Coding Checkup: Determining the New Normal for Coding Accuracy in a Post-ICD-10 World

By Mary Butler

In many ways ICD-10 coding professionals share a lot in common with college students preparing to spend a semester abroad. Both spend invaluable hours in a classroom learning the nuances and permutations of a new language, as well as months of practicing their new skills in workshops with language experts. Both coding professionals and students have tools that help ease the learning curve—phrase books and Rosetta Stone guides for the linguists and encoders and computer-assisted coding (CAC) programs for the coders. And both probably have prior experience with other languages before being put to the test with their new one. Lots of coding professionals knew ICD-9-CM backwards and forwards, just as college students might have studied Spanish in high school or Italian in college.

Both groups eventually met their respective judgment days. For coding professionals, that day was October 1, 2015—the day ICD-10-CM/PCS went live. For college students, it was the day they hopped on a plane bound for Florence. Meanwhile, parents and health information management (HIM)/coding directors had to stand by and hope their time and tuition were worth it.

While the Italian students have empty wine bottles, report cards, and stamps on their passports as evidence of their hard work, coding and HIM directors are still in the process of evaluating whether their years of experience and preparation resulted in a successful transition to ICD-10-CM/PCS, and they will continue to re-evaluate for years to come. To supplement the general observations of ICD-10 coding competence by those in the field, there is current and future research being done to identify the weaknesses and successes in the transition to date.

The industry is clamoring for coding benchmarks against which it can measure coding professionals' performance, similar to benchmarks widely available during use of ICD-9-CM. Some benchmark metrics do exist, with others in the works for the near future.

For example, the March 2017 issue of the *Journal of AHIMA* featured the results of an ICD-10 inpatient productivity study conducted by Ciox Health and the University of Pittsburgh's Department of Health Information Management, School of Health and Rehabilitation Sciences.

Additionally, this summer, Dale Kivi, MBA, vice president of business development at FutureNet, and the AHIMA Foundation will have another chance to evaluate more broadly whether the industry has finally achieved its new coding normal. Kivi will lead the foundation's study on ICD-10 productivity and accuracy, which is slated for publication in January 2018.

"The intent of the study is not to beat up on any single approach, but to establish benchmarks now that the dust has settled for the ICD-10 transition," Kivi says.

The results of both sets of research should provide valuable insights as providers and coding directors work to meet established industry standards and decide if their workforce is performing optimally. Meanwhile, insight from those directly involved in the transition shows promising progress.

Coding Vendor Marketplace in Flux

Before and after the ICD-10 implementation, many in HIM were comparing the switch to "Y2K"—which refers to the minor hysteria that computers the world over would malfunction because they weren't ready to handle the switch from 1999 to 2000, on January 1, 2000.[1] The panic turned out to be for naught, but Y2K became shorthand for frenzied technological panic.

Dale Kivi, MBA, vice president of business development for FutureNet, says that Y2K-like worries about coding productivity in the immediate aftermath of the ICD-10 transition drove many providers to over-invest in outsourced coding services. That environment of fear created a seller's market for coding vendors, Kivi says. Some coding vendors were signing contracts for as much as $100 per hour per coder as long as they could deliver qualified staff to get the job done, and offering coding professionals $5,000 signing bonuses.

Within a year of the ICD-10 transition, coding productivity levels started to return to ICD-9-CM levels and providers started to cut way back on the volume of coding they outsourced. As a result, coding professionals who left hospitals to earn more with vendors started to see their pay decrease. Coding professionals who were earning $50 per hour at the height of the transition were earning $30 or $25 per hour a year later, Kivi says.

"To me, the dynamic for coding in the marketplace has changed from a seller's market to a buyer's market because the productivity under ICD-10 has settled down considerably and there's no more fear of the sky falling," Kivi says.

For hospitals this means that the going rate for a highly qualified, trained coding professional is dropping—similar to how the price for transcription dropped when voice recognition software came out and transcription vendors started consolidating.

Kivi expects to see HIM managers do the same thing for their on-staff coders that they did for transcriptionists—and that's to do their best to protect their coding professionals' jobs.

In an op-ed Kivi wrote in *For the Record* that highlights the upcoming AHIMA Foundation study, he predicts that the consequences of the seller's market is that the "vendor struggle for survival will cause the coding market recalibration to happen at a greatly accelerated pace… The best advice for coders is to stay focused on the details. Accuracy will always be king… Department managers and directors need to run a tight ship and soon they will have national standards to measure against."[2]

By keeping productivity up and monitoring the impact of coding on revenue, HIM directors will help justify HIM managers' decision to keep coding in house, Kivi says.

"Obviously I work for a vendor but I'm fighting for coders and HIM people. The way to protect those roles within the organization is going to come down to the value that they're [coders and CDI specialists] able to deliver," Kivi says.

What is Coding's New Normal with ICD-10?

With 20 months of ICD-10-CM/PCS coding now under coding professionals' belts, the new code system is likely starting to become more familiar. And as coders become more comfortable using ICD-10, coding efficiency and accuracy have also improved. But just what is the "new normal" when it comes to coding accuracy and productivity in this post-ICD-10 implementation world?

Many providers, including Bon Secours Health System in Virginia and the Cleveland Clinic, met their goal of returning to a 95 percent productivity rate within the first year of the transition, according to organization officials. The 95 percent or better threshold is used by many providers as evidence that they've returned to pre-ICD-10 productivity.

Indra Osi, RHIA, CHP, enterprise director, hospital coding and reimbursement at the Cleveland Clinic, says that while productivity and accuracy rates went "out the window" during the early go-live period, rates have now returned to 95 percent or better at her organization. Osi kept an eye on productivity and accuracy by conducting a series of external and internal audits. External audits took place in October, November, and December 2015, and again in April and August 2016.

"I think over the course of those reviews we saw a steady increase or grasp of content and an improvement in our accuracy scores from month to month. I think April was probably our best month. We actually returned to a greater than 95 percent accuracy level," Osi says. "We had some intensive review and training on the additional 2016 codes. We wanted to make sure everyone felt comfortable with coding those new diagnoses codes. I think there's also opportunity now that the dust has settled. We're starting to understand how important specificity is, in terms of 'painting a complete clinical picture,'" Osi says.

Chrystel Barron, RHIT, CCS, CHTS-TR, works with Osi at the Cleveland Clinic as the health system's coding education instructor. She helps prepare students fresh out of RHIT programs without previous coding experience, and also coaches the Cleveland Clinic's existing coders on coding updates and problem areas.

"There should still be a learning curve since we learned ICD-10 from scratch, so we're still getting used to that. We're still always waiting for new *Coding Clinics* to come out for things we might have questions on," Barron says.

Fear of the new code set prompted some older coders to retire early, says Suzanne Drake, RHIT, CCS, coding quality and RAC coordinator at Bon Secours Health System. But the coders who stuck with it were pleasantly surprised. "After the transition, people were like, 'Whoa, this is OK, I can do this!' I think they're very comfortable now," Drake says.

Drake uses a formula to determine whether her coders are maintaining acceptable productivity standards—while also aiming to meet the industry standard of 95 percent productivity. Her formula is based on the average length of stay.

"I can't say we've recovered all the way, but coders are still producing between 15 to 18 records per day on average, so we're doing very well," Drake says.

Another indicator of the new normal, according to Drake, is accounts receivable rates, and making sure there aren't delays there. "Once we knew we no longer had a backlog, we knew we were on the right track," Drake says.

She adds that another sign that things were returning to normal was when she was able to cut back on contract coding staff—which happened in October 2016—one year after the transition.

One of the most comprehensive looks at productivity and accuracy in ICD-10 came from the Ciox Health and University of Pittsburgh study on coding that analyzed coding times on over 165,000 inpatient cases discharged between March 2016 and July 2016.3 The investigators found that the average coding time in minutes per record in October 2015, when ICD-10 first went live, was 43.68 minutes. By July 2016, average coding time decreased to 37.45 minutes per record. What's more, researchers observed consistent improvement of ICD-10 coding productivity over time in terms of the number of coded records and average coding time. Productivity continued to trend steadily towards the ICD-9-CM baseline, according to the study.

Scot Nemchik, CCS, vice president of coding education at Ciox Health and one of the study's investigators, says that it's important to note how quickly coding professionals recovered from the implementation of ICD-10.

"What was remarkable is how quickly it [coding in ICD-10] returned into an ICD-9 baseline. As far as we studied it, it didn't quite get back to ICD-9, but it was very linear, improving by the same clip each week. In addition to recovery, coders got faster in ICD-10," Nemchik says. "What we determined by looking at other related metrics was that it didn't come at the cost of inaccuracy, or at case mix, which is a big indicator in short-term acute care. It was really cool to see that getting faster while CMI trended up a little bit. They weren't going faster and causing problems."

Nemchik adds that he would have loved to continue the study over a longer period of time to see if there's a plateau in coding productivity that presented itself data-wise. "I don't think we've plateaued yet. I think there's still room for improvement there," he says.

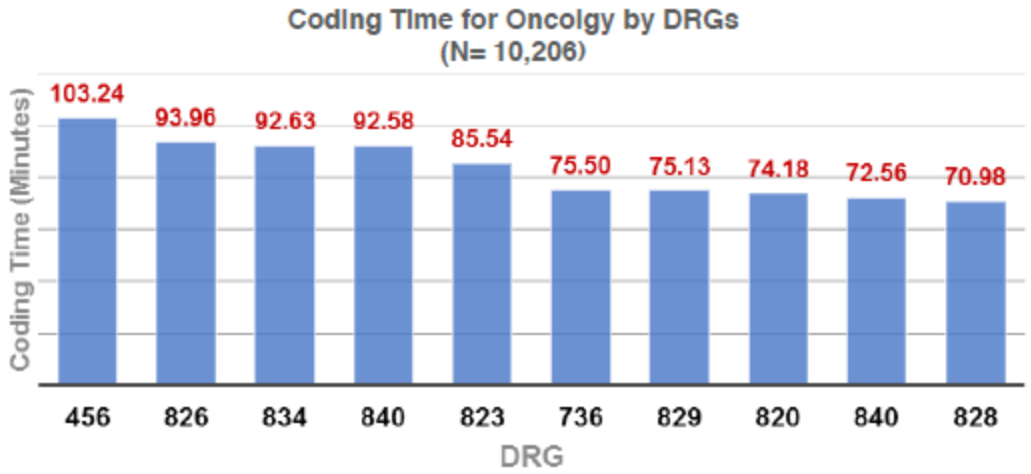
To maintain progress in coding accuracy and productivity, one solid best practice is to continually audit charts, says Zahraa Alakrawi, MS, HIS, a coauthor of the Ciox-University of Pittsburgh report.

"I think it's important to conduct internal and external audits. It's always helpful to have an outsider review your data. And then it's really important to monitor coding accuracy and productivity based on advanced or sophisticated coding metrics that's linked to clinical documentation," Alakrawi says. "I think it's going to be more helpful to make decisions based on objective data."

Focus on Coding Productivity Ranges, Not Time per Chart

This chart shows the average coding time for several different cancer-related charts. The full results of the study were published in the March 2017 issue of the *Journal of AHIMA*. One of the co-authors of the study, Zahraa Alakrawi, MS,

HIS, warns coding managers not to place too much emphasis on measures such as the "number of charts coded per hour," as an indicator of productivity. Coding time per chart can vary dramatically across specialties, especially when allowing for factors such as length of stay and case mix index (CMI). Rather than having a goal of 1.6 charts per hour, Alakrawi recommends aiming for a range rather than a set number, due to multiple variables.



456	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W MCC
826	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W MCC
834	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W MCC
840	LYMPHOMA & NON-ACUTE LEUKEMIA W MCC
823	LYMPHOMA & NN-ACUTE LEUKEMIA W OTHER O.R. PROC W MCC
736	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY W MCC
829	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC W CC/MCC
820	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W MCC
840	LYMPHOMA & NN-ACUTE LEUKEMIA W MCC
828	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W/O CC/MCC

The highest coding times corresponding with oncology were the following (in order):

1. DRG 456 (SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W MCC) with an average coding time of 103.24 minutes.
2. DRG 826 (MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W MCC) with an average coding time of 93.96 minutes.
3. DRG 834 (ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W MCC) with an average coding time of 92.93 minutes.

Outstanding Challenges in ICD-10

The one place that productivity still hasn't returned to previous levels is PCS coding—which has been very similar to learning a brand new language, even for experienced coders.

"For PCS and the way it's structured, it's completely different. Just knowing ICD-9, for experienced coders, isn't helpful in learning ICD-10-PCS. It's almost like having an outpatient coder that only does CPT do PCS. It was almost equivalent to that," Barron says.

Osi concurs, adding that she keeps her eyes peeled for coders who are still struggling to apply ICD-10-PCS guidelines and assign codes. "Some of the work that our quality education coordinators do includes internal reviews. They will address that and share information with Chrystel, and she develops an education piece on it," Osi says. "Or they will actually create education themselves and work one-on-one with the coder whose work they are reviewing."

Cleveland Clinic's world-renowned reputation means that its coders see some of the least common and complicated procedures in the country. For example, Barron says there aren't enough adequate codes for procedures such as a uterus transplant and face transplants—however, the codes to capture procedures such as hand transplants were recently added with the upgrade to ICD-10.

As far as challenges go, physician coding is also still difficult for many with ICD-10-CM, mainly due to the increased specificity required by ICD-10-CM that in turn requires more physician documentation—and that can often be lacking in physician notes.

Osi sees this conundrum as well, and says documentation remains an ongoing challenge. She speculates that improving documentation is a goal of every hospital in the United States.

"The biggest issue is the documentation. We right now have a documentation improvement initiative that is one of the goals for the organization this year—to try to improve documentation so that our records reflect the acuity of the patient and the treatment that patient receives," Osi says.

All physicians should be motivated to improve their documentation, but at the Cleveland Clinic's top rated Heart and Vascular Institute (HVI), physicians, coding professionals, and clinical documentation improvement (CDI) specialists are particularly motivated to follow coding and documentation guidelines to keep their spot in national rankings.

"We've been partnering with them and helping them develop some of those basic documentation tenets, things that are easy to remember so that the physician will document it and won't have to deal with a query later on," Osi says. "So I think there's opportunity to help our physicians avoid queries."

Notes

1. Rothman, Lily. "Remember Y2K? Here's How We Prepped for the Non-Disaster." *Time*. December 31, 2014.
2. Kivi, Dale. "Bursting the ICD-10 Cost Bubble." *For the Record* 29, no. 1 (January 2017): 5.
3. Alakrawi, Zahraa M; Valerie J.M. Watzlaf; Scot Nemchik; and Patty Thierry Sheridan. "New Study Illuminates the Ongoing Road to ICD-10 Productivity and Optimization." *Journal of AHIMA* 88, no. 3 (March 2017): 40-45.

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