by Veronica E. Jackson, MHSA; and Alexander Muckerman

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, 2012\(^2\)012, 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).

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.

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.

**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.
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.

Acknowledgments

The authors wish to thank the following individuals for their contributions and support for this
project: Ryung Suh, MD, MPP, MBA, MPH; Rose Dunphy, CPAM; Lee Draznin, MBA, MPA; Kyle Taylor,
MHSA; Angela Lewis; and Amir Hammad.

Veronica Jackson, MHSA, is a project manager at Atlas Research and a Presidential Management
Fellowship finalist.
Alexander Muckerman is senior consultant and health analyst with Booz Allen Hamilton.

Notes

1. Center for Medicare and Medicaid Services (CMS). ICD-10 Overview. Available at
http://www.cms.hhs.gov/ContractorLearningResources/Downloads/ICD-10_Overview_Presentatio
n.pdf.
2. American Hospital Association (AHA) and American Health Information Management Association
4. Department of Health and Human Services. “Health Insurance Reform; Modifications to the Health
Insurance Portability and Accountability Act (HIPAA); Final Rules.” 45 CFR Part 162. Federal Register
74, no. 11 (January 16, 2009): 3296–328. Available at
5. Department of Health and Human Services. “Health Insurance Reform; Modifications to the Health
Insurance Portability and Accountability Act (HIPAA); Final Rules.” 45 CFR Part 162. Federal Register
6. Department of Health and Human Services. “Health Insurance Reform; Modifications to the Health
Insurance Portability and Accountability Act (HIPAA); Final Rules.” 45 CFR Part 162. Federal Register
7. HP. Focus on ICD-10 Migration: Why Payers Must Embrace ICD-10 and How They Should Prepare
for It. Created August 2009; updated February 2011. Available at
Anniversary National Convention and Exhibit Proceedings, October 2003. Available at

Veronica E. Jackson, MHSA; and Alexander Muckerman, BA. “Navigating Regulatory Change: Preliminary Lessons Learned During the Healthcare Provider Transition to ICD-10.” Perspectives in Health Information Management (Winter 2012): 1-20.

Printer friendly version of this article.
There are no comments yet.