Navigating Regulatory Change: Preliminary Lessons Learned During the Healthcare Provider Transition to ICD-10-CM/PCS

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Abstract

This article presents the findings of a collaborative effort between the Georgetown University Student Consulting Team and Booz Allen Hamilton to interview healthcare providers undergoing the transition to the International Classification of Diseases, Tenth Revision, Clinical Modification/Procedure Coding System (ICD-10-CM/PCS).

The goals of this study were to extract a common set of trends, challenges, and lessons learned surrounding the implementation of the ICD-10-CM/PCS code set and to produce actionable information that might serve as a resource for organizations navigating the transition to ICD-10-CM/PCS.

The selected survey sample focused on a subset of large hospitals, integrated health systems, and other national industry leaders who are likely to have initiated the implementation process far in advance of the October 2013 deadline. Guided by a uniform survey tool, the team conducted a series of one-on-one provider interviews with department heads, senior staff members, and project managers leading ICD-10-CM/PCS conversion efforts from six diverse health systems. As expected, the integrated health systems surveyed seem to be on or ahead of schedule for the ICD-10-CM/PCS coding transition. However, results show that as of April 2010 most providers were still in the planning stages of implementation and were working to raise awareness within their organizations. Although individual levels of preparation varied widely among respondents, the study identified several trends, challenges, and lessons learned that will enable healthcare providers to assess their own status with respect to the industry and will provide useful insight into best practices for the ICD-10-CM/PCS transition.

Key word: ICD-10-CM/PCS

Introduction

This article presents the findings of a collaborative effort between the Georgetown University Student Consulting Team and Booz Allen Hamilton to interview healthcare providers undergoing the transition to the International Classification of Diseases, Tenth Revision, Clinical Modification/Procedure Coding System (ICD-10-CM/PCS) code set. The goals of this study were to extract a common set of trends, challenges, and lessons learned surrounding the implementation of the Health Information Portability and Accountability Act X12 version 5010 (HIPAA 5010) standards and the ICD-10-CM/PCS code set, and to move beyond an assessment of industry awareness to produce actionable information that might serve as a resource for healthcare administrators, project managers, and healthcare providers navigating the transition to ICD-10-CM/PCS.

Background

In the United States, the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) is the standard code set for the transmission of electronic health information by healthcare providers and other HIPAA-covered entities.[1] However, the ninth revision of the code set is now 30 years old, and as a result of advances in medical technology as well as limitations in the number of codes available, it has lost much of its ability to accurately capture clinical information.[2]

Moreover, most other developed countries have transitioned to the International Classification of Diseases, Tenth Revision (ICD-10), making international comparisons of data difficult.[3]

On October 1, 2013, the United States will transition from ICD-9-CM to ICD-10-CM/PCS, and the Centers for Medicare and Medicaid Services (CMS) will no longer reimburse providers for claims submitted using ICD-9-CM.[4] As a necessary prerequisite, on January 1, 20122012, CMS will also require covered entities to convert from HIPAA 4010 to 5010 standards for electronic data exchange.[5]

The transition to ICD-10-CM/PCS will expand the existing set of 13,000 codes to more than 150,000 codes and will require significant changes to nearly all processes within the healthcare industry that are touched by the electronic exchange of health information.[6] New features of the ICD-10-CM/PCS code set, such as enhanced clinical specificity, combination codes, and the ability to capture laterality, will greatly improve the descriptive power of coded health data.[7] However, these features will also require information system modifications and, in particular, training of coding staff in physiology, anatomy, and the use of the new code set.[8]

Methodology

This study was developed during an experiential learning course at Georgetown University. Groups of five to seven undergraduate and graduate students in the Department of Health Systems Administration partnered with professionals from local management consulting firms to conceptualize and execute a semester-long consulting project. In order to produce the results detailed here, the Georgetown University Student Consulting Team partnered with Booz Allen Hamilton to conduct a series of one-on-one provider interviews with department heads, senior staff members, and project managers leading ICD-10-CM/PCS conversion efforts from seven diverse health systems, including Tenet Healthcare Corporation, Geisinger Health System, Kindred Healthcare, and three other health systems that chose to be made anonymous (see Table 1).

Table 1
Overview of Provider Sample Set

Provider	Description
Geisinger Health System	Geisinger is a physician-led, integrated healthcare system spanning 44 counties over 20,000 square miles and serving 2.6 million people. Geisinger's Central Region encompasses the greater Danville, Pennsylvania, area, where the main campus is located.
Kindred Healthcare	Kindred Healthcare is the largest diversified provider of post-acute care services in the United States. Kindred's 120 long-term acute care hospitals in 26 states provide high-intensity medical care to patients who need extended hospital stays. Its 224 nursing and rehabilitation centers and six assisted living facilities in 27 states provide a full range of medical and social services to treat and support its patients and residents.
Tenet Healthcare Corporation	Tenet Healthcare Corporation is one of the largest investor-owned healthcare delivery systems in the nation. Its acute care hospitals, outpatient centers, and 57,613 employees in 11 states serve more than 4 million patients annually.
Urban health system (anonymous)	This health system is a nonprofit group of hospitals, health centers, clinics, imaging centers, people, and programs in a southwestern metropolitan area that covers a population of more than one million people.
Pediatric healthcare facility (anonymous)	This pediatric healthcare facility serves more than 360,000 patients each year in the mid-Atlantic region.
Integrated health system (anonymous)	This integrated health system of more than 3,300 physicians, scientists, and researchers and 46,000 allied health staff treats more than half a million people each year in the Midwest.

Because provider interviews were completed in March and April 2010, three and a half years before the October 2013 transition deadline, the selected survey sample focused exclusively on large hospitals, integrated health systems, and other

national industry leaders that were likely to have initiated the implementation process far in advance of the deadline. Targeted providers were selected based on *U.S. News* and *Modern Healthcare* rankings. The student team also included providers within its professional network if they met the selection criteria.

The team approached 23 healthcare organizations for participation in this study, 7 of which agreed to complete interviews. The team jointly developed a survey assessment instrument (see Appendix A), which was forwarded to the providers in advance of each interview and focused on the following core impact areas:

- organizational awareness
- leadership support
- strategic planning
- finance and budget considerations
- impact on reimbursement
- education and training
- quality improvement and reporting
- vendor readiness
- electronic health records (EHRs)

Each telephone interview was recorded and summarized by the interviewer. Summaries were then sent to interviewees for review and a determination of whether they would like to be identified or made anonymous in the final paper. Three of the seven providers agreed to be identified, three chose anonymity, and one requested to be removed from the final results. Table 2 shows the responses obtained from one provider as an example of the data collected in this round of interviews.

Table 2
Provider Focus: Integrated Health System (Anonymous)

Core Impact Area	Response Highlights Spring 2010
Awareness	Awareness levels throughout the organization are relatively high but differ slightly among various audiences relative to their involvement in planning efforts. Leadership, business owners of the more than 200 systems directly impacted by the conversion, and information technology (IT) professionals are highly aware of the conversion. Leadership awareness is driven by the organization's portfolio management system, which highlights this project as highly visible, due in part to its $20 million to $100 million price tag. Broader audiences such as physicians and clinicians are significantly less aware, but interviewees acknowledge that the transition will have a significant impact on physicians. They plan to address the readiness of user audiences by beginning the change management process over the next 16 months. Physicians will be the primary focus followed by coders.
Management	In spring 2009, accountability for the ICD-10-CM/PCS project was assigned to the Data Governance Group, which then appointed a steering committee composed of functional experts involved in revenue cycle, industrial engineering, information/data collection, and the organization's health systems. Health system representatives focused on finding solutions and standardizing the organization's numerous hospitals. Also on the steering committee is the 4010/5010 project lead. Communication efforts have been executed through targeted presentations to stakeholders. The health system is not anxious to utilize broadcast communications because so much is still unknown. The external relations liaison makes a targeted effort to update and share ICD-10-CM/PCS objectives to the financial managers, ensuring a heightened sense of awareness in those departments.
Planning	This health system is in the beginning stages of identifying high-level stakeholders throughout the organization. For instance, they have created documents identifying departments with high-level impact. While these documents are dynamic and ever changing, there are no specific details of which individuals or which specific processes will be impacted. However, the organization has spent more than a year identifying and surveying the business owners of relevant systems and will continue in the upcoming months to meet with and conduct in-depth interviews on remediation strategies for those systems. Additionally, they regularly participate in the Workgroup for Electronic Data Interchange (WEDI) to gain awareness and the perspective of other payers and providers in the industry. Because of its relatively high readiness levels, the

Core Impact Area	Response Highlights Spring 2010
	health system will be carrying out a virtual coding project in conjunction with WEDI. The project will allow payers and providers to conduct exercises that bring to light areas that may have been overlooked or assumed in the transition to ICD-10-CM/PCS.
Finance	This organization set forth a $1.3 million planning budget in fiscal year 2010, which assigned 3.25 incremental full-time equivalents (FTEs) to the transition effort, three of whom make up an activity team. The activity team consists of a project manager, an industrial engineer, and an IT lead that are responsible for creating and developing a more detailed work plan in 2010. The organization also identified the need for additional IT resources, specifically for the more than 200 system levels, which account for a large portion of the budget. While a planning budget has been endorsed, a more specific budget delineating training, staffing needs, potential loss of productivity, and so forth will be developed in the business plan in the upcoming months. The project team believes that such factors are premature considerations at this stage of the planning process and should be defined with a higher level of specificity by fall 2011.
Reimbursement	Financial considerations such as an impact assessment on claims processing, third-party collections, and reimbursement logistics are on the organization's radar but have not yet been explicitly defined. In addition, this health system regards ICD-10-CM/PCS as a pure expense with little, if any, revenue opportunities for them. (A cost-benefit analysis has not been conducted.) The health system also noted from its direct involvement with the payer community that payers too have not seen a financial benefit or potential return on investment.
Training	Training has not been addressed in detail yet, but training plans will be made over the next 12 months. At this time, one or two coders at most have been formally trained. Interviewees anticipate increasing the numbers of coders for the actual implementation. Also, clinicians are being reached through leadership (e.g., medical record committees, senior management committees, and budget committees) but at general levels.
Quality	No measures have been taken as of now to account for the impact on quality of patient care. Interviewees are mindful of these concerns and should be addressing them in the upcoming months.
Vendor readiness and EHRs	Given the more than 200 systems that will be affected, the organization predicts the 20/80 rule (or the Pareto principle) will apply. In other words, it is assumes that 20 percent of the more than 200 systems will represent 80 percent of the work and thus 80 percent of the risk. For that 20 percent of systems, they have identified the top priorities and begun discussions, timetable updates, and software application updates with many of the vendors of those systems.
Challenges and lessons learned	Because of the many key functions that are impacted by ICD codes, such as clinical documentation, revenue cycle, IT, and data governance, determining a clear owner can be challenging. In addition, physicians, essential users in the transition, have typically been intolerant of what they feel to be unnecessary documentation requirements. And implementing a project that appears to have costs but no benefits is burdensome. The biggest challenge may be whether vendors deliver products in a timely manner. With regard to the 5010 transition, the health system benefited greatly from payer-provider collaboration. The five largest payers and the four largest providers in their state worked closely together, along with national payers, to effectively communicate and coordinate with one another. For instance, when converting from 4010 to 5010, the providers and payers shared a readiness-to-test timeline along with status updates, which were publicly available on their Web site. The nine organizations typically approach any major HIPAA initiative as a collective unit, bearing in mind the dependency and active engagement necessary with one another. The health system noted the following factors that proved to be beneficial: • engage system owners early on (with education materials, surveys, timelines, etc.); • maintain active involvement with external organizations like WEDI to remain up to date; • integrate diverse, interdisciplinary workgroups around implementation efforts; and • target users, especially physicians, clinicians, and coders.

In July 2011, one year and four months after the original interviews were completed, the team conducted follow-up interviews with two of the original seven providers, the results of which are also detailed here (see Table 3 and Table 4). These interviews with Geisinger Health System and Kindred Healthcare aimed at obtaining an up-to-date snapshot of the two providers in their ongoing planning and execution of the ICD-10-CM/PCS conversion requirements.

Table 3
Side-by-Side Comparison: Geisinger Health System Response Highlights 2010 and 2011

Core Impact Area	Response Highlights Spring 2010	Response Highlights Summer 2011
Awareness	Geisinger Health System rated itself very highly with regard to awareness of the upcoming HIPAA 5010 standardization and ICD-10-CM/PCS coding conversions.	In early 2011, Geisinger hired a third-party vendor to conduct an assessment of the organization's readiness and provide one year of project management services. The vendor conducted more than 200 stakeholder interviews over a four-month period. Following the assessment, a select Working Oversight Committee circulated the report through all levels of the organization. According to interviewees, a large group of individuals still regard the ICD-10-CM/PCS transition as only a revenue cycle, billing, and IT issue. Among other techniques, Geisinger will implement a standing ICD-10-CM/PCS agenda item for reoccurring management meetings in order to raise awareness.
Management	A large work group of Geisinger executives and director-level staff was assigned responsibility for leading the change management project, with the senior director of revenue cycle coding operations having day-to-day management responsibility.	Geisinger formed two committees to manage the transition, an Executive Steering Committee composed of high-level executive staff and a multidisciplinary Working Oversight Committee. Day-to-day management responsibility was reassigned from the head of coding to upper management across the entire organization.
Planning	Preparations for the dual regulatory compliance changes began in mid-2009 with multidepartment, systemwide assessments focused on determining the next steps.	In mid-2011, staff began reviewing an assessment produced by a third-party vendor to develop an implementation and readiness strategic plan.
Finance	Instead of budgeting out a “bucket of dollars” for the entire health system's implementation costs, Geisinger planned to allocate costs by department.	As awareness of the significant amount of resources necessary for the conversion has grown, the organization's leadership has realized that initial budget assessments were underestimated for all the preparations and planning work they are performing this year.
Reimbursement	No official impact analysis had been performed to determine the effects of implementation. The organization had initiated small-scale steps to prepare for the extensive code mapping from ICD-9 to ICD-10-CM/PCS. Every week the senior director of revenue cycle coding operations worked with an end-coding software system to crosswalk small portions of the old and new coding systems.	Geisinger has begun to question whether the referral community is ready for the transition and how that might affect the revenue cycle.
Training	In order to manage the training component of the transition, Geisinger developed a project plan inspired by	A third-party vendor recommended Geisinger provide three levels of training:

Core Impact Area	Response Highlights Spring 2010	Response Highlights Summer 2011
	AHIMA protocols and recommendations. The organization planned to handle all of the necessary training steps internally and train each coder individually. The coder-education portion of the training was scheduled to begin only a few months before the October 1, 2013 deadline.	• General awareness training (30 minutes to 1 hour) • Intermediate training (3 to 5 hours of training for close to 5,000 individuals, many of whom are clinical staff) • Coder training (more than 16 hours of classroom training for a small group of personnel)Geisinger will engage outside help to organize and conduct this multifaceted approach to the training requirements.

Table 4
Side-by-Side Comparison: Kindred Healthcare Response Highlights 2010 and 2011

Core Impact Area	Response Highlights Spring 2010	Response Highlights Summer 2011
Awareness	Kindred Healthcare was still in the initial stages of raising ICD-10-CM/PCS awareness, with the Hospital Division leading the three divisions in terms of awareness and planning.	The Hospital Division continues to lead the other divisions in terms of awareness.
Management	Instead of assigning responsibility for the conversion to the standing Project Management Office in its Information Systems (IS) group, the organization established a steering committee with members from each business division as well as from the IS group. Kindred planned to treat the ICD-10-CM/PCS transition as a collection of projects specific to each program.	No change.
Planning	Kindred began planning in late 2009. Its goal for 2010 was to raise awareness within the organization and to have development teams identify systems and processes that would be impacted by the transition.	Kindred will focus a large amount of resources toward HIPAA 5010 testing during 2011. ICD-10-CM/PCS analysis remains light, with more ICD-10-CM/PCS planning and system testing scheduled for 2012.
Finance	Kindred anticipated no significant expenses associated with ICD-10-CM/PCS until 2012. In early 2010, the Hospital Division began a cost analysis of training and staffing. The organization planned to prepare for a 25 percent reduction in coder productivity for at least the first three to six months of the transition, with coders needing 60 to 80 hours of face-to-face training.	Kindred will budget for ICD-10-CM/PCS education for coders, physicians, and other clinical staff in 2012. In addition, there are 12,000 physicians on staff (attending physicians, consulting physicians, surgeons, and other medical staff members) and tens of thousands of other clinical staff in the hospital division that will require some type of training.
Reimbursement	The Hospital Division planned to create a test environment in 2011 and 2012, during which they would code patients' diagnoses using ICD-10-CM/PCS to see if they map to a different diagnosis related group (DRG).	To ensure that reimbursement processes remain uninterrupted during the transition, the organization's leadership plans to have significant contract renegotiation discussions with their top 10 payers.
Training	Kindred planned to continue to send its two coding leaders to the AHIMA ICD-10-CM/PCS train-the-trainer course each year and to begin in-depth training of coders, clinical staff, and others in January 2013, six to nine months before full implementation. The skill level, demand, and low turnover	Coders will start anatomy and physiology training in late 2011 and 2012. Kindred is strongly considering affiliations and programs with neighboring universities to obtain additional coders.

Core Impact Area	Response Highlights Spring 2010	Response Highlights Summer 2011
	rate for coders will make backfilling coding positions much more challenging. The organization was considering hosting a coding apprentice program in 2012 to grow the coding staff that they will need internally.	

Results

As expected, the cohort of healthcare providers selected for this study was at the helm of the adoption curve for the ICD-10-CM/PCS coding transition. However, with the exception of a few respondents, results show that as of April 2010 even large providers were still in the planning stages of the transition and were working to raise awareness within their organizations. From the interview synopses (summarized in Table 5), the team was able to extract a common set of trends, challenges, and lessons learned, as detailed below.

Table 5
Matrix of Findings

	Geisinger Health System	Kindred Healthcare	Tenet Healthcare Corporation	Urban Health System (Anonymous)	Integrated Health System (Anonymous)	Pediatric Healthcare Facility (Anonymous)
Trends						
Reported high levels of awareness among executive leadership, project managers, and individuals directly responsible for the transition.	X		X	X	X	X
Had not engaged clinicians and staff in order to raise awareness, but planned to do so in the future.		X	X	X	X	X
Appointed a steering committee to oversee the transition.	X	X	X	X	X	X
Reported being in the early stages of assessments, or having conducted only high-level impact assessments, but expected to drill down into this process in the coming year.		X	X	X	X	X
Budgeted significant funds for the conversion effort in 2010.					X	
Planned to budget funds in the near future, or budgeted minimal funds in	X	X	X			

	Geisinger Health System	Kindred Healthcare	Tenet Healthcare Corporation	Urban Health System (Anonymous)	Integrated Health System (Anonymous)	Pediatric Healthcare Facility (Anonymous)
2010 for expenses such as train-the-trainer courses.						
Expected no significant expenses until calendar year 2012.						X
Expected to analyze the impact of the transition on reimbursements in the future.	X	X	X	X	X	
Engaged in crosswalking or reimbursement testing activities.	X					
Regarded training as the most significant and costly component of the transition.		X		X		X
Planned to begin training six to nine months before implementation.	X	X			X	
Began training coding leaders in train-the-trainer courses.		X			X	
Expected improvements in internal data analysis, which in turn would guide evidence-based practice and clinical workflow improvements.	X	X	X	X		
Expected to reduce rejected claims and improve external quality reporting.			X	X		X
Expected no financial benefit or potential return on investment.					X	
Expected a significant negative impact on EHR implementation.				X		
Attributed a successful transition in part to EHRs.	X					
Expected no impact on EHRs.		X	X			X
Expressed confidence that vendors would be ready for the transition.	X					X

	Geisinger Health System	Kindred Healthcare	Tenet Healthcare Corporation	Urban Health System (Anonymous)	Integrated Health System (Anonymous)	Pediatric Healthcare Facility (Anonymous)
Expressed concern that vendors would not be ready for the transition.					X	
Challenges						
Noted difficulty creating a sense of urgency within the organizations.		X		X		
Believed government might push the 5010 and ICD-10-CM/PCS conversion deadlines back.				X		
Were preoccupied with other regulatory requirements and opportunities.		X		X		
Found implementing an EHR system while transitioning to ICD-10-CM/PCS burdensome.				X		
Reported a need to raise awareness among physicians.		X	X	X	X	
Reported difficulty differentiating between valuable information and disinformation.		X				
Expressed uncertainty with payer readiness.					X	
Expressed concern that payer mapping tools would complicate reimbursement.			X			
Anticipated difficulty staffing for the transition and backfilling coder positions to accommodate for productivity losses.		X			X	X
Lessons learned to date						
Cultivate a sense of urgency around ICD-10-CM/PCS preparation.			X		X	
Collaborate with payers.	X				X	
Maintain currency on ICD-10-CM/PCS developments.		X			X	

	Geisinger Health System	Kindred Healthcare	Tenet Healthcare Corporation	Urban Health System (Anonymous)	Integrated Health System (Anonymous)	Pediatric Healthcare Facility (Anonymous)
Engage with external organizations like the Workgroup for Electronic Data Interchange (WEDI).					X	
Approach CMS for information.		X				
Be prepared for increased workforce needs.		X			X	X

Trends

- **Most providers were highly cognizant of developments in the ICD-10-CM/PCS arena at the executive decision-making level**. Five out of six survey respondents expressed high levels of awareness among executive leadership, project managers, and individuals directly responsible for the transition. However, five out of six also had not engaged clinicians and staff in order to raise awareness, but planned to do so in the future.
- **All providers surveyed had appointed project managers and steering committees to oversee the transition**. Four of the six providers that had assigned responsibility to a specific entity acknowledged this as a critical component of a successful transition.
- **Most providers reported having conducted only preliminary gap analyses and stakeholder impact assessments**. Five out of six organizations reported being in the early stages of impact assessments or having conducted only high-level impact assessments, but expected they would drill down into this process in the coming year. Only one reported having conducted a full impact assessment.
- **Few providers had developed budgetary and financial impact assessments for the ICD-10-CM/PCS transition**. Only one of the six providers surveyed had budgeted significant funds for the conversion effort in 2010. Three planned to budget funds in the near future, or budgeted minimal funds in 2010 for expenses such as train-the-trainer courses. One expected no significant expenses until calendar year 2012. In addition, five out of six providers expected to analyze the impact of the transition on reimbursements in the future, but only one had engaged in crosswalking or reimbursement testing activities.
- **Training was widely regarded as the most significant and costly component of the transition**. Three out of six providers regarded coder and clinician training as the most significant and costly component of the transition. However, based upon a recommendation from the American Health Information Management Association (AHIMA), three out of six providers did not plan to begin training until six to nine months before implementation. Two had begun training coding leaders in train-the-trainer courses.
- **Providers anticipated improvements in clinical quality with adoption of ICD-10-CM/PCS**. Four out of six survey respondents expected that the increased granularity of the ICD-10-CM/PCS codes would improve internal data analysis, which in turn would guide evidence-based practice and clinical workflow improvements. Three out of six also expected that the heightened specificity of the new codes would reduce rejected claims and would improve external quality reporting.
- **Much ambiguity persists regarding the potential impact of ICD-10-CM/PCS on EHRs and vendor readiness**. Responses in this category varied widely, ranging from one provider expecting a significant negative impact on EHR implementation, one crediting EHRs for a large part of their success in the transition, and three out of six expecting no impact on EHRs at all. Two out of six respondents expressed confidence that vendors would be ready for the transition, while one provider expressed concern that vendors would not be ready.

Challenges

- **Rallying stakeholders behind ICD-10-CM/PCS conversion initiatives in light of more immediate regulatory, financial, and health information technology concerns**. Two out of six providers noted difficulties creating a sense

of urgency within their organizations, especially given the distant deadline of October 1, 2013. One believed the government might push the 5010 and ICD-10-CM/PCS conversion deadlines back. Two out of six providers were preoccupied with other regulatory requirements and opportunities, such as the stimulus law, healthcare reform, and complex requirements for the post-acute care sector. In particular, one provider that was in the process of implementing an EHR system found orchestrating compliance with potential "meaningful use" requirements while transitioning to ICD-10-CM/PCS burdensome.

- **Securing widespread physician buy-in**. Four out of six respondents reported a need to raise awareness among physicians, whom they regarded as essential users in the transition but who are typically reluctant to accept what they feel to be unnecessary clinical requirements.
- **Identifying timely, accurate information regarding the ICD-10-CM/PCS transition**. One provider reported difficulty differentiating between valuable information and disinformation regarding the complexity of the transition, especially given the volume of available information and seminars regarding ICD-10-CM/PCS.
- **Coordinating ICD-10-CM/PCS transition initiatives with payers**. One provider expressed uncertainty with payer readiness. Yet another expressed growing concern that payers would use mapping tools to make decisions without having sufficient clinical data, making reimbursement under ICD-10-CM/PCS more difficult.
- **Planning to weather productivity losses associated with ICD-10-CM/PCS training**. Three out of six providers anticipated difficulty staffing for the transition and backfilling coder positions to accommodate for productivity losses. One provider anticipated a 25 percent reduction in productivity for the first three to six months of the transition and predicted that coders would need 60 to 80 hours of face-to-face training. During the transition period the demand for coders, which is already high, may grow.

Lessons Learned to Date

- **Establish a sense of urgency throughout the organization**. Interviewed administrators cited cultivating a sense of urgency around ICD-10-CM/PCS preparation as a necessary precondition for the success of any transition effort.
- **Appoint an internal project manager or hire an outside project management team to oversee the implementation process**. Steering committees that include a broad swath of hospital staff and the 5010 project leads seem to be the project management structures with the greatest level of success.
- **Structure opportunities for payer-provider collaboration**. With respect to the 5010 transition, two out of six interviewees reported that collaboration between payers and providers has proven useful. For example, when converting from 4010 to 5010, one provider collaborated with payers to share a readiness-to-test timeline along with status updates, which were publicly available on the provider's Web site.
- **Maintain currency on ICD-10-CM/PCS developments**. One provider noted that active involvement with external organizations such as the Workgroup for Electronic Data Interchange (WEDI) was helpful in remaining up to date. Another recommended approaching CMS for information and described its staff as responsive, informative, and approachable on the issue of ICD-10-CM/PCS.
- **Be prepared for increased workforce needs**. Three out of six providers noted that properly managing and increasing the workforce for roughly six months after going live with ICD-10-CM/PCS could help minimize financial instability and recommended hosting an apprentice training program to meet the demand for coders internally.

Discussion

The large providers in the sample set have taken significant action to ensure a smooth transition from ICD-9-CM to ICD-10-CM/PCS. However, the results show that most providers were still in the planning stages of implementation as of April 2010 and were working to raise awareness within their organizations. In addition, providers displayed a large degree of variability with respect to their progress on gap analyses, budgeting, and training.

In July 2010, the team conducted follow-up interviews with personnel from Geisinger Health System and Kindred Healthcare, two of the participants in the April 2010 study (see Table 3 and Table 4). In contrast to the original round of interviews, which indicated that much of the early ICD-10-CM/PCS planning was being organized internally at the department or middle-management level, the follow-up interviews revealed that each hospital system had significantly increased its awareness and planning at the enterprise level. Geisinger Health System's leadership, for example, made the decision to venture outside of the system's internal structure and reached out to a third-party vendor to complete a gap analysis of the system's readiness for

ICD-10-CM/PCS. At the time of the second round of interviews (July 2010), the staff was currently in the process of reviewing the results of the assessment and developing a strategic plan to move forward.

Follow-up interviews also revealed a greater emphasis on planning, organizing and budgeting resources for the training and education aspect of the ICD-10 transition. Kindred Healthcare, which employs a workforce of 43 coders and approximately 12,000 physicians on staff, clearly identified training staff at the appropriate levels and within the recommended timeframe as one of its greatest challenges to compliance and a seamless transition. Also, with an anticipated 25 percent reduction in medical coder productivity during the first two years of the transition, Kindred plans to hire approximately 10 full-time medical coders to their staff.

By October 1, 2013, every healthcare provider in the United States will be required to achieve compliance with ICD-10-CM/PCS. This requirement necessitates two areas of future research. First, it is highly likely that all of the organizations surveyed in this study will continue to adapt in response to the 5010 and ICD-10-CM/PCS requirements, and initiatives that were still in the planning stages as of the date of this survey could present entirely new sets of challenges and lessons to be learned over the next few years. Future research could involve a follow-up survey with all providers included in the original study to evaluate their continued progress. In addition, future research could evaluate the progress of smaller providers, such as individual hospitals and physician groups, and their overall HIPAA 5010 and ICD-10-CM/PCS awareness and preparedness for implementation. This study could also be improved upon if more organizations were involved.

Like all surveys, this one is subject to the individual biases of interviewees as well as those of the interviewer. Moreover, because the survey is anonymous only for those providers who wished to be de-identified, there is some danger of skewed results from interviewees who wish for their organization to be seen in the best possible light. Finally, several factors make our survey responses difficult to standardize. First, the survey was orally administered and did not include quantifiable answers (such as on a Likert scale of 1 to 5). And although all hospital systems interviewed were asked the same questions, the respondents provided diverse answers with different points of emphasis. The diversity of emphasis in responses was further reinforced by operational and organizational differences among participating organizations and the fact that the interviewees held different positions at varying levels in their respective organizations.

Conclusion

In conclusion, this study provides an intimate perspective on the preparations of large hospitals, integrated health systems, and other national industry leaders for the transitions to HIPAA 5010 and ICD-10-CM/PCS. As expected, the integrated health systems surveyed seem to be on or ahead of schedule for the transition to ICD-10-CM/PCS coding as compared to independent hospitals. However, the results show that most providers were still in the planning stages of implementation as of April 2010 and were working to raise awareness within their organizations.

Although individual levels of preparation vary widely among respondents, we identified several trends, challenges, and lessons learned that we hope will offer healthcare providers useful insight into best practices for the transition and will enable them to assess their own status with respect to the industry. Our intent in this study was to move beyond an assessment of industry awareness and to produce actionable information that might serve as a resource for healthcare administrators, project managers, and providers navigating the transition to ICD-10-CM/PCS.

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Appendix A

Interview Questions

Management and Planning

1. How would you describe awareness of the 5010/ICD-10 regulations and implementation deadlines within your organization?
2. How has management responded to the 5010/ICD-10 implementation deadlines? For example, have new steering committees/project teams/work groups been put in place?
3. Has a specific office or individual been given responsibility for implementation of ICD-10?
4. Has your organization performed an impact assessment to identify stakeholders and processes that will be impacted by the conversion to ICD-10?
5. Is your organization in the planning or implementation stage for 5010? For ICD-10?

Financial Implications

6. Has your organization established a budget to address 5010/ICD-10 conversion costs?
7. Has your organization performed a cost analysis to understand the financial impact for your organization (for example, revenue impacts that could result from improperly coded claims)?
8. What do you see as potential benefits of the conversion?

Staffing and Training

9. How is your organization addressing training?
10. How is your organization communicating the ICD-9 to ICD-10 transition to clinicians?

Quality and Reporting

11. What measures, if any, has your organization implemented to anticipate the effect on quality of patient care?
12. How will the transition to ICD-10 affect your organization's ability to measure quality internally?

Electronic Health Records

13. How will the 5010 standards and ICD-10 transition affect your organization's transition to electronic health records?

Closing Question

14. How would you describe key lessons learned so far? Are there challenges that have arisen and what might you do differently if you could give advice to others?

Contributor Information

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Notes

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