

# General equivalency mapping helps convert ICD-9-CM codes to ICD-10-CM

by Debra Mariani, CPC, Practice Affairs Associate, Division of Advocacy and Health Policy

By October 1, 2013, physicians must start using ICD-10-CM codes rather than the ICD-9-CM codes currently in use. ICD-10-CM has been updated to reflect the current clinical understanding and technological advancements of medicine, and the code descriptions are designed to provide a more consistent level of detail. The new codes contain a more extensive vocabulary of clinical concepts, body part

specificity, patient encounter information, and other components from which codes are built.

### GEM

Fortunately, several tools are available to assist practices in making the shift. One such instrument is general equivalency mapping (GEM), which is designed to aid in converting diagnosis codes from ICD-9-CM to ICD-10-CM. The GEM program will have bidirectional mapping for finding and replacing codes or lists of codes. GEMs were developed by the National Center for Health Statistics (NCHS) and the files are published by both NCHS and the Centers for Medicare & Medicaid Services (CMS). The GEM tool is available free to the general public. This tool is critical for any health care professional who wants to understand the conversion from ICD-9-CM to ICD-10-CM. The GEM files will also convert ICD-10-CM codes back to ICD-9-CM codes, in the event you need to file a claim for a service provided before the October 1, 2013, deadline. When ICD-10-CM is implemented, it will be by a single date for all users—by date of service for ambulatory and physician reporting, or by date of discharge for inpatient settings.

Your office can use the GEM system to develop crosswalks for your most frequently used diagnosis codes. However, it is important to be aware that GEMs are not traditional crosswalks. They are reference mappings, to help the user navigate the complexity of translating meaning from one code set to the other. The GEMs are more complex than a simple one-to-one crosswalk, but ultimately more useful.

This article will present examples of the conversion on the CMS Web site ([http://www.cms.hhs.gov/ICD10/02m\\_2009\\_ICD\\_10\\_CM.asp](http://www.cms.hhs.gov/ICD10/02m_2009_ICD_10_CM.asp)), the American Academy of Professional Coders (AAPC) Web site (<http://www.aapc.com/icd-10/codes>), and the Center for Disease Control's Web site (<http://www.cdc.gov/nchs/icd/icd10cm>).

Table 1

#### ICD-10 code conversion

The ICD-10 code online conversion tool allows you to convert ICD-9 codes to ICD-10 codes or vice versa. ICD-9 is being expanded from 13,900 to approximately 120,000 ICD-10 codes, and this online tool can help you map that expansion.

- ICD-9 to ICD-10
- ICD-10 to ICD-9

Enter Code:

Lookup

ICD-9 577.0 > ICD-10

CODE	DESCRIPTOR
B25.2	Cytomegaloviral pancreatitis
K85.0	Idiopathic acute pancreatitis
K85.1	Biliary acute pancreatitis
K85.2	Alcohol induced acute pancreatitis
K85.3	Drug induced acute pancreatitis
K85.8	Other acute pancreatitis
K85.9	Acute pancreatitis, unspecified

htm#09update)—all of which are available for free. The first conversion is from the AAPC Web site, using an example for the ICD-9-CM code 577.0, *Acute pancreatitis*. Table 1 on page 31 shows this single code has now turned into a choice of seven different codes.

As always, you will still have to reference the ICD-9-CM and the ICD-10-CM codebook to see if there are any further codes and/or coding instructions. CMS and the NCHS use a flat text and table method for mapping.

There are two basic types of entries in these GEMs. They are “single entry” and “combination entry.” In special cases, a code in the source system may be mapped using both types of entries.

### Single entry

A single entry is an entry in the GEM for which a code in the source system linked to one code option in the target system is a valid entry. An entry of the single type is characterized by a single correspondence. Each row in the entry can be one of several valid correspondences, and each is an option for a one-to-one applied mapping. An entry may consist of one row, if there is a close correspondence between the two codes in the code pair. A code in the source system may be used multiple times in the GEM, and each time it will be linked to a different code in the target

**Table 2**

ICD-9-CM Source	≈	ICD-10-CM Target
789.00 Abdominal pain, unspecified site	≈	R10.0 Acute abdomen
789.00 Abdominal pain, unspecified site	≈	R10.83 Colic
789.00 Abdominal pain, unspecified site	≈	R10.9 Unspecified abdominal pain

system, as in the example in Table 2 on this page.

The GEM contains alternative equivalent relationships from which the appropriate applied mapping can be selected. Taken together, all rows containing the same source code linked to single code alternatives are considered one entry of the single type.

Both ICD-9-CM and ICD-10-CM contain “combination codes.” These are codes that contain more than one diagnosis in the code description. An example is ICD-10-CM code R65.21, *Severe sepsis with septic shock*. In this case, ICD-9-CM does not have an equivalent combination code, so in order to link the ICD-10-CM to its ICD-9-CM equivalent, a combination entry must be used in the GEM.

### Combination entry

A combination entry is an entry in the GEM for which a code in the source system must be linked to more than one code option in the target system to be a valid entry.

The following is the combination type entry for R65.21, *Severe sepsis with septic shock*, as it is depicted in the flat text GEM format from NCHS, and repeated in Table 3 (this page), which is formatted with the code descriptions and attributes

**Table 3**

ICD-10-CM	ICD-9-CM	Flag
R6521	99592	10111
R6521	78552	10112

ICD-10-CM	Description	ICD-9-CM	Description	Approximate Flag	No Map Flag	Combination Flag	Scenario	Choice List
R65.21	Severe sepsis with septic shock	995.92	Severe sepsis	1	0	1	1	1
R65.21	Severe sepsis with septic shock	785.52	Septic shock	1	0	1	1	2

labeled. It is important to note that there are no decimals in most GEM files.

### Flags

For any particular code entry, the GEM may contain several possible translations, each on a separate row. Flags are the final group of digits used to indicate additional attributes for entries in the map. The first three digits are called flags. The last two digits, scenario and choice list, are used in combination entries.

The following are three types of flags:

- *Approximate*: Indicates that the entry is not considered equivalent
- *No Map*: Indicates that a code in the source system is not linked to any code in the target system
- *Combination*: Indicates that more than one code in the target system is required to satisfy the full equivalent meaning of a code in the source system

A “scenario” designates one version of the meaning of the source system diagnosis as specified in a combination code. In other words, it identifies one roughly equivalent expression of the source system code. The “choice list” will indicate that many codes are required to satisfy the equivalent meaning in the combination code. For a more thorough explanation, go to [ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Publications/ICD10CM/2010/](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/ICD10CM/2010/).

### Things to consider

There are a few structural differences in the ICD-10-CM codebook compared with ICD-9-CM, as indicated in Table 4 on this page. The greatest challenge is the volume of diagnosis codes growing from 14,025 to 68,069.

With the coming of ICD-10-CM, providers will need more precise documentation of clinical care, which will lead to more accurate coding. This will contribute to health care quality improvement initiatives. The costs for the providers will include the following:

- Training physicians, coders, billers, and others
- Lost productivity
- System changes

The loss of productivity will be attributable to the following:

- Queries from coders to clarify documentation in the medical record

Table 4	
ICD-9-CM	ICD-10-CM
3–5 digits	3–7 digits
All characters are numeric in chapters 1–17	1st digit is alpha, the second digit is numeric, and digits 3–7 are alpha or numeric
Supplemental chapters first digit is alpha (V & E codes)	
Presently 14,025 codes	Presently 68,069 codes

- Increased billing inquiries by payors
- Increased number of adjustments and pending or suspended claims.

Suggested steps for surgeons’ offices to take leading up to the implementation of ICD-10-CM, include the following:

- Create a committee to be in charge of the change from ICD-9-CM to ICD-10-CM
- Budget planning
- Create a timeline
- Identification of training needs
- Information management system upgrades and review

Additional resources to reference in order to get your office ready for ICD-10-CM:

- World Health Organization (WHO): <http://www.who.int/classifications/icd/en/>
- CMS
- Outreach and education:
  - [http://www.cms.hhs.gov/ICD10/05\\_Educational\\_Resources.asp](http://www.cms.hhs.gov/ICD10/05_Educational_Resources.asp)
  - [http://www.cms.hhs.gov/ICD10/07\\_Sponsored\\_Calls.asp](http://www.cms.hhs.gov/ICD10/07_Sponsored_Calls.asp)

