ICD-10 Conversion and the Impact on Clinical Research

By David Vulcano

Background

The mandatory conversion from ICD-9 to ICD-10 codes is marching toward the U.S. healthcare system. (ICD stands for “International Statistical Classification of Diseases and Related Health Problems.”) The coding change is to occur instantaneously at midnight on the effective date, which has been postponed twice already and is now scheduled for October 1, 2015. Covered entities cannot bill with ICD-10 codes prior to the effective date and cannot bill with ICD-9 codes on or after the effective date. To accommodate this change, many health information and coding professionals have burned the midnight oil and endured vacation moratoriums prior to each of the previous false starts, so expect more of the same as we approach the “final” implementation date.

ICD-10 includes over 68,000 codes, up almost five-fold from 14,000 ICD-9 codes. Some ICD-9 diagnoses (e.g., diabetes) have been expanded to include new subcategorizations. Other codes have been added to describe location (e.g., the pressure ulcer is located on the back) and laterality (e.g., the cancer is in the left or right breast, handy to know prior to surgery).

Medical professionals generally applaud ICD-10 for the specificity of codes, especially with the trend toward more personalized healthcare. However, the reputation of ICD-10 is routinely blemished by codes that border on the ridiculous. Does it really matter whether your nose was broken by a baseball or a softball? Or if it occurred while playing a trumpet vs. a violin? Or if your water skis were on fire or not when you fell off them? Or if the injury occurred in the hallway vs. the bedroom of the mobile home? Or while sewing vs. knitting? It may not matter to you, but it does matter to ICD-10, as the codes are that detailed.

Codes like W22.02XA (walked into lamppost), R46.1 (bizarre personal appearance), W16.221 (fall into bucket of water causing drowning and submersion), and W5922XA (struck by turtle) seem like we are trying to categorize America’s Funniest Home Videos instead of supporting the medical care of patients. We should be grateful that W5922XA doesn’t specify whether that turtle hit you with a jab or a hook. So, if your ER physicians are being trained on how to elicit the difference between a parrot and a macaw, they are not just diversifying their avian knowledge; they need that information for the coders.

ICD-10 doesn’t just add codes but also changes and rearranges them, as it converts from the ICD-9 format of mostly three to five alphanumeric characters to mostly five to seven characters. Thus, you cannot be assured that an ICD-9 code will be the same in ICD-10. For example, the ICD-9 code V70.7 required for billing Medicare for the routine care of qualifying clinical trials will change to Z00.6. (To be clear, “Z00” is Z-Zero-Zero, not the word “zoo.”)

To be fair, the impact on clinical research operations will not be crippling, as we don’t use these codes that much (with the exception of ICD-9 V70.7 vs. ICD-10 Z00.6, as mentioned earlier). But, if you do use the codes anywhere, you do need to be aware of the change and plan for it.

Note that covered entities (i.e., healthcare providers) must change to ICD-10, but study sponsors are free to continue using ICD-9 or a mix of both. Also note that, while EMR systems must make the conversion, other systems used in clinical research (e.g., EDC (eCRF) and CTMS) are not required to, potentially increasing the complexity.
Impact and Preparation

As with any major change in the healthcare delivery infrastructure, research operations within these settings get caught in the whirlwind, often as an afterthought, as they are usually not part of the planning process. To prevent that from happening, here’s the estimated impact on research operations and what you can do about it.

Protocols

If a protocol utilizes ICD-9 codes, e.g., in the eligibility criteria, you should probably get a protocol amendment to include the equivalent ICD-10 codes. While only a small percentage of protocols use ICD-9 codes, as opposed to the narrative diagnosis, a simple amendment will avoid the risk of having to justify an apparent eligibility or other protocol violation. Of course, using the narrative diagnosis might cause the same problem if that name changed from ICD-9 to ICD-10.

EDC and CTMS

If these systems use ICD-9 codes, will they be able to accommodate the longer ICD-10 codes by the effective date? If your study sponsors or the systems you use for research do not convert to ICD-10, you should keep a record of how you map ICD-10 codes back to ICD-9 codes.

Feasibility and Recruitment Pre-Screening

If your EMR coders start coding to ICD-10 after the effective date, you will need to search both ICD-9 and ICD-10 diagnosis codes for feasibility and prescreening queries.

Longitudinal Data

Any studies that use ICD codes for recording data over a period of time will need to incorporate some sort of mapping from ICD-9 to ICD-10, or it will seem that certain diseases are eradicated on October 1, 2015, just as new epidemics erupt on that date as well.

Conclusion

If you are working at a healthcare institution, it probably has an ICD-10 conversion plan. Try to join the conversion team so clinical research issues are not ignored. Unless you are doing a lot of data studies, you may not have a lot to do, but it’s better to plan ahead and avoid that 308 (soon to be F43.0).

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