

# ICD-10 IS NOW. CHANGE WITH CONFIDENCE.

SEPTEMBER 2015

## Positive signs in early results — reasons for optimism regarding ICD-10 productivity

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One of the biggest unknowns of the ICD-10 implementation is the effect on coding productivity. Experts have estimated the expected loss in productivity post-ICD-10 as HIM professionals climb the learning curve, and studies of other countries' post-ICD-10 loss unveil valuable insights. One of the best studies on time loss published in 2014 revealed that participants took 69.4 percent more time to code in ICD-10 compared to ICD-9.<sup>1</sup> Although that percent is sure to improve over time, HIM managers and revenue cycle leaders are rightfully concerned by the implications of that level of impact.

As the industry gains experience with ICD-10 and new technologies are implemented, early data shows optimistic trends in the willingness of coders, providers and HIM professionals to train for and embrace ICD-10. Data from more than 26,000 dual-coded cases are encouraging and offer evidence that might start shifting expectations around ICD-10.

### **More codes are available, but your core set will remain small and targeted.**

Expanded code sets in ICD-10 provide the ability to capture greater specificity than ICD-9. Critics have pointed to this expansion as an overwhelming burden on providers and expense to the industry. ICD-10 supporters have compared the ICD-10 code set to an unabridged dictionary of English that contains vastly more words than any person would commonly use. Additionally, results from large-scale ICD-10 native coding using computer-assisted coding (CAC) reveal a small percentage of ICD-10 codes are commonly used.

Five times as many diagnosis codes exist in ICD-10 compared to ICD-9. Across a set of more than 26,000 inpatient and outpatient cases, roughly 5,400 different ICD-9 diagnosis codes were used. For that same set of cases, 8,200 different ICD-10 diagnosis codes were used. This difference represents growth of only one-and-a-half times, as compared to a potential growth of five times.

Applying the 80/20 rule, the results are even more startling. Roughly 750 ICD-10-CM codes cover 80 percent of coding occurrences. This pattern also holds for PCS codes, where roughly 600 ICD-10 procedure codes cover 80 percent of coding occurrences. This data confirms that a small portion of the ICD-10 code set will be used in practice.

The number of codes reported per case is the same in both ICD-9 and ICD-10. It's no secret that the more codes applied to a case, the longer it takes to complete the case, regardless of whether coders use new technology like CAC or standard approaches using references or look-up tools. Data from ICD-10 early adopters show no change in the number of diagnosis codes for both inpatient (12.5) and outpatient (four) cases. For procedure codes, the average inpatient codes per case held steady at slightly over two codes per inpatient case. These results indicate that overall no additional effort is needed due to more codes per case.

Time studies from CAC users indicate positive results with ICD-10. Many providers have invested in technologies like CAC to improve the productivity of coding teams and mitigate the impact of ICD-10. However, studies estimating the impact of ICD-10 typically have not factored in new technology. Early-adopter results have begun to fill this gap, and the first results are encouraging. In a recent presentation at the AHIMA Data Summit, a large pediatric facility that uses CAC reported no increase in coding time for ICD-10. This test was performed using Optum Enterprise CAC that assigned ICD-10 codes using natural language processing (NLP) and executed by HIM staff experienced with both the CAC tool and ICD-10. The test was comprised of both inpatient and outpatient cases, including same-day surgery and observation encounters. Despite these results, the facility is planning for extra time for their coding staff after ICD-10 implementation to place appropriate documentation queries.

### **The transition to ICD-10 is an opportunity for optimism.**

Provider organizations that have invested in preparing for ICD-10 can feel confident their investments will pay off. Key factors to consider today are:

- ICD-10 training for HIM staff remains critical. Although a small sample size, the 2014 time study demonstrated the difference in productivity between coders with basic training in ICD-10 and those with more advanced training.<sup>1</sup> Coders with basic training were nearly 30 percent slower than coders with advanced training.
- The patterns of ICD-10 code usage reflect the underlying patient mix of problems and treatments with a relatively small number (compared to the overall code set) of diagnoses and procedures making up 80 percent of code assignments.
- With more experience, productivity should continue to improve, especially for those organizations that can optimize their use of new technologies. Time studies by ICD-10 early adopters are a look ahead to the potential of what coder expertise and technology working together can deliver.

#### **References:**

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