Computer-Assisted Coding Technology Improves More Than Productivity

3M

Produced by

xtelligent HEALTHCARE MEDIA

Introduction

In 2012, the United States Department of Health and Human Services announced the transition from ICD-9 to ICD-10 coding guidelines. The original rule set a compliance deadline of October 2013, by which time all organizations were required to meet compliance standards for the new guidelines. Challenges preparing for this shift and abiding by privacy regulations pushed the deadline to 2014 and then again to Oct. 1, 2015.

At first glance, the industry had ample time. But many organizations needed to create dedicated teams to help develop and deploy transition plans to move between the two coding systems. Strategies for compliance, conversations with partners about the transition's impact, and training coders needed to take place before the nationwide rollout.

The goal of the survey was to understand the benefits health information management (HIM) and revenue cycle leaders saw to CAC technology for inpatient and outpatient coding.

The ICD-10 update contained 141,747 codes. According to the Centers for Disease Control and Prevention, a total of 69,000 conditions and almost 72,000 procedures could now be documented. More specific and accurate codes enable smoother transitions of care as well as allow payers to provide more accurate reimbursement, alleviating the burden of deciphering unspecific codes. The specificity drastically increased the documentation burden on providers and coders to maintain consistency and accuracy.

However, achieving a successful conversion was far from easy. Many organizations turned to computer-assisted coding (CAC) solutions to ease the transition burden. The software uses natural language processing technology to capture patient information and generate appropriate medicals codes necessary for reimbursement. Healthcare organizations could then focus on rolling out technology that would make the transition more seamless rather than retraining their coding, clinical documentation improvement, education, and auditing teams.

After over five years since the ICD-10 official rollout, CAC technology is being used more extensively. To understand the technology's impacts beyond coding productivity, 3M commissioned Xtelligent Healthcare Media to conduct a survey of hospitals and health systems. The survey's goal was to understand the benefits of CAC technology to health information management (HIM) and revenue cycle leaders at these organizations.

HIM titles include

- HIM coding director
- Corporate coding manager
- Division coding manager

Revenue cycle titles include

- Revenue cycle manager
- Revenue integrity director
- Chief financial officer

Beyond the transition to ICD-10, CAC technology has broad implications, including improving productivity and key quality metrics, reducing the need for outsourcing and rework claims, and promoting financial success. Continued use of the technology

can ensure the realization of these benefits and prepare organizations for any future changes in coding guidelines.

Coding Accuracy

Coding productivity during the ICD-10 transition served as the impetus for healthcare organizations to implement computer-assisted coding technology. Coding accuracy became the criteria for selecting a CAC solution.

Technology required a way to define accurate coding. Improved medical coding helps limit the number of rework claims and thus the burden on hospitals and health systems to reassess charts and codes for certainty.

Most survey respondents (73%) defined coding accuracy as 90 percent or more accuracy in their coding claims. Fewer (33%) operated according to a stricter definition of accuracy, seeking 95 percent or more accuracy of claims.

These standards are high, but these thresholds must be lofty considering the impact of coding accuracy on reimbursement levels. A growing body of research indicates that coding practices continue to evolve years after the rollout of ICD-10. Therefore, accuracy is a moving target for coders to meet as a result of ever-changing guidelines and practices.

Rather than retrain every coder as guidelines and best practices change, CAC promotes adaptability. The system can be adapted, adjusting to novel requirements with various configurations and setting adjustments.

Improved Productivity

CAC solutions have improved productivity. Since adopting CAC, 68 percent of all survey respondents report increases in productivity. This was not limited by the amount of time organizations have been employing CAC, as even those using the technology for only one to two years report improved productivity.

88% of those using CAC for five or more years report an increase in productivity.

Responses demonstrate a positive correlation between increases in productivity and familiarity with CAC. Thirty-nine percent using CAC for one to two years report increased productivity while 88 percent with five years of CAC use report the same.

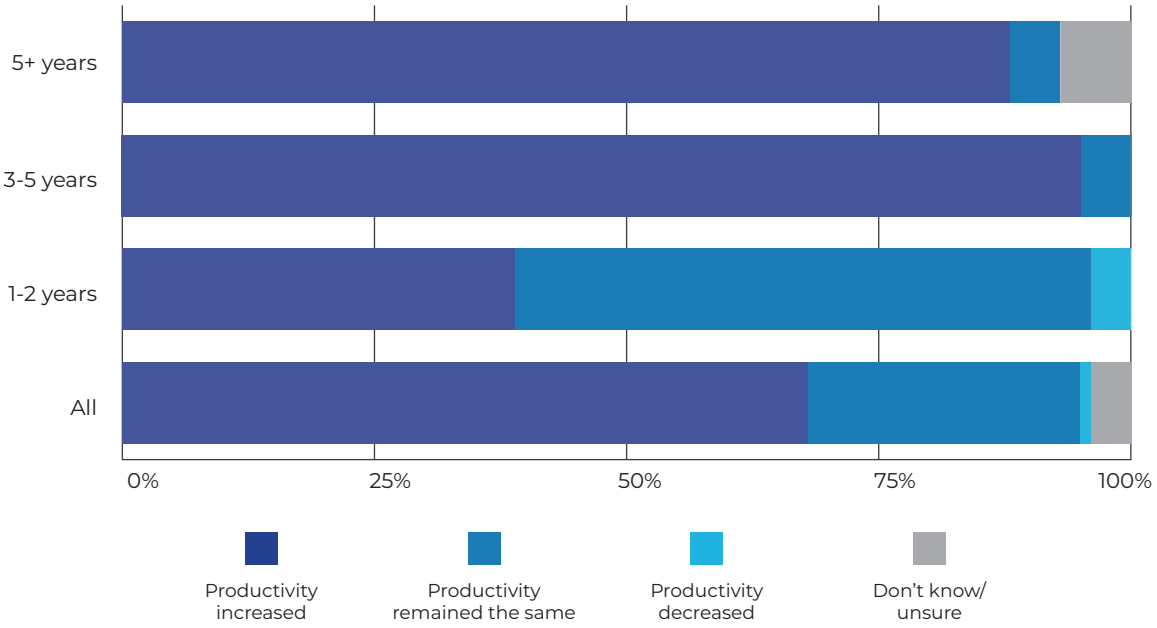
When productivity is improved, the improvement is notable. Among all respondents, 48 percent indicate increases between 11 and 20 percent. Another 36 percent note productivity increases between 21 and 30 percent.

The longer an organization uses CAC, the more pronounced technology's impact on productivity. Forty-four percent using CAC solutions for one to two years state productivity gains between one and ten percent while half (50%) describe improvements between 11 and 20 percent.

Organizations using CAC for three to five years relate more marked improvement: 83 percent report between 11 and 20 percent increases in productivity; 13 percent, between 21 and 30 percent.

Superusers show the highest productivity rate as the majority (82%) report productivity gains between 21 and 30 percent. An additional eight percent indicate an increase in productivity between 11 and 20 percent.

How did productivity at your organization change after adopting computer-assisted coding?



Improved Quality Measures

Aside from productivity, CAC solutions have a significant impact on quality. Unreliable data to inform quality metrics results in unreliable quality reporting. Solutions that eliminate the garbage-in-garbage-out data challenge simultaneously improve quality.

The ability to capture more accurate codes and query missing data advances when CAC technology is leveraged. In fact, 65 percent of all respondents report that CAC helps improve quality measures.

Nearly half of all survey respondents highlight improvement in every quality metric the survey investigated:

- Major and complication or comorbidity (MCC): 46 percent
- Patient safety indicator (PS): 46 percent
- Hospital-acquired condition (HAC): 43 percent
- Complication and comorbidity (CC): 41 percent

Superior coding abilities translate into cleaner codes, giving organizations the ability to focus more on quality metrics and improve the accuracy of these measurements.

Reduced Need for Outsourcing, Rework, DNFB

The need for outsourcing is significantly reduced when hospitals implement CAC technology. Sixty-five percent of all respondents report decreased outsourcing post-CAC rollout.

The longer an organization uses CAC, the greater the likelihood they will experience declines in outsourcing.

43% of new CAC users report a decline in outsourcing. Those who have been using CAC for over 5 years show a 74% reduction in outsourcing.

Even organizations having only recently implemented CAC solutions report a decrease in outsourcing needs. However, those having implemented CAC solutions at the beginning of the ICD-10 transition report a more significant decline, 74 percent compared to 43 percent.

Longevity and experience with CAC correlate to fewer rework claims. Seventy percent of respondents report decreased rework claims. Only 28 percent of those having adopted CAC technology over the last two years indicate the same.

Meanwhile, organizations with three to five years of CAC use see a drastic improvement, as 89 percent state decreases in rework patient claims. Once organizations exceed five years of CAC use, 90 percent report fewer rework patient claims.

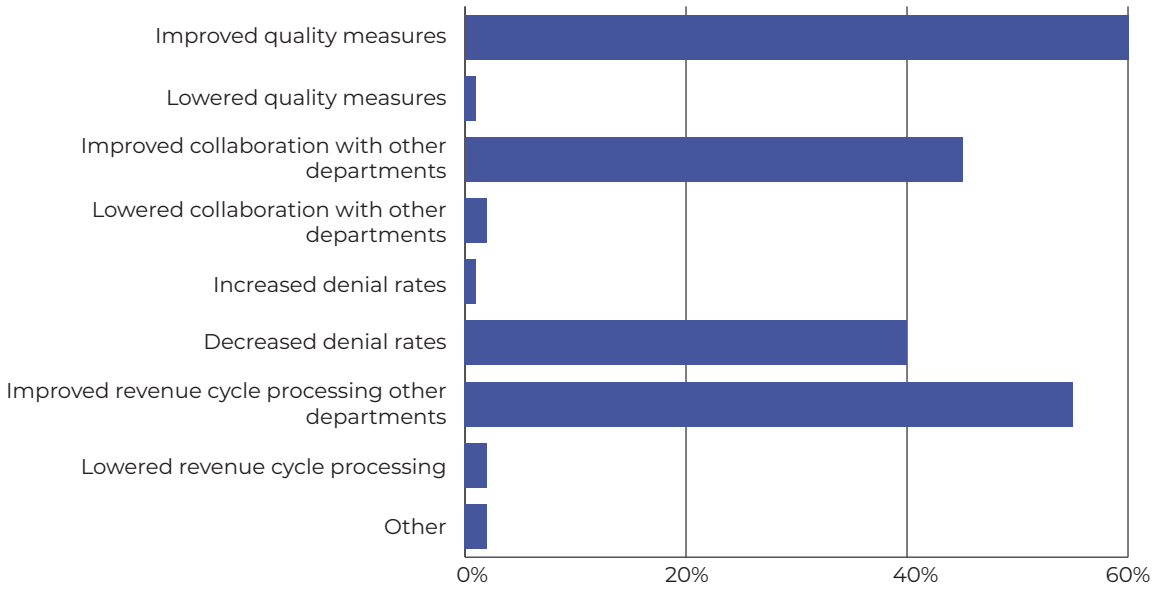
Even recent adopters of CAC technology report a drop in rework claims. But the reduction depends on the duration of the organization's CAC use, emphasizing the long-term impact of the solutions.

A similar pattern is seen with discharged not final billed (DNFB). Overall, 57 percent of all respondents report continued decreases in DNFB since beginning use of computer-assisted coding. Only 21 percent of those using CAC for one to two years indicate the same while 38 percent report no change.

When a hospital or health system uses CAC solutions for an extended period of time, it tends to report more significant improvements in coding speed and quality. Only two percent of those having implemented CAC report no change in their DNFB post-transition. Meanwhile, nearly three-quarters of those with over five years of CAC use (74%) indicate continued declines in DNFB volume.

Clearly, more experience using CAC solutions raises the probability that an organization will see a return on their investment in the technology, improving more than coding productivity.

Aside from productivity, how has computer-assisted coding impacted your organization?



Improved Financial Success

The financial impact of CAC technology is challenging to capture. But 54 percent of all respondents report improved revenue cycle processing with the use of CAC. Rolling out this solution improves internal capabilities and leads to reductions in total rework as well as improved quality metrics and value-based payment reimbursement. Organizations can calculate DNFB pre- and post-CAC adoption to demonstrate the financial impact of the technology.

Across organizations, there is a general agreement that computer-assisted coding will contribute to future financial success. Thirty-eight percent of all respondents agree, and 39 percent strongly agree that CAC would enable an organization's financial success going forward.

92% of organizations using CAC solutions the longest agree or strongly agree that CAC will enable financial success going forward.

Even those having recently implemented CAC solutions (one to two years) are optimistic about CAC's impact on financial well-being: 31 percent agree and 10 percent strongly agree.

This agreement continues to grow the longer an organization leverages a CAC solution. Fifty-two percent of those using CAC solutions for three to five years strongly agree the technology will help improve the organization's financial success and another 48 percent agree.

Organizations using CAC solutions the longest see the most significant impact on financial success as nearly three-quarters (74%) strongly agree and 18 percent agree with the statement.

While the financial impact of CAC solutions grows over time, even recent adopters of the technology see a positive return on investment from adopting the technology.

Conclusion

CAC technology was originally implemented by hospitals and health systems to help with the transition from ICD-9 to ICD-10. Five years later, this technology has grown beyond its initial purpose for the better. The benefits of CAC adoption have shown to have positive effects on auditing, quality, and finance.

Not only have CAC solutions improved productivity and coding accuracy, but they have also enabled hospitals to improve quality metrics while reducing the need for outsourcing. In turn, these solutions have had a positive financial impact on finance. Many leaders believe CAC will continue to positively impact the organization's financial success in the future.

The long-term impact of CAC technology across organizations will continue to deliver a return on the initial investment beyond productivity. CAC has implications across a hospital or health system and will continue to improve the financial health, quality, and collaboration of organizations.

Produced by

xtelligent HEALTHCARE MEDIA

About 3M

For more information on how 3M software and services can assist your organization, contact your 3M sales representative, call us toll-free at 800-367-2447, or visit us online at www.3m.com/his.