

An Essential Guide to ICD-10 Implementation

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- *ICD-10 is coming! The federal government has mandated that the United States adopt ICD-10-CM and ICD-10-PCS by **October 1, 2013**. This is not merely an upgrade from the previous ICD-9 coding classification system. It is a significant change which will introduce major change and impact throughout healthcare organizations - its providers, staff, processes and much of its underlying systems and technology.*

Some Background and Rationale for ICD-10

The International Classification of Diseases (ICD) is a classification system developed and maintained by the World Health Organization (WHO); its 10th revision was created in 1994. "ICD-10" is a generic term used to describe two components of the updated classification system developed specifically for the United States – ICD-10-CM (clinical modification) and ICD-10-PCS (procedure coding system). ICD-10-CM was developed and is being maintained by the National Center for Health Statistics (NCHS) under authorization of WHO; the further degree of specificity that it contains was developed in close collaboration with physician specialty groups who identified areas where greater detail was required. ICD-10-PCS was developed and is being maintained by the Center for Medicare and Medicaid Services (CMS).

ICD-10 is expected to result in improvements over the ICD-9 system, which is 30 years old, by providing greater detail and the ability to capture additional advancements in clinical medicine. ICD-10 CM, used in both inpatient and outpatient settings, will replace ICD-9-CM volumes 1 and 2. ICD-10-PCS will replace ICD-9-CM volume 3 for use in inpatient settings only.

ICD-10 was adopted by the UK in 1995, France in 1996, Australia in 1998, Germany in 2000 and Canada in 2001. The US is the only industrialized nation still using ICD-9, which is no longer able to precisely describe the clinical picture of a patient. Further, its numeric structure is now limited in its ability to accurately describe morbidity and mortality and to compare national and international health data. These restrictions severely limit the ability to compare outcomes of new technologies and treatments, and present problems in identifying and tracking new health threats and in surveillance of emerging diseases, such as SARS, H1N1 and others. The use of ICD-10 will support the transition to an interoperable health data exchange in the US and improve the ability to measure medical processes and outcomes. But perhaps what is most urgent to many organizations and providers as it relates to ICD-10 is the American Recovery & Reinvestment Act (ARRA) which requires that demonstrable outcomes be shown which will be supported by the adoption of ICD-10-CM and ICD-10-PCS, since the new classification system will now provide the ability to describe and report on diagnoses, procedures and outcomes at a much greater level of detail and specificity.

There are basic similarities in the concepts and logic between ICD-9-CM and ICD-10-CM; however, there are significant differences. Due to the need for greater detail and specificity in identifying and capturing information on health care conditions, there are now over 69,000 diagnosis codes, compared to ~13,000 in ICD-9-CM. Similarly, ICD-10-PCS codes are now representative of current treatment modalities, incorporating standardized terminology which should provide significant improvements in data collection and information analysis for reimbursement processing and quality and outcome measurements and research. There are now over 72,000 ICD-10-PCS codes, compared to only 3,700 procedure codes in ICD-9-CM, volume 3. In order to provide the necessary greater level of precision and specificity, there are changes to the structure of the codes in both the –CM and –PCS systems, including a greater number of characters and alpha-numeric formats. For further details on the new ICD-10 classification system, please refer to references at the end of this article.



Who will be using ICD-10?

Effective October 1, 2013, ICD-10-CM will be mandated for use by all organizations and providers in all healthcare settings to report all diagnosis codes for reimbursement, reporting, research and other purposes. Also on October 1, 2013, ICD-10-PCS will become effective; however it will be used for reporting of procedure codes for **inpatient billings in hospitals only**. Physicians and providers in ambulatory settings will continue to use CPT (Current Procedural Terminology) and HCPCS (Healthcare Common Procedure Coding System), as per their current practices and processes. The use of the new ICD-10 codes will be based on date of discharge (for inpatients) or date of service (for outpatients). It is important to note that there will be no phase-in period for use of ICD-10 codes; any service provided or diagnosis with a date of service or discharge **on or after October 1, 2013** must be submitted with an ICD-10 code.

An important prerequisite – Implementation of the new HIPAA 5010 standard

A prerequisite and interdependency to the ICD-10 transition is the implementation of another new standard that will affect the data collection and processing of administrative health information. Effective **January 1, 2012**, all covered entities, including health plans, healthcare clearinghouses and most healthcare providers, must submit their electronic transactions, including claims, remittances, eligibility, claims status requests and other transactions, using the new ANSI x12 Version 5010 transaction code set. In addition, all pharmacy transactions must be submitted using the new Version D.0 standard from the National Council for Prescription Drug Programs (NCPDP). Both of these standards replace the current version 4010A1 standard.

The need for the new 5010 and D.0 standard was based on the requirement to update the version 4010 standard, originally adopted in 2000. Many “fixes” and requests for changes and new functionality have been made over the past decade, resulting in the recognition that the 4010 standard is now inadequate. It should be recognized that the implementation of 5010 is not a “net new” implementation and should be approached by organizations, providers and payers as an upgrade and refinement to achieve administrative simplification and increased HIPAA (Health Insurance Portability and Accountability Act) compliance. The implementation of the 5010 standard is a prerequisite for ICD-10 since the current HIPAA 4010 standard does not support ICD-10 codes. For further details on the new 5010 standard, please refer to references at the end of this article.

An essential guide to ICD-10 implementation

It is anticipated that the timeframe for implementation of ICD-10 in the United States will be similar to the experience in other countries. In Canada, the full implementation period across all 12 provinces and territories required five (5) years. The time for all U.S. organizations and providers to begin developing their strategies and plans for ICD-10 implementation is now. Given the experience of other countries, it is fully expected that the entire three (3) years from 2010 to 2013 will be required to effectively implement ICD-10.

Although the strategy and planning activities described below are focused on the implementation of ICD-10, many of them should be utilized during the implementation of the HIPAA 5010 standard. In fact, due to the accelerated mandate of a January 2012, the 5010 implementation should be planned and deployed in a much earlier timeframe.

As with any other significant initiative or project impacting a wide variety of stakeholders and users, effective and strong project planning and management, funded over a multi-year period, is critical. Following is a brief description of seven key planning activities that organizations and providers should focus on over the coming months and years to ensure an effective and smooth implementation to ICD-10.



1. Strategic and Tactical Planning and Stakeholder Awareness

The implementation of ICD-10 presents a significant opportunity for an organization to develop or refine their information management strategy to ensure an effective and integrated approach in the collection, use and reporting of its clinical and administrative data and information. Real transformational value can be demonstrated in the following areas:

- Providers - through the provision of better clinical information for better decision making with the use of integrated ICD-10 data in their EHR's and EMR's;
- Operational processes - through advantages in better business intelligence and performance improvement data sets and processes;
- Information management processes and outcomes - the greater level of detail and specificity in the ICD-10 data set will allow for more standardized data and improved reporting capabilities; and
- Financial processes – due to improvements in billing, reimbursement and revenue cycle processes.

Strong project management and leadership, supported by equally strong sponsorship, senior executive support and an interdisciplinary project team, will be critical to this initiative. Key elements of project management include a robust project plan and project management structure, aligned with broad-based plans for effective change management, risk management and mitigation, communication, stakeholder engagement and benefits realization, together with a well funded, multi-year budget.

2. Readiness Assessment and Gap Analysis

One of the first activities in any ICD-10 implementation will be to conduct a comprehensive readiness assessment and prepare a gap analysis, with recommendations and a remediation plan to address identified gaps in organizational readiness. There are four main areas of impact that should be included in this assessment to determine overall organizational readiness:

- Systems/Applications and Vendor Readiness
- Technology, including interface and interoperability requirements
- Education and Training
- Workflow and Organizational Processes, including:
 - Clinical Documentation
 - Health Information Management (HIM) department, clinical service areas and back-office administrative and billing functions and processes
 - Coding Productivity and Workflow
 - Data Quality
 - Data and Information Reporting – internal and external
 - Revenue Cycle processes and workflow

The readiness assessment should be conducted in sufficient detail so that each of the current state workflow processes, systems, infrastructure and organizational structures and processes that will be impacted by the transition to ICD-10 is well understood by the organization. In addition, understanding the organizational capacity to absorb the impacts and changes of this implementation must be part of the readiness assessment.

Due to the potentially large amount of information collected through this assessment, as much as possible the information collected should be discrete and quantifiable data that can be easily processed and analyzed.



Since many organizations are conducting readiness assessments to determine their current status and gaps relative to ARRA meaningful use criteria, it may be a good practice to align the ICD-10 and ARRA meaningful use assessments to ensure that data and information collected and used in both assessments is leveraged.

3. Education and Training

The need for effective education and training on the new ICD-10 classification cannot be overestimated. There are multiple types and levels of education that will be required, depending on the type and number of staff employed by an organization and the education delivery methods available.

The types of staff that will need education can be grouped into general categories as follows:

- Health Information Management (HIM) professionals (regardless of departmental affiliation or the presence of centralized or decentralized coding practices)
- Administrative and front office staff such as Registration or Scheduling departments
- Clinical staff - physicians and all other allied health professionals who may document in the patient health record)
- Revenue Cycle and Business office support staff, including contract managers, documentation reviewers and corporate compliance officers
- Finance Department staff
- Departmental and other management staff including quality and utilization management, performance improvement and other key areas that may use or report ICD codes.

The HIM professional group will require the most intensive and lengthy education and training. The type and amount of training for this group will depend on their current level of skill and baseline knowledge in coding and reimbursement practices and policies, as well as level of basic knowledge in anatomy & physiology, terminology, pharmacology and other biomedical science knowledge.

The American Health Information Management Association (AHIMA) has recommended that, for most experienced coding professionals, a total of 50 hours of training will be necessary to learn both coding systems, as follows:

- 16 hours of training on ICD-10-CM
- 24 hours of training on ICD-10-PCS
- 10 additional hours of practice applying both systems

If staff do not possess sound biomedical science knowledge, retraining in these areas will also be necessary in addition to the 50 hours required for ICD-10.

These recommendations are based on a Field Testing Project conducted by the American Hospital Association (AHA) and AHIMA in 2003 (www.ahima.org/icd10). This study further estimated that most coders should have a high level of proficiency within 6 months of using ICD-10-CM and –PCS.

For other professionals requiring more general types of awareness and impact training, it is estimated that one session of one to two hours, with resources available for on-going questions, support and monitoring after the training sessions, should be sufficient.

The type and delivery method of education will vary based on the audience and their preference for receiving education. Delivery methods may include any one, or a combination, of:



- Traditional classroom
- Audio or web-cast conferencing
- Self Directed learning (CD-ROM, web-based, other)
- Web based learning – instructor led
- Participation in communities of practice, reviewing journals, presentation and practice briefs and other material

Any education and training will need to be structured and delivered in a way that fits the requirements and staffing mix of individual organizations. To ensure maximum effectiveness, AHIMA has recommended that intense training should occur at least six months prior to implementation and “live” use of the ICD-10 classification system (www.ahima.org/icd10)

4. Clinical Documentation Improvement

Best practice for the HIM profession dictates that “if it isn’t documented, you can’t code it”. This doesn’t necessarily mean that clinical information must be documented directly by a physician or other health professional; coding best practices can be supported by other types of clinical documentation such as diagnostic testing results, operative and pathology reports and other sources. Examples of these could include CT / MR scans, x-ray reports from cardiac catheterization procedures or laboratory testing results.

Due to the greater level of detail and specificity contained in the ICD-10 classification, it will be very important for organizations to review their documentation practices against the new demands for increased levels of detail to ensure that their documentation can support more rigorous coding. For example, post-procedural complications are coded in a hierarchy selection process of functional limitations, limb amputation/ reattachment, organ failure/rejection, mechanical, or presence of complications within or post 96 hours. In order to determine this, progress notes, history and physical notes or other detailed documentation must be read thoroughly to select the appropriate diagnosis code(s). These types of documentation must be robust enough to support this enhanced requirement. Documentation tools, such as coding templates, pick lists and other mechanisms for capturing clinical information, should be assessed and redesigned where necessary to ensure all of the required information is present to support ICD-10 coding.

Identified target areas for improvement in documentation should be addressed and managed by the ICD-10 project team and HIM managers and staff, together with the physician and other clinical teams within the organization. This is an ideal opportunity to review current documentation standards and practices, either paper based or electronic, to ensure that they meet and support:

- clinical best practice according to professional and regulatory standards,
- enhanced ICD-10 coding requirements,
- enhanced reimbursement requirements, and
- quality and performance measurement outcomes.

An effective and streamlined feedback loop (physician query process) between care providers and HIM coding staff should be established and/or reviewed. An effective physician query program will help to ensure additional clinical information is present that is required to support enhanced coding practices and processes.

5. Revenue Cycle

The potential impact of ICD-10 implementation on revenue cycle processes and revenue generation also cannot be overestimated. Other countries, including Canada, have reported an increased number of days in



coding turnaround in the immediate ICD-10 go-live period. Based on actual data from a large urban community hospital in Toronto Ontario Canada, staff productivity (measured as turn-around time) never rebounded to pre-ICD-10 levels for some patient types. New information demands to support the coding process could result in potential increases in Accounts Receivable (AR) days, increased rate of claim denials and lost/deferred revenue.

A comprehensive review of all systems, applications and workflow processes will need to be completed to ensure that the transition to ICD-10 can be effectively incorporated within the revenue cycle process. This analysis should include payers, trading partners and clearinghouses to ensure they can accept and support ICD-10 codes throughout the reimbursement process. This risk may be mitigated by use of translation, mapping or conversion tools by clearinghouses, particularly during the immediate transition period from ICD-9 to ICD-10, when both coding systems are being used.

Another critical area for review and potential impact to the revenue cycle process is the staffing and resource capacity in the HIM department and related Finance and Business Office areas. It may be necessary to temporarily augment staffing, or significantly streamline workflow processes, so that undue negative impacts to revenue are not experienced. This will be particularly acute during the immediate transition period when both ICD-9 and -10 codes are being used for pre and post October service events and staff are still in their learning curve, both on the new coding system and new or upgraded applications and workflow processes.

6. *Information Management and Technology*, including Software/Application, Technology and integration services, vendor readiness/awareness and application testing activities

Critical to ensuring an effective transition to ICD-10 is the analysis of the applications and systems used within an organization to ensure their compliance with ICD-10-CM/PCS coding classification systems. This analysis must extend beyond the typical “coding and abstracting” systems used in the HIM department to any system or application, including integration technologies, that are used throughout the organization to collect, use, translate, transmit or store an ICD-9 code, even if it is invisible to the end user.

Discussions, and potential contract negotiations, must begin as soon as possible with the organizations’ vendors and contractors to understand their transition plans and upgrade path for ICD-10 to ensure full productive use by 2013. This transition may present a strategic opportunity for the organization to launch a major version upgrade or replace key systems or applications with more advanced and functional software; be aware that this effort could result in an entirely new project with critical interdependencies and constraints with the ICD-10 project.

An integrated review of all systems and applications, with the development of a critical path identifying key inter-dependencies between systems, will be necessary. It will be important that the application vendors not be allowed to manage upgrades to their systems independently, without an analysis of the “waterfall” effect of these changes on other system, regardless of whether or not the application actually share interfaced data.

Testing of the new applications and technologies is an activity that must not be overlooked; it should begin as early as possible in the implementation process. It should involve HIM and non-HIM end-users as much as possible to ensure the functionality and use of the system meets end-user requirements. Use cases with “real life” health record documentation and pilot go-live activities are two strategies that can be used during the testing phase.

Integration of coded data between applications, internally or with external payers, trading partners and other organizations is a key activity that must be addressed early during the implementation. Interfaces may need to



be developed or re-written to accommodate ICD-10 codes. Data conversions and mapping of ICD-9 to ICD-10 codes, along with the requirement for retaining and managing historical ICD-9 data in reporting, analytical or research databases, are two components of information management that also must be planned and tested before implementation in a “live” environment can occur.

7. *Post Implementation Optimization and Auditing*

After the October 1, 2013 milestone has been reached, it will be imperative to perform a post implementation audit to identify areas for optimization. After the ICD-10 implementation, it will be important to review the clinical documentation changes, coding practices and processes, revenue cycle processes and impacts and other organizational changes made to validate their effectiveness and sustainability. Post implementation audits to ensure revenue optimization and data / information quality will be essential in order to satisfy internal and external auditors as well as organizational stakeholders who rely on the quality and integrity of the coded clinical data for quality reviews, research and other purposes.

The transition to ICD-10 is a major effort for all healthcare organizations and providers. CMS has clearly stated that the mandated timeframe of October 1, 2013, will not be changed. Despite the temptation to devote scarce resources to other initiatives and programs with more urgent deadlines, it is essential that Information Technology / Management and HIM departments begin their planning and readiness assessment activities now to ensure the necessary changes and conversions are completed efficiently and effectively. The change efforts to systems, technologies, workflow and organizational processes and staff capabilities and knowledge are underestimated at an organization’s peril.

The planning and review activities that we have described in this article provide a guide to the essential steps in an ICD-10 implementation. References are provided below to relevant websites and articles where further detailed information on these topics can be found.

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