Ten Critical Factors for Health Plan Success in Implementing ICD-10

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ICD-10 implementation requirements are much more extensive than any encountered with HIPAA to date, or even with Y2K. The most valuable lesson from both HIPAA and Y2K is that successful ICD-10 implementation will be based on planning for the best and preparing for the worst. Based on our experience with ICD-10, the following 10 critical success factors (CSFs) form the basis for health plan ICD-10 planning and preparation:

1. Build a strong implementation foundation  
2. Implement an organized change plan  
3. Train and educate: deliver the right message, to the right people, at the right time  
4. Ensure effective communications  
5. Optimize use of available tools  
6. Understand, mitigate, and plan for the financial impact  
7. Manage vendor relationships  
8. Manage provider relationships  
9. Integrate and coordinate with other priorities and initiatives  
10. Develop strategic opportunities

Health plans have a greater chance at ICD-10 implementation success and lower implementation costs by following these guiding principles throughout the process.

BUILD A STRONG IMPLEMENTATION FOUNDATION  
The conversion to ICD-10 will affect almost every aspect of a health plan’s operations. In order to manage the potential impact, health plans need to develop an ICD-10 implementation management infrastructure that will take them from the impact assessment process and through implementation, ending only after post-ICD-10 implementation stabilization.

At the center of the implementation infrastructure, organize an ICD-10 Implementation Team with primary responsibilities to:

- Oversee the ICD-10 implementation plan from the first steps in conceptual design through the post-implementation analysis and optimization period
- Develop implementation strategies
- Identify the actions, priorities, persons responsible, and deadlines for the various tasks

- Develop an estimated budget for each year, including the stabilization years immediately post-implementation
- Ensure coordination of ICD-10 internal and external stakeholder efforts

Have a senior management champion leading an implementation team made up of representatives from affected core functional areas. Assign a project manager to report to the implementation team and be responsible for:

- Organizing and facilitating project team meetings
- Developing a project plan with tasks, responsibilities, timeframes, and dependencies
- Reporting on whether the project is staying on time and within budget, barriers encountered, and proposed approaches to overcome obstacles

Monitor and modify the frequency and content of implementation team meetings to ensure prudent and appropriate use of resources. For example, we recommend that an impact assessment occur in 2009 and risk analysis and mitigation planning in 2010. Once the assessment is done, less frequent meetings can occur until the team needs to begin planning for the 2010 analyses.

IMPLEMENT AN ORGANIZED CHANGE PLAN  
Do not fall victim to the old adage, *He who fails to plan, plans to fail*. The ICD-10 transition will impact people, processes, and technology well beyond actual ICD-10 implementation. To plan for the changes, conduct an assessment of current operations to clearly identify the areas potentially affected by ICD-10 and the potential risks associated with the implementation. Only then can a health plan develop strategies and tactics to mitigate those risks.

Begin with an inventory of all functions and assess each as to whether they involve the use of ICD-9 codes. Catalog each process potentially impacted, including the inputs and outputs, the people involved, and the use of technology in the process. Include in the assessment:

- Information systems affected
- Interfaces with other systems, if any
- Processes needing revision
- Dependencies on contractors and vendors
During the assessment process, create an inventory of existing databases, systems, and tools that may be affected by the ICD-10 transition. Identify which databases use homegrown, proprietary, or custom software. Start a plan and timeline for the systems changes, upgrades, and education that will need to occur, including any new software that will need to be implemented.

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TRAIN AND EDUCATE: DELIVER THE RIGHT MESSAGE, TO THE RIGHT PEOPLE, AT THE RIGHT TIME

Manage the ICD-10 training and education budget through planning. As a first step, create ICD-10 awareness throughout the organization before diving into the ICD-10 impact assessment. Include everyone in the training that may be potentially involved in the transition along with an agenda that provides at minimum an overview, tools, risks, and opportunities related to ICD-10.

Designate one person to become the health plan’s ICD-10 expert. Have the designee attend educational sessions, read pertinent articles and research materials, and be responsible for incorporating essential information into the training programs.

During the planning process, solicit key stakeholders to provide input into a training and education approach to take advantage of available resources and the full implementation time period. For example, consider incorporating training into current continuing education efforts and schedule incremental learning sessions.

Because ICD-10 training and education will vary by function, make working with staff to understand who will be impacted by ICD-10, who will need more in-depth education, and what they will need to know part of the assessment process. Create a plan to deliver the right training at the right time. One approach is to create ICD-10 training groups based on similar education needs and then develop a targeted training plan, including at what point throughout the implementation each group will likely need training, the type of instruction (didactic, interactive, hands-on), and the delivery method (face to face, remote, independent study, train the trainer). See Figure 1 as an example.

ENSURE EFFECTIVE COMMUNICATIONS

Because ICD-10 will involve complex organizations in complex relationships dealing with complex issues, effective communications will be essential to avoid turning good intentions into costly missteps. Use communications as a strategy to not only coordinate plans for ICD-10 conversion with internal staff and external vendors, partners, and associates, but also to reinforce corporate values. Develop and implement a communication plan to provide clear and consistent messages to all audiences throughout the process, from initial assessment through the post-implementation adjustment period.

Begin by having key stakeholders start the framework by defining strategic goals and objectives. Identify the target audiences and the messages that need to be delivered. Based on audience needs, determine over what periods in the implementation timeline that the communications will take place.

Lay out the communication channels that will be most effective to create awareness, set expectations, and provide feedback and reinforcement about progress and milestones. Multiple channels will likely be necessary, depending on the levels of interaction and need for feedback. Include use of local support to reinforce communications.

### FIGURE 1: SAMPLE TRAINING AND EDUCATION FRAMEWORK

<table>
<thead>
<tr>
<th>EDUCATIONAL NEEDS</th>
<th>AUDIENCE</th>
<th>TIMING</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAMILIARITY WITH ICD-10 AND THE POTENTIAL IMPACT ON PEOPLE, PROCESSES, AND TECHNOLOGY</td>
<td>SENIOR MANAGEMENT SYSTEMS ANALYSTS</td>
<td>IMMEDIATELY PRIOR TO THE IMPACT ASSESSMENT</td>
<td>DIDACTIC, REMOTE</td>
</tr>
<tr>
<td>ADEQUATE UNDERSTANDING TO USE ICD-10 AND THE CODING TOOLS</td>
<td>REPORT SPECIFICATION WRITERS CLAIMS ANALYSTS</td>
<td>IMMEDIATELY PRIOR TO PROCESS MODIFICATION</td>
<td>INTERACTIVE, FACE TO FACE</td>
</tr>
<tr>
<td>DETAILED UNDERSTANDING TO APPLY AND INTERPRET ICD-10 CODING</td>
<td>CLAIMS MANAGERS THAT RESOLVE PAYMENT ISSUES</td>
<td>IMMEDIATELY PRIOR TO IMPLEMENTATION</td>
<td>HANDS-ON, INDEPENDENT STUDY</td>
</tr>
</tbody>
</table>
Once the general plan is developed, outline the message theme, content, level of detail, and terminology required for each planned communication, making sure it is specific to each audience. Use the language of the end user to make each and every communication a credible and positive reflection on the health plan.

**OPTIMIZE USE OF AVAILABLE TOOLS**

In addition to the ICD-10-CM and PCS coding systems and guidelines and ICD-10 Medicare Severity Diagnosis-Related Groups (MS-DRGs), the Centers for Medicare & Medicaid Services (CMS) has made available on their Web site several ICD-10 transition tools:

- General Equivalence Mappings (GEMs) between ICD-9-CM and ICD-10 and vice versa along an associated user’s guide
- Reimbursement Mappings

CMS will continue annual updates to the transition tools and make them available for public use for at least three years beyond the compliance date.

Although the intent is to standardize the ICD-10 transition process as much as possible, all HIPAA-covered entities will have to make decisions on how they use these tools; not all covered entities will make the same decisions.

Take, for example, the GEMs, which are bi-directional mappings designed to aid in converting data from ICD-9 to ICD-10 and vice versa. The GEMs link a single code to all valid alternatives in the other code set using a find and replace or list of choices methodology. Because ICD-9 and ICD-10 are so different, the GEMs usually offer a series of possible compromises rather than a one-to-one mapping.

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ICD-10 forward (ICD-9 to ICD-10) and backward (ICD-10 to ICD-9) GEMs are essential in the ICD-10 transition. Each tool will have its place in the operational transition plan. Figuring out in what processes they will be used and for how long are important tasks in developing the ICD-10 implementation plan. Of utmost importance is keeping in mind that they are short-term and imperfect interim tools and not long-term solutions.

CMS developed the GEMs as reference tools to help users derive their own mappings based on need. For example, a coder converting ICD-9 records with access to the individual medical record can make use of the increased specificity in ICD-10 codes. However, a data analyst translating ICD-9 data to ICD-10 has no access to medical records and cannot use the detailed distinctions in ICD-10. Instead, the analyst must choose an ICD-10 code or set of codes that most reasonably represents all the possibilities. The analyst may then choose to design a mapping rule for similar cases. As a result, different functions within an organization may require and develop different levels of detailed mapping.

Adding to the complexity of different departments coming to different endpoints using the GEMs, the use of GEMs will also vary among health plans. The backward mapping (ICD-10 to ICD-9) will likely be used by some to process submitted ICD-10 codes using ICD-9-based business logic. For example, insurers may accept ICD-10 codes on October 1, 2013, and use the backward GEM (or CMS Reimbursement Mapping) to process their claims with ICD-9-based fee schedules, benefit plans, coding edits, etc.

Additionally, because of the lack of ICD-10 historical data, the healthcare industry will need to apply ICD-9-based utilization and cost benchmarks to ICD-10-based data until obtaining adequate ICD-10 experience to reset the benchmarks. Use of backward GEMs will be necessary to map ICD-10 claims data to ICD-9 codes, before applying the data to the benchmarks.

The forward mapping (ICD-9 to ICD-10) may also be used by some insurers to process any ICD-9 codes submitted after their business logic is converted to ICD-10, because it is unrealistic to expect that all organizations will convert to ICD-10 on the same day.

Almost as important as recognizing the potential use of the GEMs is recognizing that ICD-10 data is needed to accurately and fully realize the differences in the two code sets. Forward mapping from ICD-9 to ICD-10 may not reflect the true diagnosis or procedure code that would have been selected with medical record review. Only billed ICD-10 data will allow health plans to accurately determine the impact of ICD-10 codes in the amount paid based on changes billed ICD-10 data will allow health plans to accurately determine the impact of ICD-10 codes in the amount paid based on changes to reimbursement schemes, coverage policy rules, and system edits related to the ICD-10 conversion.

**UNDERSTAND, MITIGATE, AND PLAN FOR THE FINANCIAL IMPACT**

Implementation of ICD-10 will introduce a broad range of financial risks and, hopefully, eventual beneﬁts. The scope and estimates published on the cost of implementing the ICD-10 code set in health plans vary signiﬁcantly. In their Final Rule, the U.S. Department of Health and Human Services (HHS) intra-agency workgroup considered the broad cost categories of training, productivity losses, and system changes to provide a cost estimate of 0.01% of revenue receipts for health insurance carriers and third-party administrators.

Every health plan has operational considerations that make applying a standard ICD-10 implementation cost assumption unrealistic. We recommend developing an anticipated five-year budget related to ICD-10 implementation tasks beginning with the impact assessment and continuing through the post-implementation stabilization period. Most organizations will allocate total implementation costs over several years to allow for a broader timeframe for absorption.

In the impact assessment process, clearly identify the specific departmental budgets that will be responsible for the associated costs. In addition, set the groundwork for determining the need
for increased staffing or consulting services to assist with system changes, claims payment backlogs, monitoring of billing consistency, and other aspects of implementation.

**Systems Implementation**

The Hay Group analyzed several ICD-10 cost studies and provided systems implementation estimates based on health plan size, as depicted in Figure 2.1

### FIGURE 2: HEALTH PLAN ESTIMATE OF SYSTEMS IMPLEMENTATION COST (PER ENTITY IN $1,000S)

<table>
<thead>
<tr>
<th>National</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Regional</td>
<td>5,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Large</td>
<td>3,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Mid-Sized</td>
<td>500</td>
<td>1,500</td>
</tr>
<tr>
<td>Small</td>
<td>$150</td>
<td>$500</td>
</tr>
</tbody>
</table>

The expanded size and alphanumeric structure of ICD-10 will require system application changes. Some health plans may need to increase storage capacity to accommodate each code taking up more space, the expanded size of each code set, and the possible need to store both ICD-9 and ICD-10 codes for some applications.

Additionally, systems that store and process ICD-9 codes, analyses that use ICD-9 codes, and reports that reference ICD-9 codes will need programming changes. The business side will also incur costs. Workgroup for Electronic Data Interchange (WEDI) estimates that, for each 100 programming hours, the business side spends 30–35 hours in specification preparation, analysis, and design sessions, testing, and other related activities, and it could be more for ICD-10.2

In addition to the resources needed to make the changes, there will be some downstream effect of the ICD-10 conversion-induced analysis, redesign, and testing of a significant portion of the claim processing rules, interfaces, and backend reporting and analysis used for trends and reimbursement. In addition, the increased specificity of ICD-10 will inevitably modify processes related to code edits, precertification requirements, benefit coverage, and medical necessity policy. These modifications will not only affect productivity, but provider reimbursement as well.

To mitigate systems implementation costs, build adequate pre-implementation testing into planning and budget estimates.

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**Training and Education**

Estimates of ICD-10 training costs range by function and can be as much as $2,000 per person (40 hours at $50 per hour).3 Most estimates do not include the cost of planning and developing the training, or materials such as coding manuals.

To mitigate costs, build a targeted training and education plan integrating ICD-10 into current forums and providing focused intense education for those who need it, when they need it.

**Cash Flow**

Cash flow disruptions will likely occur during the first year after ICD-10 implementation. Anticipate some delay in provider billing functions. Likewise, accounts payable can also expect delays that will be due to new payment mechanisms, interim manual processes, and repeat processing of denied claims.

Coding accuracy will also impact cash flow. During the first six months or so after implementation, error rates may rise to 6%-10%, compared with the typical 3% error rate that occurs for a few months each year with annual ICD-9 updates. Each returned claim increases use of resources and delays payment.4

Variables to consider in calculating the potential impact on each element of the billing and payment cycle include the reimbursement schemes impacted, amount and level of preparation, extent of staff education, coding experience, knowledge of anatomy and disease processes, and organizational size and complexity.

Health plans should analyze and plan for interim use of ICD-10 tools and anticipate the operational and financial impact of transition policies. Include in the analysis the need for additional resources related to dual systems, such as use of mapping tools. Also consider any anticipated late payments and associated interest payments.

In addition to adequate training and preparation, health plans can mitigate the impact of decreased productivity by eliminating backlogs prior to ICD-10 implementation, monitoring the turnaround times during implementation, prioritizing outstanding work, and using temporary personnel during the initial implementation period.

### MANAGE VENDOR RELATIONSHIPS

No health plan will be able to make the ICD-10 transition without collaborating with vendors. Equally important, no health plan will be able to place the burden of transition on vendors.

To make sure vendors will be ready, begin during the assessment stage to identify all affected vendors and service/maintenance contracts. List the name of each vendor and the direct services it provides. Outline all potential downstream contract issues (e.g., behavioral health vendors paying provider claims to their contracted providers).

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3 Wildsmith, ibid.
network, claims system vendors integrating a DRG grouper, medical management system vendors integrating the Milliman Care Guidelines®).

Next, define the inputs and outputs of each vendor’s products. It is likely many of these inputs and outputs may need to be modified as well. As a simple example, disease management vendor diagnosis data may be relayed to a data warehouse and directly to medical management vendor software. Part of the process for managing vendor relationships will be to define the party responsible for programming and testing the systems and each data transfer.

Once vendors, inputs, and outputs are defined, begin to define maintenance responsibilities related to the various systems and what level of health plan input is desired. For example, a claims system vendor may take on the responsibility for converting basic ICD-9 claims edits for benefit exclusions to ICD-10. Because the conversion is not a simple mapping process, the health plan will want to review the ICD-10 codes selected to ensure that they agree with the vendor’s ICD-10 choices. To illustrate, a claims system may be set up to identify as a non-covered benefit a surgery billed with an ICD-9 diagnosis code for inactive Ménière’s disease. Under ICD-10-CM, the codes for Ménière’s disease do not delineate active or inactive. All of the associated ICD-10-CM codes would likely be covered under some clinical circumstances and it would be inappropriate to identify the surgery as a non-covered benefit without reviewing each individual medical record.

Obtain a copy of the current vendor contracts to determine early on whether the provisions cover ICD-10 upgrades or if new contract amendments to address implementation will be needed. In the budget and resource planning process, understand specifically any additional human and financial resources each vendor expects that will be the health plan’s responsibility, including how many, how much, and the timeframe in which they will be incurred.

MANAGE PROVIDER RELATIONSHIPS
ICD-10 is a risk for all HIPAA-covered entities. Health plans are fearful that providers will be more proficient with ICD-10 during the early months, and will profit from health plan inexperience. Providers are suspicious that health plans will take advantage of the code conversion to change payment rules to their benefit.

To thwart potential antagonism, plan to deal with the issues openly, beginning early in the planning process. As previously stated, ICD-10 conversion will force health plans to analyze, redesign, and test all claim processing rules. Whenever this is done, it inevitably unveils or creates new payment rules. What was paid before may no longer be paid after ICD-10, and what was denied before may be paid after implementation of ICD-10. Initially, it may be difficult to distinguish purposeful change from errors.

Likewise, taking advantage of ICD-10 specificity in pre-certification requirements, benefit coverage, and medical necessity policy may produce appropriate but different provider reimbursement. Making the changes early in the process (e.g., dual coding of ICD-9 and ICD-10) with transparency to providers will go a long way in maintaining relationships.

How health plans use mappings and the variations from the CMS standardized mapping tools will affect provider payment. The communication approach will be critical in explaining to providers the strategies and rationale. Consider the following scenarios.

• Health plan A has an inpatient fee schedule based on ICD-9 procedures. It concludes that it can best maintain budget neutrality during the transition by accepting ICD-10 and using the CMS Reimbursement Mapping to reimburse based on its ICD-9 fee schedule. In the future, it will modify the fee schedules based on actual ICD-10 experience.

• Health plan B consists mostly of Medicare Advantage members. It determines that converting to ICD-10-based MS-DRG claims processing from day one is the best means to maintain budget neutrality.

• Health Plan C reimburses commercial inpatient stays with MS-DRGs. It identifies that budget neutrality is best maintained during the transition period by processing ICD-10 codes through a modified ICD-10 MS-DRG system in which it has changed code assignment in code-conflict situations using its own commercial frequency data, rather than relying on the Medicare data of CMS.

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All of these health plans have good intentions. The successful health plans will conduct early and extensive pre-implementation testing of a broad range of scenarios to better assess, control, and anticipate the potential impact on provider reimbursement. They will also be prepared to communicate these efforts to providers.

INTEGRATE AND COORDINATE WITH OTHER PRIORITIES AND INITIATIVES
This is probably one of the most challenging and critical success factors for many health plans. Rather than delaying or running ICD-10 implementation as a separate initiative, we encourage health plans to take advantage of the integration and coordination efforts that will need to occur with ICD-10 implementation and other priorities and initiatives.

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Understandably, successful implementation of ICD-10 depends on successful implementation of version 5010 ×12 transaction standards. During the assessment process, explore other known priorities and planned initiatives to ensure adequate strategic
planning. Integrate ICD-10 into any system development, system upgrades, contract changes, vendor changes, etc., and coordinate the implementation plans up to and through ICD-10 implementation.

Also, assess the impact of ICD-10 related to corporate strategic goals and information technology plans related to quality and performance. These goals may need to be accounted for or adjusted based on ICD-10 implementation.

DEVELOP STRATEGIC OPPORTUNITIES
Implementation of ICD-10 can bring with it strategic opportunities—operational efficiencies and reimbursement or systems opportunities. During the assessment process, begin to explore and identify potential strategic advantages that can be further developed in the planning process.

As the ICD-10 implementation plan evolves and options are explored, evaluate whether there are any strategic opportunities that may occur due to ICD-10 implementation. Among other things, these opportunities could be in the form of partnerships or changes in business models to grow revenue.

One starting place is to list and consider all of the items that have remained on the operational wish list that have consistently fallen to the bottom as a low priority. Evaluate whether those items could be accomplished more easily if integrated into the ICD-10 implementation initiative.

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