

# Preparing for ICD-10 Transformation

## Executive Summary

Recently finalized HIPAA 5010 and ICD-10 mandates pose a significant challenge to the entire healthcare community despite the fact that the initial deadlines of April 1, 2010 and October 1, 2011 for HIPAA 5010 and ICD-10 respectively have been pushed back significantly. The current deadline for compliance to HIPAA 5010 standard is January 1, 2012 and for the ICD-10 standard it is October 1, 2013. Healthcare entities now have more time to put together appropriate approaches to address these two issues in a more strategic manner.

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ICD-10 provides a once in a lifetime opportunity for payers to streamline their operations and create new value-added services that can bring strategic advantage. This whitepaper explores areas payers will need to review, and mechanisms to address implementation concerns. This paper looks beyond ICD-10 compliance and examines what the mandate means for business transformation. It also recommends key areas of focus, approaches and best practices

to ensure a smooth transition and realize maximum benefit.

## Approaching ICD-10

Since many of the clinical and financial decisions in a payer enterprise are based on ICD codes, the impact of the changeover from ICD-9 to ICD-10 will touch all areas of the enterprise -- making this transition truly transformational.

## Complexity of ICD-10

Figure 1 on the following page highlights the problem of changing codes from ICD-9 to ICD-10. ICD-9 does not map uniformly to ICD-10. Depending on the clinical context, ICD-10 codes can map in a complex manner with a number of embedded conditions (Refer to examples within figure 2 on the following page).

There are scenarios where four (4) diagnosis codes in ICD-9 are transformed to seventy-two (72) possible ICD-10 codes (for ankle sprain).

Similarly, angioplasty is represented by code 39.50 in the ICD-9-CM system. In the ICD-10 system, the number of codes to represent angioplasty increases to 1170. However, the complexity does not always increase from ICD-9 to ICD-10. Figure 2 on the following page shows scenarios where ICD-10 contains fewer codes compared with ICD-9.



ICD-9-CM		ICD-10-PCS
00.53 Implantation or replacement of CRT pacemaker generator	=	OJH60P3 Insertion of Cardiac Resynchronization Pacemaker Pulse Generator, Open Approach OR OJH63P3 Insertion of Cardiac Resynchronization Pacemaker Pulse Generator, Percutaneous Approach
		OR
		OJPT0PZ Removal of Pacemaker/Defibrillator, Open Approach OR OJPT3PZ Removal of Pacemaker/Defibrillator, Percutaneous Approach AND OJH60P3 Insertion of Cardiac Resynchronization Pacemaker Pulse Generator, Open Approach OR OJH63P3 Insertion of Cardiac Resynchronization Pacemaker Pulse Generator, Percutaneous Approach

Figure 1

ICD-9	ICD-10
010.90 Primary tuberculous infection, unspecified examination 010.91 Primary tuberculous infection, bacteriological/histological exam not done 010.92 Primary tuberculous infection, bacteriological/histological exam unknown (at present) 010.93 Primary tuberculous infection, tubercle bacilli found by microscopy 010.94 Primary tuberculous infection, tubercle bacilli found by bacterial culture 010.95 Primary tuberculous infection, tubercle bacilli confirmed histologically 010.96 Primary tuberculous infection, tubercle bacilli confirmed by other methods	A15.7 Primary respiratory tuberculosis

Figure 2

Source: *Diagnosis GEM Documentation and User's Guide 2009 version*; Centers for Medicare and Medicaid Services

This expansion and consolidation of codes increases the complexity of diagnosis and procedure coding enormously. Payers need to determine how they will structure their medical and reimbursement policies to align with these classification changes, and how they might use this additional information to drive new business processes and business opportunities.

Although there are significant complexities in moving from ICD-9 to ICD-10, these complexities can be mitigated and exploited through various mechanisms such as:

- Creation of effective maps in the specific functional context of a crosswalk-based compliance approach
- A phased compliance roadmap based on the initial ICD-10 crosswalk, followed by complete

implementation of ICD-10 in core processes and applications

- Leveraging the built-in intelligence of the codes to improve automated decision-making processes relating to adjudication, case management, etc.
- Just-in-time and right level of training for staff members who deal with claims processing, claims analysis, medical management, quality assurance, etc.
- Acquisition /development of tools and aids to leverage the built-in intelligence of the codes for improved efficiency and productivity

While ICD-10 brings a significant amount of complexity, it also provides great opportunity for improving several processes. During the phase where compliance is ensured through

usage of crosswalks, impacted entities can derive significant value from the ICD-10 codes submitted.

For example, in case management, recurrent incidences of multiple chronic diseases -- such as asthma or hypertension -- along with additional complications, can be identified with

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far better precision through more granular coding. Using these features, the parameters for identifying patients for case management programs can be improved.

In claims processing, additional information in the form of ICD-10 codes makes it possible to eliminate some of the clinical review of claims and create rules to increase the auto adjudication rate.

## Impacts

ICD-10 implementation is a complex subject in any enterprise context. Its impact will vary depending on how medical policies and business processes are handled within the enterprise.

**As business processes are impacted, the way the business processes are automated, executed and delivered through applications will also be impacted significantly.**

Though almost all medical and business processes in healthcare delivery and financing are likely to be impacted due to ICD-10, some processes are likely to be affected more than others -- for instance, claim pricing would typically be impacted more than enrollment.

ICD-10 will essentially impact a payer in the following dimensions:

### Medical and Reimbursement Policies

Chief Medical Officers will need to provide significant guidance to the local or national provider population that interacts with the payer. Provider advisory councils will play a key role in the rollout of payers' medical policy programs. It is also possible that in a given geography, hospital associations, as well as health insurance or managed care trade associations, will play a role in trying to develop cross-entity consistency for guidelines on handling certain ICD10 coding and medical policy. Because each provider typically interfaces with multiple covered entities a

community/statewide approach can bring significant benefits.

The ICD-10 code set and the ability it brings to "drill down" -- providing more accurate and more granular insight into clinical practice and evolving delivery technology -- will enable payers to enter into new arrangements, especially with highly specialized delivery organizations. With the coming wave of healthcare reform, payers who move on this quickly will have a strategic advantage in their markets and be able to develop innovative reimbursement models that more closely follow clinical practice.

### Business Process

Business processes that use clinical rules to drive core decision-making will be impacted significantly by ICD-10 codes. For payers, business rules related to clinical editing, claims adjudication, actuarial processes, fraud and abuse, care management and others need to be changed in accordance with the ICD-10 codes. In some scenarios, changes to business rules will warrant business process changes as well, especially in areas such as fraud and abuse, care management, disease management, population management, and pre-authorization.

There are critical areas where the payer's business rules need to be reviewed completely from an ICD-10 perspective. For analytics and decision-making, the introduction of ICD-10 will have a significant impact on historical data sets. With the finer granularity of ICD-10, the traditional way of aggregation of services and diagnosis to determine the most expensive, utilized services will change significantly.

Transitioning from ICD-9 to ICD-10 codes will not involve a similar level of complexity across all codes. Payers need to understand which ICD codes are being utilized by which processes. A process using codes that are less complex may be easier to remediate than a process involving more complex codes.

### Infrastructure and Applications

Business processes are supported by computer applications, databases and enterprise infrastructures. As business processes are impacted, the way the business processes are automated, executed and delivered through applications will also be impacted. Payers need to clearly understand how their computer

applications support their business processes to determine the precise impact.

Increased granularity and complexity of ICD-10 codes will impose stricter requirements on computer applications in aspects such as performance, storage, configuration flexibility, usability, fields and reports. Enterprise computing and data infrastructure will need to be assessed to understand how increased complexity will impact the core infrastructure. For example, an application that runs in a nightly batch window will need to be reviewed for performance when increased processing using ICD-10 codes is required. Another example is increased call volume during the initial periods of ICD-10 implementation. Payers will need to ensure that their telephony and IVR services are adequate to support greater call volume as well as more complex data and queries during this period.

### People and Training

People and training are the two most critical aspects that will be impacted heavily due to ICD-10 codes. Existing staff, especially those who make clinical/financial decisions based on ICD-10 codes, need to be trained to ensure their readiness.

Subsequently payers will need to determine how to train their staff to handle enhanced processes.

Some of the processes, such as customer service supporting trading partners, are likely to see an increase in activity after ICD-10 implementation, where other activities such as collecting additional claims information through attachments, may see a reduction.

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An enterprise-level assessment needs to be performed, factoring in the expected change in various activities to rationalize the use of people supporting these activities. The outcome of such an assessment will highlight various enterprise human resource strategies such as retraining, redeployment, short-term contracting or other sourcing for specific activities.

The impact of ICD-10 will be significant in different domain and technical areas. The areas typically in need of assessment for the impact of ICD-10 are depicted below:

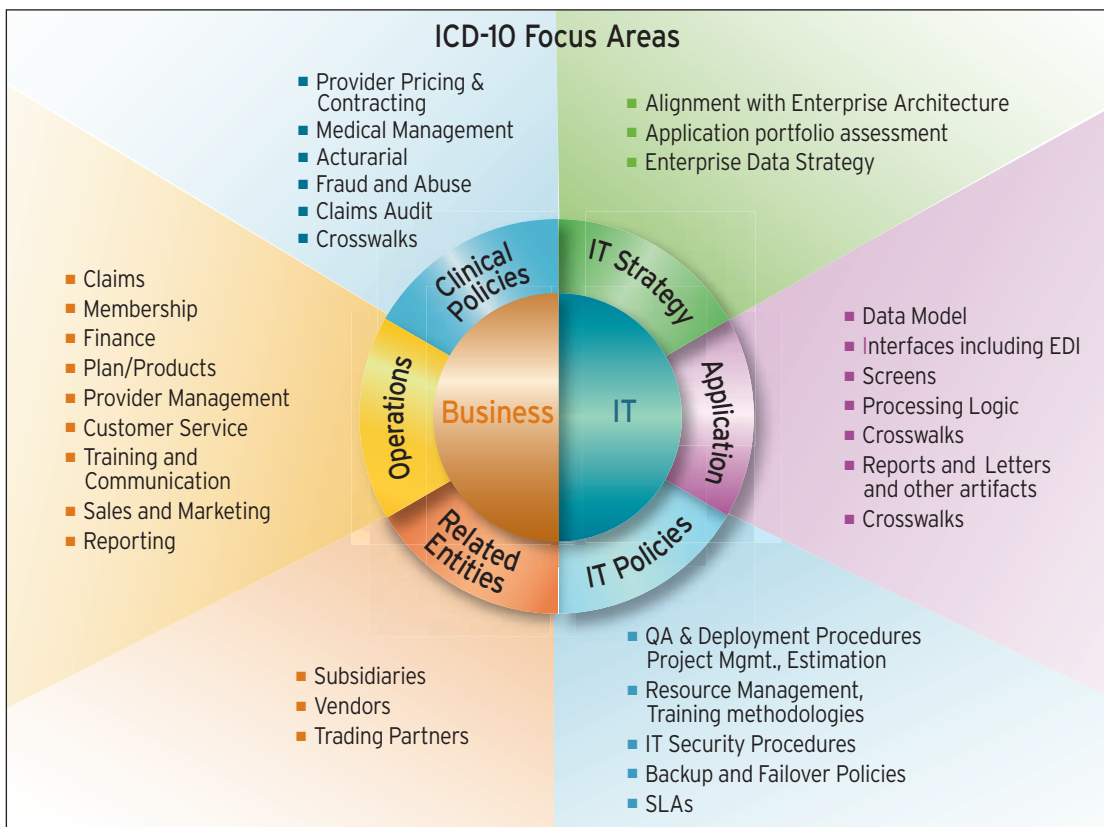


Figure 3

## Implementation Considerations

Payers need to consider a number of critical aspects when planning to start compliance and transformation activities for ICD-10.

**For analytics and decision-making, the introduction of ICD-10 will have a significant impact on historical data sets.**

Consideration for each of these aspects will facilitate future value-added services, enhanced business processes, better business intelligence and easier regulatory reporting.

### Enterprise Alignment

Alignment to enterprise business and technology roadmaps is one of the key aspects for successful ICD-10 implementation. It is important, especially in the current economic scenario, that payers implement ICD-10 in an optimal fashion. A payer needs to factor into its ICD-10 plan current and future service offerings, market entry plans, potential acquisitions, major contract negotiations, business operations and other dimensions.

**One option a payer may review is whether implementing ICD-10 to ICD-9 crosswalk would allow them to keep their internal processes running as-is.**

Similarly, a payer needs to factor in various applications such as a legacy modernization roadmap, its IT outsourcing plan, and any other major IT initiatives such as SOA

implementation, enterprise analytics implementation, etc. In some of these scenarios, ICD-10 may influence the enterprise IT roadmap so that certain initiatives can be advanced to simplify the environment and avoid having to implement ICD-10 on processes and applications that may be identified for sunset.

### Mapping and Crosswalk Considerations

One option a payer may review is whether implementing ICD-10 to ICD-9 crosswalk would allow them to keep their internal processes running as-is. Any scenario of this kind needs to be evaluated carefully with the following considerations:

- a. A complete crosswalk, known as General Equivalence Mapping or GEM, is available from CMS and CDC, but this may increase the overall complexity of the implementation
- b. Future procedures and diagnosis codes will

likely come in the form of ICD-10 only. Supporting these newer procedures and diagnosis codes in bills or benefit structures will require these codes be supported natively since they may not have an ICD-9 equivalent.

- c. Future regulatory reporting and other CMS program mandates will assume that ICD-10 codes are in use by covered entities.

Keeping these aspects in mind, a payer may look at crosswalk as an effective transition mechanism.

### Transformation Roadmap

The transformation roadmap can be broadly divided in two phases.

An initial or baseline phase can follow a crosswalk strategy giving critical time to the enterprise to upgrade its internal systems to be fully supportive of ICD-10 at their core. During this phase, the ICD-10 codes on incoming claims should be transformed to the corresponding ICD-9 codes based on a pre-configured crosswalk mechanism, and the eventual payment would be made as per the existing payment structure for that ICD-9 code. While this arrangement is in place, the organization should also focus energies on building an accurate database of relevant ICD-10 codes and related meta-data, in order to be prepared to eventually move away from the crosswalk arrangement.

A second and final phase would enable native ICD-10 support in the core systems. This would involve a number of activities, including complete revamp of payment structures so that all ICD-10 codes map to a specific fee without depending on a crosswalk to ICD-9. A similar exercise would need to happen with respect to historical claims data, so that even time-series analysis of claims will not require any ICD-9 crosswalking. Thus, by having a pure ICD-10 system the organization will stand to reap the benefits of this comprehensive new code set.

It must be noted however, that even for an initial crosswalk-based transformation, the amount of change is significant. Appropriate crosswalks need to be maintained at all process handshake points and external customer-facing areas. The accuracy and reliability of the crosswalk must be tested thoroughly, and the crosswalk must be maintained with the updated, new codes and/or

new mappings until complete ICD-10-based core processing is supported.

### Managing 5010 and ICD-10 Together

Since HIPAA 5010 is a precursor to ICD-10 implementation, some payers may want to start the overall compliance process together. HIPAA 5010 and ICD-10 are essentially two different types of problems. Payers need to determine carefully the areas where a combined effort would likely reduce their efforts in assessment, process enhancement, training, etc.

Still, in such scenarios, the elements of process where the core business rules are impacted heavily due to ICD-10 codes may warrant separate focus. For example, in a fraud and abuse situation, the claims input to the fraud detection and investigation mechanism would be jointly impacted along with subsequent case management processes. However in such a scenario the core fraud and abuse rules may also justify separate attention since the basis of most fraud and abuse rules are the procedure and diagnosis codes.

### Managing Risk

ICD-10 may pose significant risk in the normal business operations of a payer. Risks such as incorrect claim processing, due to various factors such as too lenient/stringent pre-processing edits or incorrect benefit configuration, have the potential to overload a payer's operations during the initial days of implementation. One way of mitigating this risk is to consider implementing the ICD-10 codes in a staggered manner with various trading partners, creating phases where both ICD-9 and ICD-10 codes are run in parallel, with limited and gradual transition from ICD-9 to ICD-10 as the basis of key activities such as reimbursement, utilization and management. Still a significant risk cannot be ruled out where an analysis of historical data is needed, forcing comparison of claims carrying ICD-9 and ICD-10 codes. Claims audit, fraud and abuse, analytics can be examples of such scenarios.

In a study by the Blue Cross and Blue Shield Association billing errors are predicted to rise between 10% and 25% in the first year after

ICD-10 implementation'. In certain scenarios, payers may take longer to embrace patients' patient-centric care management decisions that may impact the delivery of critical interventions. Payers must prepare well in advance to form alternate plans and contingencies on patient care considerations while coding related issues are being sorted out.

**The impact of ICD-10 will be significant in different domain and technical areas.**

### Organizational Change Management

ICD-10 transformation will mean deep impact on an organization's people, processes and technology. New roles will likely be created, and existing roles and relationships will be redefined. An organization needs to monitor and control all the changes taking place during the transformation process to ensure current business does not get disrupted as transformation occurs.

In ICD-10, changes are not limited within the organization's boundaries, but are also to be expected from trading partners, vendors, regulatory agencies and business partners. Setting the right expectations, providing on-time training along with appropriate and frequent communication and outreach programs are often the most effective mechanisms for managing such changes. End-to-end process simulation, factoring in trusted external entities, would go a long way toward setting appropriate expectations in terms of new tasks, roles and activities required.

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Whatever path is chosen focused and sustained, training needs to occur at the appropriate time. It is estimated that training coders and adjusters on the new code set should start approximately six months before introduction of ICD-10 codes, but no sooner than this, as coders may lose knowledge of codes due to lack of immediate application.

<sup>1a</sup>"Why We Need 1,170 Codes for Angioplasty"; By JANE ZHANG; NOVEMBER 11, 2008; The Wall Street Journal"

## ICD-10 Compliance Approach

Payers may adopt different strategies for ICD-10 transformation as explained earlier in the Transformation Roadmap section. The chart below (figure 4) provides a view of the phased transformation through dual processing, cross-walking and complete migration between 2011 and 2016. However, payers need not wait until 2016 to utilize the value of ICD-10 nomenclature. All ICD-10 data that gets accumulated during the cross-walking and transitioning phases can be used in areas like medical management to improve operational efficiencies as well as clinical outcomes.

## ICD-10 Testing

Testing is one of the critical components of ICD-10 transformation and compliance. ICD-10 testing would depend on the approach taken for ICD-10 compliance. If a crosswalk approach is taken during the first phase of compliance, then all external facing components and processes need to be tested as part of this. Internal processes and applications need to be tested to ensure that they are working as expected. For the second phase, when ICD-10 is supported natively in the core processes, a complete set of tests need to be performed on core functionality while ensuring that external-facing interfaces are performing as expected. See Figure 5 below.

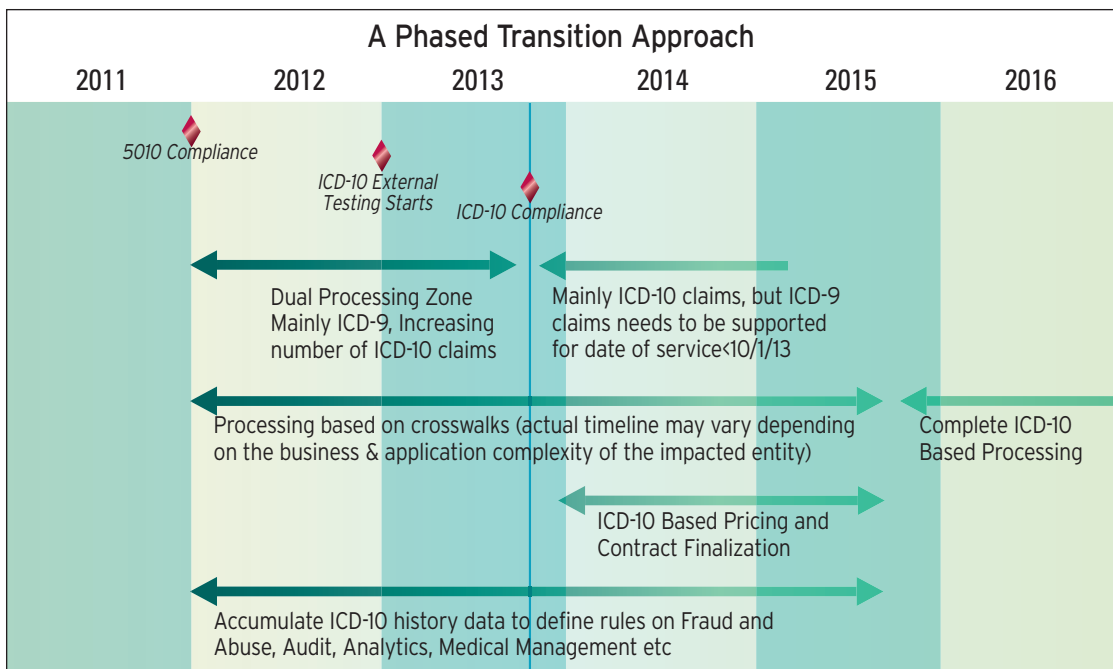


Figure 4

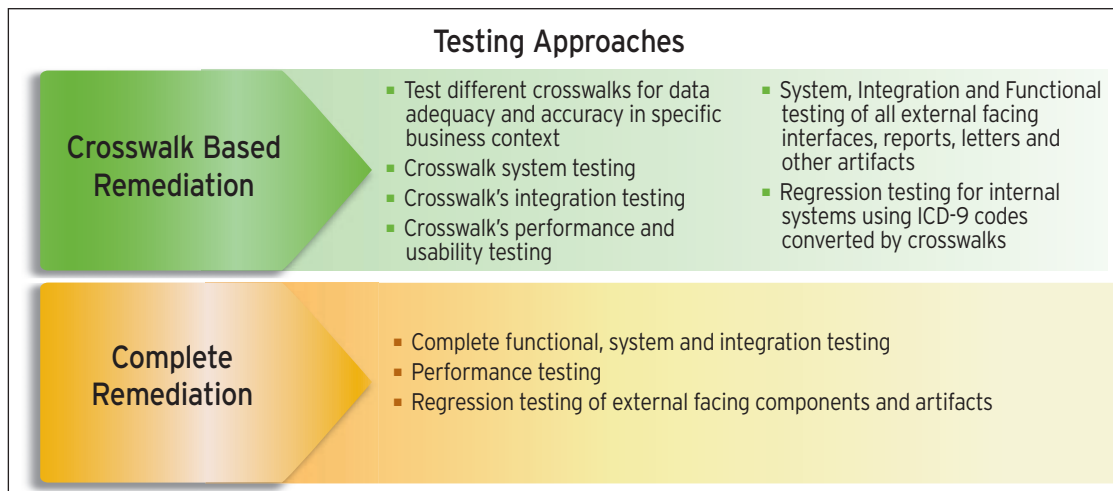


Figure 5

## Conclusion

Due to the far-reaching implications of ICD-10, it is imperative that payers thoroughly evaluate the scope and the opportunity before rolling out plans for ICD-10 transformation. The decisions originating from proper planning and deliberation will impact the way payers look at clinical and business processes, as well as their budgeting, staffing, systems and governance structure.

It is clear that ICD-10 provides excellent opportunities for payers to re-evaluate their business models and processes, the type of services they can provide, their operational model, and their IT systems and infrastructure.

The extended timeframe provides payers ample time to do it right. It starts with a solid plan.

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## About Cognizant

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