3.02 Understand health informatics

Handout

Directions: Record notes and class discussion in your own words. Compare the ICD-9-CM and CPT codes as you view the PowerPoint presentation.

<table>
<thead>
<tr>
<th>Health Informatics</th>
<th>Management Duties</th>
<th>Technical Duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<table>
<thead>
<tr>
<th>Health Informatics Professionals</th>
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<tbody>
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<table>
<thead>
<tr>
<th>Analyze patient information</th>
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<table>
<thead>
<tr>
<th>Abstract and code patient information</th>
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</thead>
<tbody>
<tr>
<td>1</td>
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<td>2</td>
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</table>

http://icd9cm.chrisendres.com/
http://www.findacode.com/search/search.php

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3.02 What's the Main Term?

Handout

Directions: Using the ICD-9-CM for reference, identify and underline the main term in each diagnosis listed below.

1. Open fracture, maxilla
2. Congenital diaphragmatic hernia
3. Diaper rash
4. Dysplasia of the cervix
5. Sleep apnea
6. Intracranial abscess
7. Congestive heart failure
8. Acute cystitis
9. Chronic maxillary sinusitis
10. Impacted feces
11. Upper respiratory infection
12. Irritability of the stomach
13. Elevated blood pressure
14. Nontraumatic rupture of Achilles tendon
15. Diabetic cataract
16. Cushing's Syndrome
17. Vitamin B₁₂ deficiency
18. Trench mouth
19. Webbed toes
20. Intrinsic asthma in status asthmaticus
3.02 ICD-9-CM Coding
Handout

Directions: Use the ICD-9-CM Code book to assign the correct ICD-9-CM codes for the following diagnoses. Follow the Basic Steps of ICD-9-CM Coding.

1. Allergic diarrhea
2. Cholesterosis of gallbladder
3. Urethral chancre
4. Cystic fibrosis
5. Congestive rheumatic heart failure
6. Viral meningitis
7. Cleft lip and palate
8. Pancytopenia
9. Infantile cerebral palsy
10. Anal fistula
11. Acne vulgaris
12. Dermatophytosis of the foot
13. Hiatal hernia with obstruction and gangrene
14. Mitral valve insufficiency
15. Monocytic leukocytosis
16. Lung mass
17. Prolapse of the bladder, female
18. Rupture of the gallbladder
19. Venereal warts
20. Gouty arthritis
Directions: Use the CPT Code book to assign the correct CPT code for the following procedure/service. Follow the Basic Steps of CPT Coding.

1. Arthrography of the knee, supervision and interpretation

2. Lipid panel blood test

3. Breast abscess, incision and drainage

4. Pneumocentesis

5. Closed reduction of closed fracture, clavicle, without manipulation

6. Influenza vaccine, age 3 years old (preservative free)

7. Bacteria culture, urine

8. Stool for occult blood

9. X-ray pelvis, 4 views

10. Bilateral screening mammography

11. Diagnostic arthroscopy, right wrist, with synovial biopsy

12. Laparoscopic cholecystectomy with cholangiography

13. Anesthesia services for hernia repair in the lower abdomen

14. Dilation of cervical canal

15. Molar pregnancy excision

16. Electrosurgical removal, 12 skin tags

17. Magnetic resonance imaging (MRI), lumbar spine with contrast

18. Needle core biopsy of lung

19. Destruction of 8 warts

20. Repair of complex, open wound of scalp; 2.8 cm
3.02 Understand health informatics

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Directions: Record notes and class discussion in your own words. Compare the ICD-9-CM and CPT codes as you view the PowerPoint presentation.

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<th>CPT Coding</th>
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20. Gouty arthritis
3.02 CPT Coding

Handout

Directions: Use the CPT Code book to assign the correct CPT code for the following procedure/service. Follow the Basic Steps of CPT Coding.

1. Arthrography of the knee, supervision and interpretation
2. Lipid panel blood test
3. Breast abscess, incision and drainage
4. Pneumocentesis
5. Closed reduction of closed fracture, clavicle, without manipulation
6. Influenza vaccine, age 3 years old (preservative free)
7. Bacteria culture, urine
8. Stool for occult blood
9. X-ray pelvis, 4 views
10. Bilateral screening mammography
11. Diagnostic arthroscopy, right wrist, with synovial biopsy
12. Laparoscopic cholecystectomy with cholangiography
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18. Needle core biopsy of lung
19. Destruction of 8 warts
20. Repair of complex, open wound of scalp; 2.8 cm
Directions: Record notes and class discussion in your own words.

<table>
<thead>
<tr>
<th>Document information</th>
<th>Career Responsibilities</th>
<th>Class Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Communicate information</td>
<td></td>
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<tr>
<td>Manage health information systems</td>
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</tbody>
</table>

3.02 Understand health informatics II
Handout
Directions: Translate the following patient scenario and rewrite the scenario using the definition of the abbreviation. Underline the definition.

Katie was admitted to the ED with complaints of FUO, N/V, and SOB. She had had nothing po because the sx became worse pc. A CBC, UA, and BS were ordered. An intravenous line was started and she was made NPO. Her TPR was normal but her P had increased. After a few hours, it was determined that she could be OOB and the order for BR was discontinued. She was placed on cl liq and received more than gtts for lunch. Her initial Dx of R/O salmonella was amended as she tolerated the liquids. When all lab work returned WNL, she was discharged. On the way out of the ED, she had to complete the paperwork with her DOB and was given a Rx for nausea.
3.02 Medical Abbreviations

Handout

a       before
ac      before meals
ad lib  as desired
ax      axillary
BR      bedrest
BS      blood sugar
BSE     breast self-exam
CBC     complete blood count
cl liq  clear liquids
DNR     do not resuscitate
DOA     dead on arrival
DOB     date of birth
Dx, dx  diagnosis
ED      emergency department
FUO     fever of unknown origin
gtt     drop
NPO     nothing by mouth
N/V, N&V nausea and vomiting
p       after
P       pulse
OOD     out of bed
cpyc     after meals
po      by mouth
R       respiration
R/O     rule out
ROM     range of motion
Rx      treatment
SOB     shortness of breath
Sx      symptom
T, temp temperature
TPR     temperature, pulse, respiration
UA, U/A urinalysis
WNL     within normal limits
3.02 Proofreading Exercise

Handout

Directions: In the record below, circle misspelled words and identify missing words. Underline the misspelled words and write the corrected and missing words in the appropriate blanks. Consult medical and English dictionaries as necessary.

1. The laboratory testing of blood, urine, and

2. other body fluids and waste products plays a

3. minor role in modern diagnostic medicine.

4. The number of available tests increases

5. almost daily, and the range of diseases and

6. conditions able to be tested in laboratory

7. studies continually broadens. Some mention

8. of laboratory test results appears frequently

9. in history, in physical examination reports

10. and nearly always in hospital discharge

11. summaries. Accordingly the medical

12. transcriptionist must be familiar with the

13. general concepts of laboratory medicine as

14. well as with specific tests. Diagnostic

15. laboratory procedures may be called tests,

16. studies, or simply work ("lab studies, " "lab

17. word"). Physicians may report that they

18. ordered, got, ran, did, or (in the case of

19. blood work) drew a test.

20. Crohn's disease is a chronic disorder

21. which consists of inflammation of the

22. gastrointestinal tract. It is most commonly
23. inflammation of the terminal ilium. The
24. exact cause is unknown, but possible
25. causes are allergies, immune
26. disorders, and infections. Laboratory tests
27. have not detected any bacteria or virus
28. responsible for causing Crohn's disease.
29. The patient experiences cramping,
30. abdominal pain, nausea, diarrhea,
31. abdominal tenderness, and weakness.
32. Patience may be given interavenous fluids
33. to provide nutrition while resting the bile.
34. Some patients require surgery if the bile
35. perforates, obstructs, or if there is
36. massive hemorrhage.
<table>
<thead>
<tr>
<th>Key Term</th>
<th>Definition</th>
<th>Student Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>abstracting</td>
<td>collecting information from a medical record</td>
<td></td>
</tr>
<tr>
<td>claims attachment</td>
<td>medical report attached to the claim form substantiating a medical condition</td>
<td></td>
</tr>
<tr>
<td>coding</td>
<td>assignment of a code to the patient's diagnoses, procedures for the purpose of reimbursement</td>
<td></td>
</tr>
<tr>
<td>ICD-9-CM</td>
<td>International Classification of Diseases, 9th Revision, Clinical Modification – coding system used to report diagnoses and reasons for encounters, such as an annual physical examination, on outpatient and physician office claims</td>
<td></td>
</tr>
<tr>
<td>CPTa</td>
<td>Current Procedural Terminology – coding system published by the American Medical Association that is used to report procedures and services performed during outpatient and physician office encounters</td>
<td></td>
</tr>
<tr>
<td>CMS</td>
<td>Center for Medicare and Medicaid Services – administrative agency within the federal Department of Health and Human Services; responsible for the operation of Medicare and Medicaid</td>
<td></td>
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<tr>
<td>-----------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>explanation of benefits (EOB)</td>
<td>report detailing the results of processing a claim (Ex: payer reimburses provider $80 on a submitted charge of $100)</td>
<td></td>
</tr>
<tr>
<td>health insurance claim form (CMS-1500)</td>
<td>documentation submitted to a third-party payer or government program requesting reimbursement for healthcare services provided</td>
<td></td>
</tr>
<tr>
<td>medical necessity</td>
<td>linking every procedure or service code reported on the claim to an ICD-9-CM condition code that justifies the necessity for performing that procedure or service</td>
<td></td>
</tr>
<tr>
<td>preauthorization</td>
<td>prior approval for treatment by specialists and documentation of post-treatment reports</td>
<td></td>
</tr>
<tr>
<td>remittance advice</td>
<td>notice sent by the insurance company that contains payment information about a claim</td>
<td></td>
</tr>
</tbody>
</table>
# 3.02 Patient Registration Form

**Handout**

<table>
<thead>
<tr>
<th>Name: Jean Smith</th>
<th>Social Security No: 244-44-4444</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address: 452 Farm Blvd</td>
<td></td>
</tr>
<tr>
<td>City, State, Zip: Anyville, NC 27828</td>
<td>DOB: 1-5-40</td>
</tr>
<tr>
<td>Phone: (H) (252) 753-5300 (W): (252) 753-5266</td>
<td>Sex: Female</td>
</tr>
<tr>
<td>Occupation/Employer: Perdue</td>
<td>Physician: Jones</td>
</tr>
<tr>
<td>Spouse's Name: John Smith</td>
<td>Status: Married</td>
</tr>
<tr>
<td>Emergency Contact: Jane Smith</td>
<td>Emergency Contact Phone: 753-1111</td>
</tr>
<tr>
<td>(Other than Spouse)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Insurance Plan: Prudential</th>
<th>Policy ID#: YPP5689XX3</th>
<th>Group #: 37500</th>
<th>Secondary Policy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policyholder Name: Amanda Dixon</td>
<td>Birthdate: 1-5-40</td>
<td>Relationship: Self</td>
<td>Policyholder Name:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Birthdate:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Relationship:</td>
</tr>
</tbody>
</table>

Assignment of Insurance Benefits

I hereby authorize direct payment of surgical/medical benefits to Dr. ______________________ for services rendered by him/her in person or under his/her supervision. I understand that I am financially responsible for any balance not covered by my insurance.

Authorization to Release Information

I hereby authorize Dr. ______________________ to release any medical or incidental information that may be necessary for either medical care or in processing applications for financial benefit.

Medicare-Medicaid

I certify that the information given by me in applying for payment is correct. I authorize release of all records on request. I request that payment of authorized benefits be made on my behalf.

*A photocopy of these assignments shall be valid as the original.*

**PATIENT SIGNATURE:** Amanda Dixon  
**DATE:** 01-01-06

**PARENT/GUARDIAN (please print):** ______________________  
**SIGNATURE:** ______________________

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Alphabetic Filing
- All personal names are transposed so that the last name is the primary indexing unit, first name second and middle name or initial is the third unit.
- April Smith Smith, April
- Jesse W. Brown Brown, Jesse W.
- If filing identical names, use the city and street names to place in alphabetical sequence
  - Don S. Clay, Asheboro, N. C. Clay, Don S. Asheboro
  - Don S. Clay, Raleigh, N. C. Clay, Don S. Raleigh
- Names with prefixes are filed disregarding punctuation and spacing within the surname
  - Rena de la Santos de la Santos, Rena
  - Amee La Croix La Croix, Amee
  - David M. McArthur McArthur, David M.
- Abbreviated names are files as though the names were spelled out.
  - Chas. Malley Malley, Charles
  - Charles L. Malley Malley, Charles L.
- Professional titles and degrees are placed at the end of the name and enclosed in parentheses.
- Organizations and Businesses in order they are written
  - American, Red, Cross
- Exception: If Owner's name is name of business, then follow name rules
  - The T.S. Eliot Company is filed as Eliot, T., S., Company
- Hyphenated names are considered as one unit
- After indexing, follow strict alphabetical order, use as many letters as needed to file
- Nothing comes before something
- Numbers in a name are indexed as though they were spelled out

Numeric Filing
- Cross indexing (referencing) is required
- Patient names are indexed as for alpha filing
- Agency numbering usually runs in order, and a record is kept of which numbers have been assigned.
- When patient comes to agency, alpha cross index is checked to locate patient's file number
- Numbers go in order from small to large
- If zero falls before other numbers, the zero is disregarded when filing
- Many systems use the same terminal (last) digit for certain shelves or drawers - if so - check the last digit and then put all the same last digits together