3.02 Understand Health Informatics
Health Informatics

- Health Informatics professionals treat technology as a tool that helps patients and healthcare professionals.
Health Informatics

- A career area that combines
  - technology
  - healthcare science
  - communications
  - administration
  - business management.

- Two areas of health informatics:
  - Management
  - Technical
Health Informatics: Management Duties

- Design and develop information systems needed for medical records and insurance.
- Develop policies and procedures for handling medical information to ensure patient privacy and security.
- Manage budget.
- Train users.
Health Informatics:
Technical Duties

- Design and develop information systems that operate between healthcare facilities
- Integrate all medical records and insurance requirements into one system
- Develop information systems that follow policies and procedures for handling information to ensure patient privacy and security
Health Informatics Professionals

- Analyze patient information
- Abstract and code patient information
Health Informatics Professionals

- Document information
- Communicate information
- Manage health information systems
Health Informatics
Career Responsibilities

**Analyze patient information**

- Determine information required
- Collect required information
- Evaluate the information
- Report and distribute information within legal guidelines
Abstract and code patient information

- Abstracting refers to collecting information from a medical record.
- Coding refers to the assignment of a code to each of the patient’s diagnoses and procedures for the purpose of reimbursement
  - Diagnosis codes
  - Procedure codes
Health Informatics
Career Responsibilities

Abstract and code patient information

- Collect information to record charges and reimbursements
- Use appropriate medical terminology
- Apply information for regulatory and legal purposes
Coding:

Diagnosis codes

Procedure codes
Coding

Refers to the assignment of a code to each of the patient’s diagnoses and procedures for the purpose of reimbursement

Diagnosis codes

Procedure codes
Diagnosis Codes

ICD-9-CM Coding
Diagnosis Codes

**World Health Organization**
- International Classification of Diseases (ICD)
- Codes aid in tracking the presence of disease

**US Department of Health and Human Services**
- International Classification of Diseases Clinical Modification (ICD-CM)
- Used in diagnosis coding
Diagnosis Codes

ICD-9-CM Coding

- Used to code the diagnosis
- Must identify the main term in the diagnosis

Example: Essential hypertension
Diagnosis Codes

ICD-9-CM Coding

• The code book:
  • Contains three volumes
    • Volume 1 – Tabular List of Diseases
    • Volume 2 – Index to Diseases
    • Volume 3 – Index to Procedures and Tabular List of Procedures

• Physicians’ offices and outpatient facilities use only Volumes 1 and 2 when coding
Diagnosis Codes

ICD-9-CM Coding

Continued

- Volume 1
  - *numerical* listing of conditions

- Volume 2:
  - *alphabetical* listing of the diseases
  - always found at the beginning of the code book
Diagnosis Codes

ICD-9-CM Coding

Continued

Main Term in Diagnosis

- Main term – condition causing the patient to be sick.
  - Example: **Urinary Tract Infection**

Infection is the main term in this diagnosis.

Urinary Tract is the location of the infection and would not be the first place to look in the index (Volume 2).
Diagnosis Codes

ICD-9-CM Coding

Complete

What’s the Main Term?
Diagnosis Codes

ICD-9-CM Coding

Basic Steps

- Locate the main term in the alphabetic index (Volume 2).
- Review the subterms.
- Follow cross-references.
- Verify the code found in the alphabetic index in the Tabular List (Volume 1).
- Assign the correct code.
Complete the ICD-9-CM Coding handout
Procedure Codes

CPT Coding
Procedure Codes

CPT Coding

- Used to code medical procedures and services performed in outpatient facilities
- Has an index and a numerical listing
Procedure Codes

CPT Coding

- To use the code book:
  - Go to the index, locate the procedure
  - Go to the numerical listing to determine which code is appropriate for the procedure listed in the charge form
There are 6 sections within the numerical listing.

- Evaluation and Management
- Anesthesia
- Surgery
- Radiology
- Pathology and Laboratory
- Medicine
Procedure Codes

CPT Coding

- The CPT index is organized by alphabetical main terms which include:
  - procedures
  - services
  - organs
  - anatomic sites
  - conditions
  - eponyms
  - abbreviations
Procedure Codes

CPT Coding

- This is quite different from what you learned from the ICD-9-CM coding.
- Reminder, with ICD-9-CM coding, you had to pick a main term. Not true with CPT coding.
- For this reason, most students like CPT coding over ICD coding.
Procedure Codes

CPT Coding

Basic Steps

1. Review the procedure or service listed on the charge slip. Ex: Rapid Strep Test
2. Locate the main term for the procedure or service.
3. Locate subterms and follow cross references.
4. Record all codes listed to be reviewed.
5. Review the description of procedure/service codes.
6. Record all codes listed to be reviewed.
7. Review the description of the procedure/service codes
8. Assign the appropriate code number.
Complete the CPT Coding handout