3 Myths of ICD-10-CM/PCS: Addressing Why it is Not Feasible to use SNOMED CT in Place of ICD-10 or Wait for ICD-11—and Other Misperceptions

By Sue Bowman, MJ, RHIA, CCS, FAHIMA

As the US healthcare industry experiences yet another delay in ICD-10-CM/PCS implementation, misunderstandings surrounding the ICD-10-CM/PCS transition continue to perpetuate. This article addresses a few of the most common misperceptions—myths that need to be exposed with fact-based evidence:

- The idea that replacement of ICD-9-CM is not a necessity.
- The increase in the number of codes from ICD-9 to ICD-10 increases the difficulty of using the new code set.
- SNOMED CT or ICD-11 represent viable alternatives to ICD-10-CM/PCS implementation.

ICD-9-CM Must Be Replaced

Replacing ICD-9-CM is not optional. Almost 25 years ago, the National Committee on Vital and Health Statistics (NCVHS) expressed concern that the ICD classification might be stressed to a point where the quality of the system would soon be compromised.[1] More than 10 years ago, NCVHS sent a letter to the Secretary of the US Department of Health and Human Services (HHS) recommending the ICD-10 code sets be adopted as replacements for the ICD-9-CM code set.[2]

Both costs and dangers are associated with continued use of the outdated ICD-9-CM coding system. ICD-9-CM is obsolete and no longer reflects current clinical knowledge, contemporary medical terminology, or the modern practice of medicine. Its limited structural design lacks the flexibility to keep pace with changes in medical practice and technology. The longer ICD-9-CM is in use, the more the quality of healthcare data will decline, leading to faulty decisions based on inaccurate or imprecise data.[3]

After reviewing ICD-9-CM codes, healthcare providers often don't know precisely what was wrong with patients or what treatments they received. By continuing to use this outdated code set, US healthcare providers have a limited ability to extract the information that will optimize public health surveillance, exchange meaningful healthcare data for individual and population health improvement, or move to a payment system that is based on quality and outcomes.

An inability to uniquely capture new technologies and services, along with using codes that do not reflect current clinical knowledge and practice, severely restricts the reliability and validity of US healthcare data. The ability to accurately analyze the provision of healthcare services and whether reimbursement is fair and equitable is compromised. If data on new diseases and technology or important distinctions in diagnoses and procedures cannot be captured, it is not possible to effectively analyze healthcare costs or outcomes.

Electronic health records (EHRs) and interoperability require a modern coding system for summarizing and reporting data. Without ICD-10-CM/PCS, the US investment in EHRs will be greatly diminished, as the value of more comprehensive and detailed information will be lost if it is aggregated into outdated, broad, and ambiguous codes such as those in ICD-9-CM.

Further declines in coding productivity and accuracy can also be expected as long as ICD-9-CM is in use. The ambiguity and obsolete clinical terminology used in many ICD-9-CM codes make the system difficult to use and leave reported codes open to interpretation.[4]

ICD-10-CM/PCS Facilitates Accurate and Efficient Code Reporting

Just as the size of a dictionary or phone book does not make it more difficult to look up a word or phone number, an increased number of codes does not make it harder to find the right code. In fact, the correct code is easier to find in a more comprehensive and detailed code set—just as it is easier to find a word in a comprehensive dictionary. Coding is easier when detailed and precise codes are available.[5] If a dictionary is incomplete, or the words are vague or nonspecific, it is more difficult to find the correct definition—just as the inability to find a code that accurately describes a particular health condition is frustrating. As noted above, the ambiguity of ICD-9-CM and the use of outdated terminology makes ICD-9-CM more difficult to use since the codes are open to multiple interpretations. Greater specificity and clinical accuracy makes ICD-10-CM/PCS easier to use than ICD-9-CM. Increased specificity, clinical accuracy, and a logical structure facilitate—rather than complicate—the use of a code set.

When the expansion of codes in ICD-10-CM is examined more closely, it is much less daunting. The major reason for much of the code expansion is identification of the affected side of the body. This specification of laterality accounts for 46 percent of the total increase in the number of codes.[6] And for those ICD-10-CM codes with greater clinical detail than is found in ICD-9-CM, much of that detail was requested by organizations representing clinicians because this level of detail was thought to be clinically significant.[7] With the growing emphasis on linking quality and payment, and the movement toward value-based purchasing, it is clear this additional clinical detail will be important.[8] For example, ICD-10-CM contains significantly more detail than ICD-9-CM regarding specific types of surgical complications and types of devices, implants, or grafts involved.

The Alphabetic Index and electronic tools will continue to facilitate proper code selection. The improved structure and specificity of the ICD-10 code sets will facilitate the development of increasingly sophisticated electronic tools to aid the coding process. An individual provider will never use all of the codes in a given code set, but instead will only use those relevant to their specific patient population.[9]

SNOMED CT and ICD-10 are Complementary Systems

Clinical terminology and classification systems play separate but equally important roles in healthcare delivery. Neither a clinical terminology nor a classification can serve all current and future uses for coded data required in the US healthcare delivery system. Terminologies and classifications are designed for distinctly different purposes and satisfy diverse user requirements. A standard clinical terminology enables clinicians to represent detailed information in a consistent, reliable, and comprehensive way.[10]

A clinical terminology such as SNOMED CT is an “input” system designed for the primary documentation of clinical care.[11] It is the global clinical terminology that adds processable meaning to the EHR.[12] When implemented in software applications, SNOMED CT can be used to represent clinically relevant information consistently, reliably, and comprehensively as an integral part of producing EHRs.[13]

The International Classification of Diseases (ICD) is the international standard diagnostic classification that organizes content into meaningful standardized criteria and enables the storage and retrieval of diagnostic information for epidemiological and research purposes.[14] ICD is the foundation for the identification of health trends and statistics on a global scale. The ICD defines the universe of diseases, disorders, injuries, and other related health conditions. It organizes information into standard groupings of diseases, which allows for:

- Easy storage, retrieval, and analysis of health information for evidenced-based decision-making
- Sharing and comparing health information between hospitals, regions, settings, and countries
- Data comparisons in the same location across different time periods[15]

ICD allows the counting of deaths as well as diseases, injuries, symptoms, reasons for encounters, factors that influence health status, and external causes of disease. It is the diagnostic classification standard for clinical and research purposes. These include monitoring of the incidence and prevalence of diseases, observing reimbursement and resource allocation trends, and keeping track of safety and quality guidelines.[16]

The International Classification of Diseases and Related Health Problems, 10th Revision, Clinical Modification (ICD-10-CM) is a US version of the World Health Organization’s ICD-10 and was developed for use in reporting morbidity data in all healthcare settings. The International Classification of Diseases 10th Revision Procedure Coding System (ICD-10-PCS) has been developed as a replacement for Volume 3 of the International Classification of Diseases 9th Revision (ICD-9-CM).

Classification systems are "output" rather than "input" systems and are not designed for the primary documentation of clinical care. Classification systems group together similar diseases and procedures and organize related entities for easy retrieval.[17] They group ideas for aggregation and analysis and add statistical value to data.[18] Essential to the big picture of healthcare, classification systems are intended for secondary data uses, including:

- Measurement of quality of care
- Reimbursement
- Statistical and public health reporting
- Operational and strategic planning
- Other administrative reporting functions[19]

SNOMED CT and ICD are designed for different purposes and each should be used for the purpose for which it is designed. While ICD's focus is statistical, SNOMED CT is clinically-based and focused on capturing the information needed for clinical care.[20] The standard vocabulary afforded by SNOMED CT supports meaningful information exchange to meet clinical requirements. ICD-10-CM and ICD-10-PCS, with their classification structure and conventions and reporting rules, are useful for classifying healthcare data for administrative purposes, including reimbursement claims, health statistics, and other uses where data aggregation is advantageous.

A clinical terminology intended to support clinical care processes should not be manipulated to meet reimbursement and other external reporting requirements. Such manipulation represents the potential to adversely affect patient care, the development and use of decision support tools, and the practice of evidence-based medicine. Clinical terminologies are not well-suited for the secondary purposes for which classification systems are used because of their immense size, considerable granularity, complex hierarchies, and lack of reporting rules.[21]

Health records created and stored in electronic environments (i.e., electronic health records) require the use of uniform health information standards, including a common medical language. Together terminologies and classification systems provide the common medical language necessary for interoperability and the effective sharing of clinical data.[22] The benefits of health information technology investments cannot be achieved without using the latest available versions of terminology and classification standards. SNOMED CT and ICD-10-CM/PCS used together in EHR systems can contribute to patient safety and evidence-based high-quality care provided at lower cost by leveraging a "capture once, use many times" process.

Information captured in SNOMED CT can be repurposed through linkage to ICD. Classification systems allow granular clinical concepts captured by a terminology to be aggregated into manageable categories for secondary data purposes.[23] Clinical data "input" into EHR systems can be transformed by ICD into "output" governed by reporting rules and guidelines for use. The benefits of using SNOMED CT increase exponentially if it is linked to modern, standard classification systems for the purpose of generating health information necessary for secondary uses such as statistical and epidemiological analyses, external reporting requirements, measuring quality of care, monitoring resource utilization, and processing claims for reimbursement.[24]

HHS does not believe SNOMED CT qualifies as a standard for reporting medical diagnoses and hospital inpatient procedures for purposes of administrative transactions.[25] HHS has consistently maintained that it does not consider adoption of SNOMED CT to be a viable alternative to ICD-10-CM/PCS implementation because these code sets are designed for distinctly different purposes.

To maximize the value of health information, classifications and terminologies should be used appropriately according to their purpose and design. Instead of selecting a single classification or terminology to serve all clinical functions, multiple classifications and terminologies should be used for the functions for which they are ideally suited, and only linked as needed. Together terminologies and classifications provide the common medical language necessary for interoperability and the effective sharing of clinical data.[26] Linked together, ICD and SNOMED CT support better data collection, more efficient reporting, data interoperability, and reliable information exchange in health information systems. Healthcare systems will benefit from better data while reducing data capture and reporting costs. ICD-10-CM/PCS and SNOMED CT can both contribute to the improvement of the quality and safety of healthcare and provide effective access to information required for decision support and consistent reporting and analysis.[27]

US Can't Afford to Wait for ICD-11

Based on the World Health Organization's current timeline, ICD-11 is expected to be finalized and released in 2017.[28] For the US, that date is the beginning, not the end, of the process toward adoption of ICD-11. Regardless of the benefits of ICD-11, the US would still need to evaluate the code set for national use and likely develop a national version to allow for the annual updating demanded by Congress and US stakeholders.[29] Also, since ICD-11 does not include a procedure classification system, a procedure coding system for use in the US would need to be developed.

The process of evaluating ICD-11 for use in the US, developing a national modification to meet US information needs, and developing a procedure coding system would take at least a decade, followed by the rulemaking process to adopt ICD-11 as a HIPAA code set standard. In the case of ICD-10, it took eight years to develop a US modification of ICD-10 and a procedure coding system, and 19 years for a final rule to be published. Five years after publication of this final rule, and 24 years after the World Health Assembly endorsed ICD-10, the US has still not implemented ICD-10-CM/PCS.

The US cannot wait another 10-25 years to replace the ICD-9-CM code set. As noted above, replacement of ICD-9-CM is long overdue. Waiting until ICD-11 is ready for implementation in the US is not a viable option, as waiting that long to replace the ICD-9-CM code set would seriously jeopardize the country's ability to evaluate quality and control healthcare costs.[30] US healthcare data is being allowed to deteriorate while the demand increases for high-quality data that can support new healthcare initiatives such as the "meaningful use" EHR Incentive Program, value-based purchasing, and other initiatives aimed at improving quality and patient safety and decreasing costs.[31]

In a 2013 report on the feasibility of skipping ICD-10 and going right to ICD-11, the American Medical Association Board of Trustees recommended against skipping ICD-10 and moving directly to ICD-11, as this approach is fraught with its own pitfalls.[32] Concerns cited in this report included:

- ICD-9 is outdated today and continuing to use the outdated codes limits the ability to use diagnosis codes to advance the understanding of diseases and treatments, identify quality care, drive better treatments for populations of patients, and develop new payment delivery models.
- The US market will miss out on the improvements in the ICD-10 codes that align with today's diagnosis coding needs, including the addition of laterality, updated medical terminology, greater specificity of the information in a single code, and flexibility to add more codes.
- Skipping ICD-10 will impede the ability of the industry to build on their knowledge and experience of ICD-10, which is expected to be needed for ICD-11. Learning the medical concepts, training efforts, and overall implementation efforts for ICD-11 will be more challenging if ICD-10 is not implemented first.
- Implementing ICD-10 is expected to reduce payers' reliance on requesting additional information, known as "attachments," which could reduce burdens on physicians, but this opportunity would be delayed until ICD-11 if ICD-10 is not implemented.
- The timeframe to have ICD-11 fully implemented could be as long as 20 years, unless there is a strong commitment by the industry to implement it faster.[33]

Implementing ICD-10-CM/PCS is an important step on the pathway to ICD-11. ICD-10-CM has informed ICD-11 development, as updated clinical knowledge and additional detail considered important for use cases such as quality and patient safety monitoring have been incorporated into the US code sets.[34] Transitioning to ICD-10-CM/PCS in 2015 will provide an easier and smoother transition to ICD-11 at some point in the future.

By preparing information systems now to accommodate ICD-10-CM/PCS, they will also be better able to accommodate the transition to ICD-11.[35] And just as modifications to ICD-10 have been incorporated into ICD-10-CM through the annual update cycles, it is anticipated that content additions in ICD-11 that are not already included in ICD-10-CM will be incorporated into ICD-10-CM over time, which will facilitate the transition to ICD-11. Due to the structural limitations and obsolescence of ICD-9-CM, modifications to ICD-9-CM to reflect changes in the World Health Organization version of ICD would be impossible, complicating and disrupting a future transition to ICD-11 if the ICD-10-CM/PCS code sets are not implemented first.[36]

Notes

1. AHIMA. "ICD Timeline." May 15, 2014.
2. Ibid.

3. Bowman, Sue. "Why We Can't Skip ICD-10." *Journal of AHIMA* website. April 5, 2012. http://journal.ahima.org/2012/04/05/why-we-cant-skip-icd-10/.
4. Averill, Richard and Rhonda Butler. "Misperceptions, Misinformation, and Misrepresentations: The ICD-10-CM/PCS Saga." *Journal of AHIMA* website. June 20, 2013. http://journal.ahima.org/wp-content/uploads/Week-3_Averill-and-Butler_final.pdf.
5. Ibid.
6. Ibid.
7. Averill, Richard and Sue Bowman. "There Are Critical Reasons for Not Further Delaying the Implementation of the New ICD-10 Coding System." *Journal of AHIMA* 83, no. 7 (July 2012): 42-48.
8. Averill, Richard and Rhonda Butler. "Misperceptions, Misinformation, and Misrepresentations: The ICD-10-CM/PCS Saga."
9. Ibid.
10. WHO-FIC. "International Classification of Diseases (ICD) and Standard Clinical Reference Terminologies: A 21st Century Informatics Solution." May 2013. http://www.cdc.gov/nchs/data/icd/Class_Term_InfoShee_May2013.pdf.
11. Bowman, Sue. "Coordination of SNOMED-CT and ICD-10: Getting the Most out of Electronic Health Record Systems." *Perspectives in Health Information Management* Spring 2005 (May 25, 2005).
12. International Health Terminology Standards Development Organisation. "SNOMED-CT – Adding Value to Electronic Health Records." February 2014. http://ihtsdo.org/fileadmin/user_upload/Docs_01/Publications/SNOMED_CT/SnomedCt_Benefits_20140219.pdf.
13. International Health Terminology Standards Development Organisation. "About SNOMED CT." http://www.ihtsdo.org/snomed-ct/snomed-ct0/.
14. WHO-FIC. "International Classification of Diseases (ICD) and Standard Clinical Reference Terminologies: A 21st Century Informatics Solution."
15. World Health Organization. "International Classification of Diseases (ICD) Information Sheet." http://www.who.int/classifications/icd/factsheet/en/.
16. Ibid.
17. Bowman, Sue. "Coordination of SNOMED-CT and ICD-10: Getting the Most out of Electronic Health Record Systems."
18. Ibid.
19. Ibid.
20. Fung, Kin Wah. "How the SNOMED-CT to ICD-10 Map facilitated the map to a national extension of ICD-10." National Library of Medicine. 2012.
21. Bowman, Sue. "Coordination of SNOMED-CT and ICD-10: Getting the Most out of Electronic Health Record Systems."
22. Ibid.
23. Ibid.
24. Ibid.
25. Department of Health and Human Services. "HIPAA Administrative Simplification: Modification to Medical Data Code Set Standards To Adopt ICD–10–CM and ICD–10–PCS; Proposed Rule." *Federal Register* 73, no. 164 (August 22, 2008). http://www.gpo.gov/fdsys/pkg/FR-2008-08-22/pdf/E8-19298.pdf.
26. Bowman, Sue. "Coordination of SNOMED-CT and ICD-10: Getting the Most out of Electronic Health Record Systems."
27. WHO-FIC. "International Classification of Diseases (ICD) and Standard Clinical Reference Terminologies: A 21st Century Informatics Solution."
28. World Health Organization. "International Classification of Diseases (ICD) Information Sheet."
29. Averill, Richard and Sue Bowman. "There Are Critical Reasons for Not Further Delaying the Implementation of the New ICD-10 Coding System."
30. Ibid.
31. Bowman, Sue. "Why We Can't Skip ICD-10."
32. American Medical Association. "Evaluation of ICD-11 as a New Diagnostic Coding System." Report of the Board of Trustees. 2013. http://www.ama-assn.org/assets/meeting/2013a/a13-bot-25.pdf.
33. Ibid.
34. Bowman, Sue. "Why We Can't Skip ICD-10."

35. Averill, Richard and Sue Bowman. “There Are Critical Reasons for Not Further Delaying the Implementation of the New ICD-10 Coding System.”
36. Bowman, Sue. “Why We Can’t Skip ICD-10.”

Sue Bowman (sue.bowman@ahima.org) is a senior director, coding policy and compliance, public policy at AHIMA.

Article citation:
Bowman, Sue E. "3 Myths of ICD-10-CM/PCS: Addressing Why it is Not Feasible to use SNOMED CT in Place of ICD-10 or Wait for ICD-11—and Other Misperceptions" *Journal of AHIMA* 85, no.8 (August 2014): 40-44.