The True Costs of Coding Errors:
How AI Turns Challenges Into Opportunities

Accurate medical coding is a critical goal for health systems. Many strive for 95% overall coding accuracy, though true accuracy often falls short. With so many possible codes – for example, ICD-10 alone has about 70,000 diagnoses – it's easy for mistakes to happen despite the best efforts of dedicated professionals. Unfortunately, inaccurate coding does more than cause administrative headaches – it exerts a financial toll on organizations in a myriad of ways.

Few providers fully comprehend the true enterprise-wide costs associated with coding inaccuracies. Aside from slowing down the revenue cycle, coding mistakes prevent proper reimbursement and result in inaccurate, incomplete patient records. But what options do providers have for reducing them?

One increasingly common choice is autonomous coding. Many organizations are turning to the latest generation of AI medical coding technology for its ability to markedly reduce errors, enhance accuracy, and improve financial outcomes.

However, before examining the role of AI in improving the accuracy of coding, it is crucial to understand how coding errors negatively impact an organization's financial health and operational efficiency. This understanding illuminates the full scale of the problem and the stakes for implementing effective programs to improve accuracy.

The True Costs of Coding Errors

Coding errors have far-reaching consequences, but there are three major categories for providers to monitor: administrative burdens, lost revenue, and disrupted cash flow.

Administrative Burden

The costs of administrative tasks are shockingly high – in 2022, the healthcare system spent $82.7 billion on them alone, as reported by RevCycle Intelligence. When coding errors arise, they create administrative costs in at least four ways: labor time spent on review, managing denials, training, and clinician impact. First, catching and correcting coding errors requires close review by medical coders and administrative staff. Factor in the burden of managing coding-related denials – according to a Premier survey, providers waste $10.6 billion yearly on fighting denials – and labor and administrative overhead continue to escalate.

Providers also have to invest sizable resources in ongoing training and education to keep coding staff up to date with guideline changes. On the clinician side, excessive administrative burden creates friction and contributes to burnout among staff, resulting in higher turnover rates with financial ramifications. When physicians are busy keeping up with administrative duties, they have less time to dedicate to patient care. In this way, coding errors amplify administrative costs and exacerbate staff stress, diverting attention from patient care and lowering service quality.

Lost Revenue

Coding errors are a major cause of denied claims, resulting in lost revenue, or otherwise leaving money on the table. The American Medical Association found that denials represented 11% of all claims in 2022, corresponding to 110,000 unpaid claims for an average-sized health system. While overcoding can contribute to coding-related denials, undercoding is a frequent behavior that causes providers to miss out on appropriate revenue.

For example, undercoding occurs when coding results understate the full extent of reimbursable services performed. Imagine that a physician conducts a comprehensive examination in the Emergency Department and manages multiple complex conditions, but the coding team only bills for a low-acuity evaluation and management (E/M) code. This behavior results in lower revenue than appropriate, as the claim fails to represent the totality of reimbursable services rendered according to E/M guidelines.

Cash Flow Disruption

Inaccurate coding disrupts cash flow, making it more difficult for provider organizations to manage their finances effectively. Reimbursement delays start to pile up when claims are frequently denied or require resubmission due to coding errors. This backlog then strains the organization's liquidity, pushing cash receipts further into the future. At the same time, increased working capital costs, exacerbated by recent interest rate conditions, put more pressure on finance teams. In this way, cash flow disruptions – stemming originally from coding errors – can severely impact operations.

Enhancing Accuracy With Autonomous Coding

Given the myriad ways that coding errors drive financial challenges for providers, how are forward-thinking leaders considering technology to help? Many executives are catching on to the benefits of AI for improving coding accuracy and other revenue cycle outcomes. For example, a Bain and KLAS survey found that 58% of healthcare leaders have either implemented an AI adoption strategy or are in the process of creating one.

In particular, Bain and KLAS found that revenue cycle management was the top priority for new technology. By improving accuracy, technology such as autonomous coding directly mitigates the financial repercussions of coding errors.

Here are four concrete ways in which autonomous coding enhances accuracy and, consequently, financial performance:

1. **Reduced Costs:** AI coding is significantly less expensive than manual coding (typically 30-50% lower cost on a per-encounter basis), even compared to off-shore operations, while delivering higher accuracy. The increased accuracy of AI coding – from training models on hundreds of millions of high-quality coded encounters – offers further cost savings by reducing time and effort spent on lengthy and complex corrections along with other forms of administrative overhead.

2. **Improved Revenue Capture:** Increased coding accuracy with AI is especially important for E/M coding, ensuring that all services rendered are appropriately documented and billed for proper acuity leveling. Autonomous coding technology

can also capture procedures that human coders might overlook. Both of these effects can lead to higher relative value units (RVUs), where appropriate. The quality of autonomous coding is particularly beneficial for physicians who are compensated based on RVUs, as accurate coding directly impacts their personal income.

3. **Reduced Denials:** Autonomous coding improves accuracy and compliance, consequently minimizing coding-related denials. Reducing denials makes the claims process run more smoothly and frees up resources, giving staff time to spend on managing high-value encounters. Shorter delays enhance RCM, leading to a more stable and predictable financial environment. Depending on the configuration, AI coding may also provide insights into common reasons for denials, empowering providers to address these issues upstream.

4. **Enhanced Consistency and Continuous Improvement:** AI coding approaches each encounter uniformly to ensure consistent application of coding guidelines across all cases, leading to more predictable and reliable outcomes for providers. One large advantage that autonomous systems have over human coders is the ability to instantly adapt to new coding guidelines, such as the latest CMS-HCC-V28 updates. Historically, guideline changes take months for revenue cycle and coding teams to adopt, increasing organizational training costs. But with autonomous coding, the technology immediately implements coding guideline updates and payor rules, helping providers to remain compliant and up to date.

These impacts are not theoretical. Take the example of ApolloMD, a nationwide physician group serving millions of patients at more than 100 hospitals and health systems across the US. By bringing on autonomous coding, the organization has improved coding accuracy and quality, reduced costs, and relieved administrative burdens for clinicians. Many organizations are pursuing similar projects across medical specialties to reduce their enterprise-wide costs stemming from coding inaccuracies and to set themselves up for long-term financial and operational stability.

Turn Coding Challenges Into Opportunities

From an enterprise-wide perspective, the true costs of coding errors are undeniable: They result in administrative burdens for staff, lost revenue, and disrupted cash flow. Enhancing coding accuracy – reaching or exceeding the typical 95% goal – is a worthy initiative that delivers benefits across the organization.

To overcome the practical challenges that have historically impeded efforts at boosting accuracy, the latest generation of coding automation technology offers an exciting advantage. Providers incorporating autonomous coding into their revenue cycle organization solve the root causes of coding errors and thereby unlock reduced costs, improved revenue capture, and reduced denials. By implementing AI, billing and coding leaders turn coding challenges into opportunities for growth – bolstering their financial future.

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