

# Medical Coding and Billing II

**8389 18 weeks**

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## Course Description

**Suggested Grade Level:** 12

Students will become familiar with the health insurance industry and legal and regulatory issues. Students will learn the principles of medical coding and billing related to reimbursement, claim submission, and payment regarding ICD, CPT, and HCPCS coding systems. Students will consider the impact of fraud and importance of biomedical ethics.

## Task Essentials Table

- Tasks/competencies designated by plus icons (⊕) in the left-hand column(s) are essential
- Tasks/competencies designated by empty-circle icons (○) are optional
- Tasks/competencies designated by minus icons (⊖) are omitted
- Tasks marked with an asterisk (\*) are sensitive.

8389	Tasks/Competencies
Introducing Medical Coding and Billing	
⊕	Identify key job responsibilities in medical coding.
⊕	Identify key job responsibilities in medical billing.
⊕	Examine state and federal regulatory standards.
⊕	Explain job opportunities in medical coding and billing.

8389	Tasks/Competencies
Introducing Coding Systems	
+	Examine the International Disease ICD-9-CM.
+	Identify key features of the ICD-10-PCS/CM.
+	Identify key features of the CPT.
+	Identify key features of the Healthcare Common Procedure Coding System (HCPCS).
+	Explain the steps used to locate codes.
+	Locate codes based on provider information.
+	Explain reimbursement forms, including the CMS 1500 and UB-o4 forms.
Applying Coding and Billing to Medical Diagnosis and Procedures	
+	Explain the impact of contractual agreements and forms, including the CMS 1500 and UB-o4 forms.
+	Explain diagnosis coding specialties.
+	Demonstrate diagnosis coding specialty procedures.
Understanding Issues with Fraud and Abuse	
+	Explain the healthcare fraud and abuse climate.
+	Explain the role of the Department of Health and Human Services in fraudulent activity.
+	Explain the False Claims Act.
+	Describe the role of an auditor.
+	Explain solutions for avoiding fraud and abuse.

Legend: + Essential ○ Non-essential ⊖ Omitted

## Curriculum Framework

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# Introducing Medical Coding and Billing

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## Task Number 001

### Identify key job responsibilities in medical coding.

#### Definition

Identification should include

- reviewing documentation to ensure compliance with national standards
- adhering to privacy standards as required by HIPAA
- translating patient information into alphanumeric medical code
- collecting, posting, and managing patient account payments
- submitting claims to insurance
- preparing and reviewing patient statements.
- reviewing delinquent accounts and calling for collection purposes
- processing payments from insurance companies
- coding patient services and entering into the computer
- sorting and filing paperwork
- ensuring healthcare facilities are reimbursed for all procedures
- handling information about patient treatment, diagnosis, and related procedures to ensure proper coding
- knowing several different coding systems, including Level 1 HCPCS and Level 2 HCPCS
- using computers to read and organize charts
- following up to see if a claim is accepted or denied
- investigating a rejected claim to see why a denial was issued
- investigating insurance fraud and reporting it if found.

#### Process/Skill Questions

- Why is accuracy important in the medical coding field?
- Why is knowledge of legal and regulatory issues important to a medical coder?

#### HOSA Competitive Events (High School)

##### Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Medical Law and Ethics

## Teamwork Events

- Health Career Display
- 

## Task Number 002

### Identify key job responsibilities in medical billing.

#### Definition

Identification should include

- adhering to privacy standards as required by HIPAA
- entering patient information into computer files and, possibly, also in paper records
- organizing, managing, and sorting paperwork, including patients' charts
- entering data continuously as patients are subjected to diagnostic tests and receive treatments
- translating information into alphanumeric medical code
- preparing and mailing billing statements
- submitting claims to insurance companies and other third-party payers
- processing payments from insurance companies
- posting transactions and reconciling payments to patient ledgers
- collecting and managing patient account payments
- identifying past-due bills and recommending collection actions
- ensuring that a facility is reimbursed for all services provided
- resolving conflicts regarding payments and reimbursements
- writing reports and providing information to government agencies
- responding, in writing and by telephone, to patients' questions about billing
- investigating and reporting instances of insurance fraud
- providing information and preparing documents for legal inquiries and litigation
- ensuring the confidentiality of patients' personal information
- performing clerical duties that may include answering the telephone, greeting patients, and sorting mail.

#### Process/Skill Questions

- How are medical coding and medical billing different?
- When would the positions of medical coder and medical biller be combined?

## HOSA Competitive Events (High School)

### Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Medical Law and Ethics

#### **Teamwork Events**

- Health Career Display
- 

## **Task Number 003**

### **Examine state and federal regulatory standards.**

#### **Definition**

Examination should include

- identifying health care industry standards
- explaining Medicare, Medicaid, TRICARE, and commercial payers
- comparing and contrasting the regulatory requirements for each.

#### **Process/Skill Questions**

- How would a supplemental policy impact primary care insurance?
- Which insurance is primary if the patient has Medicare coverage?

### **HOSA Competitive Events (High School)**

#### **Teamwork Events**

- HOSA Bowl
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## **Task Number 004**

### **Explain job opportunities in medical coding and billing.**

#### **Definition**

Explanation should include

- Professional Coder (CPC)

- Certified Outpatient Coder (COC)
- Certified Inpatient Coder (CIC)
- Certified Risk Adjustment Coder (CRC)
- Certified Professional Biller (CPB)
- Certified Professional Medical Auditor (CPMA)
- Certified Physician Practice Manager (CPPM)
- Certified Professional Compliance Officer (CPCO)

### **Process/Skill Questions**

- Who are the credentialing organizations for medical coding and/or medical billing?
- Where are potential employment opportunities?
- From where did the ICD-9 originate?
- What does the CM represent at the end of the ICD-9?

### **HOSA Competitive Events (High School)**

#### **Leadership Events**

- Medical Photography

#### **Teamwork Events**

- Health Career Display

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# **Introducing Coding Systems**

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## **Task Number 005**

### **Examine the International Disease ICD-9-CM.**

#### **Definition**

Examination should include the following:

- History of the ICD-9-CM
- Contents of each volume of the ICD-9-CM
- Guidelines concerning ICD-9-CM coding

- Common signs and symbols of the ICD-9-CM
- Factors to be aware of when using ICD-9-CM
- Transition from ICD-9-CM to ICD-10-CM/PCS
- Current Procedural Terminology

### **Process/Skill Questions**

- From where did the ICD-9 originate?
- What does the CM represent at the end of the ICD-9?

### **HOSA Competitive Events (High School)**

#### **Health Science Events**

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

## **Task Number 006**

### **Identify key features of the ICD-10-PCS/CM.**

#### **Definition**

Identification should include

- ICD-10-PCS codes
  - 1: Medical and Surgical
  - 2: Obstetrics
  - 3: Placement
  - 4: Measurement and Monitoring
  - 5: Extracorporeal Assistance and Performance
  - 6: Extracorporeal Therapies
  - 7: Osteopathic
  - 8: Other Procedures
  - 9: Chiropractic
  - B: Imaging
  - C: Nuclear Medicine
  - D: Radiation Oncology
  - F: Physical Rehabilitation and Diagnostic Audiology
  - G: Mental Health
  - H: Substance Abuse Treatment



- ICD-10-CM codes
  - Chapter I A00 – B99: Certain infectious and parasitic diseases
  - Chapter II C00 – D48: Neoplasms
  - Chapter III D50 – D89: Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
  - Chapter IV E00 – E90: Endocrine, nutritional, and metabolic diseases
  - Chapter V F00 – F99: Mental and behavioural disorders
  - Chapter VI G00 – G99: Diseases of the nervous system
  - Chapter VII H00 – H59: Diseases of the eye and adnexa
  - Chapter VIII H60 – H95: Diseases of the ear and mastoid process
  - Chapter IX I00 – I99: Diseases of the circulatory system
  - Chapter X J00 – J99: Diseases of the respiratory system
  - Chapter XI K00 – K93: Diseases of the digestive system
  - Chapter XII L00 – L99: Diseases of the skin and subcutaneous tissue
  - Chapter XIII M00 – M99: Diseases of the musculoskeletal system and connective tissue
  - Chapter XIV N00 – N99: Diseases of the genitourinary system
  - Chapter XV O00 – O99: Pregnancy, childbirth, and the puerperium
  - Chapter XVI P00 – P96: Certain conditions originating in the perinatal period
  - Chapter XVII Q00 – Q99: Congenital malformations, deformations, and chromosomal abnormalities
  - Chapter XVIII R00 – R99: Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified
  - Chapter XIX S00 – T98: Injury, poisoning, and certain other consequences of external causes
  - Chapter XX V01 – Y98: External causes of morbidity and mortality
  - Chapter XXI Z00 – Z99: Factors influencing health status and contact with health services
  - Chapter XXII U00 – U99: Codes for special purposes

## **Process/Skill Questions**

- What are the differences between the PCS and CM systems and applications?
- How does knowing the guidelines lead to successful completion of certification exams?

## **HOSA Competitive Events (High School)**

### **Health Science Events**

- Medical Spelling
- Medical Terminology
- Knowledge Test: Human Growth and Development
- Knowledge Test: Pathophysiology

## **Task Number 007**

### **Identify key features of the CPT.**

#### **Definition**

Identification should include the following three categories of codes:

- Category I: procedures that are consistent with contemporary medical practice and are widely performed
- Category II: supplementary tracking codes that can be used for performance measures
- Category III: temporary codes for emerging technology, services, and procedures

#### **Process/Skill Questions**

- What are the differences between the CPT and ICD-10 systems and applications?
- How does knowing the guidelines lead to the successful completion of certification exams?

### **HOSA Competitive Events (High School)**

#### **Health Science Events**

- Medical Spelling
- Medical Terminology
- Knowledge Test: Human Growth and Development
- Knowledge Test: Pathophysiology

#### **Recognition**

- Health Care Issues Exam

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## **Task Number 008**

### **Identify key features of the Healthcare Common Procedure Coding System (HCPCS).**

#### **Definition**

Identification should include the following types of HCPCS:

- Level I codes: same as CPT codes; when used to bill Medicare or Medicaid, they are considered HCPCS codes
- Level II codes: designed to represent non-physician services such as ambulance rides, wheelchairs, walkers, other durable medical equipment, and other medical services that do not fit readily into Level I codes
- Modifier codes: provide additional information about a procedure or service without redefining the service provided.

### **Process/Skill Questions**

- What are the differences between the HCPCS, CPT, and ICD-10 systems and applications?
- How does knowing the guidelines lead to the successful completion of certification exams?

### **HOSA Competitive Events (High School)**

#### **Health Science Events**

- Medical Spelling
- Medical Terminology
- Knowledge Test: Human Growth and Development
- Knowledge Test: Pathophysiology

## **Task Number 009**

### **Explain the steps used to locate codes.**

#### **Definition**

Explanation should include

- go to the alpha index in each system
- correlate alpha to numeric code.

### **Process/Skill Questions**

- What resources are available to locate codes?
- Is correct spelling important when locating codes?

### **HOSA Competitive Events (High School)**

#### **Health Science Events**

- Medical Spelling
  - Medical Terminology
- 

## **Task Number 010**

### **Locate codes based on provider information.**

#### **Definition**

Location should include

- accessing the appropriate reference
- interpreting clinical documentation to assign relevant codes
- assigning codes to procedures and services.

#### **Process/Skill Questions**

- Why is it important to analyze the clinical documentation with attention to detail?
- What are the ramifications of miscoding?

### **HOSA Competitive Events (High School)**

#### **Health Science Events**

- Medical Spelling
  - Medical Terminology
  - Knowledge Test: Pathophysiology
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## **Task Number 011**

### **Explain reimbursement forms, including the CMS 1500 and UB-o4 forms.**

#### **Definition**

Explanation of forms, including the CMS 1500 and UB-o4, should include

- key term
- historical development of CMS reimbursement systems

- special rules for the Medicare physician fee schedule payment system
- chargemaster
- hospital revenue cycle management
- appeal process
- completion of forms for
  - workers' compensation
  - Blue Cross/Blue Shield
  - Medicare
  - Medicaid
  - TRICARE.

### **Process/Skill Questions**

- When would you use a 1500 form versus an UB-o4 form?
- What are common mistakes made when filling out forms?
- What is a clean versus dirty claim?
- What are the steps to an appeal?

### **HOSA Competitive Events (High School)**

#### **Health Science Events**

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pathophysiology

# **Applying Coding and Billing to Medical Diagnosis and Procedures**

## **Task Number 012**

**Explain the impact of contractual agreements and forms, including the CMS 1500 and UB-o4 forms.**

### **Definition**

Explanation should include

- participation versus nonparticipation
- reimbursement agreements
- interpretation of remittance advice
- criminal consequences
- role of the Office of the Inspector General and complete background checks.

### **Process/Skill Questions**

- How does reimbursement differ between participating and nonparticipating programs?
- What safety mechanisms are in place to alert employers to fraudulent activities?

### **HOSA Competitive Events (High School)**

#### **Health Science Events**

- Knowledge Test: Medical Law and Ethics

## **Task Number 013**

### **Explain diagnosis coding specialties.**

#### **Definition**

Explanation should include

- cancer and neoplasma
- musculoskeletal
- cardiovascular and circulatory
- respiratory
- immune system
- nervous system
- eye and ear
- genital and urinary systems
- digestive
- endocrine
- obstetrics
- surgical and anesthesia
- lab
- radiology
- pathology
- congenital malformations
- accidents and injuries
- mental health

- morbidity.

### **Process/Skill Questions**

- What is the reimbursement code for each specialty area?
- What are the procedures when codes overlap in specialty areas?

### **HOSA Competitive Events (High School)**

#### **Health Science Events**

- Medical Spelling
  - Medical Terminology
  - Knowledge Test: Human Growth and Development
  - Knowledge Test: Pathophysiology
- 

## **Task Number 014**

### **Demonstrate diagnosis coding specialty procedures.**

#### **Definition**

- cancer and neoplasma
- musculoskeletal
- cardiovascular and circulatory
- respiratory
- immune system
- nervous system
- eye and ear
- genital and urinary systems
- digestive
- endocrine
- obstetrics
- surgical and anesthesia
- lab
- radiology
- pathology
- congenital malformations
- accidents and injuries
- mental health
- morbidity.

### **Process/Skill Questions**

- Why is medical terminology important to specialties related to anatomy, physiology, and body organization pertaining to coding and billing treatment or procedures?
- Why is provider information crucial to reimbursement?

## **HOSA Competitive Events (High School)**

### **Health Science Events**

- Medical Spelling
- Medical Terminology
- Knowledge Test: Human Growth and Development
- Knowledge Test: Pathophysiology

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# **Understanding Issues with Fraud and Abuse**

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## **Task Number 015**

### **Explain the healthcare fraud and abuse climate.**

#### **Definition**

Explanation should include

- upcoding
- downcoding
- unbundling
- kitchen sink coding
- inconsistent coding
- inflated charges.

#### **Process/Skill Questions**

- How do unbundling and decoding differ?
- How can you recognize and report fraudulent behavior?
- What is the fraud and abuse whistleblower?
- What are the consequences of fraudulent behavior?

## **HOSA Competitive Events (High School)**

### **Health Science Events**



- Medical Spelling
  - Medical Terminology
  - Knowledge Test: Pathophysiology
- 

## **Task Number 016**

### **Explain the role of the Department of Health and Human Services in fraudulent activity.**

#### **Definition**

Explanation should include that the Department of Health and Human Services accept all sources of potential fraud for waste, abuse, and mismanagement related to their services and programs (e.g., Medicare and Medicaid).

#### **Process/Skill Questions**

- How much money is lost annually due to fraudulent Medicare and Medicaid claims?
- What are the civil and criminal repercussions of federal fraudulent activity?
- How can a provider lose the privilege to bill Medicare and Medicaid claims?

### **HOSA Competitive Events (High School)**

#### **Recognition**

- Health Care Issues Exam
- 

## **Task Number 017**

### **Explain the False Claims Act.**

#### **Definition**

Explanation should include local, state, and federal laws regarding defrauding the government.

#### **Process/Skill Questions**

- What is the Lincoln law?
- Who monitors healthcare fraud?

## **HOSA Competitive Events (High School)**

### **Health Science Events**

- Knowledge Test: Medical Law and Ethics
- 

## **Task Number 018**

### **Describe the role of an auditor.**

#### **Definition**

Description should include reviewing documentation to ensure it was billed and coded in accordance with regulatory rules and standards.

#### **Process/Skill Questions**

- What circumstances will trigger an audit?
- What are the consequences of a failed audit?

## **Task Number 019**

### **Explain solutions for avoiding fraud and abuse.**

#### **Definition**

Explanation should include strategies to avoid fraudulent behavior and the mismanagement of state and federal funds.

#### **Process/Skill Questions**

- What precautions can a coder and biller take to protect against an audit?
- What legal and ethical rights do medical coders and billers have?

## **HOSA Competitive Events (High School)**

### **Health Science Events**

- Knowledge Test: Medical Law and Ethics
-

# SOL Correlation by Task

Identify key job responsibilities in medical coding.	
Identify key job responsibilities in medical billing.	
Examine state and federal regulatory standards.	History and Social Science: GOVT.9, GOVT.15
Explain job opportunities in medical coding and billing.	English: 12.5
Examine the International Disease ICD-9-CM.	
Identify key features of the ICD-10-PCS/CM.	
Identify key features of the CPT.	
Identify key features of the Healthcare Common Procedure Coding System (HCPCS).	
Explain the steps used to locate codes.	English: 12.5
Locate codes based on provider information.	
Explain reimbursement forms, including the CMS 1500 and UB-o4 forms.	English: 12.5
Explain the impact of contractual agreements and forms, including the CMS 1500 and UB-o4 forms.	English: 12.5
Explain diagnosis coding specialties.	English: 12.5
Demonstrate diagnosis coding specialty procedures.	
Explain the healthcare fraud and abuse climate.	English: 12.5  History and Social Science: GOVT.9, GOVT.15, GOVT.16
Explain the role of the Department of Health and Human Services in fraudulent activity.	English: 12.5, 12.8  History and Social Science: GOVT.9, GOVT.15
Explain the False Claims Act.	English: 12.5, 12.8
Describe the role of an auditor.	English: 12.5, 12.8
Explain solutions for avoiding fraud and abuse.	English: 12.5, 12.8

## Instructional Resources

[American Health Information Management \(AHIMA\)](#)  
[American Association of Professional Coders \(AAPC\)](#)  
[Medical Coding](#)  
[Medical Billing](#)  
[Medical Association of Billers \(MAB\)](#)  
[Medical Billing Certifications](#)

# Appendix: Credentials and Career Cluster Information

**Industry Credentials: Only apply to 36-week courses**

- AAPC Medical Coding Examinations
- Billing Coding Specialist Certification (BCSC) Examination
- Certified Coding and Billing Specialist (CBCS) Examination
- Certified Medical Administrative Assistant (CMAA) Examination
- College and Work Readiness Assessment (CWRA+)
- Electronic Health Record Certification (EHRC) Examination
- Medical Administration Assistant Certification (MAAC) Examination
- Medical Coding and Billing Specialist (MCBS) Examination
- National Career Readiness Certificate Assessment
- National Certified Insurance and Coding Specialist (NCICS) Examination
- Nationally Registered Certified Administrative Health Assistant (NRCAHA) Examination
- Nationally Registered Certified Coding Specialist (NRCCS) Examination
- Workplace Readiness Skills for the Commonwealth Examination

<b>Career Cluster: Health Science</b>	
<b>Pathway</b>	<b>Occupations</b>
<b>Health Informatics</b>	<b>Admitting Clerk Financial Manager Medical Assistant Medical Biller, Patient Financial Services Medical Information Technologist Medical, Health Services Manager</b>
<b>Support Services</b>	<b>Data Entry Specialist Front Office Assistant Records Processing Assistant</b>
<b>Therapeutic Services</b>	<b>Medical Assistant</b>