ICD-10-CM: Diagnostic Coding for the Future

The International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) is a morbidity classification published by the United States. It is used to classify diagnoses and reason for visits in all health care settings. (ICD-10-PCS was developed with support by the Centers for Medicare and Medicaid Services to replace volume 3 of ICD-9-CM.) ICD-10-CM is based on ICD-10, the statistical classification of disease published by the World Health Organization (WHO). ICD-10-CM is expected to replace ICD-9-CM in 2011. The information presented in this appendix is excerpted and developed from the copyrighted Ingenix publications, *Coders' Desk Reference* and *ICD-9-CM Volumes 1 & 2*. More comprehensive information on ICD-10-CM can be found in the Ingenix publication, *ICD-10 Made Easy.*

Note:

ICD-10 is used in the United States as a mortality classification for the coding of death certificates. ICD-10-CM is a morbidity classification that contains more detail than is required in a mortality classification. It also includes conditions that are potentially fatal, but that are mostly treatable. While strictly fatal conditions (e.g., decapitation) are classified in ICD-10, such conditions are not included in ICD-10-CM.

ICD-10-CM includes more codes and applies to more users than ICD-9-CM because it is designed to collect data on every type of health care encounter (e.g., inpatient, outpatient, hospice, home health care, and long-term care). The ICD structure developed by WHO, and clinically modified for use in the United States, is also expected to improve the quality of data input into clinical databases and thereby provide more information about patients' health care encounters.

ICD-10

The WHO published ICD-10 in 1994 with a new name (International Statistical Classification of Diseases and Related Health Problems) and reorganized its three-digit categories (a list follows). Although the title was amended to clarify content and purpose and to reflect development of codes and descriptions beyond diseases and injuries, the familiar abbreviation "ICD" was kept. ICD-10 contains clinical detail, expands information about previously classified diseases, and classifies diseases discovered since the last revision.

ICD-10 also incorporates organizational changes and new features, but its format and conventions remain largely unchanged. Chapter titles, organization, and Includes and Excludes notes are similar to ICD-9. The biggest difference is that the new codes are alphanumeric, and there is more detail in ICD-10 than in ICD-9.

The ICD-10 coding system consists of 21 chapters:

- Chapter 1 (A00–B99): Certain Infectious and Parasitic Diseases
- Chapter 2 (C00–D48): Neoplasms
- Chapter 3 (D50–D89): Diseases of the Blood and Blood–forming Organs and Certain Disorders Involving the Immune Mechanism
- Chapter 4 (E00–E90): Endocrine, Nutritional, and Metabolic Diseases

- Chapter 5 (F01–F99): Mental and Behavioral Disorders
- Chapter 6 (G00–G99): Diseases of the Nervous System
- Chapter 7 (H00–H59): Diseases of the Eye and Adnexa
- Chapter 8 (H60–H95): Diseases of the Ear and Mastoid Process
- Chapter 9 (I00–I97): Diseases of the Circulatory System
- Chapter 10 (J00–J99): Diseases of the Respiratory System
- Chapter 11 (K00–K93): Diseases of the Digestive System
- Chapter 12 (L00–L99): Diseases of the Skin and Subcutaneous Tissue
- Chapter 13 (M00–M99): Diseases of the Musculoskeletal System and Connective Tissue
- Chapter 14 (N00–N99): Diseases of the Genitourinary System
- Chapter 15 (000–099): Pregnancy, Childbirth, and the Puerperium
- Chapter 16 (P04–P94): Certain Conditions Originating in the Perinatal Period
- Chapter 17 (Q00–Q94): Congenital Malformations, Deformations, and Chromosomal Abnormalities
- Chapter 18 (R00–R99): Symptoms, Signs, and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified
- Chapter 19 (S00–T98): Injury, Poisoning, and Certain Other Consequences of External Causes
- Chapter 20 (V01–Y97): External Causes of Morbidity
- Chapter 21 (Z00–Z99): Factors Influencing Health Status and Contact with Health Services

Two new chapters added to ICD-10 include "Diseases of the Eye and Adnexa" (Chapter 7) and "Disorders of the Ear and Mastoid Process" (Chapter 8). Supplementary classifications of the external causes of morbidity (called external causes of injury, or E codes, in ICD-9-CM) and factors influencing health status (or V codes) are incorporated into the core ICD-10 classification system. This means that these codes and descriptions are located throughout all chapters of ICD-10, and they are no longer designated as E codes and V codes.

Some chapter titles were revised for ICD-10. For example, ICD-9, Chapter 5, is titled "Mental Disorders," whereas the ICD-10 Chapter 5 title was changed to "Mental and Behavioral Disorders." The word "certain" was added to the title of Chapter 1, Infectious and Parasitic Diseases, to stress the fact that localized infections are classified to the pertinent body system (e.g., urinary tract infection would be classified to Chapter 14). The title of the ICD-10 chapter on congenital anomalies was expanded to include the terms deformations and chromosomal abnormalities.

ICD-10 chapters were rearranged to allow for expansion in the number of categories for disorders of the immune mechanism by including them in the chapter for diseases of the blood and blood-forming organs. In ICD-9, these disorders are included with "Endocrine, Nutritional, and Metabolic Diseases." The chapters on "Diseases of the Genitourinary System, Pregnancy, Childbirth, and the Puerperium," "Certain Conditions Originating in the Perinatal Period," and "Congenital Malformations, Deformations, and Chromosomal Abnormalities" are sequential in ICD-10.

Some conditions are reassigned to a different chapter because of new knowledge about the disorder. For example, in ICD-9, gout is classified within Chapter 3, "Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders." In ICD-10, gout was moved to Chapter 13, "Diseases of the Musculoskeletal System and Connective Tissue."

ICD-10-CM

The National Center for Health Statistics (NCHS) emphasized problems identified in ICD-9-CM as it began to make clinical modifications to ICD-10 for the classification of mortality and morbidity data. In the United States, ICD-10 is being modified to:

- return to or exceed the level of specificity found in ICD-9-CM.
- expand the alphabetic index to diseases.
- provide code titles and language that complement accepted clinical practice.
- remove codes unique to mortality coding.

The modifications applied by the NCHS include:

- increasing ICD-10's five-character structure to six characters.
- incorporating common fourth-digit subcategories and fifth-digit subclassifications.
- creating codes that allow for laterality (e.g., a unique code for the right arm).
- adding trimesters to obstetric codes.
- creating combined diagnosis/symptoms codes.

Clinical modification does *not* affect the information reported to the WHO, but it expands that information for specificity purposes.

EXAMPLE 1: ICD-9 and ICD-9-CM code descriptions

ICD-9		ICD-9-CM	
140	Malignant neoplasm of the lip	140.0	Malignant neoplasm of the upper lip, vermilion border
374.1	Ectropion	374.13	Spastic ectropion

EXAMPLE 2: ICD-10 and ICD-10-CM code descriptions

ICD-10		ICD-10-CM	ICD-10-CM	
K57.3	Diverticular disease of large intestine without perforation or abscess	K57.31	Diverticular disease of large intestine without perforation or abscess, with bleeding	

ICD-10-CM codes begin with a letter and are followed by up to five numbers. All letters of the alphabet are used, and valid codes can contain three, four, five, or six characters.

EXAMPLE: ICD-10-CM codes at highest level of specificity

Z66	Do not resuscitate
Q90.1	Down syndrome, Trisomy 21, mosaicism (mitotic nondisjunction)
A69.21	Meningitis due to Lyme disease
J01.01	Acute recurrent maxillary sinusitis

ICD-10 Volumes

ICD-10 is published in three volumes, and original publication dates were 1992 for Volume 1, 1993 for Volume 2, and 1994 for Volume 3.

ICD-10 Volume 1: Tabular List

Volume 1 contains a tabular list of alphanumeric disease codes. The same organizational structure in ICD-9 applies to ICD-10: all category codes with the same first three digits have common traits, and each digit beyond three adds specificity. In ICD-10, valid codes can contain anywhere from three to five digits; in the clinical modification, valid codes can contain up to six digits.

The ICD-9 organizational structure also applies to ICD-10 notes and instructions.

When a note appears under a three-character category code, it applies to all codes within that category. Instructions located under a specific four- or five-character code apply only to that single code.

ICD-10 Volume 2: Instruction Manual

Volume 2 of ICD-10 contains rules and guidelines for mortality and morbidity coding. In ICD-10-CM, it is undecided whether a separate volume will be dedicated to rules, or if they will be organized under a different volume title. If Volume 2 of ICD-10-CM is titled "Instruction Manual," it will be important to remember that it does not refer to the Index to Diseases, as in ICD-9-CM. CMS and the NCHS are modifying ICD-10 instructions for use in the United States, and these modifications may be available when the final draft of ICD-10-CM is published.

ICD-10 Volume 3: Alphabetic Index

Volume 3 of ICD-10 is an index to codes classified in the Tabular List. Like the ICD-9-CM Index to Diseases, main terms in the ICD-10 index are organized alphabetically according to the name of the disease. The ICD-10-CM Alphabetic Index will consist of a similar arrangement of entities, diseases, and other conditions according to the axis of classification (organizing entities, diseases, and other conditions according to etiology, anatomy, or severity). In ICD-10-CM, anatomy is the primary axis of classification, which explains chapter titles such as "Diseases of the Circulatory System" and "Diseases of the Genitourinary System."

Organizational Changes in ICD-10 and ICD-10-CM

ICD-10-CM will seem very familiar, but some classification changes include those related to iatrogenic illness, sequelae, and injury. Iatrogenic illness results from medical intervention (e.g., an adverse reaction to contrast material injected prior to a scan). Sequelae (the plural form of sequela) are late effects of injury or illness. In ICD-9-CM, these are classified within Section 990-995, which is located at the end of the Injury and Poisoning chapter. In ICD-10, these codes appear at the end of each anatomic chapter, as appropriate.

EXAMPLE:

H59.2	Cystoid macular edema following cataract surgery (Eye and Adnexa)
K91.0	Vomiting following gastrointestinal surgery (Digestive System)
M96.2	Postradiation kyphosis (Musculoskeletal System)

An injury is a traumatic wound or some other damage to an organ. In ICD-9-CM, injuries are initially classified in Chapter 17, "Injury and Poisoning" by type (e.g., all open wounds are classified in the same chapter). In ICD-10-CM, the axis of classification for injury is the anatomic site of injury. Thus, all injuries to the foot are classified together, as are all injuries to the head. Most of the multiple injury codes have been eliminated from ICD-10-CM, and injuries to the head are subdivided into the following three-digit categories:

Injuries to the head (S00-S09)

- S00 Superficial injury of head
- S01 Open wound of head

- S02 Fracture of skull and facial bones
- S03 Dislocation, sprain, and strain of joints and ligaments of head
- S04 Injury of cranial nerves
- S05 Injury of eye and orbit
- S06 Intracranial injury
- S07 Crushing injury of head
- S08 Traumatic amputation of part of head
- S09 Other and unspecified injuries of head

Other Issues of Importance When Comparing ICD-10-CM to ICD-9-CM

E codes in ICD-10-CM classify diseases of the endocrine system, *not* external causes. External causes, currently classified in ICD-9-CM as E codes, will be classified as V, W, X, and Y codes in ICD-10-CM. V codes, which are included in an ICD-9-CM supplemental classification to report factors influencing health status, are classified as Z codes in ICD-10-CM.

EXAMPLE: ICD-10-CM external cause and health status codes

V01	Pedestrian injured in collision with pedal cycle
V79.3	Bus occupant (any) injured in unspecified nontraffic accident
W58	Bitten or struck by crocodile or alligator
X81	Confined or trapped in a low-oxygen environment
X39.41	Exposure to radon
X05	Exposure to ignition or melting of nightwear
Y62.5	Failure of sterile precautions during heart catheterization
Y90.1	Blood alcohol level of 20-30 mg/100 mL
Z45.1	Encounter for adjustment and management of infusion pump
Z91.5	Personal history of self-harm

Note:

J codes, included in the HCPCS level II (national) coding system, are assigned to report drug administration. In ICD-10-CM, J codes are assigned to report disorders of the respiratory system.

Implementing ICD-10-CM

Preparing all professionals—not just coders and insurance specialists—is key to the successful implementation of ICD-10-CM. Consider the following actions:

- Create a task force. Divide implementation of ICD-10-CM responsibilities into major working topics, and assign each member of the task force a job (e.g., coder training, physician training, and identification of software and application elements for information systems).
- Be vigilant. Assign one member of the task force to research, read, and summarize articlesabout ICD-10-CM implementation found in professional journals and newsletters, on the Internet, and in the Federal Register.

- Alert the entire organization to the change to ICD-10-CM. Do not wait until the implementation date to speak with information systems managers, vendors, business offices, or physicians. The transition to ICD-10-CM affects all departments, so communication with everyone will avoid problems later. Open task force meetings to the entire organization, and invite representatives to become part of the working group.
- Anticipate problems. Plan for education and training of personnel, consider the costs associated with implementation of ICD-10-CM, and involve computer information systems personnel in the transition to ICD-10-CM.
- *Train physicians.* The level of detail required in ICD-10-CM emphasizes physician participation. The patient's chart must specify terminology and provide complete documentation according to new standards. For example, in osteoporosis with pathologic fracture, the physician must identify the origin of osteoporosis as disuse, drug-induced, idiopathic, menopausal, postmenopausal, postsurgical, or postoophorectomy along with the specific site.
- *Review patient records.* Conduct a review of patient records to identify documentation problems relevant to ICD-10-CM.

Scheduling

ICD-10-CM is ready to be implemented in the United States, possibly in 2011, but a single procedural system has not been selected. In October 2000, the Department of Health and Human Services (DHHS) selected Current Procedural Terminology (CPT) as the standard code set for reporting health care services in electronic transactions. (ICD-10-PCS is expected to be implemented in 2011.)

Planning for the Future

Procedures for updating subsequent editions in the United States will probably be similar to the process of updating existing coding systems. Revisions are made at midyear and at the end of the year, and major changes in the time frame are published in the *Federal Register*. The ICD-9-CM Coordination and Maintenance Committee meets twice each year to discuss coding revisions proposed for the subsequent year.

Internet Links

Ingenix	Ingenix will post updates about ICD-10-CM and ICD-10-PCS, along with other coding issues. Go to http://www.shopingenix.com and scroll over Industry Resources, then click on the News link, scroll down, and click on the ICD-10 news item.
National Center for Health Statistics	The pre-release draft of ICD-10-CM Official Guidelines for Coding and Reporting for Acute Short- term and Long-term Hospital Inpatient and Physician Office and other Outpatient Encounters was published by the CMS in June 2003. (ICD-10-CM has not yet been adopted for implementation to replace ICD-9-CM.) For up-to-date information about the implementation of ICD-10-CM and to view the latest Draft ICD-10-CM Official Guidelines for Coding and Reporting for Acute Short-term and Long-term Hospital Inpatient and Physician Office and other Outpatient Encounters, go to http:// www.cdc.gov/nchs and click on the Disease Classification link, then click on the ICD-10-CM link.