

September 23, 2008

ADOPTION OF ICD-10-CM AND ICD-10-PCS

AT A GLANCE

The Issue:

On August 15, the Centers for Medicare & Medicaid Services (CMS) released a proposed rule to modify the medical data code set standards and adopt ICD-10-CM for coding of patient diagnoses and ICD-10-PCS for coding of hospital procedures. The proposed rule, available at http://www.cms.hhs.gov/TransactionCodeSetsStandards/02_TransactionsandCodeSetsRegulations.asp#TopOfPage, was published in the August 22 *Federal Register*; comments are due October 21. This proposed rule affects health plans, health care clearinghouses and health care providers that transmit any electronic health information in connection with the Health Insurance Portability and Accountability Act (HIPAA) transaction standards. Compliance is proposed for October 1, 2011 (Federal Fiscal Year 2012). A separate proposed rule, also issued August 15, calls for an updated version of current electronic transaction standards (Version 5010).

Our Take:

An update to the current ICD-9-CM code set, which has been in use for almost 30 years, is long overdue, and the AHA has strongly advocated for upgrading the nation's coding system to ICD-10-CM and ICD-10-PCS. In recent years, ICD-9-CM has been incapable of meeting the increased level of detail needed for biosurveillance, value-based purchasing and quality reporting. Coding that accurately describes the diagnoses and procedures is critical if we truly seek to improve health care quality. Adoption of ICD-10-CM and ICD-10-PCS will enable the study of the drivers that affect cost in relationship to specific conditions, and options for treating them, as well as stimulate the adoption of health information technology.

Successfully transitioning to ICD-10-CM and ICD-10-PCS will require careful planning and coordination of resources. A large number of provider and health plan databases and applications will be affected – every application where diagnosis or procedure codes are captured, stored, analyzed or reported – and health information coding professionals will need to be retrained. A three-year implementation plan is proposed to help providers adjust to the new system. This change is welcome and long overdue since ICD-9-CM is no longer able to meet the pressing requirements for increased granularity and specificity in a coding system.

What You Can Do:

- ✓ Share this advisory with your senior management team.
- ✓ Assemble an ICD-10 planning and transition team.
- ✓ Appoint an ICD-10 transition team leader.
- ✓ Watch for AHA's comments on the proposed rule to use in making your own comments to CMS in support of the concurrent implementation of ICD-10-CM and ICD-10-PCS.

Further Questions:

If you have questions, please contact Nelly Leon-Chisen, RHIA, director of coding and classification, at (312) 422-3396 or nleon@aha.org or George Arges, senior director health data management group, at (312) 422-3398 or garges@aha.org.

September 23, 2008

ADOPTION OF ICD-10-CM AND ICD-10-PCS

BACKGROUND

On August 15, the Centers for Medicare & Medicaid Services (CMS) released a proposed rule to modify ICD-9-CM, the medical data code set standards currently used, and adopt ICD-10-CM and ICD-10-PCS. While the ICD-9-CM code set includes both diagnosis and procedure codes, under ICD-10, diagnosis and procedure codes would be split into two code sets – ICD-10-CM and ICD-10-PCS, respectively. The proposed rule, available at http://www.cms.hhs.gov/TransactionCodeSetsStands/02_TransactionsandCodeSetsRegulations.asp#TopOfPage, was published in the August 22 *Federal Register*; comments are due October 21. CMS proposes a three-year implementation plan for the updated code set with full compliance starting October 1, 2011, Federal Fiscal Year (FY) 2012.

A separate proposed rule, also issued Aug. 15, calls for the adoption of updated version (Version 5010) of current Health Insurance Portability and Accountability Act (HIPAA) electronic transaction standards. These are needed because the current version of the adopted standard, Version 4010/4010A1, cannot distinguish the ICD-10 code sets. The transition to the newer version of the HIPAA transaction standards must be completed by April 1, 2010, 18 months ahead of ICD-10 implementation.

ICD-9-CM

The International Classification of Diseases, 9th Edition was developed by the World Health Organization (WHO) to promote international comparability in the collection, processing, classification, and presentation of morbidity and mortality data. ICD-9-CM is a clinical classification system, developed for the U.S., consisting of diagnosis and procedure codes in use since 1979. Other nations have developed their own clinical modifications (CM). When the Medicare hospital inpatient prospective payment system was implemented in 1983, ICD-9-CM was used as the basis for assigning the diagnosis-related groups (DRGs). All diagnostic and procedural information for inpatient DRGs is captured using ICD-9-CM.

In ICD-9-CM, diagnoses and procedures are grouped into different chapters and sections based on body system or cause of the condition. For example,

surgeries of the circulatory system are grouped together. According to the 2000 HIPAA Electronic Transactions and Code Sets rule, all health care providers, including inpatient hospitals, must use ICD-9-CM *diagnosis* codes, which contain three to five digits. ICD-9-CM *procedure* codes contain three to four digits and are used exclusively by hospitals to report inpatient hospital procedures.

All ICD-9-CM codes are published in a set of three volumes.

- **Diagnosis:** International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) Volumes 1 and 2 (including the Official ICD-9-CM Guidelines for Coding and Reporting), as maintained and distributed by the Department of Health and Human Services (HHS), for coding diseases, injuries, impairments, other health problems and their manifestations, and causes of injury, disease, impairment or other health problems.
- **Procedures:** ICD-9-CM Volume 3 (including the Official ICD-9-CM Guidelines for Coding and Reporting), as maintained and distributed by HHS, for procedures or other actions performed on hospital inpatients for the treatment of diseases, injuries and impairments.

All other procedures are coded using the current Procedural Terminology, 4th Edition (CPT-4) and Health Care Common Procedure Coding System (HCPCS).

ICD-9-CM codes are maintained and updated via an open, public process. Since 1985, the ICD-9-CM Coordination and Maintenance Committee has received and reviewed public comments on proposed code revisions, deletions and additions. This federal committee is co-chaired by the National Center for Health Statistics (NCHS) and CMS. Suggestions for code updates come from both the public and private sectors.

ICD-9-CM codes also serve as the foundation for grouping hospital discharges to the correct Medicare Severity-Adjusted Diagnosis-related Group (MS-DRG), which is now used by CMS to refine Medicare payment. ICD-9-CM diagnosis and procedure codes also are key to benchmarking, quality assessment, pay-for-performance (P4P) research, public health reporting, health care policy development and strategic planning to meet the health needs of our communities.

Limitations of ICD-9-CM

An update to the ICD-9-CM code set is long overdue. Over time, care delivery has shifted from the inpatient acute-care setting to outpatient, home care, long-term care and other settings. ICD-9-CM's ability to incorporate new codes or expand enumeration to accommodate these changes has been limited by physical numbering constraints. ICD-9-CM diagnostic codes are often outdated and, in many instances, insufficient to provide detail for non-acute conditions.

The problems are even more acute for coding procedures: ICD-9-CM is running out of codes for new procedures and devices.

In 1997, the National Committee on Vital and Health Statistics (NCVHS) began to study the known shortcomings of ICD-9-CM and assess the need to move to ICD-10 (or an alternative code set), including the impact of such a transition. Between 1997 and 2003, the NCVHS conducted eight days of hearings. It also commissioned a RAND Corporation study on the potential costs and benefits of transitioning to ICD-10-CM and ICD-10-PCS. In 2003, based on testimony received from more than 80 public and private sector groups and the RAND study findings, the NCVHS concluded that ICD-10-CM and ICD-10-PCS should be adopted as the HIPAA standard to replace ICD-9-CM.

The aging ICD-9-CM code set has mounting space limitations and workarounds that violate the structural hierarchy needed to handle new diagnoses and procedures. The ICD-9-CM code set was never designed to provide the increased level of detail required to support emerging needs such as quality reporting and development of P4P programs. Other challenges include its inability to easily provide the detail for mortality and biosurveillance reporting.

Space Limitations and Impact of Workarounds on Structural Hierarchy. While the ICD-9-CM code set has evolved, its functionality has been exhausted. It is no longer able to respond to additional requests for specificity.

ICD-9-CM is organized using chapters for each body system, but some chapters can no longer accommodate new codes. When this occurs, any additional codes are assigned to “overflow” chapters for procedures that are not classified elsewhere. However, in some instances, these also are full. As a result, additional codes must be assigned to topically unrelated chapters. **The AHA estimates that in 2009 the system will run out of procedure codes in the appropriate, logical sections of ICD-9-CM, as well as in the overflow chapters.** For example, new medical techniques for hip replacements are currently assigned to an overflow chapter. When those chapters become full, new procedures will be assigned to a chapter now devoted to procedures related to the eye. When a code is isolated in a separate, unrelated part of the ICD-9-CM, coders may not be able to find the code and conceivably could code less specifically. Researchers and statisticians in their analyses also may miss cases with codes located in unrelated chapters. The hierarchical structure of the ICD-9-CM procedure code set has been compromised and each year that goes by only increases the complexity of using this outdated system.

Lack of Detail. Accurate coding captures information that is critical for research and ultimately improves quality and cost containment by enabling the study of specific conditions and options for treating them. Accuracy also is a critical factor in the development of payment systems, especially P4P programs; successful

programs require detailed coding of diagnoses and the procedures performed to treat specific conditions.

The following examples illustrate the lack of detail in reporting diagnoses and procedures using ICD-9-CM:

- ICD-9-CM has a single diagnosis code for fracture of the wrist. If a patient is treated for two successive wrist fractures, the ICD-9-CM code does not provide enough detail to distinguish between a second fracture, a repeat fracture of the same wrist, a fracture of the other wrist, incorrect billing for delayed healing, or non-union or mal-union of the original fracture. Answers to these specific questions are important to determine if there has been an adverse event in the hospital, normal delayed healing of a fracture, a negative outcome from a previous treatment, or a simple data-entry error.
- ICD-9-CM contains a single procedure code that describes the endovascular repair or occlusion of head and neck vessels. It does not describe the artery or vein on which the repair was performed, the precise nature of the repair, or whether the approach is a percutaneous procedure or is transluminal with a catheter. This additional information is important to determine differences in resources utilized and to evaluate potential differences in outcomes (e.g., infection, complications or length of stay) based on differences in procedures.
- Four or more ICD-9-CM procedure codes are needed to delineate a spinal fusion procedure with sufficient detail to describe the level of the spine (e.g., cervical, lumbar, thoracic), the number of vertebrae fused, and the type and number of devices inserted. Such details are important to distinguish significant differences in resource use associated with treating these patients (e.g., different costs for interbody fusion devices depending on how many are required, length of time in the operating room, or length of time the patient may need to recover as an inpatient).

Mortality Reporting and Biosurveillance. Use of ICD-9 makes international reporting and comparisons difficult. The ICD-9 diagnosis code set is no longer supported or maintained by the WHO. At least 138 countries have adopted ICD-10 for coding and reporting mortality data, while 99 of those countries also have adopted ICD-10 along with a clinical modification for coding and reporting morbidity data.

In 1999, the U.S. adopted ICD-10 for mortality reporting. Until the U.S. implements ICD-10 for morbidity reporting applications, our ability to understand morbidity and mortality data on an international scale is limited. Comparability at the international level is important to assess health quality for clinical, epidemiological and quality purposes. Because the U.S. is capturing morbidity data using the outdated ICD-9-CM, it has experienced problems identifying and monitoring outbreaks of known diseases and new emerging health threats such

as anthrax, Severe Acute Respiratory Syndrome (SARS) and Monkeypox. A workaround was developed in the case of SARS but valuable time was lost.

Development of ICD-10-CM and -PCS

The WHO developed ICD-10 for diagnosis codes only in 1989, and its Assembly adopted it in 1990. The WHO does not have an international procedure coding system, allowing each country to develop and adopt its own.

ICD-10-CM Diagnosis Codes. The NCHS, housed within the Centers for Disease Control and Prevention, has developed ICD-10-CM, a clinical modification of the WHO's ICD-10, for U.S. health care providers. This clinical modification was developed with input from the AHA as well as a number of prominent specialty groups and organizations.

There are approximately 68,000 ICD-10-CM diagnosis codes, each with three to seven alphanumeric characters, compared to 13,000 ICD-9-CM codes, each with three to five characters. In addition, in ICD-10-CM, the first digit is alphabetical, while digits two and three are numeric. Digits four through seven can be alphabetical or numeric. Under ICD-9-CM, the first digit may be alphabetical (E or V) or numeric; digits two through five are numeric. As a result, the ICD-10-CM code set provides much more information and detail within the codes than ICD-9-CM, facilitating timely electronic processing of claims by reducing requests for additional information.

ICD-10-CM also includes the following improvements over ICD-9-CM:

- Significant improvements in coding primary care encounters, external causes of injury, mental disorders, neoplasms and preventive health.
- Advances in medicine and medical technology that have occurred since the last revision.
- Codes with more detail on socioeconomic, family relationships, ambulatory care conditions, problems related to lifestyle and the results of screening tests.
- More space to accommodate future expansions (alphanumeric structure).
- New categories for post-procedural disorders.
 - The addition of laterality – specifying which organ or part of the body is involved when the location could be on the right, the left or bilateral.
 - Expanded distinctions for ambulatory and managed care encounters.

The chart below offers a side-by-side comparison of the two code sets.

**Comparison of ICD-9-CM vs. ICD-10-CM
(For Coding Diagnoses Only)**

| ICD-9-CM Diagnosis Codes | ICD-10-CM Diagnosis Codes |
|---|--|
| 3-5 characters in length | 3-7 characters in length |
| Approximately 13,000 codes | Approximately 68,000 available codes |
| First digit may be alpha (E or V) or numeric; Digits 2-5 are numeric | Digit 1 is alpha; Digits 2 and 3 are numeric; Digits 4-7 are alpha or numeric |
| Limited space for adding new codes | Flexible for adding new codes |
| Lacks detail | Very specific |
| Lacks laterality | Allows laterality and bilaterality |
| Difficult to analyze data due to non-specific codes | Specificity improves coding accuracy and richness of data for analysis |
| Codes are non-specific and do not adequately define diagnoses needed for medical research | Detail improves the accuracy of data used for medical research |
| Does not support interoperability because it is not used by other countries | Supports interoperability and the exchange of health data between the U.S. and other countries |

ICD-10-PCS Procedure Codes. ICD-10-PCS is a procedure coding system developed by CMS. ICD-10-PCS has unique, precise codes to differentiate body parts, surgical approaches and devices used in procedures. This becomes increasingly important when assessing and tracking the quality of medical processes and outcomes, and compiling statistics that are valuable tools for research. It can be used to measure differences in resource consumption and outcomes for various procedures, and to describe precisely what was done to the patient.

ICD-10-PCS codes have seven alphanumeric characters and are grouped into approximately 30 procedure categories identified by a leading alpha character. Each character in a code has a specific meaning. The first character shows the type of procedure by clinical specialty. Almost half of the 16 sections remain undesignated at this time, leaving room for future expansion. The meaning of each subsequent character may change depending on the section. For example, the fifth character in the imaging section identifies the contrast material used, while the fifth character in the medical and surgical section identifies the surgical approach. The second character defines the body system with the exception of the rehabilitation and mental health sections, in which the second character defines the type of procedure performed. The chart below offers a side-by-side comparison.

**Comparison of ICD-9-CM vs. ICD-10-PCS
(For Coding Procedures Only)**

| ICD-9-CM Procedure Codes | ICD-10-PCS Procedure Codes |
|--|--|
| 3-4 numbers in length | 7 alpha-numeric characters in length |
| Approximately 3,000 codes | Approximately 87,000 available codes |
| Based on outdated technology | Reflects current usage of medical terminology and devices |
| Limited space for adding new codes | Flexible for adding new codes |
| Lacks detail | Very specific |
| Lacks laterality | Has laterality |
| Generic terms for body parts | Detailed descriptions for body parts |
| Lacks description of methodology and approach for procedures | Provides detailed descriptions of methodology and approach for procedures |
| Limits DRG assignment | Allows DRG definitions to better recognize new technologies and devices |
| Lacks precision to adequately define procedures | Precisely defines procedures with detail regarding body part, approach, any device used and qualifying information |

AT ISSUE

Provisions of the Proposed Regulation

Use of ICD-10-CM and ICD-10-PCS by Covered Entities. CMS proposes to adopt the ICD-10-CM and ICD-10-PCS code sets to replace the ICD-9-CM Volumes 1 and 2 code sets for reporting diagnoses and Volume 3 code set for reporting procedures, including the official coding guidelines, when conducting standard transactions. HIPAA-covered entities would be required to use these codes. Because ICD-10-PCS codes are used only for inpatient hospital procedures, the ICD-10-PCS codes would not be used in outpatient transactions, or by physicians.

CMS believes that use of ICD-10-CM and ICD-10-PCS will result in more accurate payments for new procedures, fewer rejected claims, fewer improper claims, improved identification of new procedures, improved disease management, better understanding of health conditions and health care outcomes, and harmonization of disease monitoring and reporting worldwide.

CMS proposes to establish an ICD-10-CM/PCS Coordination and Maintenance Committee to follow the same procedures currently used by the ICD-9-CM Coordination and Maintenance Committee for consideration of new codes and revisions to existing codes.

The proposed rule does not specifically address the impact on prospective payment systems that currently use ICD-9-CM codes. CMS believes that these issues can best be addressed through the usual rulemaking process.

Rejected Alternatives to ICD-10. CMS considered and rejected a number of options in deciding to propose the adoption of ICD-10-CM and ICD-10-PCS. As is its custom, CMS seeks public comment on the following proposals:

- **Unassigned Codes.** CMS considered extending the life of ICD-9-CM by assigning codes to new diagnoses and procedures without regard to the hierarchy of the code set. ICD-9-CM's hierarchy strategy groups procedures by body systems, and then groups similar procedures that apply to a specific body system into categories. CMS already departed from the current organizational structure of ICD-9-CM procedures when it created a variety of procedure codes in two new previously unused chapters. However, the AHA does not believe this is a long-term solution to the code shortage.
- **Systematized Nomenclature of Medicine Clinical Terms (SNOMED-CT®).** SNOMED-CT® is an input system that is primarily designed for the documentation of clinical care. Using SNOMED-CT® mapped to ICD-10-CM and ICD-10-PCS permits the use of a clinical terminology as the basis for electronic health records.

CMS rejected SNOMED-CT® as an alternative for ICD-10-CM and ICD-10-PCS because the code sets are designed for distinctly different purposes. CMS did not believe that SNOMED-CT® qualifies under section 1172(c)(1) of Title XI of the Social Security Act, Part C, Administration Simplification as a standard for reporting medical diagnoses and hospital inpatient procedures for purposes of administrative transactions. The AHA agrees with CMS' assessment.

- **CPT-4.** CPT-4 is developed and maintained by the American Medical Association to capture physician services. CPT-4 also is used to capture services performed in the outpatient and ambulatory care settings. After extensive hearings and discussions, in November 1990 the NCVHS issued a report that described structural problems and serious flaws with both CPT-4 and ICD-9-CM procedure codes for the inpatient setting. In 1993, an NCVHS subcommittee determined that neither system could capture services in all health care settings. Despite numerous hearings, NCVHS has not endorsed the use of CPT-4 for hospital inpatient procedure coding. The AHA does not

believe that using CPT-4 for coding hospital inpatient procedures is a viable solution.

- ICD-11. Another option considered was to skip adoption of ICD-10 and wait until ICD-11 is ready for implementation. Preliminary work on the development of ICD-11 has been carried out by WHO. However, this work is at the early stages and no firm timeframes for the completion of developmental work or testing have been identified. Work has not yet begun on developing the companion procedure codes needed to implement ICD-11 in the U.S. This means that the earliest projected date for implementation would be 2020, assuming that no clinical modification would be needed for the ICD-11 and that the companion procedure code set could be completed in time. The U.S. has always used a clinical modification of the ICD coding system to meet the specific requirements needed for administrative and reimbursement purposes. We have no reason to believe that ICD-11 would be different. The AHA does not believe that waiting for ICD-11 is realistic given that the ICD-9-CM system is already obsolete.

Proposed Compliance Dates

Hospitals and others have stated that they will need at least two years from the publication of a final rule to implement ICD-10. Under Section 1175 of HIPAA, the earliest date CMS could implement ICD-10 could be 180 days after the issuance of a final rule, which is expected before the end of the year.

However, in the proposed rule, CMS suggests October 1, 2011 (Federal FY 2012) as the compliance date for ICD-10-CM and ICD-10-PCS code sets for all covered entities. It is important that the compliance date coincide with the effective date of the annual Medicare inpatient PPS updates. CMS believes that it is in the field's best interest (including small health plans) to have a single compliance date for ICD-10-CM and ICD-10-PCS. This will reduce the burden on both providers and insurers, who will be able to use a single new coding system for claims received for encounters and discharges occurring on or after October 1, 2011. A single compliance date will significantly reduce confusion in processing claims and analyzing data. Historically, all previous versions of the ICD coding systems have been implemented on a single date.

CMS is soliciting public comment on the proposed compliance date of October 1, 2011 and the implementation timeline shown in the chart below. Once the final ICD-10 and HIPAA transaction standard Version 5010 rules are published, CMS estimates that both CMS and the field will begin documenting the requirements for both ICD-10 and Version 5010 system changes. They will then complete any gap analyses and undertake design and system changes for compliance with the Version 5010 transaction standard. These changes must be in place prior to the ICD-10 implementation to accommodate the increase in the size of the fields for the ICD-10 code sets.

**CMS Proposed Milestones for ICD-10
and HIPAA Transaction Standard Version 5010/D.0 I**

| ICD-10 | HIPAA Transaction – v5010/D.0 |
|--|---|
| August 22, 2008: Publish proposed rule | August 22, 2008: Publish proposed rule |
| | September 2008: Industry begins to document requirements for change including initiation of education and outreach |
| October 21, 2008: Comments close | |
| November/December 2008: <i>The AHA expects final ICD-10-CM and HIPAA transaction standard Version 5010 rules to be released</i> | |
| December 2008: CMS and industry begin educational and outreach efforts | |
| | April 2009: Industry builds and tests system changes (internal and external testing) |
| June 2009: Industry begins design documentation | |
| December 2009: Industry builds and internally tests system changes | |
| | April 2010: Compliance Date for all Covered Entities |
| July 2010 - October 2011: Conduct testing with trading partners | |
| October 2011: ICD-10 Compliance Date for all Covered Entities | |

Given the milestones outlined above, careful coordination of activities in transitioning to both ICD-10 and the HIPAA transaction standard Version 5010 will be required. CMS recommends that health care organizations begin to document required changes for the transaction standard by September 2008. This includes initiation of education and outreach. CMS estimates that educational and outreach efforts on the ICD-10 transition for the diagnosis and procedure code sets will begin by December. By April 2009, the field is expected to build and test internal and external system changes on the transaction standard. By June 2009, the field could then begin to design documentation for ICD-10 and be ready to build and internally test system changes by December of the same year. It is expected that, by April 2010, all covered entities would be compliant with the HIPAA transaction standard Version 5010 so that, by July 2010, they could begin to conduct testing of ICD-10 system changes with trading partners. Such testing changes would occur between July 2010 and October 2011, with an ICD-10 anticipated compliance date for all covered entities of October 1, 2011.

NEXT STEPS

Comments

The ICD-10 code sets provide a standard coding convention that is flexible, incorporates unique codes for all substantially different procedures or health conditions and allows for new procedures and diagnoses to be easily incorporated as new codes for both existing and future clinical protocols.

Preparing for the transition from ICD-9-CM to ICD-10-CM and ICD-10-PCS will require careful planning and coordination of resources to ensure successful implementation. It is not too early to start preparing since these changes will have significant budgetary, training and information system implications across clinical, financial and administrative areas.

Given the changes included in this rule and how long hospitals have been waiting for an update to ICD-10-CM and ICD-10-PCS, the AHA encourages members to submit their own comments to CMS outlining their support for this long-awaited change. Watch for an AHA comment letter that you can use to assist you in preparing your organization's comments.

All comments are due to CMS by October 21 and may be submitted electronically at <http://www.regulations.gov>. Follow the instructions for "Comment or Submission" and enter the file code CMS-0013-P to submit comments on this proposed rule. You also may submit written comments (one original and two copies) to CMS.

Via regular mail

Centers for Medicare & Medicaid Services
Department of Health and Human Services
Attention: CMS –0013– P
P.O. Box 8016
Baltimore, MD 21244-8016

Via overnight or express mail

Centers for Medicare & Medicaid Services
Department of Health and Human Services
Attention: CMS –0013 – P
Mailstop: C4-26-05
7500 Security Boulevard
Baltimore, MD 21244-1850

Further Questions

If you have questions, please contact Nelly Leon-Chisen, RHIA, director of coding and classification, at (312) 422-3396 or nleon@aha.org or George Arges, senior director health data management group, at (312) 422-3398 or garges@aha.org.