

Medical Billing and Coding

Subject: Career Development and Career and Technical Education

Grade: 11

Expectations: 31

Breakouts: 118

(a) Introduction.

1. Career and technical education instruction provides content aligned with challenging academic standards, industry-relevant technical knowledge, and college and career readiness skills for students to further their education and succeed in current and emerging professions.
2. The Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
3. Medical Billing and Coding familiarizes students with the process, language, medical procedure codes, requirements of Health Insurance Portability and Accountability Act (HIPAA), and skills they will need to make accurate records. Students will develop an understanding of the entire process of the revenue cycle and how to effectively manage it. The program is designed to prepare students for employment in a variety of health care settings as entry level coder, medical billing specialist, and patient access representative.
4. Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
5. Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(b) Knowledge and Skills Statements

- (1) The student demonstrates professional standards/employability skills required by the healthcare industry. The student is expected to:
 - (A) demonstrate the ability to communicate and use interpersonal skills effectively;
 - (i) demonstrate the ability to communicate effectively
 - (ii) demonstrate the ability to use interpersonal skills effectively
 - (B) compose written communication, including emails using correct spelling, grammar, formatting, and confidentiality;
 - (i) compose written communication including emails using correct spelling
 - (ii) compose written communication including emails using correct grammar
 - (iii) compose written communication including emails using correct formatting
 - (iv) compose written communication including emails using confidentiality
 - (C) use appropriate medical terminology and abbreviations; and
 - (i) use appropriate medical terminology
 - (ii) use appropriate medical abbreviations
 - (D) model courtesy and respect for patients and team members in the multi-disciplinary healthcare setting and maintain good interpersonal relationships.
 - (i) model courtesy for patients in the multi-disciplinary healthcare setting

- (ii) model courtesy for teams in the multi-disciplinary healthcare setting
- (iii) model respect for patients in the multi-disciplinary healthcare setting
- (iv) model respect for teams in the multi-disciplinary healthcare setting
- (v) maintain good interpersonal relationships [with patients]
- (vi) maintain good interpersonal relationships [with teams]

(2) The student explores career opportunities in revenue cycle management. The student is expected to:

- (A) identify professional opportunities within the medical billing and revenue cycle management professions;
 - (i) identify professional opportunities within the medical billing professions
 - (ii) identify professional opportunities within the revenue cycle management professions
- (B) demonstrate ethical billing and coding practices as outlined by professional associations guidelines; and
 - (i) demonstrate ethical billing practices as outlined by professional associations guidelines
 - (ii) demonstrate ethical coding practices as outlined by professional associations guidelines
- (C) investigate professional associations applicable to the field of health informatics such as American Academy of Professional Coders (AAPC), American Health Information Management Association (AHIMA), Healthcare Billing and Management Association (HBMA), and American Association of Healthcare Administrative Management (AAHAM).
 - (i) investigate professional associations applicable to the field of health informatics

(3) The student explains the ethical and legal responsibilities of personnel in medical billing and coding. The student is expected to:

- (A) identify major administrative agencies that affect billing and coding such as Centers for Medicare and Medicaid Services (CMS) and the Office of the Inspector General (OIG);
 - (i) identify major administrative agencies that affect billing and coding
- (B) identify major laws and regulations that impact health information, including HIPAA, the Stark Law, the Fair Debt Collection Practices Act, and the False Claims Act;
 - (i) identify major laws and regulations that impact health information, including HIPAA
 - (ii) identify major laws and regulations that impact health information, including the Stark Law
 - (iii) identify major laws and regulations that impact health information, including the Fair Debt Collection Practices Act
 - (iv) identify major laws and regulations that impact health information, including False Claims Act
- (C) analyze legal and ethical issues related to medical billing and coding, revenue cycle management, and documentation within the medical record;
 - (i) analyze legal issues related to medical billing and coding
 - (ii) analyze legal issues related to revenue cycle management
 - (iii) analyze legal issues related to documentation within the medical record
 - (iv) analyze ethical issues related to medical billing and coding
 - (v) analyze ethical issues revenue cycle management

- (vi) analyze ethical issues related to documentation within the medical record
 - (D) research compliance laws;
 - (i) research compliance laws
 - (E) identify appropriate documentation required for the release of patient information
 - (i) identify appropriate documentation required for the release of patient information
 - (F) differentiate between informed and implied consent;
 - (i) differentiate between informed and implied consent
 - (G) compare and contrast use of information and disclosure of information; and
 - (i) compare and contrast [the] use of information
 - (ii) compare and contrast [the] disclosure of information
 - (H) evaluate cases for insurance fraud and abuse.
 - (i) evaluate cases for insurance fraud
 - (ii) evaluate cases for insurance abuse
- (4) The student identifies the body systems to support proficiency in billing and coding. The student is expected to:
- (A) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) and Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems and how they apply to medical billing and coding, including:
 - (i) the integumentary system;
 - (ii) the skeletal system;
 - (iii) the muscular system;
 - (iv) the cardiovascular system;
 - (v) the respiratory system;
 - (vi) the digestive system;
 - (vii) the endocrine system;
 - (viii) the urinary system;
 - (ix) the reproductive system; and
 - (x) the nervous system and special senses; and
 - (i) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the integumentary system
 - (ii) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the skeletal system

- (iii) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the muscular system
- (iv) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the cardiovascular system
- (v) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the respiratory system
- (vi) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the digestive system
- (vii) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the endocrine system
- (viii) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the urinary system
- (ix) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the reproductive system
- (x) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by identifying the anatomy and physiology of body systems, including the nervous systems and special senses
- (xi) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including the integumentary system
- (xii) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including the skeletal system
- (xiii) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including the muscular system
- (xiv) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including the cardiovascular system
- (xv) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including the respiratory system
- (xvi) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including digestive systems
- (xvii) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including the endocrine system
- (xviii) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including the urinary system
- (xix) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including the reproductive system

- (xx) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by identifying the anatomy and physiology of body systems, including the nervous system and special senses
- (xxi) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the integumentary
- (xxii) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the skeletal system
- (xxiii) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the muscular system
- (xxiv) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the cardiovascular
- (xxv) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the respiratory system
- (xxvi) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the digestive system
- (xxvii) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the endocrine
- (xxviii) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the urinary system
- (xxix) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the reproductive system
- (xxx) explain the sections and organizations of the International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) coding manuals by how [body systems] apply to medical billing and coding, including the nervous system and special senses
- (xxxi) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including the integumentary
- (xxxii) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including the skeletal system
- (xxxiii) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including the muscular system
- (xxxiv) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including the cardiovascular system
- (xxxv) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including the respiratory system

- (xxxvi) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including the digestive system
 - (xxxvii) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including endocrine system
 - (xxxviii) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including urinary system
 - (xxxix) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including the reproductive system
 - (xl) explain the sections and organizations of the Current Procedural Terminology (CPT) coding manuals by how [body systems] apply to medical billing and coding, including the nervous system and special senses
 - (B) identify mental, behavioral, and neurodevelopmental disorders and how they apply to medical billing and coding.
 - (i) identify mental disorders
 - (ii) identify behavioral disorders
 - (iii) identify neurodevelopmental disorders
 - (iv) identify how [mental disorders] apply to medical billing and coding
 - (v) identify how [behavioral disorders] apply to medical billing and coding
 - (vi) identify how [neurodevelopmental disorders] apply to medical billing and coding
- (5) The student demonstrates proficiency in the use of the ICD-10-CM, CPT, and Healthcare Common Procedure Coding System (HCPCS) coding systems. The student is expected to:
- (A) apply coding conventions and guidelines for appropriate charge capture;
 - (i) apply coding conventions for appropriate charge capture
 - (ii) apply coding guidelines for appropriate charge capture
 - (B) describe the process to update coding resources;
 - (i) describe the process to update coding resources
 - (C) assign and verify diagnosis and procedure codes to the highest level of specificity, and, as applicable, HCPCS level II codes and modifiers in accordance with official guidelines;
 - (i) assign diagnosis codes to the highest level of specificity in accordance with official guidelines
 - (ii) assign procedure codes to the highest level of specificity in accordance with official guidelines
 - (iii) verify diagnosis codes to the highest level of specificity in accordance with official guidelines
 - (iv) verify procedure codes to the highest level of specificity in accordance with official guidelines
 - (v) assign, as applicable, HCPCS level II codes in accordance with official guidelines
 - (vi) assign, as applicable, HCPCS level II modifiers in accordance with official guidelines
 - (vii) verify, as applicable, HCPCS level II codes in accordance with official guidelines
 - (viii) verify, as applicable, HCPCS level II modifiers in accordance with official guidelines
 - (D) describe the concepts of disease groupings and procedure-code bundling; and
 - (i) describe the concepts of disease groupings

- (ii) describe the concepts of procedure-code bundling
- (E) identify coding compliance, including medical necessity.
 - (i) identify coding compliance including medical necessity
- (6) The student understands revenue cycle management. The student is expected to:
 - (A) define revenue cycle management;
 - (i) define revenue cycle management
 - (B) differentiate between various types of employer-sponsored and government-sponsored insurance models, including health maintenance organization (HMO), preferred-provider organization (PPO), Medicare, Medicaid, TRICARE, high deductible health plans, and workers' compensation;
 - (i) differentiate between various types of employer-sponsored and government-sponsored insurance models, including health maintenance organization (HMO), preferred-provider organization (PPO), Medicare, Medicaid, TRICARE, high deductible health plans, and workers' compensation
 - (C) define Medicare Administrative Contractors (MACs) and investigate the administrative services provided by the MAC for Texas;
 - (i) define Medicare Administrative Contractors (MACs)
 - (ii) investigate the administrative services provided by the MAC for Texas
 - (D) describe the patient scheduling and check-in process, including verifying insurance eligibility, obtaining pre-authorization, and processing appropriate patient authorization and referral forms;
 - (i) describe the patient scheduling, including verifying insurance eligibility
 - (ii) describe the patient scheduling, including obtaining pre-authorization
 - (iii) describe the patient scheduling, including processing appropriate patient authorization
 - (iv) describe the patient scheduling, including referral forms
 - (v) describe the patient check-in process, including verifying insurance eligibility
 - (vi) describe the patient check-in process, including obtaining pre-authorization
 - (vii) describe the patient check-in process, including processing appropriate patient authorization
 - (viii) describe the patient check-in process, including referral forms
 - (E) describe the sections of the CMS-1500 form to prepare and submit mock clean claims electronically or manually;
 - (i) describe the sections of the CMS-1500 form to prepare mock clean claims electronically or manually
 - (ii) describe the sections of the CMS-1500 form to submit mock clean claims electronically or manually
 - (F) differentiate between primary and secondary insurance plans to initially process crossover claims;
 - (i) differentiate between primary and secondary insurance plans to initially process crossover claims
 - (G) interpret remittance advice to determine financial responsibility of insurance company and patient, including a cash-paying patient;
 - (i) interpret remittance advice to determine financial responsibility of insurance company
 - (ii) interpret remittance advice to determine financial responsibility of [the] patient
 - (H) analyze reason for insurance company denials or rejections and determine corrections or appeals required; and

- (i) analyze reason for insurance company denials or rejections
 - (ii) determine corrections or appeals required [for insurance company denials or rejections]
- (l) analyze an aging report and how it relates to the revenue cycle.
 - (i) analyze an aging report
 - (ii) analyze how [an aging report] relates to the revenue cycle