Taking ICD-10-CM in Parts

Save to myBoK

Although ICD-10-CM represents a significant break from ICD-9-CM, the code set should prove familiar to most ICD-9-CM users and very approachable for new learners, writes Steven J. Steindel, PhD, FACMI. Here he offers a different perspective on learning ICD-10-CM by approaching it in its two distinct sections: clinical and nonclinical.

On October 1, 2013, healthcare providers will start reporting HIPAA claims using the ICD-10 counterparts to the current ICD-9 code sets. The vastly expanded code space of ICD-10-CM should prove familiar to most ICD-9-CM users and very approachable for new learners. With the exception of using letters (not numbers) to designate chapters, the division of the eye-ear chapter into two, and some slight reordering of appearance, ICD-10-CM is very familiar, including the rules for exclusions, inclusions, and notes. Inside the chapters, third digit codes 0–7 still refer to specific items; 8 refers to "other"; and 9 is used for "unspecified." That numbering also repeats within the subsections.

Dividing ICD-10-CM in Two

Despite the similarities to ICD-9-CM, on first approach ICD-10-CM does appear different. A letter replaces the common numeric first digit describing the chapter, and letters appear in a limited number of places outside the last digit. The familiar chapters from ICD-9-CM appear, but they are in a different order. The eye and ear portions from ICD-9-CM chapter 6 now appear in separate chapters.

A significant factor in most discussions of ICD-10-CM is that the code set uses published, computer-readable tables. These tables only have the reportable codes and lack chapter and section header codes commonly found in ICD-9-CM. (For purposes of this article "reportable codes" refers to those codes accepted by the Centers for Medicare and Medicaid Services for the adjudication of claims. The use of codes for other reporting purposes or to other claim processers is not defined at the time of publication.)

Table 1 shows a distribution of the terms in ICD-10-CM based on the January 2009 version with augmented header codes.

Table 1. Chapter Concept Distribution in ICD-10-CM

Chapter	Code Block	Chapter Name	% of All ICD-10-CM Codes	Increase in Number of Codes over ICD-9-CM
I	A00–B99	Certain infectious and parasitic diseases	1.4	1.2
II	C00–D48	Neoplasms	2.0	2.3
III	D50–D89	Diseases of the blood and bloodforming organs and certain disorders involving the immune mechanism	0.3	2.5
IV	E00–E90	Endocrine, nutritional and metabolic diseases	1.0	2.8
V	F00–F99	Mental and disorders	1.0	2.5
VI	G00–G99	Diseases of the nervous system	0.8	1.7
VII	H00–H59	Diseases of the eye and adnexa	3.2	3.3
VIII	H60–H95	Diseases of the ear and mastoid process	1.0	4.0

IX	I00–I99	Diseases of the circulatory system	1.6	2.9
X	J00–J99	Diseases of the respiratory system	0.4	1.4
XI	K00–K93	Diseases of the digestive system	1.0	1.4
XII	L00–L99	Diseases of the skin and subcutaneous tissue	1.0	3.9
XIII	M00–M99	Diseases of the musculoskeletal system and connective tissue	8.8	16.1
XIV	N00–N99	Diseases of the genitourinary system	0.8	1.6
XV	O00–O99	Pregnancy, childbirth and the puerperium	2.8	6.7
XVI	P00–P96	Certain conditions originating in the perinatal period	0.6	0.8
XVII	Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities	1.0	2.0
XVIII	R00–R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	0.8	2.1
XIX	S00–T98	Injury, poisoning and certain other consequences of external causes	58.3	26.5
XX	V01–Y98	External causes of morbidity and mortality	10.6	10.2
XXI	Z00–Z99	Factors influencing health status and contact with health services	1.5	1.1
XXII	U00–U99	Codes for special purposes	0.0	0.0

Based on the January 2009 version of ICD-10-CM with augmented headers. *Adapted from:* Steindel, Steven J. "International Classification of Diseases, 10th Edition, Clinical Modification and Procedure Coding System: Descriptive Overview of the Next Generation HIPAA Code Sets." *Journal of the American Medical Informatics Association* 17, no. 3 (May–June 2010): 274–82.

From the chapter description alone we can divide ICD-10-CM into two parts. The first part is from chapters I–XVIII (A–R), and by looking at the chapter names we can loosely call this section "clinical." The remaining chapters (XIX–XXI, or S–Z) can be called "nonclinical." They roughly correspond to ICD-9-CM injury and E&M codes. Learning and using ICD-10-CM can be easily accomplished by taking into account this two-phase approach to coding. Depending on a practice's patient case mix, staff who assign codes may require enhanced clinical knowledge to fully utilize ICD-10-CM's increased specificity.

In learning ICD-10-CM it is necessary to realize that the two parts differ. First, while the number of codes increased overall by 7 times, the number clinical codes has increased only 3 times while nonclinical codes increased 14 times. Adding laterality was a key objective in forming ICD-10-CM, and that addition has a direct impact on the code increase—27 percent of the codes contain "left"; 27 percent, "right"; and 1 percent, bilateral. Chapters in which we expect to have a heavy laterality influence (eye, ear, and musculoskeletal system) increased more than the other clinical chapters.

Approaching a size increase of 3 times is less daunting than approaching one of 7; indeed, for most clinical chapters the number of codes increases by a factor of 1.5 to 2.5 times (see table 1).

Clinical Chapters

To help understand how ICD-10-CM is constructed figure 1 illustrates how an M chapter section is constructed. In this example only those codes with a fifth digit are reportable. The others are not found in the federally supplied computer readable tables.

M90.5 Osteonecrosis in diseases classified elsewhere
Code first underlying disease, such as: caisson disease (T70.3) hemoglobinopathy (D50-D64)
- M90.50 Osteonecrosis in diseases classified elsewhere, unspecified site
- M90.51 Osteonecrosis in diseases classified elsewhere, shoulder
  - M90.511 Osteonecrosis in diseases classified elsewhere, right shoulder
  - M90.512 Osteonecrosis in diseases classified elsewhere, left shoulder
  - M90.519 Osteonecrosis in diseases classified elsewhere, unspecified shoulder
- M90.52 Osteonecrosis in diseases classified elsewhere, upper arm
  - M90.521 Osteonecrosis in diseases classified elsewhere, right upper arm
  - M90.522 Osteonecrosis in diseases classified elsewhere, left upper arm
  - M90.529 Osteonecrosis in diseases classified elsewhere, unspecified upper arm
- M90.53 Osteonecrosis in diseases classified elsewhere, forearm
  - M90.531 Osteonecrosis in diseases classified elsewhere, right forearm
  - M90.532 Osteonecrosis in diseases classified elsewhere, left forearm
  - M90.539 Osteonecrosis in diseases classified elsewhere, unspecified forearm
- M90.54 Osteonecrosis in diseases classified elsewhere, hand
  - M90.541 Osteonecrosis in diseases classified elsewhere, right hand
  - M90.542 Osteonecrosis in diseases classified elsewhere, left hand
  - M90.549 Osteonecrosis in diseases classified elsewhere, unspecified hand
- M90.55 Osteonecrosis in diseases classified elsewhere, thigh
  - M90.551 Osteonecrosis in diseases classified elsewhere, right thigh
  - M90.552 Osteonecrosis in diseases classified elsewhere, left thigh
  - M90.559 Osteonecrosis in diseases classified elsewhere, unspecified thigh
- M90.56 Osteonecrosis in diseases classified elsewhere, lower leg
  - M90.561 Osteonecrosis in diseases classified elsewhere, right lower left
  - M90.562 Osteonecrosis in diseases classified elsewhere, left lower leg
  - M90.569 Osteonecrosis in diseases classified elsewhere, unspecified lower leg
- M90.57 Osteonecrosis in diseases classified elsewhere, ankle and foot
  - M90.571 Osteonecrosis in diseases classified elsewhere, right ankle and foot
  - M90.572 Osteonecrosis in diseases classified elsewhere, left ankle and foot
  - M90.579 Osteonecrosis in diseases classified elsewhere, unspecified ankle and foot
- M90.58 Osteonecrosis in diseases classified elsewhere, other site
- M90.59 Osteonecrosis in diseases classified elsewhere, multiple sites

The second item to note is how the terms under M90.52 mirror those under M90.51 with minor, but important, word changes. This formulaic construction of major portions of chapters is a key to understanding, learning, and implementing ICD-10-CM that is very predominant in the nonclinical chapters. In the clinical chapters those chapters having heavy laterality influence, the obstetrics chapter (O) where trimester and fetus number codes repeat, and portions of other chapters, such as E08-E13 (diabetes) or F10-F19 (Mental and behavioral disorders due to psychoactive substance use), also show the same formulaic pattern.

The nonformulaic portions of the clinical chapters have a striking resemblance in form and content to ICD-9-CM, despite the new codes. Familiarization with these new codes will be similar to an ICD-9-CM update, only a bit larger. Table 2 is an illustration of a subsection from ICD-9-CM and ICD-10-CM focusing on epilepsy and seizures.

Table 2. Comparison of Epilepsy and Recurrent Seizure Codes in ICD-9-CM and ICD-10-CM

ICD-9-CM Code	ICD-9-CM Description	ICD-10-CM Reportable Codes*
345	Epilepsy and recurrent seizures	G40.
345.0	Generalized nonconvulsive epilepsy	G40.301, G40.311
345.1	Generalized convulsive epilepsy	G40.301, G40.311

345.2	Petit mal status	G40.301
345.3	Grand mal status	G40.301
345.4	Localization-related (focal) (partial) epilepsy and epileptic syndromes with complex partial seizures	G40.201, G40.209, G40.211, G40.219
345.5	Localization-related (focal) (partial) epilepsy and epileptic syndromes with simple partial seizures	G40.109, G40.101, G40.111, G40.119, G40.009, G40.001, G40.019, G40.009
345.6	Infantile spasms	G40.401, G40.409, G40.419, G40.411
345.7	Epilepsia partialis continua	G40.501, G40.509, G40.511, G40.519
345.8	Other forms of epilepsy and recurrent seizures	G40.801, G40.809, G40.811, G40.819
345.9	Epilepsy, unspecified	G40.901, G40.909, G40.911, G40.919

*G40.x1: intractable G40.x1; G40.x0: not intractable; G40.z01: with status epilepticus; G40.x19: without status epilepticus

ICD-9-CM covers this topic with one header and 10 codes. ICD-10-CM uses 58 codes, of which 33 are reportable, an increase of more than 3 times. Much of the increase is due to the formulaic use of “intractable” (G40.x1), “not intractable” (G40.x0),” “with status epilepticus” (G40.x01), and “without status epilepticus” (G40.x19) for the additional codes. Note that despite the code size increase some precision was lost by lumping 345.0–345.3 into one set of ICD-10-CM codes (G40.301, G40.311). All G40 sections relate directly to an ICD-9-CM section. Also note the continued use of 8 for “other” and 9 for “unspecified.”

Nonclinical Chapters

The S chapter (injury) now has 38,647 codes, including header codes, of which 30,199 are reportable. It is not feasible to look up a code in the S chapter; the code must be constructed through the formulaic nature of the chapter with the seventh-character letter suffix added (see table 3).

Table 3. Injury Letter Suffix Codes

Letter Code	Description (bold indicates common suffix codes)
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**

Code S72, Fracture of the femur, containing 2,606 total codes, provides an illustration. Subsumed under S72 are just seven sections describing five specific fracture locations/types, as well as S72.8 for other fractures, and S72.9 for unspecified fractures.

S72.0 (Fracture of head and neck of femur) expands out to eight sections, with S72.09 for other, and S72.01 – S72.06 describing specific area fracture types.

S72.03 (Midcervical fracture of femur) expands to six subheadings describing specific fracture types and laterality. It is at this level that adding the appropriate suffix code forms the reportable codes (see table 3). This stepwise approach follows for most of the nonclinical sections, except for the Z chapter and parts of Y. At each section instructions give the appropriate set of the letter codes to use, and most sections just use A, D, and S.

Case Mix Influences Approach

How a practice approaches ICD-10-CM will depend on the complexity of its case mix. The same skills learned in applying exclusions, inclusions, and observing notes still apply in all cases. Where the case mix seen is contained, as in many office practices, ICD-10-CM simply can be approached as a major upgrade of ICD-9-CM.

Practices will have new codes and, depending on their specialty and patient mix, a possible increase of most likely 1.5 to 2.5 times. With skillful editing they may be able to use the same devices such as superbills that they use today. Many of the common NOS terms used in practices are retained as "unspecified." For example, "Depression NOS" (311) is now an inclusion under the term "Major depressive disorder, single episode, unspecified" (F32.9).

Targeted practices involving the eye, ear, orthopedics, obstetrics, other specific practice areas (see the neurology example above), and those using codes from the nonclinical sections should approach coding ICD-10-CM stepwise. In many cases, many reportable codes exist, and these practices might consider creating local coding sheets containing the sections that lead to the reportable codes, as described above.

Care providers may then note—not the code—but the component of the code. The reportable code is then found in second step, mostly using machine look-up. Table 4 is an example of a code selection form for the 620 codes subsumed under S72.0 (Fracture of the head and neck of the femur).

Table 4. Hypothetical Coding Table for S72.0 (Fracture of head and neck of femur)

S72.0X	Fracture	X:[State]Fracture[Laterality]	Letter Code Use: All
5th digit subcode of S72.0	*Description of S72.0 subcode*	*6th digit descriptions for S72.0 subcodes. X indicates the number; state indicates the type of fracture; fracture indicates the S72.0 description; lateriality is as stated. Use indicates the specific S72.0 subcodes the 6th digit applies to.*	*7th digit letter code. Note if the codes did not apply to all 6th digit terms a Use clarifier would appear.*
0	Fracture of unspecified part of neck of femur	1:Fracture [right] *Use:* All	A
1	Unspecified intracapsular fracture of femur	2:Fracture [left] *Use:* All	B
2	Fracture of epiphysis (separation) (upper) of femur	3:[Displaced] Fracture [unspecified] *Use:* 2-6 only	C
3	Midcervical fracture of femur	4:[Nondisplaced] fracture [right] *Use:* 2-6 only	D

4	Fracture of base of neck of femur	5:[Nondisplaced] fracture [left] *Use:* 2-6 only	E
5	Unspecified fracture of head of femur	6:[Nondisplaced] fracture [unspecified] *Use:* 2-6 only	F
6	Articular fracture of head of femur	9:[Other] fracture of [unspecified] *Use:* 9 only	G
9	Other fracture of head and neck of femur		H
			J
			K
			M
			N
			P
			Q
			R
			S

Those who have codes derived by a computer—such as an encoder or electronic health record system—should learn which of the two approaches noted above is used and when. Practices should maintain the flexibility to develop their own computer pick-list version of the example selection form (see table 4). Regardless, selection of the right code by a computer will involve extra input for the formulaic sections. For nonformulaic sections the current internal mapping systems, after modification to ICD-10-CM codes, can still be used.

With the present expansion of clinically oriented computer systems and the need to update practice management systems to accommodate the new codes, practices should consider using such systems as an encoder to help derive the codes rather than input them from paper forms.

As noted in table 2, ICD-10-CM codes require familiarity with clinical terms. In the example noted, deriving the correct code requires correctly applying, as ICD-9-CM now requires, the terms “(not) intractable”, “with(out) status epilepticus” to the encounter. As noted in figure 1, anatomical locations in the orthopedic (M) chapter tend to be broad: shoulder, hand, et cetera. Table 4 shows the increased precision in anatomical description found in the injury section, and table 3 is an example of the type of physiology knowledge required. Increasing knowledge of these areas will enhance ICD-10-CM coding skills.

While an inconvenience exists in the transition to ICD-10-CM’s alphanumeric codes, the change is orderly and rapidly learned. And while the code set requires greater clinical knowledge than ICD-9 does, the benefit of properly applying the codes for claims processing and clinical content should result in an easier transition to the pay-for-performance, quality, and other enhanced reporting initiatives envisioned for the near future.

Acknowledgments

The author wishes to thank Claire Dixon-Lee, PhD, and Sue Bowman, RHIA, CCS, for their careful review of this article and thoughtful comments.

Original source:
Steindel, Steven J. "Taking ICD-10-CM in Parts" (Journal of AHIMA website), January 01, 2011.