9.2 CVD Case Study

- I25.110 Angina – see Arteriosclerosis, coronary (artery), native vessel with angina pectoris, unstable
- I69.351 Hemiplegia, following, cerebrovascular disease, cerebral infarction
- Z95.1 Status (post), aortocoronary bypass

Acute Myocardial Infarction

- Code category I21 for initial MI less than or equal to 4 weeks old
- Code category I22 for subsequent MI
  - Use when a patient who has suffered an AMI has a new AMI within the 4 week time frame of the initial AMI
  - Must be used in conjunction with a code from category I21-never alone

Acute Myocardial Infarction

- I21.3, ST elevation (STEMI) myocardial infarction of unspecified site is default for “unspecified MI”
- If an AMI is documented as nontransmural or subendocardial, but the site is provided, it is still coded as a subendocardial AMI
- Old or healed MI not requiring further care is I25.2
9.3 AMI Case Study

Acute non-ST anterior wall myocardial infarction suffered 5 days ago and atrial fibrillation

I21.4 Infarct, myocardium acute with non ST elevation, 4 weeks or less (NSTEMI)

I48.91 Atrial Fibrillation

9.4 AMI Case Study

Patient from previous case presents to ED two weeks later with acute inferior wall MI. She is still being monitored following her initial MI two weeks ago and is still suffering from atrial fibrillation

I22.1 Infarct, myocardial acute, 4 weeks or less, recurrent

I21.4 Infarct, NSTEMI

I48.91 Atrial Fibrillation

Chapter 9 Take Away Point

With all coding rule changes, very significant expansion of specificity and detail, the greatly increased complexity of the codes, and the frequency in which circulatory disorders are coded, this will likely be the most challenging chapter to master
Respiratory condition described as occurring in more than one site that is not specifically indexed, classify to the lower anatomical site (e.g. tracheobronchitis to bronchitis in J40).

Additional codes required for some categories:
- To identify infectious agent or virus
- Associated lung abscess
- Underlying disease
- Tobacco use or exposure

**Acute Exacerbation**

- COPD and Asthma
  - acute exacerbation
    - Worsening or decompensation of a chronic condition
    - Not equivalent to an infection superimposed on a chronic condition
    - May be triggered by an infection
Influenza

- Code only confirmed cases due to certain identified viruses (J09 and J10)
- Suspected, possible or probable should be coded to J11, Influenza due to unidentified influenza virus (use caution when coding these, clarify if possible)

Ventilator Associated Pneumonia

- Only code based on provider documentation
- Additional code required to identify organism
- Do not use an additional code from categories J12-J18 to identify type of pneumonia
  - UNLESS: Patient was admitted to hospital with one type of pneumonia and subsequently developed VAP (which would become a secondary diagnosis)

10.1 COPD Case Study

**COPD with emphysema**

J43.9 Emphysema (remember that emphysema IS COPD) read the notes in the book – more specific – COPD is a generic code

*Pay attention to includes and excludes notes*
10.2 Asthma Case Study

Moderate persistent asthma with status asthmaticus and acute exacerbation of chronic obstructive pulmonary disease

- J45.42 Asthma, asthmatic, moderate persistent, with, status asthmaticus
- J44.1 Disease, lung, obstructive (chronic), with, acute, exacerbation NEC

10.3 Pneumonia Case Study

MSSA pneumonia

- J15.211 Pneumonia due to methicillin susceptible Staphylococcus aureus (MSSA)

10.4 URI/INFLUENZA Case Study

Upper respiratory tract infection due to novel influenza A virus

- J09.X2 Influenza (bronchial) (epidemic) (respiratory) (upper) (unidentified influenza virus), due to identified novel influenza A virus, with, respiratory manifestations, NEC
A coder must pay very close attention to the guidelines and notes in both the Alphabetic Index and the Tabular List in Chapter 10 to assign the correct codes.

Patient with recurrent right inguinal hernia with gangrene and obstruction

K40.41 Hernia, inguinal, with gangrene (and obstruction) recurrent

- Category note:
  - Hernia with both gangrene and obstruction is classified to hernia with gangrene
11.2 Gastric Ulcer Case Study

Acute gastric ulcer with hemorrhage

K25.0 Ulcer, ulcerated, ulcerating, ulceration, ulcerative, gastric – see Ulcer, stomach (eroded) (peptic) (round), acute, with, hemorrhage

11.3 Crohn’s Case Study

Crohn’s disease of small intestine with small bowel obstruction

• An additional code for the small bowel obstruction is not required as the combination code in ICD-10-CM identifies both the Crohn’s disease and the small bowel obstruction.

  • K50.012 Crohn’s disease – see Enteritis, regional, Enteritis (acute) (diarrheal) (hemorrhagic) (noninfective) (septic), regional (of), small intestine, with complication, intestinal obstruction

Chapter 11 Take Away Point

This chapter looks and feels the same as ICD-9 but close attention must be paid to combination codes and instructional notes indicating the need for additional codes.
CHAPTER 12

Pressure Ulcer Stage Codes

• Combination codes that identify site and stage
• Severity designated by stages 1-4, unstageable and unspecified based on clinical documentation
• Any associated gangrene should be sequenced first
• Unspecified vs. unstageable
• No code is assigned for healed pressure ulcer

12.1 Pressure Ulcer Case Study

Patient with gangrenous pressure ulcer of right hip with cellulitis and pressure ulcer of sacrum documented by physician. Nursing assessment indicated stage 2 sacral ulcer and stage 3 decubitus ulcer of right hip.
12.1 Pressure Ulcer Case Study

- I96 – Ulcer, gangrenous, gangrene
- L89.213 – Ulcer, pressure, Stage 3, hip
- L89.152 – Ulcer, Stage 2, sacral
- L03.115 – Cellulitis, lower limb

12.2 Stasis Ulcer Case Study

- Atherosclerosis of right ankle (native artery), with non-healing ulcer, with breakdown of skin

12.2 Stasis Ulcer Case Study

- 170.233 Atherosclerosis, see also arteriosclerosis. Arteriosclerosis, arteriosclerotic (diffuse) (obliterans) (of) (senile) (with calcification), extremities (native arteries) leg, right, with ulceration (and intermittent claudication and rest pain), ankle
- L97.311 Ulcer, ulcerated, ulcerating, ulceration, ulcerative, lower limb (atrophic) (chronic) (neurogenic) (perforating) (pyogenic) (trophic) (tropical) ankle, right, with skin breakdown only
12.3 Rash Case Study

A patient with a rash on the trunk and upper extremities over the last 3-4 days due to Ramipril taken for hypertension. Physician discontinues Ramipril and prescribes Captopril and a topical cream for localized dermatitis.

Chapter 12 is another chapter with extensive use of laterality; however, coders need to carefully understand the details in the combination codes for pressure and non-pressure ulcers.

- L27.1 Dermatitis, (eczematous) due to drugs and medicaments, (generalized) (internal use) localized skin eruption
- T46.4X5D Table of Drugs and Chemicals, Ramipril, Adverse Effect, initial encounter
- I10 Hypertension, hypertensive (accelerated) (benign) (essential) (idiopathic) (malignant) (systemic)
Musculoskeletal System

- Most codes have site and laterality designations
- Site represents bone, joint or muscle involved
- "Multiple sites" codes

Seventh Characters

- A – initial encounter
- D – subsequent encounter
- G – subsequent encounter – delayed healing
- K – subsequent encounter – nonunion
- P – subsequent encounter – malunion
- S – sequela

*****If code starts with M or S – look for direction regarding 7th characters
Aftercare

- Aftercare for broken bones will now be coded to fracture with 7th character D in post acute care
- Pathological and stress fractures are found in this chapter

Osteoporosis

- Use category M81, Osteoporosis without pathologic fx, for patients with osteoporosis who do not current have a pathologic fracture due to osteoporosis.
  - patients with a history of osteoporosis fractures, status code Z87.310, Personal history of (healed) osteoporosis fracture, should follow code M81

Pathological Fracture

- Use category M80, Osteoporosis with current pathological fracture, for patients who have a current pathologic fracture at the time of an encounter.
  - DO NOT USE traumatic fracture code here
  - this must be determined and documented by the physician.
13.1 Path Fracture Case Study

An 80-year-old female with senile osteoporosis complaining of severe back pain with no history of trauma. Provider documentation reveals pathological compression fractures of several lumbar vertebrae.

-M80.08XD

Case Studies 13.2-13.3

Bacterial Septic Arthritis

-M00.80

Degenerative disc disease, lumbar region, with myelopathy

-M51.06

Chapter 13 Take Away Point

Although the detail in this musculoskeletal chapter is not that complicated, coders will need to pay very close attention when consulting the index and tabular due to the sheer volume of codes and the ease of miscoding from viewing so many similar codes.
Stages of Chronic Kidney Disease

- CKD classification based on severity designated by stages 1-5
- End stage renal disease (ESRD) is assigned when it has been documented by the provider (Stage 5 requiring chronic dialysis)
- If both a stage of CKD and ESRD have been documented, assign the code for ESRD only

14.1 Kidney Failure Case Study

An 83-year-old man with complaints of lower abdominal pain and the inability to urinate over the past 24 hours, diagnosed as acute kidney failure due to acute tubular necrosis, caused by a urinary obstruction. The urinary obstruction was a result of the patient’s benign prostatic hypertrophy.
14.1 Kidney Failure Answer

- N17.0 – Failure, kidney, acute w/tubular necrosis
- N40.1 – Hypertrophy, prostate – see enlargement, prostate with LUTS
- N13.8 – Obstruction, urinary

14.2 UTI Case Study

- A 78-year-old female with fever, malaise, and left flank pain. A urinalysis shows bacteria of more than 100,000/ml present in the urine and subsequent urine culture shows Proteus growth as the cause of the urinary tract infection. The patient also has a history of repeated UTIs over the past several years.

- N39.0  Infection, infected, infective, (opportunistic), urinary (tract)
- B96.4  Infection, infected, infective (opportunistic), bacterial NOS, as cause of disease classified elsewhere, proteus (mirabilis) (morganii)
- Z87.440  History, personal (of), infection, urinary(recurrent) (tract)
Chapter 14 – Diseases of the Genitourinary System has changed very little in comparison to other chapters; however, coders must remain diligent in selecting codes to avoid simple mistakes.

CHAPTER 15

Obstetrics (O00-O9A)

- Even though it is rare there are long term care providers that do care for pregnant moms
- Code the condition for which the patient is receiving care and any other diagnoses secondary
- Example: Fractured ankle, with secondary pregnancy
CHAPTER 16

Certain Conditions Originating in the Perinatal Period (P00-P96)

Perinatal Codes

- Even though it may be rare to care for babies in long term care it does happen
- Code the diagnosis for which you are caring for the patient
- Cleft Palate, tube feeding, then any other secondary diagnoses

CHAPTER 17

Congenital Malformations, Deformations and Chromosomal Abnormalities (Q00-Q99)
Congenital Malformations

• Assigned any time in a patient’s life if being diagnosed or treated
• May be present at birth but not diagnosed until later in life
• If previously treated and resolved, code personal history code

Manifestations

• DO NOT code manifestations if they are inherent to the malformation/deformation/abnormality
• DO code manifestations that are not inherent
• EX: Down Syndrome – Use F70-79 to further identify the intellectual disability

17.1 & 17.2 Case Study

Down Syndrome
- Q90.9

Septal heart defect
- Q21.9
Chapter 17 Take Away Point

With the significant expansion of conditions and sites, coders will need to collect more detail on congenital conditions.

CHAPTER 18

• Symptoms, signs, abnormal results and ill-defined conditions without a classifiable diagnosis

• Only use if definitive diagnosis has not been established

• May be used in addition to a definitive diagnosis as long as the sign or symptom is not routinely associated with that diagnosis
Signs & Symptoms

- R29.6, (repeated) falls
  - when patient has recently fallen and the reason is being investigated
- Z91.81, History of falling
  - when a patient has fallen in the past and is at risk for future falls
- May be assigned together

Example

- R53.2, Functional quadriplegia
  - Lack of ability to use one’s limbs or to ambulate due to extreme debility
    - NOT associated with neurologic deficit or injury

18.1 Fever Case Study

Patient with fever of 101 degrees with chills. Lab tests and urinalysis are within normal limits. Physician gives final diagnosis as fever with chills, possible viral syndrome.

- R50.9   Fever (of unknown origin) (persistent)(with chills) (with rigor)
Patient complaining of right upper quadrant abdominal pain in addition to nausea and vomiting. Patient also has elevated blood pressure readings, but diagnosis of hypertension is not made. Patient referred for follow up appointment.

- R10.11 Pain, abdominal, upper, right quadrant
- R11.2 Nausea, with vomiting
- R03.0 Elevated, elevation, blood pressure, reading (incidental) (isolated) (nonspecific), no diagnosis of hypertension

CHAPTER 19

Injury, Poisoning, and Certain Other Consequences of External Causes (S00-T88)
7TH CHARACTERS

- A – initial encounter
  - Active treatment (surgical treatment, ED encounter, evaluation & treatment by new physician)

- D – subsequent encounter
  - Routine care during healing or recovery phase
  - Aftercare Z codes are not used for aftercare for injuries or poisonings where 7th characters are provided to identify subsequent care

- S – sequela
  - Complications or conditions arising as direct result of condition

Injuries

- Assign separate codes for each injury unless a combo code is provided
- Superficial injuries are not coded when associated with more severe injuries of same site
- Do not assign traumatic injury codes for normal, healing surgical wounds or complications of these

Aftercare

- Aftercare for broken bones will now be coded to Fracture with 7th character D
- Traumatic fractures are found in this chapter
Traumatic Fractures

- A fracture not indicated as open or closed should be coded to closed
- A fracture not designated as displaced or non-displaced should be coded to displaced
- 7th characters
  - Some fractures have expanded 7th characters to identify open fractures
- Compound fracture = open fracture

Fracture Specificity

- Greater specificity for fractures
  - Type
  - Specific site
  - Displaced vs. non-displaced
  - Routine vs. delayed healing
  - Mal-union
  - Type of encounter

19.1 Elbow FX Case Study

A patient admitted for aftercare following traumatic lateral epicondyle fracture of the right elbow, which is healing normally.

- S42.431D Fracture, traumatic (abduction) (adduction) (separation), humerus, lower end, epicondyle, lateral (displaced)
A patient admitted following surgery for an infected right hip prosthesis.

-T84.51XD  Complication(s) (from) (of), joint prosthesis, internal, infection or inflammation, hip. Review the Tabular for complete code assignment and seventh character.

Adverse Effects

• Drug correctly prescribed and properly administered
• Code nature of adverse effect followed by the code for the cause in the Table of Drugs and Chemicals
  – Tachycardia, delirium, vomiting, renal failure
• DO NOT code directly from the Table!

19.3 Digoxin Case Study

A patient taking Digoxin is experiencing nausea, vomiting and profound fatigue. The patient indicates that she has been taking the drug as prescribed. Evaluation and treatment focused on adjustment of medication only.
19.3 Digoxin Case Study

- R11.2 Nausea, with vomiting
- R53.83 Fatigue
- T46.0X5D Table of Drugs and Chemicals, Digoxin, adverse effect

Poisoning

- Error made in drug prescription
- Overdose of drug intentionally taken
- Non-prescribed drug taken with correctly prescribed and properly administered drug
- Interaction of drugs and alcohol
- 5th or 6th character shows intent
- Use additional code for manifestations of poisoning

Under-dosing

- Taking less than is prescribed by provider or manufacturers instruction inadvertently or deliberately
- Noncompliance (Z91.12-, Z91.13-) or complication of care (Y63.61, Y63.8-Y63.9) codes are to be used in addition to indicate intent, if known