## Contents

**Introduction** .......................................................... 1
- Welcome to the Career of Medical Coding ................. 1
- The Nature of Medical Coding .................................. 1
- Coding and the Financial Picture .......................... 2
- Supporting Organizations ...................................... 3
- Opportunities in Coding ........................................ 5

**Chapter 1: Medical Terminology and Anatomy** .............. 7
- Introduction .......................................................... 7
- History ................................................................. 7
- Spelling ................................................................. 8
- Approaches to Medical Terminology .......................... 8
- Introduction to Human Anatomy ............................... 10
- Integumentary System .............................................. 14
- Musculoskeletal System .......................................... 16
- Respiratory System .................................................. 24
- Cardiovascular System ............................................. 29
- Lymphatic System ..................................................... 35
- Digestive Tract ......................................................... 38
- Urinary System ........................................................ 48
- Endocrine System ...................................................... 54
- Nervous System ........................................................ 57
- Eye—Ocular—Auditory .............................................. 60
- Planes ................................................................. 64
- Summary ............................................................... 65
- Discussion Questions ............................................. 65

**Chapter 2: Insurance Basics** ...................................... 67
- Introduction .......................................................... 67
- History ................................................................. 67
- Medicare and Medicaid .......................................... 67
- Health Insurance Today .......................................... 68
- Payer Comparisons .................................................. 69
- The Reimbursement Process .................................... 77
- Coverage Issues ....................................................... 77
- Payment Methodologies ........................................... 77
- Fee Schedules and Relative Values ............................ 78
- Capitation ............................................................... 78
- Inpatient and Ambulatory Systems ............................. 79
- Claim Submission ..................................................... 79
- Common Insurance Terminology ................................ 80
- Fraud and Abuse Issues .......................................... 80
- Summary ............................................................... 81
- Discussion Questions ............................................. 81

**Chapter 3: Coding Physician Services and Procedures** ....... 83
- Introduction .......................................................... 83
- CPT History ............................................................ 83
- Who uses CPT codes? ............................................. 84

**Chapter 4: Diagnosis Coding and ICD-9-CM** ................. 127
- Introduction .......................................................... 127
- History ................................................................. 127
- ICD-9-CM Diagnosis Coding ..................................... 128
- Organization ......................................................... 129
- Coding Guidelines .................................................. 129
- Documentation and Diagnosis Coding ..................... 129
- ICD-9-CM, Volume 2 .............................................. 130
- ICD-9-CM, Volume 1 .............................................. 133
- Supplemental Classification: V Codes ..................... 136
- Appendixes to Volume 1 .......................................... 137
- Conventions .......................................................... 138
- Assigning Diagnosis Codes ..................................... 143
- Clinical Applications of Coding Guidelines .................. 146
- ICD-10 Coding System ............................................ 147
- Summary ............................................................... 151
- Discussion Questions ............................................. 152

**Documentation and the CPT Code Book:**
- Reviewing the Source Document ............................. 85
- CPT Coding Conventions ....................................... 86
- Guidelines ............................................................ 88
- Code Changes ....................................................... 89
- Resequencing of CPT Codes ................................... 89
- Modifiers ............................................................... 90
- Modifier Impact on Reimbursement ......................... 91
- Add-on and Modifier 51 Exempt Codes ..................... 92
- Unlisted Procedures .............................................. 93
- The CPT Code Book Index ...................................... 93
- The 10 Steps to Basic CPT Coding ........................... 94
- Evaluation and Management Services ..................... 95
- E/M Service Guidelines ........................................... 96
- Evaluation and Management Service Levels .............. 98
- Selecting a Visit Code ............................................ 98
- New and Established Patient Services ....................... 99
- SOAP Note ............................................................ 99

**Main Categories of the Evaluation and Management Section** .................................................. 104
- Anesthesia ........................................................... 108
- Surgery ............................................................... 111
- Surgery Section Guidelines ..................................... 114
- Ancillary Services ................................................... 117
- Technical and Professional Components ................... 117
- Radiology ............................................................. 118
- Pathology ............................................................. 121
- Medicine .............................................................. 124
- Summary ............................................................... 125
- Discussion Questions ............................................. 126
Chapter 5: HCPCS Level II Coding ................................... 153
  Introduction ................................................................... 153  
  HCPCS Level I /CPT Coding System ............................... 153
  HCPCS Level II National Codes ..................................... 153
  The HCPCS National Codes in Detail ............................ 154
  HCPCS Codes .............................................................. 155
  Use of HCPCS ................................................................ 156
  How to Use HCPCS .................................................... 156
  Color-Coded Coverage Instructions ............................... 156
  Modifiers ...................................................................... 157
  Unlisted HCPCS Codes ................................................. 158
  Practicing the Principles .............................................. 158
  Hospital Outpatient Services ....................................... 159
  Physician Office Services .......................................... 159
  DMEPOS ...................................................................... 160
  The HCPCS Level II Codes ......................................... 162
  Summary ...................................................................... 163
  Discussion Questions..................................................... 163

Chapter 6: Medical Coding and Practice Management .... 165
  Introduction ................................................................... 165
  Registration .................................................................. 165
  Encounter Forms ........................................................ 166
  Precertification and Preauthorization ............................ 166
  Claims Submission and Processing ............................... 168
  Problem Claims .......................................................... 169
  Advance Beneficiary Notice ............................................. 169
  Charge Amounts .......................................................... 170
  Physician Reimbursement Methodologies ............................ 170
  Inpatient Reimbursement Methodologies ............................ 171
  Diagnosis-Related Group ............................................. 172
  Postpayment Process .................................................. 174
  Red Flags Rule ........................................................... 177
  The Medical Record and Documentation ............................ 178
  Inpatient Charting ........................................................ 181
  Compliance and Legal Considerations .............................. 184
  Summary ...................................................................... 186
  Discussion Questions..................................................... 186

Chapter 7: Inpatient Coding .......................................... 189
  Introduction ................................................................... 189

Chapter 8: Coding for Outpatient Facility Services—APCs
  and ASCs ................................................................... 209
  Introduction ................................................................... 209
  Outpatient Services Defined ......................................... 209
  Claims Processing ........................................................ 210
  APCs and the Outpatient Prospective Payment System .......... 211
  Services Covered in an APC ........................................... 215
  ASC Cost Controls ........................................................ 216
  Ambulatory Surgery Center .......................................... 219
  Legislation Affecting Reimbursement ............................... 220
  ASC Payment Groups ................................................... 221
  Summary ...................................................................... 226
  Discussion Questions..................................................... 226

Appendix A: The Office of Inspector General 2010 Work Plan
  for Medicare Physicians and Other Health Professionals . 227

Appendix B: Additional Word Roots, Prefixes, and
  Suffixes ................................................................... 233

Appendix C: Student Exercises ........................................ 241

Glossary ...................................................................... 275

Index .......................................................................... 301
• The kneecap (patellofemoral) joint (patella and femoral trochlear notch); the patella, or kneecap, is a small, triangular bone anterior to the knee joint.

**Lower Extremity**

The anterior cruciate ligaments (ACL) are located inside the knee joints and attach the femur to the tibia.

Articular cartilage is a tough, elastic tissue that covers the ends of bones in joints.

Each lower extremity also includes the tarsals, metatarsals, and phalanges in the toes. The tibia, or shinbone, is the larger, medial bone of the leg and bears the major portion of the weight of the leg.

The top ankle joint is composed of three bones:

- The tibia
- The fibula
- The talus

The leg bones (tibia and fibula) form a pocket around the top of the ankle bone (talus) which allows the foot's up and down bending. The subtalar is where the talus connects to the calcaneus (heel bone) and provides the foot's ability to rock from side to side. Three sets of fibrous tissues connect the bones and provide stability to both joints. The bumps on either side of the ankle are the ends of the lower leg bones; the bump on the outside of the ankle (lateral malleolus) is part of the fibula; the smaller bump on the inside of the ankle (medial malleolus) is part of the tibia.

**Foot and Toes**

The talus and calcaneus are on the posterior part of the foot and the talus is the only bone of the foot that articulates with the fibula and tibia. The calcaneous, or heel bone, is the strongest tarsal bone and bears the weight of the leg transmitted from the talus during walking.

The metatarsus consists of five metatarsal bones and, like the metacarpals of the palm of the hand, each metatarsal consists of a base, shaft, and head. The phalanges of the foot resemble those of the hand; all but the big toe consists of a base, shaft, and head. The large toe, or hallux, has the proximal and distal phalanges.
Components of the Medical Record
A complete and accurate patient information sheet is usually the first component of the medical chart or record.

Patient information falls into two categories—general medical information and billing information. Because people may see more than one provider or they may move, change jobs, and switch insurance plans, patient information forms are updated on a regular basis.

The following shows the information gathered in the office.

Patient Medical Information
A patient medical information form should contain the following:

- Patient’s full name
- Current address and telephone number
- Date of birth
- Sex
- Occupation, employer’s name, address, and telephone number
- Reason for visit
- Allergies (must be documented at each patient encounter)
- Current medications
- Previous medical history and pertinent family history
- Referring physician name, address, and telephone number
- Name and telephone number of person to contact in an emergency

Patient Billing Information
A patient billing form is separate from the medical record and contains the following pertinent information:

- Patient’s full name
- Current address and telephone number
- Date of birth
- Sex
- Social security number
- Driver’s license number
- Occupation, employer’s name, address, and telephone number
- Responsible party (insured), address, and telephone number
- Reference: a relative or friend not living with the patient including address and telephone number
- Medical insurance information including address, contract or policy number, group number, and effective dates for coverage

Preprinted Patient History Forms
One of the most important elements in a patient’s medical record is the health history. Preprinted checklist-style forms are often used to obtain a patient’s history. Different types of forms are used in hospitals, although various departments sometimes use preprinted patient history forms as a screening tool. The physician should make pertinent comments, and date and sign the history form as part of the medical record.