be recorded second. The Code first note appears only in the Tabular List.

**EXAMPLE**
D63.0 Anemia in neoplastic disease
Code first neoplasm (C00-D49)
The Code first note indicates the codes listed should be sequenced first. If a female patient with right breast cancer has anemia due to the cancer, the proper codes and sequencing are C50.911, D63.0

Use additional code, if applicable
The causal condition note indicates this code may be assigned as a diagnosis when the causal condition is unknown or not applicable. If a causal condition is known, the code should be sequenced as the principal diagnosis.

**EXAMPLE**
D68.32 Hemorrhagic disorder due to extrinsic circulating anticoagulants
Use additional code for adverse effect, if applicable, to identify drug (T45.515, T45.525)
In this example, report code T45.515A in addition to D68.32 only if it is documented that the hemorrhagic disorder is an adverse effect of anticoagulants.

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.

**EXAMPLE**
If a patient has nausea and vomiting, it is reported with one code that describes both symptoms. Look for the term vomiting in the Alphabetic Index in your ICD-10-CM code book.

Vomiting R11.10
with nausea R11.2
In this example, R11.2 is reported for a patient who has symptoms of nausea and vomiting. It would be inappropriate to report two codes when one code describes the patient’s signs and symptoms.

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).

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.

Notes
Notes are used to define terms, clarify information, or list choices for additional characters.

Other
Other or other unspecified codes are used when the information in the medical record provides detail for which a specific code does not exist. Index entries with NEC in the line designate other codes in the Tabular List. These index entries represent specific disease entities for which no specific code exists, so the term is included within the other code.

See
This instruction directs you to a more specific term under which the correct code can be found.

See also
This indicates additional information is available that may provide an additional diagnosis code.

See category
The see category indicates that you should review the category specified before assigning a code.

Unspecified
Unspecified codes are used when the information in the medical record is not available for coding more specifically and should only be selected when there is no other option. For example, if the provider documents hyperfunction of the pituitary gland without additional information as to the cause or type of pituitary gland hyperfunction, the only option is an unspecified code E21.3 Hyperparathyroidism, unspecified.

And
The word “and” in a code description can mean either “and” or “or.” For example, code A52.75 Syphilis of kidney and ureter.

With
In the ICD-10-CM Alphabetic Index the word ‘with’ is listed immediately under the main term, not in alphabetical order. Terms indented under the term ‘with’ in the Alphabetic Index (either under a main term or a subterm) are presumed to have
Introduction
This chapter reviews CPT®, ICD-10-CM, and HCPCS Level II coding for the respiratory system, the mediastinum and diaphragm, and the hemic and lymphatic systems. Objectives for this chapter include:

- Highlight basic anatomy and functions relevant to these systems
- Define key terms
- Provide practical advice to apply CPT® codes and modifiers relevant to these systems
- Review common diagnoses
- Introduce HCPCS Level II codes and coding guidelines as they apply to these systems

Anatomy and Medical Terminology
The Respiratory System
The human respiratory system begins with air entering the nostrils. The cilia are microscopic filaments bathed in nasal mucus that cover the inside surface of the nose. A sticky layer of mucus and the cilia draws particles to the back of the throat and into the esophagus for swallowing.

The larynx (voice box) connects the pharynx with the trachea. The larynx is formed by nine cartilages connected by muscles and ligaments. The epiglottis covers the larynx to protect the trachea from inhaled food or liquid. The larynx also contains vocal cords separated by a triangular opening, called the glottis, through which air flows. The hyoid bone provides attachment to the muscles of the floor of the mouth, the tongue above, the larynx below, the epiglottis and pharynx behind.

The trachea (windpipe) connects the nose and mouth to the lungs. If the epiglottis fails to cover the larynx, food or liquid may enter the trachea, the body's natural defense is to cough. For males, the largest cartilage of the larynx and thyroid cartilage, grow large and protrudes at the bottom of the throat called Adam's Apple.

Trachea, Bronchi, and Bronchioles
The trachea branches into the right and left bronchi. The carina is the ridge that separates the opening of the right and left bronchi. The right bronchus branches into three bronchi that provide airways to the three lobes of the right lung. The left bronchus branches into two bronchi to the two lobes of the left lung. The lobar bronchi branch into tertiary or segmental bronchi, and into smaller bronchioles. Bronchioles branch into alveolar ducts and sacs. The alveoli, or air sacs, are the primary units for the exchange of oxygen and carbon dioxide in the lungs. The exchange occurs by diffusion across the alveoli and the walls of the capillaries that surrounds the alveoli.

The lungs are in the thoracic cavity. The right lung is divided into three lobes and the left lung is divided into two lobes. The lobes are divided by fissures and the individual lobes are divided further into segments and lobules.
Eye: Introduction and Anatomy

The eyeball is composed of a tough membrane called sclera. This white outer skin of the eye is covered with a thin protective layer of conjunctiva. Light first enters the eye through the cornea. The cornea has five layers; sometimes corneal defects will be managed by removing one or two layers, rather than full-thickness cornea. The cornea meets the sclera in a ring called the limbus, also known as the sclerocorneal junction. Behind the cornea is the anterior segment of the eye, which is filled with a clear, salty fluid called aqueous humor.

Next, light from the aqueous humor enters the crystalline lens, a convex disc suspended on threads just behind the iris. The iris is a muscle that expands and contracts to regulate the amount of light entering the posterior chamber of the eye through the pupil. If the light is too bright, the iris expands so the size of the pupil shrinks. If there is too little light, the iris contracts to enlarge the pupil and allow more light into the eye. The threads holding the lens and the ciliary body to which they are connected automatically tug at the lens to change its shape to help focus on items near or far.

After the light has been bent by the crystalline lens, it enters the vitreous humor, a gel-like mass that fills the large posterior chamber of the eye. The vitreous humor presses against the inner layer of the eye, maintaining the eyeball’s shape and keeping the blood-rich choroid layer in contact with the retina. The light is placed upon the retina’s rods and cones like a projected image at a movie theater, and these images are transmitted via the optic nerve to the brain.

The eyeball’s shape affects the way light is focused and directed (refraction). Any reduction in fluid within the eye will affect...
3. **C. 88147**

**RATIONALE:** In the CPT® Index, look for Smear and Stain/Cervical or Vaginal Smears/Partially Automated Screen or Cervical Smears/Cytopathology/Partially Automated Screen. Code 88147 correctly reports the smear/cytopathology was taken from the cervix and was screened by an automated system under the physician's supervision.

4. **D. 80307, 80361**

**RATIONALE:** In the CPT® Index, look for Drug Screen directing you to See Drug Assay. Look in the CPT® Index for Drug Assay. Because the method is thin layer chromatography (TLC), code 80307 is correct. Then look for Drug Assay/Drug Procedure/Definitive Drug Class/Opiates, 1 or more which directs you to 80361. Review the codes to verify accuracy.

5. **C. 88304, 88305**

**RATIONALE:** In the CPT® Index, look for Pathology and Laboratory/Surgical Pathology/Gross and Micro Exam. You are referred to a list of Level II–Level VI. Review the codes to choose appropriate services. For this encounter, two lesions were removed. The first one a pigmented nodule falling under code 88305 (Skin-other than cyst/tag/debridement/plastic repair). The second excision was an inclusion cyst, falling under code 88304 (Skin-cyst/tag/debridement).

6. **D. 85380**

**RATIONALE:** In the CPT® Index, look for Fibrin Degradation Products - See Pathology and Laboratory, Fibrin Degradation Products. Look for Pathology and Laboratory/Fibrin Degradation Products/D-dimer. Review the codes to choose the appropriate service. Neither code listed is the correct code but continue to look at this code area and you will see 85380. Code 85380 correctly reports testing for a possible deep vein thrombosis (venous thromboembolism).

7. **C. 80055, 81025**

**RATIONALE:** In the CPT® Index, look for Blood Tests/Panels/Obstetric. Review the codes to determine which code is correct based on the tests included. According to CPT® guidelines, “In order to report a code for a panel, all of the tests listed in the panel definition must be performed. If tests are performed in addition to those listed in the panel definition, they should be reported in addition to the panel code.” For this encounter, an additional test, urine pregnancy test, was ordered. In the CPT® Index, look for Pregnancy Test/Urinalysis. You are referred to 81025. Review the codes to verify accuracy.

8. **A. 89268, 89280**

**RATIONALE:** In the CPT® Index, look for Insemination/Artificial/of Oocytes referring you to 89268. Code 89268 is the correct code because the embryologist is inseminating a sperm cell to an egg (oocyte) for fertilization. In the CPT® Index, look for Fertilization/Assisted Oocyte/ Microtechnique. Review the codes to choose the appropriate service. Code 89280 is correct because 4 oocytes (less than 10) were fertilized. According to CPT® guidelines, “Code 89268, Insemination of oocytes, includes the work involved in conventional in vitro insemination of oocytes and is not included in assisted oocyte fertilization (89280, 89281) and both should be reported if both are performed.”

9. Lab Report #1: 88305, 88302, L98.499, K43.2

**RATIONALE:** Two separate specimens were received and analyzed: Although the first specimen is received in two cassettes, it is in one container and analyzed as one diagnosis; therefore, it is coded as one unit. In the CPT® Index, look for Pathology and Laboratory/Surgical Pathology/Gross and Micro Exam. You are referred to a list of Level II–Level VI. Review the codes to choose appropriate services. The skin ulcer is found under surgical pathology code 88305 (Skin, other than cyst/tag/debridement/plastic repair) and the old hernia mesh is found under surgical pathology code 88302 (Hernia sac, any location). Although this is not a hernia sac, according to CPT® guidelines for Surgical Pathology, “any unlisted specimen should be assigned to the code which most closely reflects the physician work involved when compared to other specimens assigned to that code.” For the diagnosis codes, look in the ICD-10-CM Alphabetic Index for Ulcer/skin referring you to L98.499. A recurrent ventral hernia is coded as an incisional hernia. Look for Hernia/incisional referring you to K43.2. Verify codes selections in the Tabular List.
41. **A. Gastroepiploic**

**RATIONALE:** This may seem like a very tough question and without your code book resources, it would be. Very few coders who are not coding vascular procedures daily would know this answer. However, the job as coders is to be resourceful and to be able to find answers to questions quickly. In this case, Appendix L of your CPT® code book contains charts with the vascular families. The answer is easily found by turning to the section for First Order, Celiac trunk.

42. **C. L03.319, B95.62**

**RATIONALE:** The “apron of fat” is belly fat that creates a redundancy of skin along the hip line of an obese person’s front torso, part of the trunk. This scenario requires two codes, one to report the cellulitis and one to report the infective agent causing the cellulitis. In the ICD-10-CM Alphabetic Index, look for Cellulitis/trunk referring you to code L03.319; this code reports cellulitis of that region. In the Alphabetic Index, look for MRSA (Methicillin resistant Staphylococcus aureus)/as the cause of diseases classified elsewhere, referring you to code B95.62. MRSA is more difficult to treat than methicillin susceptible staph (MSSA) and this differentiation is clinically significant. Code B95.62 is a supplemental code and should not be used as a principal diagnosis.

43. **D. S46.011A, W00.0XXA**

**RATIONALE:** The patient slipped and fell causing the tear. This is a traumatic injury. In the ICD-10-CM Alphabetic Index, look for Tear, torn (traumatic)/rotator cuff/traumatic referring you to S46.01-. In the Tabular List, the 6th character is 1 for the right rotator cuff.

The 7th character is A for initial encounter is used because the patient is still receiving active treatment with the diagnostic testing. ICD-10-CM guideline 1.C.19.a indicates that the initial encounter is for active treatment for the condition (surgical treatment, emergency encounter, evaluation, and continuing treatment by the same or different physician).

The external cause code is used to identify how the injury occurred. Using the ICD-10-CM Index to External Causes, look for Slipping (accidental) (on same level) (with fall)/on ice, referring you to W00.0-. In the Tabular List, this code requires a 7th character; however, the code is four characters in length. Placeholders X will be required to keep character A in the 7th position. The complete code is W00.0XXA.

44. **C. Z12.39, R92.2, Z80.3**

**RATIONALE:** Code the special screening as a reason for the encounter along with a code to report the patient’s breast density, which provides medical necessity for a more extensive test. Dense breast tissue occurs in many premenopausal women. It can interfere with reading a mammogram and mask abnormalities in the image. In the ICD-10-CM Alphabetic Index, look for Screening/neoplasm (malignant)/breast referring you to code Z12.39. In the Alphabetic Index, look for Breast/dense referring you to code R92.2. Look in the Alphabetic Index for History/family (of)/malignant neoplasm (of)/breast and you are referring you to code Z80.3. Verify codes in the Tabular List.

45. **B. A4312**

**RATIONALE:** In the HCPCS Level II code book, look for Foley catheter. Review the code range to which you are referred. A two-way silicone Foley catheter insertion tray is reported with code A4312.

46. **B. J0882**

**RATIONALE:** In the HCPCS Level II code book, look in the Table of Drugs for Aranesp and you are directed to see Darbepoetin Alfa. Look in the Table of Drugs for Darbepoetin Alfa and there are two code options, J0881 and J0882. Code J0882 is for 1 mcg for a patient with ESRD on dialysis.

47. **A. They can never be the first listed code**

**RATIONALE:** According to the ICD-10-CM guidelines, in most cases manifestation codes will have in the code title, “in diseases classified elsewhere.” Codes with this title are a component of the etiology/manifestation convention. The code title indicates that it is a manifestation code. “In diseases classified elsewhere”, codes are never permitted to be used as first-listed or principal diagnosis codes. They must be used in conjunction with an underlying condition code and they must be listed following the underlying condition.
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