The Health Care Revenue Cycle

Understanding the ICD-10

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A major change is taking place in the medical billing and coding field that will affect the way diseases are specified on insurance claim forms. As of this writing (May 2012), the change is set to officially occur in the United States sometime in 2013 or 2014, but it may be pushed backed regardless of the fact that most European countries have already adopted it.

Before discussing this change, it would be wise to review, very briefly, the basic facts about medical billing and coding that were presented in Chapters 1 and 2 of the *Health Care Revenue Cycle Workbook*. As you know, every Medical Biller and Coder (MBC) has to have two manuals handy at all times to perform his or her work properly. One is called *The International Classification of Diseases* or *ICD*. The current edition is the ninth edition and it is called the ICD-9. The other manual is named *The Current Procedural Terminology* or *CPT*.

The *ICD* lists every disease (e.g., cancer, diabetes, bacterial infection), trauma (e.g., fracture, concussion, gunshot wound), and condition (e.g., heart attack, pregnancy, psoriasis) that a patient might experience. Next to each disease, trauma or condition, a number is assigned, called a *code*. These codes, rather than the names of diseases, are entered on insurance forms. It standardizes and greatly simplifies the processing of insurance claims. The ICD is owned by the World Health Organization (WHO), a United Nations organization. They finance and administer the yearly updates and lease it to companies throughout the world who publish it in many languages. As a result, it is used by MBCs all over the world. The WHO, of course, is the organization initiating and supervising the changes. The new edition with the changes will be called *ICD-10*, because it will be the tenth edition of the ICD.

The other manual, *Current Procedural Terminology***,** or *CPT***,** describes the procedures and services doctors and hospitals provide to patients to treat their diseases. This is what a doctor or hospital is actually paid for by an insurance company or government agency. In other words, the ICD codes *identify the disease* and the CPT codes *describe the treatment*. As with the ICD, a code is assigned to each procedure and this code is entered on the insurance forms making it easier and faster to communicate with insurance companies. The CPT is owned by the American Medical Association (AMA) who revises it once a year and leases it to publishers for printing and distribution. Unlike the ICD,

which is used worldwide, the CPT is used only in the United States. The coding changes we are discussing here pertain only to those used in the ICD, used worldwide, not to those codes in the CPT, used only in the USA. To recap, the information in this addendum pertains only to the ICD, not the CPT, which remains essentially unchanged. The current edition of the ICD is ICD-9 and is the subject of this brief review. When the changes are finalized and released, the edition will be called ICD-10.

A few more items for this review: The ICD-9 is in two parts -- the *Tabular List***,** also known as *Volume 1* and the *Alphabetic Index of Diseases***,** also known as *Volume 2*. The *Tabular List* lists diseases numerically (from 001-999.9) by their codes. The *Alphabetic Index of Diseases* lists diseases alphabetically (from A-Z) just as its name implies.

Medical codes have a special format and the changes to this traditional format, the ones currently used in ICD-9, are what we'll be discussing in detail very shortly. These ICD-9 codes are three digits (001 or 650), four digits (291.5) and five digits (426.11). The period in them serves as a divider. The digits to the left of the period refer to the generic name of the disease, such as *diabetes*. They are called the *category*. The digits to the right of the period further define the disease, such as the various kinds of diabetes. For example, 250.0 is the generic name for *Diabetes mellitus without mention of complication*, 250.3 is *diabetes with coma*, 250.7 is *diabetes with gangrene*, 250.8 is *diabetes with osteomyelitis*, and so forth. These digits along with the category are called the *subcategory.*

ICD-9 coding:

123.45

Category = first 3 numbers to the left of the period

123.45

Subcategory = first 3 numbers to the left of the period and the first digit to the right of the period

123.45

Subclassification = all numbers

Note: In ICD-9, 4 numbers (123.4) are called *subcategory* and 5 numbers (123.45) are called *subclassification.* There is no subclassification in ICD-10. The term has been eliminated. The ICD-10 has only category and subcategory divisions in its codes.

If possible, try to have a copy of both the ICD-9-CM and the ICD-10-CM editions of this coding manual so that you can compare and contrast the differences between the two manuals and learn how to use the new set of codes found in the ICD-10-CM. "CM," by the way, means "clinical modification."

PCS—Procedure Classification System

It should be noted, that in addition to *Volume 1— the Tabular List* and *Volume 2— the Alphabetic Index*, which are found in one volume in both the ICD-9 and ICD-10 editions, there is a *third volume*, which is printed as a separate book and is called *ICD-9-PCS* and *ICD-10-PCS*. "PCS" stands for "Procedure Classification System" and is used primarily for coding hospitalized patients.

The ICD-10-CM

Now that we've reviewed the fundamentals of medical billing and coding as it pertains to ICD-9, it's time to explore the changes WHO is introducing. The ICD-10-CM continues to use the same codes as the ICD-9, but they have been *expanded* so they contain more information. The structure, conventions, and philosophy of coding remain the same, but WHO has implemented the ICD-10 with longer codes that provide more specificity (i.e., supply more data) than the ICD-9. For example, they provide additional information such as laterality (i.e., which side of the body is effected), type of patient encounter (e.g., first office visit to a doctor, second office visit to a doctor, etc.) and much more.

The first major change for ICD-10 codes is that they always begin with a letter of the alphabet. ICD-9 codes always begin with a number. This letter represents a particular body system or medical condition. Following are a few examples of letters that begin the categories in ICD-10. This is not a complete list; just representative examples:

A *and* B represent Infectious and Parasitic Diseases
C = Neoplasms
G = Diseases of the Nervous System
M = Diseases of the Musculoskeletal System and Connective Tissue
O = Pregnancy, Childbirth, and the Puerperium

S = Injury, Poisoning, and Certain Other Consequences of External Causes
W = External Causes of Morbidity

The second major change for ICD-10 codes is that they can have up to 7 characters (numbers and letters). ICD-9 codes have up to 5 numbers. Remember, the characters to the right of the period constitute the *subcategory*. The 7th character of an ICD-10 code is called the *extension.* It can be either a letter or a number. More about that in a moment. A typical ICD-10 code might be *S42.351A.* Notice there are seven characters. With certain conditions, ICD-10 codes can have less than 7 characters as you will soon see.

The X Placeholder

Every position in the subcategory of an ICD-10 code (all characters to the right of the period) represents something. (Of course, what they specifically represent varies depending upon the category of disease.) For example, perhaps the 4th position represents a particular part of the body, or the way the body works, the 6th position the status or type of disease or laterality (left or right) and the 7th position the type of encounter in the doctor's office.

If a position is not needed for a disease, it still must be used. For example, if the 5th position is not needed, it nevertheless cannot be ignored. Otherwise, the 7th position will be the 6th position and not the 7th position. Therefore, if a position is not required, an X is inserted as a *placeholder*. An ICD-10 code is not correct if it is not fully coded to the full number of characters, just as you saw in "Coding to the Highest Level of Specificity" in the ICD-9 manual when the codes were 3, 4 or 5 numbers. To reiterate, when the 4th, 5th, or 6th position does not need a letter or number, an "X" is inserted at that position so the code can be considered fully coded.

To study an example of a code that uses the X placeholder, the character "J" represents *Diseases of the Respiratory System, (J00 to J99)* found in Chapter 10 of the ICD-10 manual. As stated, each position of a code stands for something specific. In this particular family, 5 characters are necessary, so if a condition has only 4 characters, the X substitutes for the missing character.

> The first character of the category code is "J", representing *Diseases of the Respiratory System* (nose, throat, and lungs), and the next two characters, the 2nd and 3rd characters to the left of the period, represent a particular disease of the respiratory system called "influenza."

Character Position: 1 2 3 4 5

J09.X1

"X" is in the 4th position and is called the "placeholder."

You therefore, have the following listings:

J09.**X**1	Influenza due to identified novel influenza A virus with pneumonia
J09:**X**2	Influenza due to identified novel influenza A virus with other respiratory manifestations. The 2 stands for "respiratory manifestations"
J09.**X**3	Influenza due to identified novel influenza A virus with gastrointestinal manifestations. The 3 stands for "gastrointestinal."
J09.**X**9	Influenza due to identified novel influenza A virus with other manifestations. The 9 stands for "other manifestations."

All these codes contain 5 characters. (As stated earlier, there are instances when less than 7 characters are used in ICD-10 codes.) However, there is no appropriate 4th character, so the letter "X" takes up this space and indicates that there is nothing that goes into the 4th position in this particular case. The "X" is considered a character and is part of the code.

These specific groups of codes have only 5 characters but other groups of codes of course can have 6 characters and the 4th and 5th positions will use the placeholder "X", if necessary. Similarly, if a particular group of codes has 7 characters, the 4th, 5th, and 6th positions can use the placeholder "X", if necessary.

Codes with less than 7 Characters

As you have seen, ICD-10 codes can have less than 7 characters. Following are other examples of ICD-10 codes with numbers and letters and less than 7 characters. They are from Chapter 10: *Diseases of the Respiratory System* and these codes run from 3 characters up to 6 characters. There is no 7th character available for this group of codes.

J00	Acute nasopharyngitis	(3 characters)
J03.0	Streptococcal pharyngitis	(4 characters)
J04.11	Acute tracheitis with obstruction	(5 characters)
J95.822	Acute and chronic postprocedural respiratory failure	(6 characters)

The Extension (7th Position)

The ICD-10 codes also report types of visits (called "encounters") with the doctor. The type of visit is indicated by the 7th position, the *extension*. Notice these examples:

T16.1XXA
The "A" in the 7th position indicates "initial encounter" and is taken from a graph located in the ICD-10 manual. The first 4 positions indicate a foreign body in the right ear. The 5th and 6th positions are not used so the placeholder X is inserted at these positions. Therefore, the entire code indicates that this is the first visit the patient is having in the doctor's office for a foreign body (imagine it's actually a pea) stuck in the patient's right ear. Incidentally, the ICD-9 equivalent code would be simply, *931***.**

T16.2XXD
The "D," in the 7th position indicates "subsequent encounter." The entire code indicates a foreign body in the left ear, subsequent encounter. Subsequent encounters are additional visits beyond the first visit the patient is having in the doctor's office. The ICD-9 equivalent code would be, as for the previous code, *931***.**

T16.9XXS
The "S" in the 7th position indicates "sequela", which means "complication" or "something further." It also indicates additional visits beyond the first visit the patient is having in the doctor's office for this condition. In other words, this is not a routine follow-up visit, but a visit necessitated by a new development. The entire code, therefore, indicates a foreign body in ear, unspecified (can be right or left), additional visit beyond the first visit the patient is having in the doctor's office, and there is a complication (sequela) such as inflammation or infection**.** As with the previous two codes, the ICD-9 equivalent code is *931.* Not only does the ICD-9 code not distinguish whether the foreign body is in the right or left ear, it does not indicate what type of doctor's visit the patient is having**.**

Notice that for ICD-10 codes T16.1XXA, T16.XXD, and T16.XXS, the placeholder X is used for the 5th and 6th positions because these groups of codes, as you have seen, require a 7th character that indicates the type of patient encounter with the doctor. The 5th and 6th positions are not indicating anything, so "X" is used at these positions.

Let's examine, character by character, a 7 character ICD-10 code, **S42.351A**, which codes for a displaced comminuted fracture of the shaft of the right humerus.

Character position 1 2 3 4 5 6 7

S42.351A

Category = characters 1, 2, 3

S42 these three characters are called *category*. A Category identifies the disease, condition or injury. **S42** codes for **Fracture of shoulder and upper arm**. In other words, **S42** codes for the general anatomic location of the fracture. (Note: "anatomic" is an adjective of "anatomy," which means body parts)

Now for positions 4, 5, 6 and 7. As has been stated, in ICD-10 these positions constitute the *subcategory*.

1 2 3 4 5 6 7 = Character Position 7 is called Extension.

S42.351A

Subcategory = characters 4, 5, 6, 7

S42.**3** codes for Fracture of **shaft of humerus** (*humerus* is the upper arm). "Shaft of humerus" is a more precise anatomic location of the fracture and is indicated by the addition of the number "3" in the code at the 4th position.

S42.3**5** codes for **Comminuted fracture** of shaft of humerus ("comminuted" is a type of fracture). This is an even more precise description of the type of fracture and is indicated in the code by the addition of the number "5" at the 5th position.

S42.35**1** codes for **Displaced** comminuted fracture of shaft of humerus, **right arm** The addition of the number "1" at the 6th position in the code indicates an even more precise description of the type of fracture (displaced) and laterality, or which side of the body, the right arm, the fracture is located.

S42.351***A***

The "A" is called the *Extension* and is part of the subcategory portion of the code. It identifies the patient encounter with the doctor and is a logical part of the subcategory. Encounter indicates what type of visit the patient had with the doctor. Therefore, the entire ICD-10 code S42.351A codes for Displaced comminuted fracture of shaft of humerus, right arm, initial encounter for closed fracture.

In Summary, an ICD-10 subcategory (in this case ***351A***) identifies the cause of the disease, the location of the disease, or the severity of the disease, condition, or injury.

The Stage of a Disease

Besides the type of doctor\patient office visit, the stage or severity of a disease is also captured in the ICD-10 codes that were not seen in the ICD-9 codes.

For example, the ICD-10 codes can capture the severity of a disease process such as for glaucoma, reported as stage unspecified (0), mild stage (1), moderate stage (2), severe stage (3), or indeterminate stage (4), seen in the 7th character position (which the coder takes from a graph in the manual) Notice these examples:

H04.121**0** = Low tension glaucoma, right eye, stage unspecified
H04.121**1** = Low tension glaucoma, right eye, mild stage
H04.121**2** = Low tension glaucoma, right eye, moderate stage
H04.121**3** = Low tension glaucoma, right eye, severe stage
H04.121**4** = Low tension glaucoma, right eye, indeterminate stage

Another example of ICD-10 codes capturing the timing of a disease process is seen in the 5th character position of the following:

O71.0**0** = Rupture of uterus before onset of labor, unspecified trimester
O71.0**2** = Rupture of uterus before onset of labor, second trimester
O71.0**3** = Rupture of uterus before onset of labor, third trimester

Other Comparisons between the ICD-9 and ICD-10

Following is a random list of ICD-9 and ICD-10 features, big and small, that both coding systems continue to have (with one exception):

Alphabetic Index and Tabular List

Index to External Causes (codes to describe if the patient was injured in a car or sports accident, poisoned, or injured on the job)

Table of Drugs and Chemicals (codes to describe the substance that poisoned the patient)

Neoplasm Table (codes to describe what type of tumor or cancer the patient is diagnosed with)

Hypertension Table The ICD-10 does NOT have a Hypertension Table (this is a table in the ICD-9 that gave codes to people with high blood pressure)

V Codes To Z Codes

The ICD-10 has changed the old "V" codes in ICD-9 to "Z" codes. Both V and Z codes represent "Factors Influencing Health Status and Contact with Health Services," which are now found in Chapter 21 in the ICD-10 manual (codes: Z00-Z99).

The old "V" and the new "Z" codes are used for persons getting examinations to enter the military or college or a job; where there are foreign body fragments in the patient's body (shrapnel or pacemaker); persons with potential health hazards related to communicable diseases (e.g., flu, sexually communicated diseases); DNR status (patients who have written a legal document telling family and doctors how they want to die), Blood Types (A, B, O and AB); and other factors contributing to health problems (homelessness, disabilities, mental health issues), obesity, and personal history situations (such as abused spouse).

E Codes

The ICD-10 has changed the old E codes found in the ICD-9 (for external causes of injury such as car/bus/plane/motorcycle/pedestrian accidents, sport injuries, assault, complications from medical/surgical care, etc.) and has sprinkled them throughout the ICD-10 manual in the form of V, W, X, and Y codes. However, a large number of ICD-9 E codes can be found in the ICD-10 in Chapter 20: "External Causes of Morbidity- (V01-Y99)." Morbidity refers to death and injury. It should be noted that V codes still exist in the ICD-10, as they did in the ICD-9 manual, but V codes have different meanings than they did in the ICD-10.

There are more chapters (21) in the ICD-10 Tabular List, than in the Tabular List of the ICD-9 (18 chapters). The 21 chapters in the ICD-10 represent more codes for more diseases, conditions, and injuries. Be aware that the ICD-10 now has codes for over 77,000 different diseases, conditions and injuries. The ICD-9 had 22,000 codes for different diseases, conditions, and injuries.

Icons

ICD-10 uses icons (symbols that are either in color or with a circle around the number) just as ICD-9 did. In ICD-9, a "4" or "5" icon indicated that a 4th or 5th number was required. In the following ICD-9 examples, the numbers in parentheses are icons:

(4) 299 Pervasive developmental disorder (this 3 digit code needs a 4th digit)
(5) 299.0 Autistic disorder (this 4 digit code needs a 5th digit)

Therefore, adding a 5th digit to 299.0, this code becomes:
299.0**0** Autistic disorder, current or active state
299.0**1** Autistic disorder, residual state

If you look in the ICD-10 manual, the codes have icons (symbols) for 4th, 5th, 6th and 7th characters. Therefore:

(4th) N00 (3 characters) becomes N00.0, or N00.1, or N00.2, etc. (4 characters)
(5th) N13.3 (4 characters) becomes N13.30 or N13.39 (5 characters)
(6th) N39.49 (5 characters) becomes N39.490 or N39.498 (6 characters)

The following are codes requiring 7 digits (indicated with the icon "7th"):

(7th) O35.0 (4 characters) becomes O35.0XX0, or O35.0XX2, or O35.0XX3 (7 characters). Remember, the 5th and 6th positions use the placeholder "X" so a 4 character code becomes a 7 character code

Note: Also notice in your ICD-10 manual that for the code O35.0 the first character is the letter "O" and the 4th character is the number zero (0). In the ICD-10 coding manual the number "0" has a slash through it to distinguish it from the letter "O".

Also, do not confuse in the ICD-10 manual the number "1" with the uppercase letter "I." For example, ICD-10 codes in Chapter 9, *Diseases of the Circulatory System*, codes run from 3 to 6 characters. The first character is an uppercase letter "I," not the number "1":

I00 Rheumatic fever without heart involvement (3 characters)
I09.0 Rheumatic myocarditis (4 characters)

Main Codes and Additional Codes

Similar to the ICD-9, the ICD-10 also provides directions telling the MBC to code additional codes to the main code such as maternal condition (main code), type of infectious or disease agent (additional codes). Notice the following ICD-10 codes:

O10.111 Pre-existing hypertensive heart disease complicating pregnancy, first trimester (main code)
I11.0 Hypertensive heart disease with heart failure (2nd or additional code)

The ICD-10 manual inserts the instruction, "Use additional code for I11 to identify the type of hypertensive heart disease," which means, in addition to the main code, O10.111, there is a second additional code that must be added to this main code on the claim form to complete the code. These additional codes are found under code I11, which the MBC has to visit to capture the additional codes. Obviously, the doctor would tell the MBC what medical conditions and codes are to be included to the main code.

Therefore, for code O10.11 (main code), a second (additional code) I11.0 is added to complete the main code:

"EXCLUDES 1" and "EXCLUDES 2," NOS and NEC

"EXCLUDES 1" and "EXCLUDES 2" are instructions included with ICD-10 codes.

"EXCLUDES 1" means "These two codes cannot be coded together." For example, the S00.27 group of codes represents "other superficial bite of eyelid and periocular area." This group cannot be coded together with the S01.15 group of codes representing "open bite of eyelid and periocular area." These two groups of codes repeat each other or cannot be coded together for payment reasons, or one condition cannot co-exist with the other one from a medical point-of-view. If the coder still codes these codes together, the insurance carrier will reject the claim and not pay it.

Another example of "EXCLUDES 1" would be the E10 group of codes for juvenile onset diabetes mellitus (type 1), in which a child is born with this disease. This group cannot be coded simultaneously on the same claim form with acquired diabetes mellitus (type 2), E11, for an adult that developed the disease after

age 18. These two types of diabetes cannot exist medically together and therefore will not be paid by the insurance company.

You cannot use the E10 group of codes with the E11 group of codes for the same patient on the same claim form. E10 and E11 contradict each other. Either the patient is younger than 18 and has Type 1 diabetes, or the patient is older than 18 and has Type 2 diabetes. This classification can also be found in ICD-9 as the icon "EXCLUDES."

"EXCLUDES 2" means "These two codes can be used together." It is found only in the ICD-10 and indicates two codes can be coded together. An example would be S00.12XA (Contusion of left eyelid and periocular area; Black eye; initial encounter), which can be coded together with S05.12XA (Contusion of eyeball and orbital tissues, left eye; initial encounter).

In this case, anatomically and medically these two codes are compatible as the left eyeball, eyelid, bone and skin around the eye have suffered a contusion (eye being struck by a baseball, for example), and there is bleeding under the skin (black eye). Both ICD-10 codes S00.12XA and S05.12XA would describe to the insurance carrier the full extent of the injury to the patient's left eye. Remember, the coder wants to capture ALL aspects of the diagnosis to be as accurate and complete as possible.

INCLUDES

In both the ICD-9 and ICD-10, the direction "INCLUDES" appears and informs the MBC that for a particular group of codes certain conditions apply and should be taken into consideration when coding.

An example would be:

E11 Type 2 diabetes mellitus
INCLUDES diabetes (mellitus) due to insulin secretory defect diabetes NOS
Insulin resistant diabetes (mellitus)
Use additional code to identify any insulin use (Z79.4)

So when coding for the E11 group of codes, you should take into account the other conditions listed under the word "INCLUDES" when using the E11 group of codes. Again, the doctor will give you assistance.

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NOS

NOS means "Not otherwise specified" or "unspecified." NOS is used in the description of the code when there is no better code to use. The doctor or medical records (reports, lab and biopsy results, imaging studies, progress and surgical notes, etc.) will tell you when to use a code described with the NOS icon.

For example:
I82.210 Acute embolism and thrombosis of superior vena cava
Embolism and thrombosis of superior vena cava NOS

This means that the ICD-10 code I82.210 can be used for "embolism and thrombosis of the superior vena cava" when the medical evidence is insufficient for a more specific code to be assigned. The "NOS' is also used in the ICD-9 in a similar fashion. There are examples in the Tabular List!

NEC

NEC means "Not elsewhere classifiable" or "other specified." This means the patient's medical information provides data for which a specific code does not exist in the Tabular List. There is simply no better code to use!

For example:
G30 Alzheimer's disease
EXCLUDES 1 **senile degeneration of brain (NEC) (G31.1)**

NEC simply means that if the doctor diagnoses a type of Alzheimer's Disease with senile degeneration of the brain, and no other code can be found anywhere else in the ICD-10, use code G31.1. We recommend looking up this code in the ICD-10. You'll find further explanation.

In conclusion, we hope we've provided you with the essentials of ICD-10 and have demonstrated that the transition for the average MBC from ICD-9 should not be onerous or confusing. There is nothing to dread. Good luck!