ICD-10-CM AND THE EMERGENCY PHYSICIAN

BACKGROUND

Technically known as the *International Statistical Classification of Diseases and Related Health Problems*, the *International Classification of Diseases* (ICD) is the standard tool for epidemiologic tracking of illnesses and injuries as well as morbidity vital statistics. A copyrighted publication of the World Health Organization (WHO), it is part of the WHO family of international classifications. This includes the *International Classification of Functioning*, *Disability and Health*, the *International Classification of Health Interventions*, and the *International Classification of Diseases for Oncology*.

An attempt to develop a single uniform mortality classification system was made at the first International Statistical Congress (ISI) in 1853. The ISI in 1893 published the *International List of Causes of Death*, which is considered the first ICD. The first decennial revision (ICD-1) was in 1901. The ISI held their last revision meeting in 1938, approving ICD-5. The responsibility for future revisions would fall to the WHO after World War II.

Work by the United States, Canada and the United Kingdom with the WHO led to a single classification system for both morbidity and mortality and became the foundation for ICD-6, *Manual of the International Classification of Diseases, Injuries and Causes of Death.* Further revisions occurred in 1955 (ICD-7), 1965 (ICD-8), 1975 (ICD-9) and 1989 (ICD-10).

UNITED STATES CLINICAL MODIFICATIONS

As early as 1855, the American Medical Association (AMA) urged its members to make a concerted effort with state legislatures to establish offices for vital statistic registration. In 1952, United States adapted ICD-7, *International Classification of Diseases Adapted for Indexing of Hospital Records by Diseases and Operations*.

The release of ICD-9 saw the development of a clinical modification that would meet the need of the entire healthcare system in the US (ICD-9-CM). Medical specialties in the United States also expressed concerned that the 10-year intervals between revisions were insufficient and keeping the diagnosis system up-to-date so on annual revision system for the US clinical modification was established. An additional ICD-9 code set was added in order to show inpatient hospital resource utilization. Not to be confused with CPT-4, which is managed and copyrighted by the AMA, this additional ICD-9 code set was designed to be used primary by hospitals.

A public-private collaboration of "Cooperating Parties", NCHS, the Health Care Finance Administration (HCFA) (now the Centers for Medicare and Medicaid Services [CMS]), AHA, and the American Medical Record Association (now the American Health Information Management Association [AHIMA]), was established to develop and maintain guidelines and serve as a source in resolving technical issues related to diagnostic coding. The Central Office on ICD-9-CM at the AHA serves as the clearinghouse for issues related to the use of ICD-9-CM. It is also responsible for publishing *Coding Clinic for ICD-9-CM*, which is the official publication

for ICD-9-CM coding guidelines and advice, as designated by the Cooperating Parties. This publication has been updated for ICD-10-CM, Coding Clinic for ICD-10.

DEVELOPMENT OF ICD-10-CM

In 1994, NCHS worked with the Center for Health Policy Studies to assess whether ICD-10 was a significant improvement over ICD-9-CM for morbidity reporting as well as make recommendations for improvements with the revised classifications. The evaluation showed that a clinical modification of the WHO version would be a significant improvement in is worth implementing.

NCHS then undertook a three-phase development for ICD-10-CM. In Phase I public and private sector stakeholders reviewed the prototype system. In Phase II there were consultations with a number of medical societies, clinical coders and other stakeholders to assure clinical accuracy. Phase III included public review with submission of more than 1200 comments that resulted in further tweaking of the new system. Pilot testing by AHA and AHIMA was conducted in 2003 using a broad cross-section of the healthcare community with more than 180 participants.

WHY CHANGE TO ICD-10-CM?

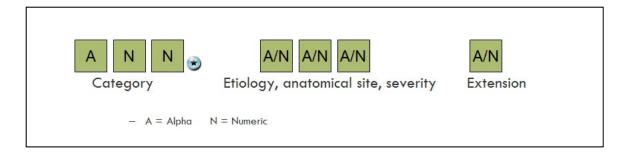
ICD-9-CM is no longer robust enough to meet current and future health care needs. In the over 30 years that this classification system has been in place some of the content is no longer clinically accurate. There are structure limits that prevent the expansion to meet the new demands for new codes. Additionally, since more than 90 countries have switched to ICD-10 (some with local clinical modifications) and the United States has been using the system for reporting mortality data since 1999, it makes it difficult to compare state, national and international morbidity and mortality data.

Moving to ICD-10-CM has several advantages. It uses current medical terminology and disease classification reflecting the advances that have occurred in medicine. It allows for greater specificity that can help in supporting clinical decision-making. There is greater flexibility with more room for expansion that can quickly incorporate emerging conditions. Comparison of morbidity and mortality data will be easier. The greater specificity will support improved public health surveillance and measurement of health care services with better quality metric measurements. This will help provide better data for research and in identifying fraud and abuse.

STRUCTURAL DIFFERENCES BETWEEN ICD-9-CM AND ICD-10-CM

ICD-9-CM contains 3 to 5 numerical placeholders, while ICD-10-CM contains 7 placeholders. In ICD-10-CM all codes are a combination of alpha and numeric placeholders containing between three and seven characters. The place holder "X" is used with codes that require a 7th character but are less than six characters in length.

ICD-10-CM code format and structure



INSTRUCTIONAL NOTES

Exclusion notes:

ICD-10-CM has two different types of excludes notes. The "Excludes1" notation means that the two conditions cannot be coded together. For example, post-traumatic hydrocephalus (G91.3) would not be used in a patient with congenital hydrocephalus (Q03.9). The "Excludes2" notation means that while the second condition is not part of the primary problem the two conditions may exist at the same time and it is acceptable to code them together. For example, a patient may be diagnosed with Streptococcal pharyngitis (J02.0) as well as uncomplicated Scarlet fever (A38.9) at the same time.

Code First/Use Additional Code notes:

A condition may have both an underlying cause and multiple manifestations. Coding convention requires when there is not a single code to explain this circumstance that the underlying condition (etiology) be listed or "sequenced" before any associated manifestations. The "code first" notation will be present with the manifestation and "code additional" with the etiology.

For example, in a patient who presents to the ED with sepsis following a procedure, where the organism hasn't yet been identified, the etiology, post-procedural sepsis (T81.4 code set) would be coded first with the manifestation, sepsis of unspecified (unknown) organism (A41.9) listed as the additional code. In some cases, etiology and manifestations will have a single combination code; such as sickle cell SS disease with acute chest syndrome (D57.01).

Code Also Note:

Occasionally, two codes may be needed in order to fully describe a condition. In this situation there with is a "code also" note. The order that the codes are sequenced will depend on which condition the ED physician carries the greater risk of morbidity or mortality. For example, chronic pain due to trauma (G89.21) could also be coded as pain disorder with related psychological factors (F45.42).

A dash "-" following a code indicates that additional characters are needed to fully identify the diagnosis.

7TH CHARACTER:

The seventh digit can be used for a variety of different purposes. This can range from an alpha character describing the stage of glaucoma or presence of tophi with gout, to a numeric character

identifying the affected fetus when there are problems associated with multiple gestations or the time/place when a coma score was obtained. The largest application of the 7th character is with orthopedic conditions (see Figure 2). The codes will not only differentiate whether the fracture is open of closed on the initial encounter but uses the Gustilo classification in defining the severity of open fractures and identifies issues with fracture healing such as malunions and non-unions. The ED physician will generally only use two of the sixteen available 7th character extensions (A, initial encounter for closed fracture, B, initial encounter for open fracture NOS).

There are three 7th characters that are used to identify the phase of care for injuries and external causes of morbidity: A (initial encounter), D (subsequent encounter), and S (sequel). An "initial encounter" is when the patient is receiving active care for injuries, fractures, burns, poisonings and similar conditions in the ED. This would be the majority of ED encounters. A "subsequent encounter" is used when a patient is receiving additional or routine care during the healing or recovery phase from an injury, fracture, burn, poisoning and similar condition. In the ED, this would include a cast change or medication adjustment. This designation would not be used if treatment is directed at a current acute disease or injury, even if the patient has already been seen for the condition in the same ED. The "sequela encounter" is similar to the late effect codes in ICD-9-CM and would only be used if the patient is being seen for a complication due to an injury, fracture, burn, poisoning or similar condition. In the ED, this would include management of a scar that was the result of a burn. The table below lists examples of the seventh character for fractures.

Seventh digit codes for fractures

- A initial encounter for closed fracture
- B initial encounter for open fracture type I or II initial encounter for open fracture NOS
- C initial encounter for open fracture type IIIA, IIIB, or IIIC
- D subsequent encounter for closed fracture with routine healing
- E subsequent encounter for open fracture type I or II with routine healing
- F subsequent encounter for open fracture type IIIA, IIIB, or IIIC with routine healing
- G subsequent encounter for closed fracture with delayed healing
- H subsequent encounter for open fracture type I or II with delayed healing
- J subsequent encounter for open fracture type IIIA, IIIB, or IIIC with delayed healing
- K subsequent encounter for closed fracture with nonunion
- M subsequent encounter for open fracture type I or II with nonunion
- N subsequent encounter for open fracture type IIIA, IIIB, or IIIC with nonunion
- P subsequent encounter for closed fracture with malunion
- Q subsequent encounter for open fracture type I or II with malunion
- R subsequent encounter for open fracture type IIIA, IIIB, or IIIC with malunion
- S sequela

TERMINOLOGY

Just as with ICD-9-CM, ICD-10-CM does not require any new skills in documentation for the ED physician. Information such as laterality and episode of care should be able to be found in the documented history and physical. The use of appropriate terminology and supporting documentation will help support the medical necessity of the encounter and services provided.

Examples of charting details would include identifying: 1) why a patient has acute respiratory failure, e.g. "acute respiratory failure due to hypercapnia (J96.02)"; 2) the mechanism and location of an injury, e.g. "contusion of the left eye (S00.12XA) due to an altercation (Y04.0XXA) at high school (Y92.213)"; 3) the intent of an ingestion, e.g. "intentional ingestion of acetaminophen (T39.1X2)".

The specifics of the fracture type have also been expanded. Now there will be unique codes indicating if the fracture is pathologic, traumatic or due to stress, transverse or spiral, displaced or non-displaced, just to name a few. Documentation as to the etiology and anatomic location is important. For example, a stress fracture of the thoracic vertebrae would be coded to M48.44XA, a pathologic shoulder fracture due to age-related osteoporosis to M80.08XA, and a wedge compression fracture of third thoracic vertebra to S22.030.

Specifying the affected side in addition to the anatomic location is also important when appropriate. Documenting "non-displaced transverse fracture of the shaft of the left radius and ulna (S52.325A, S52.225A)" instead of "forearm fracture (S52.90)" will allow for more specific coding and identification of the injury.

Infections such as cellulitis and abscesses also are identified by their anatomic location. The ED physician would document, for example, "cutaneous abscess of left axilla (L02.412)" instead of "axillary abscess (L02.419)".

In ICD-9-CM the term "open wound" was used for lacerations, puncture wounds and bites, and "complication" included infected wounds, those with foreign bodies or with delayed care. ICD-10-CM separates these terms so that the type of wound and complication are more easily identified. Where a puncture wound of the left forearm with a retained foreign body was coded as "unspecified open wound of left forearm, (S51.802)", there will be a unique code specifically identifying the injury as a "puncture wound with foreign body of left forearm (S51.842A)".

The ED physician should be aware of the terms used to identify a septic patient. The terms "septicemia" and "sepsis" are often used interchangeably. In ICD-10-CM septicemia will code to "sepsis of unspecified organism (A41.9)". When known, the cause of sepsis should be identified, e.g. following vaccination, post-operative, after transfusion, as well as the organism. By convention, the term "urosepsis" translates to urinary tract infection (UTI). For a patient who is septic from a UTI, the ED physician needs to document that "the patient is septic due to a UTI" in order to have the proper codes identified (A41.9, N39.0).

"Severe sepsis" is the term used for sepsis associated with organ dysfunction (R65.20) or severe sepsis with septic shock (R65.21. The underlying infectious agent should be coded first if known and any specific organ dysfunction coded additionally, e.g. acute kidney failure (N17 code set.), disseminated intravascular coagulopathy (DIC) (D65). The term "systemic inflammatory response syndrome (SIRS)" is used with septic-like conditions not due to an infection, such as heat stroke or trauma, with (R65.11) or without (R65.10) organ dysfunction. "Bacteremia" is not

"sepsis"; it is a positive blood culture without any specific condition. Documentation needs to make the distinction between sepsis, severe sepsis, SIRS and bacteremia.

ICD-10-CM allows for an expansion to identify encounters when there is a concern for a suspected condition or exposure without signs or symptoms that after evaluation and observation is not found (i.e. ruled out).

Code	Diagnosis
Z03.6	Encounter for observation for suspected toxic effect from ingested substance ruled
	out
Z04.1	Encounter for examination and observation following transport accident
Z04.2	Encounter for examination and observation following work accident
Z04.4-	Encounter for examination and observation following alleged rape or sexual abuse
Z20-	Contact with and (suspected) exposure to communicable diseases
Z77.0-	Other contact with and (suspected) exposure to hazardous to chiefly non medicinal
	chemicals

Table 1: Examples of ICD-10-CM codes for suspected conditions not found.

CONCLUSIONS

ICD-10-CM reflects advances in medicine and is more logically arranged to reflect anatomy, etiology and severity. Enhancements to the new code set include better reporting of lifestyle and socioeconomic issues, common manifestations and complications. By consistently documenting these key principles, healthcare data collection will be improved resulting in better reporting of services supporting the work performed.

ICD-10-CM will be effective for all encounters starting October 1, 2015. All services provided before that date will continue to be reported with ICD-9-CM. In preparation, the ED physician should be looking at their available resources. This includes reviewing the electronic health record to verify that it is ICD-10-CM ready and what steps have to be taken to ensure it's updated. Verify that the billing software or service not only supports ICD-10-CM, but will be able to continue to report encounters prior to October 1 with ICD-9-CM. Make sure your billing clearing house is ready for the transition. Take steps now to encourage physicians to document and use more specific codes especially those who tend to use unspecified diagnosis codes or whose documentation leads to an "unspecified" code.

Additional free resources, including the tabular code sets, indexes and tables are available from the National Center for Healthcare Statistics at www.cdc.gov/nchs/icd/icd10cm.htm.

REFERENCES

ICD-10-CM Official Guidelines for Coding and Reporting, 2014. Accessed on December 18, 2013 at http://www.cdc.gov/nchs/data/icd/icd10cm_guidelines_2014.pdf.

History of the development of the ICD. Accessed October 1, 2013 at http://www.who.int/classifications/icd/en/HistoryOfICD.pdf

Moriyama IM, Loy RM, Robb-Smith AHT. History of the statistical classification of diseases and causes of death. Rosenberg HM, Hoyert DL, eds. Hyattsville, MD: National Center for Health Statistics. 2011.

Brooks P. ICD-10 Overview. Accessed October 1, 2014 at https://www.cms.gov/Medicare/Medicare-
https://www.cms.gov/Medicare/Medicare-
LearningResources/downloads/ICD-10
Overview Presentation.pdf