CODING KNOWLEDGE AND SKILLS ASSESSMENT
Emergency Room Coding

A. ICD-9-CM / CPT Coding Exercises

The following multiple-choice questions reflect the types of coding issues often encountered at Hospital based coding sites. Questions relate to ED/ER encounters. Please select the letter, which most appropriately and accurately answers the question.

1) A patient presents to the Emergency Department with chief complaints of “dehydration”, fever and severe diarrhea. The patient is given IV fluids. The attending physician documented Salmonella gastroenteritis on the Emergency room encounter form and signs it. Which of the following is the correct coding and sequencing?

a) 276.51, 003.0  
b) 003.0  
c) 003.0, 276.51  
d) 276.51, 003.0, 780.6

2) A patient with a history of alcoholic cirrhosis is seen in the Emergency Room of the hospital with hematemesis. The appropriate primary diagnosis is:

a) Alcoholic cirrhosis  
b) Gastric varix  
c) Hematemesis  
d) Esophageal varicies in diseases classified elsewhere without mention of bleeding

3) A 45-year-old patient is taken to the Emergency Room with severe chest pain. The patient has a history of arteriosclerotic coronary artery disease, status post PTCA. Discharge diagnosis given by the attending ER physician was “Chest pain, noncardiac possible angina.” The appropriate primary diagnosis is:

a) Chest pain  
b) Unstable angina  
c) CAD of native coronary vessels  
d) Acute coronary syndrome

4) An elderly 77-year-old male patient with a history of atrial fibrillation on Coumadin therapy is seen in the Emergency Room due to recurrent epistaxis. The physician documents ‘Epistaxis secondary to Coumadin therapy coagulopathy’. The appropriate primary diagnosis should be:

a) 784.7  
b) 286.5  
c) 286.9  
d) 286.7

5) A patient is admitted to the Emergency Room with chief complaints of fever, cough, and weakness. The patient’s chest x-ray revealed a right-sided infiltrate and pneumonia was confirmed. The patient was also found to be in renal failure. The discharge note of the Emergency Room Physician lists, pneumonia, and acute renal failure. The appropriate sequence of codes for proper ICD-9-CM code assignment is:
a) 785.52, 486, 584.9  
b) 486, 584.9  
c) 486, 584.9, 785.52  
d) 486, 785.2, 584.9  

6) A patient came to the emergency room with hypotension and tachycardia. Upon exam, the patient's condition was determined to be the result of a tetanus toxoid that was administered four hours earlier. Which of the following is the appropriate sequencing?

a) Hypotension; tachycardia; and accidental poisoning due to tetanus toxoid  
b) Unspecified adverse reaction and undetermined cause E code  
c) Poisoning due to tetanus toxoid and therapeutic use E code for tetanus toxoid  
d) Hypotension; tachycardia; and therapeutic use E code for tetanus toxoid

7) The following ICD-9-CM index entries appear:

Encephalitis  
  infectious (acute) (virus) NEC 049.8  
  postinfectious NEC 136.9 [323.62]

The diagnosis listed by the physician is “encephalitis after infection.” Which of the following represents the correct coding and sequencing?

a) 049.8  
b) 323.6  
c) 136.9; 323.62  
d) 049.8; 136.9

8) Child presents to emergency room accompanied by parents. The patient has a large 1.5 cm splinter lodged on the sole of his foot superficially, after playing on a wooden floor in his bare feet. The physician prepares the area with betadine, and pulls the splinter out with tweezers without making an incision. The appropriate CPT code is:

a) An appropriate evaluation/management code for emergency room services. (99281-99285)  
b) 28190  Removal of foreign body, foot; subcutaneous  
c) 10120  Incision and removal of foreign body, subcutaneous tissues; simple  
d) A and B

9) A cause-and-effect relationship between hypertension and which of the following conditions may be assumed?

a) Chronic kidney disease  
b) Heart failure  
c) Neither condition  
d) Both heart and chronic kidney disease

10) Sickle-cell anemia and thalassemia are both types of:

a) Iron deficiency anemias  
b) Hereditary hemolytic anemias  
c) Aplastic anemia  
d) Coagulation defects
B. Outpatient Emergency Room Case Examples Using Your CPT Book
(Do not code the E&M visit CPT code):

1. A 7-year-old male patient comes to the ER with his parents, after falling out of a tree and landing on his left arm. He is complaining of pain in the left arm and tenderness. An examination is performed and a laceration is also noted on the left arm 2” in length, which is distant from the site of the pain. An x-ray is taken and demonstrates a fracture of the left forearm. The laceration is closed with steri-strips and a tetanus injection is given. The arm is put in a cast (forearm) by the ER physician and ortho tech. The patient is discharged to be followed up with the pediatrician in 7 days.
Assign the correct CPT Code(s):____________________________

2. **ER Procedure:** Repair deep laceration of the right arm and shoulder.
   **Clinical Indication/Diagnosis:** Deep laceration of right arm/shoulder from broken glass
   **Technique/Details:** A 2.8 cm simple laceration was repaired on the right arm. A 2.6 cm laceration on the shoulder was also repaired with extensive removal of glass.
Assign the correct CPT Code(s): _____________________________

3. A 55-year-old patient with known GI problems come to the ER complaining of abdominal pain and feeling weak and faint. Lab work reveals a low Hct/hgb. The patient receives a blood transfusion of 2 units whole blood without any adverse effects.
Assign the correct CPT code(s): ______________________________________

4. A 16 year old patient comes to the ED/ER with a 4 cm laceration of the right hand due to a knife (while preparing food). Active bleeding is noted. The wound is cleansed with saline and examined. The decision is made to repair the wound/laceration with sutures.
   **Procedure:** The wound was infiltrated with lidocaine as a local anesthetic. The physician uses nylon sutures to close the single-layer, simple 4-cm laceration without incident. Steri-strips are applied to the skin. The patient is given an injection of tetanus in the right arm and another injection of antibiotics SQ.
Assign the correct CPT code(s): _________________________________

5. What is the appropriate E/M code for a new patient office visit in which a comprehensive history and comprehensive physical exam were performed and medical decision making was of high complexity?
Select the correct E/M code:____________________________________
EMERGENCY ROOM REPORT

CHIEF COMPLAINT: Laceration of leg

HISTORY OF PRESENT ILLNESS: Patient was using a chain saw and lacerated his left leg. He is ambulatory to the Emergency Room. Medications: Insulin, Aciphex. Social History: He is married and lives with his family.

REVIEW OF SYSTEMS: There is a laceration of the left calf.

PAST MEDICAL HISTORY: Diabetes mellitus, pt takes Insulin.

PHYSICAL EXAMINATION: Vital signs are stable. There is a jagged 9 cm laceration to the left calf. Laceration extends through the skin.

PROCEDURE: Cleansed the affected area. Infiltrated with a local anesthetic, and sutured with layered sutures of 4-0 Vicryl. He was placed in a knee immobilizer and given Ancef 1 gr IM.

ASSESSMENT: Laceration to the left calf, repaired with sutures

PLAN: Continue with Keflex 500 mg po qid, Vicodin 1-2 q4h. See your physician on Monday for a wound check.
EMERGENCY ROOM CARE
CASE STUDY 2

EMERGENCY ROOM REPORT

CHIEF COMPLAINT: Seizure

HISTORY OF PRESENT ILLNESS: According to the family he had at least three seizures lasting at least three minutes and separated by intervals of five minutes with generalized shaking and loss of consciousness. An ambulance was summoned and he was found to be postictal thereafter with improvement in route to the hospital. There has been no prior history of seizures.

PAST MEDICAL HISTORY: An 81-year-old male who does have a prior history of chronic renal failure, on dialysis three times a week. Patient does have a history of diabetes mellitus, hypertension and recurrent bladder infections.

ALLERGIES: None noted

PHYSICAL EXAMINATION: Blood pressure 198/120, pulse 163, respirations 24, temperature 98.7.

EMERGENCY ROOM COURSE: Discussed case with patient and his family who are at bedside. Obtained CT and chest x-ray both reported as normal. Additionally he was given nitroglycerin spray sublingual for elevated blood pressure, which came down, and last blood pressure was 149/100.

FINAL DIAGNOSIS:
1. Seizure
2. Chronic renal failure
3. Hypertension
4. Diabetes mellitus

PLAN: Follow up with your personal physician within the next week
CHIEF COMPLAINT: Fall

HISTORY OF PRESENT ILLNESS: A 86 year old female tripped and fell while shopping in her local grocery store, injuring her right wrist, laceration of forehead, laceration of her right shoulder and right knee. She was brought to the emergency room by ambulance in quite a bit of distress from the fall.

PAST MEDICAL HISTORY: Has a history of mild congestive heart failure and osteoporosis.

REVIEW OF SYSTEMS: Refer to history

PHYSICAL EXAMINATION: Blood pressure 142/60, pulse 62, respirations 20, temperature 97.5. There is a dirty 3.0 cm laceration of knee, 2.5 cm laceration of forehead and 3.2 cm laceration of shoulder.

DIAGNOSTIC TEST RESULTS: X-ray of right wrist indicates a comminuted fracture of the right distal radius.

EMERGENCY ROOM COURSE: IV was established for administration of Demerol 50 mg and Phenergan 12.5 mg for pain. Cardiac monitor showed a normal sinus rhythm. Reduction of right distal radius performed under local anesthetic and then placed in an air cast. Cleansed the affected areas. Infiltrated with a local anesthetic, simple suture of the forehead with interrupted sutures of 4-0 Vicryl. Infiltrated with local anesthetic, layered suture of the shoulder with interrupted sutures of 4-0 Vicryl. Infiltration with local anesthetic thoroughly cleansed dirty laceration, layered suture and debrided the knee with interrupted sutures of 4-0 Vicryl. All areas were closed with interrupted sutures of 4-0 Ethilon.

FINAL DIAGNOSES:
1. Fracture of distal radius
2. Laceration of knee, shoulder and forehead
3. Osteoporosis
4. Congestive heart disease

PLAN: Discharged home with pain medications and to follow up with orthopedist within 2 days.
EMERGENCY ROOM REPORT

CHIEF COMPLAINT: Wrist pain, s/p fall.

HISTORY OF PRESENT ILLNESS: Patient is a 10 year-old female who presents after falling off the bed at home. She is ambulatory, a very pleasant girl who has no past surgical history. She appears well hydrated, well nourished, and well developed.

PAST MEDICAL HISTORY: Asthma. Allergy to Penicillin.

PHYSICAL EXAMINATION: Patient has swelling over the distal radius and ulna. Distal neurovascular is intact. She is able to move her arm.

DIAGNOSTICS: Review of the x-rays reveals a fracture of the radius and ulna. The radius fracture is approximately 4 cm proximal to the joint space, with volar displacement of about 0.5 cm of the fragment. More of a greenstick fracture is noted in the ulna.

PROCEDURE: Patient is placed in a short-arm splint by nursing and checked by myself.

ASSESSMENT: Fracture, distal radius and ulna, right hand. Patient is right hand dominant.

PLAN: Patient is to call orthopedic surgeon to schedule an appointment.
EMERGENCY ROOM CARE
CASE STUDY 5

EMERGENCY ROOM REPORT

CHIEF COMPLAINT: Vaginal spotting, abdominal cramping.

HISTORY OF PRESENT ILLNESS: Patient is a 34 year-old female. She is approximately 6 weeks pregnant by dates. The patient reports that she has had some vaginal spotting this morning. She complains of some abdominal cramping similar to her menses, but much milder. Her Gyn history: she is G4, P2 with 1 miscarriage and 2 live births.

PAST MEDICAL HISTORY: Takes medication for htn and hypercholesterol.

ALLERGIES: None.


DIFFERENTIAL DIAGNOSES: Includes ectopic pregnancy versus spontaneous AB versus threatened AB.

Pregnancy test is positive. Ultrasound revealed a tiny IUP measuring 4mm. Her blood type is A+, and no RhoGam will be required.

ASSESSMENT: Acute threatened miscarriage.

PLAN: Discharge with outpatient Ob/Gyn follow-up.
EMERGENCY ROOM REPORT

CHIEF COMPLAINT: 55 year-old male s/p mva; complains of shoulder pain from seatbelt, no airbag deployment. Restrainted passenger. Vehicle was out-of-control and struck a side-rail; it did not roll-over. Patient struck head with a loss of consciousness for 10 seconds.

PAST MEDICAL HISTORY: DM type II, insulin dependent. Describes alcohol use as 6-8 drinks on the weekends. Patient reports he quit smoking 2 years ago.

ALLERGY: NKDA

PHYSICAL EXAMINATION: Patient’s chest wall shows ecchymosis. Vital Signs are stable.

DIAGNOSTIC RESULTS: Cervical-spine is negative. No acute bony abnormality. Head scan is negative.

ASSESSMENT: Closed head injury. LOC. Muscular strain of the shoulder. Chest wall contusion.

PLAN: Patient is discharged to home. Advised to return to the Emergency Room if experiencing an increase in pain.
CHIEF COMPLAINT: Bloody nose.

HISTORY OF PRESENT ILLNESS: 40 year-old male woke up at 0530 with a bloody nose. No headache. No blurred vision. He presents by ambulance for further evaluation and management.

REVIEW OF SYSTEMS: Bilateral oozing from nose. Alert and oriented to room, respirations regular and unlabored, skin warm and dry.

PAST MEDICAL HISTORY: dm-insulin dependent, htn, gerd.

ADDITIONAL INFO: Non-compliant with meds. Patient states he was ordered by PMD to take anti-hypertensives, but he stopped taking them.

PHYSICAL EXAMINATION: There is no obvious distress. Vital Signs have been reviewed. He is noted to be significantly hypertensive at 231/146. His heart rate was 101.

PROCEDURE: Bilateral anterior packing was performed. Bleeding stopped quickly.

ASSESSMENT:
1. epistaxis, resolved
2. hypertensive urgency
EMERGENCY ROOM CARE
CASE STUDY 8

EMERGENCY ROOM REPORT

CHIEF COMPLAINT: This is a 39 year-old female who presents to the emergency room by ambulance. She had taken 60 Xanax. Paramedics found an empty bottle of Xanax on the scene. One tube of charcoal was given enroute.

HISTORY OF PRESENT ILLNESS: Patient had been drinking alcohol and arguing with her boyfriend on the telephone. She told him she was going to kill herself. The boyfriend hung up and called 911.

MEDICATIONS: Xanax, Zoloft, Ambien

REVIEW OF SYSTEMS: Not obtainable.

PAST MEDICAL HISTORY: Depression, hx gastric bypass. Patient smokes 1 pack per day.

DIAGNOSTIC RESULTS: Urine drug screen is positive for marijuana and cocaine.

ASSESSMENT: Suicide attempt.

PLAN: Patient will be transferred to Monte Vista Mental Health.