

STUDY SESSIONS
WEEK 5 - ICD-10-CM
COMPLEX CASES

1. A 41-year-old patient arrives at the emergency department after being rescued from a residential house fire. The provider documents a 2% third-degree burn of the right lower leg, a 5% second-degree burn of the left forearm, and a 5% first-degree burn of the abdomen. The patient reports that the injuries occurred when they were exposed to flames inside their single-family home. Based on this information, which of the following ICD-10-CM code codes should be assigned for this encounter?
 - a. T24.311A, T22.212A, T21.11XA, T31.12, X02.0XXA, Y92.009
 - b. T24.311A, T22.212A, T21.11XA, T31.0, X00.0XXA, Y92.019
 - c. T24.301A, T22.212A, T21.11XA, T31.11, X03.0XXA, Y92.009
 - d. T24.311A, T22.212A, T21.11XA, T31.10, X00.0XXA, Y92.019

2. A 34-year-old patient presents to the ED after tripping over a curb while jogging on a public sidewalk. The provider documents a closed displaced fracture of the right clavicle shaft along with superficial abrasions of the right shoulder at the same site. The patient also has a closed nondisplaced fracture of the left distal tibial with superficial abrasions of the left lower leg at the same site. Which of the following ICD-10-CM code groupings represents the correct coding assignment for this encounter?
 - a. S42.011A, S40.811A, S82.202A, S80.812A, W01.0XXA, Y92.480
 - b. S42.021A, S82.302A, W01.0XXA, Y92.480
 - c. S42.001A, S82.202A, W00.0XXA, Y92.480
 - d. S42.021A, S82.302A, W01.0XXA, Y92.018

3. A 52-year-old patient with a documented history of HIV disease (AIDS) presents to the ED after slipping on wet pavement and sustaining a closed fracture of the right ankle. The provider notes that the patient's HIV disease is stable and not related to the reason for the visit, and no HIV-related conditions are treated during this encounter. Which of the following code groupings represents the correct ICD-10-CM codes for this encounter?
 - a. B20, S82.891A, W01.0XXA
 - b. S82.891A, B20, W01.0XXA
 - c. S82.891A, Z21, W01.0XXA
 - d. B20, S82.891A, W00.0XXA

4. A 29-year-old patient at 32 weeks' gestation presents for evaluation and treatment of several pregnancy-related complications. The provider documents mild preeclampsia, gestational diabetes controlled by diet, and anemia. No delivery occurs during the encounter. The provider documents that the primary reason for the visit is management of mild preeclampsia. Which of the following ICD-10-CM code groupings represents the correct coding assignment for this encounter?
- a. O14.03, O24.410, O99.013, Z3A.32
 - b. O24.41, O14.415, O99.013, Z3A.32
 - c. O14.03, O24.414, O99.013, Z3A.32
 - d. O14.03, O24.419, O99.019, Z3A.32
5. A 63-year-old patient with long-standing type 2 diabetes mellitus presents for evaluation of several issues. The provider documents diabetic chronic kidney disease stage 3, peripheral neuropathy, and cataracts. The patient is also treated for essential hypertension and acute otitis media, both of which the provider confirms are unrelated to diabetes. Which of the following ICD-10-CM codes represent the correct coding assignment for this encounter?
- a. E11.22, N18.3, E11.40, E11.36, I10, H66.001
 - b. E10.22, N18.3, E11.40, E11.36, I10, H66.001
 - c. E11.22, N18.3, E11.40, E11.36, I10, H66.009
 - d. E11.29, N18.3, E11.40, E11.36, I10, H66.001
6. A 68-year-old patient is admitted with severe sepsis due to E. coli pneumonia. The provider documents septic shock, acute respiratory failure, and acute kidney failure, all confirmed as organ dysfunctions resulting from the sepsis. The pneumonia is identified as the underlying infection. Which of the following code groupings represents the correct coding assignment for this encounter?
- a. R65.21, A41.51, J18.9, J96.00, N17.9
 - b. A41.51, R65.21, J18.9, J96.00, N17.9
 - c. A41.51, R65.21, J15.5, J96.00, N17.9
 - d. A41.9, R65.21, J18.9, J96.00, N17.9
7. A 76-year-old patient presents with acute left arm pain after lifting a heavy box. Imaging confirms a fracture of the left humerus, and the provider notes that the patient has age-related osteoporosis involving the same anatomical site. The patient also has primary osteoarthritis of the left shoulder, which is documented as a chronic condition unrelated to the current injury, and addressed during this encounter. Which of the following ICD-10-CM codes represents the correct coding assignment for this encounter?
- a. M80.022A
 - b. M80.022A, M19.012
 - c. S42.292A, M80.022A
 - d. M81.0, S42.292A, M19.012

8. A 72-year-old patient presents for management of several chronic conditions. The provider documents hypertensive heart disease with heart failure and hypertensive chronic kidney disease stage 3a. The patient also has type 2 diabetes mellitus, which the provider confirms is unrelated to the hypertension, heart failure, or CKD and is stable during this encounter. Which of the following ICD-10-CM codes represents the correct coding assignment for this visit?
- a. I13.0, I50.9, N18.30
 - b. I11.0, I50.9, N18.30, E11.9
 - c. I13.0, I50.9, N18.30, E11.9
 - d. I13.0, I50.9, N18.31, E11.9
9. A 79-year-old patient presents for wound assessment and treatment. The provider documents a stage 3 pressure ulcer of the right heel and an unstageable pressure ulcer of the left buttock. Both ulcers are evaluated and treated during the encounter. Based on ICD-10-CM guidelines for coding multiple pressure ulcers, which of the following code groupings represents the correct coding assignment for this visit?
- a. L89.613, L89.320
 - b. L89.610, L89.322
 - c. L89.623, L89.320
 - d. L89.893, L89.892
10. A 55-year-old patient presents for an annual physical examination. During the visit, the provider administers routine influenza and Tdap vaccines. The provider also evaluates and manages two chronic conditions: type 2 diabetes mellitus without complications and essential hypertension, both addressed and documented as stable. Based on ICD-10-CM guidelines for preventive services with additional chronic conditions addressed, which of the following code groupings represents the correct coding assignment for this encounter?
- a. Z00.01, Z23, E11.9, I10
 - b. Z00.00, Z23, E11.9, I10
 - c. Z00.00, E11.9, I10
 - d. Z23, E11.9, I10

Answer Key

1. A 41-year-old patient arrives at the emergency department after being rescued from a residential house fire. The provider documents a 2% third-degree burn of the right lower leg, a 5% second-degree burn of the left forearm, and a 5% first-degree burn of the abdomen. The patient reports that the injuries occurred when they were exposed to flames inside their single-family home. Based on this information, which of the following ICD-10-CM code codes should be assigned for this encounter?
- a. T24.311A, T22.212A, T21.11XA, T31.12, X02.0XXA, Y92.009
 - b. T24.311A, T22.212A, T21.11XA, T31.0, X00.0XXA, Y92.019
 - c. T24.301A, T22.212A, T21.11XA, T31.11, X03.0XXA, Y92.009
 - d. T24.311A, T22.212A, T21.11XA, T31.10, X00.0XXA, Y92.019

Rationale: The provider documents three burns of differing degrees across multiple anatomical sites, requiring separate burn codes for each location and depth. The third-degree burn of the right lower leg is correctly captured with T24.311A, which identifies a full-thickness burn of the right lower leg, initial encounter. The second-degree burn of the left forearm is reported with T22.212A, and the first-degree burn of the abdomen is assigned T21.11XA. Because the total body surface area involved is 12%, T31.10 is required to indicate burns involving 10–19% of the body surface with 0–9% of the burns that are third degree. The external cause code must reflect exposure to flames in a residential structure, which is accurately represented by X00.0XXA. The place of occurrence—single-family home—is reported with Y92.019. Option D is the only answer choice that correctly captures the degree, site, extent, cause, and location of the burns.

Alphabetic Index:

- Burn → lower → limb → third degree (verifying in the alphabetic index will lead you to look for T24.311 due to knowing the site of the lower leg).
- Burn → forearm → left → second degree
- Burn → abdomen → first degree
- Burn → extent (percentage of body surface) → 10-19 percent → 0 – percent third degree burns
- External Cause Index → Burn → flames → *see also* → Exposure → fire → uncontrolled → in building or structure
- External Cause Index → Place of Occurrence → residence → house, single family

2. A 34-year-old patient presents to the ED after tripping over a curb while jogging on a public sidewalk. The provider documents a closed displaced fracture of the right clavicle shaft along with superficial abrasions of the right shoulder at the same site. The patient also has a closed nondisplaced fracture of the left distal tibial with superficial abrasions of the left lower leg at the same site. Which of the following ICD-10-CM code groupings represents the correct coding assignment for this encounter?
- a. S42.011A, S40.811A, S82.202A, S80.812A, W01.0XXA, Y92.480
 - b. S42.021A, S82.302A, W01.0XXA, Y92.480
 - c. S42.001A, S82.202A, W00.0XXA, Y92.480
 - d. S42.021A, S82.302A, W01.0XXA, Y92.018

Rationale: ICD-10-CM guideline I.C.19.b.1 instructs coders not to assign separate codes for superficial injuries when they occur at the same anatomical site as a more serious injury, such as a fracture. Therefore, the superficial abrasions of the right shoulder and left lower leg are not coded because they occur at the same sites as the documented fractures. The correct fracture codes are S42.021A for the closed displaced fracture of the right clavicle shaft and S82.302A for the closed nondisplaced fracture of the left distal tibial. The external cause code W01.0XXA correctly identifies a fall on the same level due to tripping, and Y92.480 identifies the place of occurrence as a sidewalk. Option B is the only answer choice that correctly excludes the superficial injuries and applies the correct fracture, external cause, and place-of-occurrence codes.

Alphabetic Index:

- Fracture (traumatic) → clavicle → shaft (displaced)
- Fracture (traumatic) → tibia (shaft) → lower end
- External Cause Index → Fall → same level → from → slipping, stumbling, tripping
- External Cause Index → Place → sidewalk

3. A 52-year-old patient with a documented history of HIV disease (AIDS) presents to the ED after slipping on wet pavement and sustaining a closed fracture of the right ankle. The provider notes that the patient's HIV disease is stable and not related to the reason for the visit, and no HIV-related conditions are treated during this encounter. Which of the following code groupings represents the correct ICD-10-CM codes for this encounter?
- a. B20, S82.891A, W01.0XXA
 - b. S82.891A, B20, W01.0XXA
 - c. S82.891A, Z21, W01.0XXA
 - d. B20, S82.891A, W00.0XXA

Rationale: ICD-10-CM guideline I.C.1.a.2.c state that when a patient with HIV disease (B20) is treated for an unrelated condition, the unrelated condition is sequenced first, followed by B20 as a secondary diagnosis. In this scenario, the patient is treated for a closed fracture of the right ankle, which is correctly reported with S82.891A. Because the patient has documented HIV disease—not asymptomatic HIV—B20 must be assigned and cannot be replaced with Z21. The external cause code W01.0XXA correctly identifies a fall on the same level due to slipping. Option B is the only answer choice that correctly sequences the unrelated injury first, followed by B20, and includes the correct external cause code.

Alphabetic Index:

- Fracture (traumatic) → ankle
- HIV
- External Cause Index → Slipping → on → surface (slippery) (wet)

4. A 29-year-old patient at 32 weeks' gestation presents for evaluation and treatment of several pregnancy-related complications. The provider documents mild preeclampsia, gestational diabetes controlled by diet, and anemia. No delivery occurs during the encounter. The provider documents that the primary reason for the visit is management of mild preeclampsia. Which of the following ICD-10-CM code groupings represents the correct coding assignment for this encounter?
- a. O14.03, O24.410, O99.013, Z3A.32
 - b. O24.41, O14.415, O99.013, Z3A.32
 - c. O14.03, O24.414, O99.013, Z3A.32
 - d. O14.03, O24.419, O99.019, Z3A.32

Rationale: ICD-10-CM Chapter 15 guidelines require that the complication chiefly responsible for the encounter be sequenced first. Because the provider states that the visit is primarily for management of mild preeclampsia, O14.03 is correctly assigned as the first-listed diagnosis. The patient also has diet-controlled gestational diabetes, reported with O24.41, and maternal anemia complicating pregnancy, captured with O99.013. Since no delivery occurs, all codes must remain in the antepartum category. The weeks of gestation are reported with Z3A.32. Option A is the only answer choice that correctly sequences the preeclampsia first and assigns the appropriate gestational diabetes and maternal anemia codes with the correct trimester and gestational age.

Alphabetic Index:

- Pre-eclampsia → mild
- Diabetes → gestational (in pregnancy) → diet controlled
- Pregnancy → complicated by → anemia
- Pregnancy → Weeks of gestation → 32 weeks

5. A 63-year-old patient with long-standing type 2 diabetes mellitus presents for evaluation of several issues. The provider documents diabetic chronic kidney disease stage 3, peripheral neuropathy, and cataracts. The patient is also treated for essential hypertension and acute otitis media, both of which the provider confirms are unrelated to diabetes. Which of the following ICD-10-CM codes represent the correct coding assignment for this encounter?
- a. E11.22, N18.3, E11.40, E11.36, I10, H66.001
 - b. E10.22, N18.3, E11.40, E11.36, I10, H66.001
 - c. E11.22, N18.3, E11.40, E11.36, I10, H66.009
 - d. E11.29, N18.3, E11.40, E11.36, I10, H66.001

Rationale: The provider documents multiple diabetic complications, requiring the use of ICD-10-CM combination codes from category E11 to identify both the diabetes type and the affected body systems. The patient's chronic kidney disease stage 3 due to diabetes is correctly captured with E11.22, followed by N18.3 to specify the CKD stage. Diabetic peripheral neuropathy is reported with E11.40, and diabetic cataract is assigned E11.36. The essential hypertension and acute otitis media are unrelated to diabetes, so they are coded separately with I10 and H66.001, respectively. Option A is the only answer choice that correctly applies the diabetes combination codes, includes the required CKD stage code, and assigns the unrelated conditions appropriately.

Alphabetic Index:

- Diabetes → type 2 → with → chronic kidney disease
- Disease → kidney → chronic → stage 3 (moderate)
- Diabetes → type 2 → with → neuropathy
- Diabetes → type 2 → with → cataract
- Hypertension
- Otitis → media → acute

6. A 68-year-old patient is admitted with severe sepsis due to E. coli pneumonia. The provider documents septic shock, acute respiratory failure, and acute kidney failure, all confirmed as organ dysfunctions resulting from the sepsis. The pneumonia is identified as the underlying infection. Which of the following code groupings represents the correct coding assignment for this encounter?
- a. R65.21, A41.51, J18.9, J96.00, N17.9
 - b. A41.51, R65.21, J18.9, J96.00, N17.9
 - c. A41.51, R65.21, J15.5, J96.00, N17.9
 - d. A41.9, R65.21, J18.9, J96.00, N17.9

Rationale: ICD-10-CM guideline I.C.1.d.2 indicates that the code for the underlying systemic infection be sequenced first when assigning codes for severe sepsis. In this scenario, the provider identifies E. coli pneumonia as the infectious source, so A41.51 (sepsis due to E. coli) is correctly sequenced first. Because the provider documents septic shock, the appropriate code R65.21 must be assigned to indicate severe sepsis with septic shock. The pneumonia itself is coded with J18.9 as the localized infection. The documented organ dysfunctions—acute respiratory failure and acute kidney failure—are reported with J96.00 and N17.9, respectively, because they are directly related to the severe sepsis. Option C is the only answer choice that correctly sequences the systemic infection first, includes the septic shock code, and captures all organ dysfunctions associated with the sepsis.

Alphabetic Index:

- Sepsis → severe → with septic shock
- Sepsis → Escherichia coli (E. coli)
- Pneumonia → Escherichia coli (E. coli)
- Failure → respiratory → acute
- Failure → kidney → acute

7. A 76-year-old patient presents with acute left arm pain after lifting a heavy box. Imaging confirms a fracture of the left humerus, and the provider notes that the patient has age-related osteoporosis involving the same anatomical site. The patient also has primary osteoarthritis of the left shoulder, which is documented as a chronic condition unrelated to the current injury, and addressed during this encounter. Which of the following ICD-10-CM codes represents the correct coding assignment for this encounter?
- a. [M80.022A](#)
 - b. M80.022A, M19.012
 - c. S42.292A, M80.022A
 - d. M81.0, S42.292A, M19.012

Rationale: When a fracture occurs in a bone affected by osteoporosis, ICD-10-CM requires the use of a combination code from category M80, even if the provider does not explicitly describe the fracture as pathological. Because the documentation states that the patient has age-related osteoporosis at the site of the humerus fracture, the correct code is M80.022A, which identifies osteoporosis with a current fracture of the left humerus, initial encounter. A separate fracture code from Chapter 19 is not assigned, because the M80 combination code already includes both the osteoporosis and the fracture. The patient's chronic left-shoulder osteoarthritis is documented but not addressed during this encounter, so it is not coded. Option A is the only answer choice that correctly applies the osteoporosis-with-fracture combination code and appropriately excludes the unrelated condition that was not treated or evaluated.

Alphabetic Index:

- Osteoporosis → age-related → with current pathological fracture → humerus

8. A 72-year-old patient presents for management of several chronic conditions. The provider documents hypertensive heart disease with heart failure and hypertensive chronic kidney disease stage 3a. The patient also has type 2 diabetes mellitus, which the provider confirms is unrelated to the hypertension, heart failure, or CKD and is stable during this encounter. Which of the following ICD-10-CM codes represents the correct coding assignment for this visit?
- a. I13.0, I50.9, N18.30
 - b. I11.0, I50.9, N18.30, E11.9
 - c. I13.0, I50.9, N18.30, E11.9
 - d. I13.0, I50.9, N18.31, E11.9

Rationale: ICD-10-CM requires the use of combination codes when hypertension causes both heart disease and chronic kidney disease, based on guideline I.C.9.a.3. Because the provider documents hypertensive heart disease with heart failure and hypertensive CKD stage 3, the correct code is I13.0, which identifies hypertension with both cardiac and renal involvement. The heart failure must be coded separately with I50.9, and the CKD stage 3a is captured with N18.31. The patient's type 2 diabetes mellitus is documented as unrelated to the hypertension, heart failure, and CKD, but it is addressed as stable during the encounter, so it is appropriately coded with E11.9. Option D is the only answer choice that correctly applies the hypertension combination code, includes the required heart failure and CKD stage codes, and captures the unrelated but addressed diabetes.

Alphabetic Index:

- Hypertension → cardiorenal → with heart failure → with stage 1 – stage 4 chronic kidney disease
- Failure → heart
- Disease → kidney → chronic → stage 3a
- Diabetes

9. A 79-year-old patient presents for wound assessment and treatment. The provider documents a stage 3 pressure ulcer of the right heel and an unstageable pressure ulcer of the left buttock. Both ulcers are evaluated and treated during the encounter. Based on ICD-10-CM guidelines for coding multiple pressure ulcers, which of the following code groupings represents the correct coding assignment for this visit?
- a. L89.613, L89.320
 - b. L89.610, L89.322
 - c. L89.623, L89.320
 - d. L89.893, L89.892

Rationale: ICD-10-CM requires coders to assign site-specific pressure ulcer codes that identify both the anatomical location and the stage of each ulcer. The provider documents a stage 3 pressure ulcer of the right heel, which is correctly reported with L89.613. The left buttock ulcer is documented as unstageable, meaning the base cannot be visualized due to slough or eschar, so the correct code is L89.320, which captures an unstageable pressure ulcer of the left buttock. Because both ulcers are evaluated and treated during the encounter, both must be coded. Option A is the only answer choice that accurately reflects the documented sites and stages for each pressure ulcer.

Alphabetic Index:

- Ulcer → pressure (pressure area) → heel
- Ulcer → pressure (pressure area) → buttock

10. A 55-year-old patient presents for an annual physical examination. During the visit, the provider administers routine influenza and Tdap vaccines. The provider also evaluates and manages two chronic conditions: type 2 diabetes mellitus without complications and essential hypertension, both addressed and documented as stable. Based on ICD-10-CM guidelines for preventive services with additional chronic conditions addressed, which of the following code groupings represents the correct coding assignment for this encounter?
- a. Z00.01, Z23, E11.9, I10
 - b. Z00.00, Z23, E11.9, I10
 - c. Z00.00, E11.9, I10
 - d. Z23, E11.9, I10

Rationale: ICD-10-CM requires the use of Z00.00 for a routine adult physical examination without abnormal findings. Chronic conditions such as type 2 diabetes mellitus and essential hypertension that are already established and simply addressed as stable do not qualify as abnormal findings discovered during the exam, so they do not change the first-listed code. Because routine influenza and Tdap vaccines are administered, Z23 is also assigned to capture the encounter for immunization. The chronic conditions are both evaluated and managed during the visit, so they are appropriately coded with E11.9 and I10. Option A is the correct answer because it accurately reflects a routine physical exam without new abnormal findings, includes the immunization code, and reports the chronic conditions addressed during the encounter.

Alphabetic Index:

- Examination → annual
- Vaccination → encounter for
- Diabetes → type 2
- Hypertension