ICD-10 IMPLEMENTATION: OBJECTS ON THE HORIZON ARE CLOSER THAN YOU THINK

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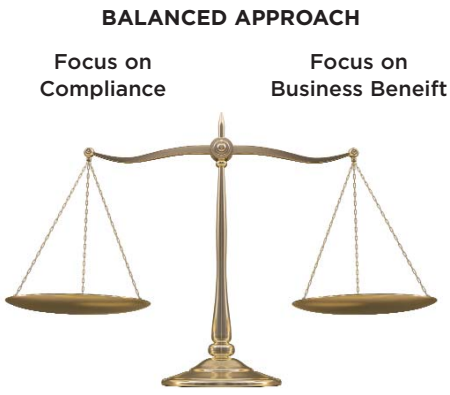
Introduction

When the deadlines for ICD-10 implementation were extended to 2013, the health care industry seemed to heave a huge collective sigh of relief. Hospitals, physicians and payers had been united in their requests for extensions, citing the time required for system and process changes to adopt the new standards.[1] Equally important to the industry, extensions had also been granted for implementation of the x12 HIPAA 5010 (5010) transaction sets, which were known to be the critical predecessor to ICD-10 success.

With the additional time allowed for trading partner testing, and for thorough testing of systems and business processes that would be effected by the change, the new timelines were still aggressive but success seemed possible. A year later, the landscape looks quite different and there is wide disparity among responses to 5010 and ICD-10 implementation.[2] Some organizations have completed assessment and planning for 5010 changes and are moving into implementation activities, but many are not that far along. The situation is similar when it comes to ICD-10; there are some organizations doing assessment and planning, but many have not yet begun.

There are certainly many distractions and competing priorities. Health care organizations across the country continue to grapple with the operational challenges of the ongoing economic downturn. For hospitals and physicians, the view of the future is dominated by concerns about implementing the requirements of the HITECH Act and ensuring that they achieve "meaningful use" of electronic medical records. Insurance carriers and payers are equally challenged by the requirements of the industry reforms embodied in the Patient Protection and Affordable Care Act.

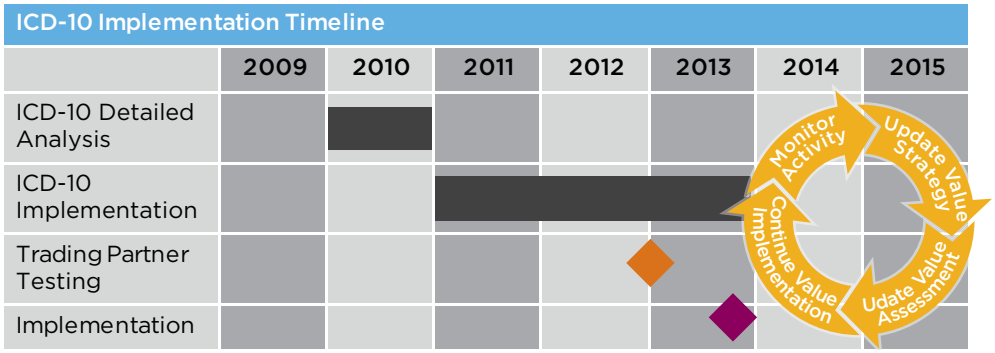
The sheer magnitude of the business process and technology changes that are required for ICD-10 implementation may be a deterrent to assessment and planning as well. The fact remains, however, that organizations that have not begun their ICD-10 remediation efforts are at risk of missing the current deadlines. What's equally clear is that the deadlines are unlikely to be adjusted again.[3]



Creating a Balanced Approach

Competing priorities and intractable deadlines mean that health care organizations must take a disciplined and proactive approach to ICD-10 remediation. Although the long-term benefits of ICD-10, in the form of improved data capture, reporting capability, public health and international comparisons, quality and outcomes measurement, and effective automation of clinical documentation are clear,[4] in the near term pragmatic organizations will approach ICD-10 remediation as a compliance and regulatory requirement. Successful remediation efforts will be characterized by an approach that balances the compliance requirements imposed by regulatory deadlines, with the incremental business and clinical benefits that can be achieved through comprehensive implementation over the long term.

Once the implementation deadlines have been met, health care organizations can begin the systematic, continuous improvement activities that will enable them to realize the clinical improvements and business benefits that the new coding system is expected to provide.



Getting Started

Assessment and planning efforts should be the first priority, as health care organizations consider their ICD-10 remediation efforts. Developing an effective implementation approach and migration plan requires solutions to some fundamental questions:

- How to handle the implementation transition period when both ICD-9 and ICD-10 codes will be used
- How to manage historical comparisons and reporting requirements that span the periods when both ICD-9 and ICD-10 coding systems are used
- How to organize and prioritize the application upgrades, business process changes and technology process changes that ICD-10 requires

Crosswalks: Mapping and Wrapping

It's not practical to cut over to the new coding system all at once

The implementation date for ICD-10 is based on date of service. At the point of implementation, transactions and services coded under ICD-9 will still comprise the majority of submissions and transactions. Over time, ICD-10 will begin to predominate. However, appeals, resubmissions and other longer-term follow-up procedures will extend the "mixed" coding environment from months to years.

As a result, every health care organization can expect an extended transition period during which they will have to support both ICD-9 and ICD-10 coding systems. During the transition period, providers and payers must have the ability to translate from one coding system to the other.

In addition, given the complexity of the systems and process changes that are required for the conversion to ICD-10, it is possible that some systems and applications will not be entirely ICD-10-compliant at the implementation deadline. Moreover, not all trading partners will be ready for the implementation on time. Non-compliant organizations and systems must still be supported until they are able to adopt the new coding standards, and this too will require the ability to translate back and forth between the two coding systems.

Finally, the longitudinal and historical comparisons required for quality monitoring, disease and care management programs, rating and underwriting, and even claims and benefits adjudication will be characterized by "mixed" coding for an extended period of time. Most organizations will choose to maintain their transaction and service history in the codes in which they were originally created. The long history of ICD-9 will ensure the need to be able to "translate" or crosswalk between the two coding systems for years to come.

Crosswalks between ICD-9 and ICD-10 present a particular challenge

The nature of the change from ICD-9 to ICD-10 coding means that the task of developing effective and workable translations and crosswalks between the two

systems will be imperfect and complex[5]. ICD-10 has been developed to reflect clinical and technology advances and to facilitate deeper and more precise clinical descriptions. As a result, there are relatively few instances where there is a one-to-one match between a code in ICD-9 and a corresponding code in ICD-10. In fact the majority of ICD-10 codes are more precise and more descriptive than the codes available in ICD-9. The result is that most ICD-9 codes can logically be "mapped" to more than one ICD-10 code. The particular "match" that is appropriate in ICD-10 will be determined by clinical information from the medical record; information that is not available from the ICD-9 coded transaction. In other cases, it requires several ICD-10 codes to provide a clinical description that in ICD-9 only requires a single code. Finally, there are cases where ICD-9 codes have been obsolesced by state of the art clinical terminology and definitions. These older codes have no equivalent in ICD-10 (see Figure 1).

Fortunately, the Centers for Medicare and Medicaid Services (CMS) have developed a crosswalk framework. The General Equivalence Mappings (GEMs)[6] have been developed in collaboration with industry stakeholders from the payer, hospital and physician sectors and are intended to form the basis for an industry-standard crosswalk and mapping tool. However, because of the imprecise "matches" between the two coding systems, each organization that is planning an implementation will likely develop a slightly different crosswalk, one that reflects their unique business, clinical and financial priorities.

Figure 1: General Equivalence Mapping Categories

Equivalence	ICD-9 Codes	Descriptions
One-to-One	3,458 (24.52%)	Unique equivalent code in ICD-10
Single	9,600 (68.07%)	Single equivalent code in ICD-10, but there are several to choose from
Combination	629 (4.46%)	Multiple ICD-10 codes are required to describe the ICD-9 code
Null	416 (2.95%)	No equivalent code exists

Source: CSC, 2010

Characteristics of a good approach to crosswalks

Determining the approach and developing the actual crosswalks to be used must be one of the highest assessment and planning priorities for organizations implementing ICD-10. The crosswalk solution will be central to the effective management of the transition period where both coding systems will be in use and it will in large part determine the level of financial and operational disruption during and after implementation. A reliable crosswalk solution must be able to minimize the productivity impacts of the transition period — anticipating and minimizing the need for manual interventions and processing as well as minimizing the potential financial impact of unintended reimbursement changes that result from the change in coding systems.

A good crosswalk solution must function bi-directionally, facilitating the translation from ICD-9 to ICD-10 and in the opposite direction as well.

- Transaction processing (benefits adjudication, accumulators, coinsurance, copayments and provider reimbursements) must yield the same results, regardless of which coding system is used on the submission.
- Output documents produced from transaction processing (letters, explanation of benefits, explanation of payments, etc.) must reflect the coding system that was used on the original submission.
- Historical comparisons that span the implementation of ICD-10 must always be supported.

A robust approach to the use of crosswalks and translation utilities must also allow the organization to anticipate and adjust for operational and financial impacts as they emerge after implementation. The use of business analytics and

business intelligence tools to monitor performance will be critical. Organizations must plan to use these tools to proactively identify unintended impacts and create alerts for the need to make adjustments to the crosswalks and procedures.

Finally, crosswalk and translation mapping tools must be implemented enterprisewide so that all the applications, systems and processes are using the same set of "rules." Leveraging the effort across all aspects of the implementation will ensure the most effective use of resources and help prevent anomalies and errors that will inevitably result from multiple, uncoordinated instances of unsynchronized tools.

A balanced approach to crosswalk creation and implementation

There are thousands of ICD-9 codes, and even more codes in the ICD-10 system. The organization that tries to address all of them is at significant risk of paralyzing itself. A thoughtful, rational approach that prioritizes and focuses on the highest potential productivity and financial impact is essential.

Building effective crosswalks requires skills from across the organization. Identifying business subject matter expertise and engaging executive sponsorship early will help ensure that the right resources are available at the right time. Mobilizing cross-functional resources and sponsorship will also support efforts to develop internal agreement and buy-in for the approach, objectives, priority and timing to prevent loss of focus and momentum.

Few health care organizations use all the available ICD-9 codes, and even fewer will use all of those available in ICD-10. Prudent crosswalk builders will take the time to analyze existing coding practices for volume, frequency and financial impact and use these insights to develop crosswalks that address the highest priority codes first. Minimizing productivity impacts suggests that high volume, high frequency codes are the highest priority for translation automation. Minimizing unintended financial impacts will also tend to prioritize the high dollar amounts as well.

Leveraging the general equivalence mappings (GEM) framework provided by CMS will save time and effort in the short run, and in the long run as well. The equivalence maps have already been identified, and there is no reason to do them again. In addition, using the GEMs ensures that the organization is using a common starting point that will be shared by most trading partners. This common starting point will be critical for resolving potential translation conflicts during testing and after implementation.

Crosswalks and mapping tools will be a feature of ICD-10 remediation and implementation efforts across all sectors of health care. Effective engagement of trading partners as collaborators in the crosswalk development process will prove to be a best practice. Establishing agreements on crosswalk and translation values in advance of testing and implementation may prevent negative operational impacts and processing bottlenecks. It can also minimize or eliminate financial disputes, particularly if the crosswalk values can be embedded in network contractual agreements where reimbursement impacts have been thoroughly pre-negotiated.

Every health care transaction system that uses diagnosis information will require a crosswalk solution for ICD-10 remediation. Prudent organizations will leverage the solutions provided by key vendors, particularly those that are integrated with core transaction systems. Where vendor solutions are well-designed, and can be delivered in a timely fashion, they present the opportunity to save valuable internal resources. However, each solution must be evaluated and integrated with the overall plan carefully to ensure that they are extensible and adaptable to the overall enterprise, and long-term requirements.

The long transition period and the ongoing need for longitudinal clinical comparisons ensure that crosswalks and mapping tools between ICD-9 and ICD-10 will be in use for an extended period. Maintenance and enhancement of crosswalks will be an ongoing effort after implementation — and flexible, adaptable solutions will be required to ensure that they can be adjusted and updated as circumstances and requirements dictate.

Developing a Migration Plan

Core, or high volume transaction systems form the cornerstones of the ICD-10 migration plan.

Virtually all transaction systems use diagnosis coding in one form or another, and getting a clear understanding of the remediation approach, schedule and implementation requirements will serve to establish the basic framework for the migration plan. Once these are known, the ancillary applications and IT processes (interfaces, reports, etc.) can be added to the overall plan.

Most organizations have a mixed application and IT environment, where multiple vendors and internally developed systems, applications and processes are in use. Developing an enterprise approach to the migration is a key step in ensuring that organizational resources are used most efficiently, and that the overall transition to ICD-10 is completed with a minimum of technical, operational and financial disruption.

Key questions to be resolved include:

- How will the application, business process or system process address the need for bi-directional crosswalks and translations between ICD-9 and ICD-10 during the transition period? It's possible that some will propose an embedded or proprietary solution, while others will delegate the responsibility for crosswalk and mapping tools to the user organization.
- What's the migration strategy that's required to implement the solution? Will multiple upgrades be required? This question may pose a particular issue for organizations that are not currently using the latest release of a vendor supported application.
- When will each component of the migration strategy be available for implementation? Determining the degree to which the solutions can be delivered in a fully tested, production-ready version will be a critical scheduling variable in developing the enterprisewide migration plan.

Characteristics of a good migration approach

Successful migration plans for ICD-10 implementation will address the requirements in an integrated, enterprisewide fashion. The overall plan will balance industry deadlines, internal business requirements, trading partner readiness and vendor schedules. The critical path may not address every contingency, but will reflect business priorities and resource availability.

Recognizing that many applications, systems and processes will be effected by the implementation, the successful migration plan will phase in over time in a structured set of manageable releases that can be effectively implemented by the organization. Grouping the migration activities into a predictable set of manageable releases leverages organizational testing and training resources and helps to minimize operational and financial disruptions.

Finally, successful migration approaches will include the use of appropriate automation for testing and configuration management to ensure the synchronization of changes and adjustments over the entire scope of the implementation.

A balanced approach to migration planning

Developing the enterprise migration approach is another key task where it would be easy to become overwhelmed by the magnitude of the effort that's required. Meeting the implementation dates with a minimum of operational, technical and financial disruption will require the organization to keep careful focus on priorities and compliance requirements. Organizations that maintain that focus, will be the ones that:

- Identify systems and processes that will be effected by ICD-10 implementation to include in the migration plan and schedule them effectively. Once the impacts are identified, evaluate them carefully and prioritize those with significant operational, technical or financial risk. Systems and processes that are tangentially effected, or those where the risk is lower, are candidates for deferring to later releases in the migration plan.

- Carefully evaluate vendor and internal approaches to ensure compatibility and alignment with the enterprise migration approach. Core transaction system remediation for ICD-10 will form the framework for the enterprise migration. This is especially important when it comes to developing, maintaining and enhancing crosswalks.
- Get commitments and schedules from vendor resources and from internal resources.
- Recognize that application remediation strategies may not be ready and that using a scheduled release approach will help the organization minimize the impact of timing gaps and schedule conflicts.
- Identify gaps and develop contingency plans for resource and commitment failures.

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References

1. Rubenstein, Sarah. "Feds Delay ICD-10 for Two Years." HealthBlog, *Wall Street Journal*. January 15, 2009 http://blogs.wsj.com/health/2009/01/15/feds-delay-icd-10-for-two-years/. (Accessed March 25, 2010).
2. Sullivan, Tom. ICD-10 Watch Blog, http://www.icd10watch.com/blog/behind-hipaa-5010-timeline. (Accessed March 25, 2010).
3. CMS. "ICD-10-CM/PCS Myths & Facts." www.cms.hhs.gov/MLNProducts/downloads/ICD-10-CM_PCS_Myths&Facts.pdf. (Accessed March 17, 2010).
4. Amy Schlom and Jordan Battani, "Responding to ICD-10: Healthcare Payer Strategy to Achieve Regulatory Compliance and ROI." CSC, 2009.
5. AHIMA. "Putting the ICD-10-CM/PCS GEMs into Practice." *Journal of AHIMA* 81, no.3 (March 2010): 46-52.
6. CMS. "General Equivalence Mappings–ICD-9-CM to and from ICD-10-CM and ICD-10-PCS Fact Sheet." www.cms.hhs.gov/MLNProducts/downloads/ICD-10_GEM_factsheet.pdf. (Accessed March 10,2010).
7. National Center for Health Statistics. "General Equivalence Mapping Files (ICD-10-CM)." www.cdc.gov/nchs/about/otheract/icd9/icd10cm.htm. (Accessed March 10, 2010).

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