Improving Accuracy in Your Revenue Cycle by Moving Interventions Upstream

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Accuracy counts for so much in the medical industry. It starts with making accurate diagnoses and finding effective therapies that improve outcomes for sick patients. Accurate documentation of the patient’s clinical story is also imperative, not only to the longitudinal care of each patient but also to the financial health of the provider organization.

Accurate documentation is the foundation to abstracting accurate diagnosis, procedure, and charge codes. These codes summarize the clinical story of each patient encounter and they drive the organization’s revenue streams.

Increasing Complexity

Reimbursement rates for inpatient services are impacted by numerous regulatory elements well beyond a single MS-DRG used to reflect an inpatient care episode. Established over the years as part of value-based payment methodologies, there are many more variables involved now, including: the more refined APR-DRG; HCC risk adjustments; Quality Indicators (QI); hospital acquired conditions (HACs) and infections (HAIs); the MIPS Score from the Medicare Access and CHIP Reauthorization Act (MACRA), and performance metrics for risk sharing models like ACOs and others.

All of these elements influence how payers evaluate and reimburse for care delivered to patients under their coverage. This means providers must adhere to specific criteria when coding and submitting bills, further increasing the barriers to optimizing financial performance in an already complex process.

To add to the complexity, provider organizations often establish different departments, usually with independent governance, to monitor and manage the various sets of performance metrics. A clarification in documentation that improves one metric might also help on others, but the visibility into this is limited because of organizational structure. Optimizing one variable without confirming the corresponding change on another is a chronic issue impacting the documentation and coding processes.

Today’s Practice: Post-Encounter Auditing

Many providers realize this phenomenon, but their primary approach to confirming accuracy is through post-encounter coding and auditing. Why is this so? Quite simply, concurrent focus on coding accuracy and clinical documentation prior to discharge can feel like aiming at a moving target; trying to track multiple variables managed by disparate systems, all while on a tight deadline to get bills out the door.

Tomorrow’s Practice: Pre-Bill Auditing

What could help providers monitor and manage accuracy in coding and quality measures earlier in their billing cycle? The solution is a system that leverages advanced technology based on machine learning to make probabilistic estimates of accuracy. These estimates not only deliver visibility for all managers involved in revenue and quality; they also help to focus the work of the intervention teams on high impact cases. The benefits to the revenue stream are enormous. A virtual integration of documentation improvement, coding of diagnosis and procedures, and estimating performance metrics can help organizations overcome the technical and operational barriers that impede efficient and accurate coding.

Before a hotel’s guest even checks out of their room, they already have an accurate, itemized bill. Imagine the impact on your organization’s financial and clinical performance if you could generate an accurate bill prior to discharge? How could you manage such a feat?

The answer is to move your accuracy interventions much further upstream in the process.
Capturing the Story: Coding is a Complex Challenge

Drawing out and abstracting the clinical story of a patient encounter is a fine art. Only an experienced, skilled medical coder can assess the natural language input from clinical staff, the supporting clinical data, and patient- and condition-specific details to produce a coded case that accurately reflects the patient’s treatment and the myriad elements that impact quality measures and revenue capture.

Indeed, a coder might correct one issue — adding a Present on Admission (POA) indicator, for example — only to realize that it dramatically changes the DRG. After a few code changes followed by efforts to trace and address the subsequent impact on related variables, it can feel like playing a game of whack-a-mole. It's frustrating for coders to continually review, adjust and weigh these moving variables, especially when you consider the pressure to complete cases on a strict deadline.

There's also the problem of insufficient and conflicting documentation, which leads to codes that do not tell the whole story. Is a specific condition acute or chronic? When a coder suspects there may be missing information or clarification is needed, a physician query can be issued. However, if coding doesn't begin until after discharge, the chance of getting additional clarification is greatly diminished, thus hindering the possibility of the record truly reflecting the acuity of care delivered and capturing optimal revenue.

Many had hoped that computer-assisted coding (CAC) would help deliver quantum leaps in coding effectiveness - but real-world data has shown that CAC simply isn't the silver bullet it was promised to be.

CAC Alone isn’t the Answer

Some attempts have been made to bring computing power to bear when capturing the clinical story of a patient from the documentation. Many had hoped that computer-assisted coding (CAC) would help deliver quantum leaps in coding effectiveness — but real-world data has shown that CAC simply isn't the silver bullet it was promised to be. Some coding staff might see increased productivity with CAC, but there's little evidence to show that the coding accuracy improves accordingly. And that doesn't even address issues with the accuracy of the patient's documented acuity; CAC only codifies data that's included in the documentation, not data or details that are omitted from it.

Additionally, organizations that rely heavily on CAC risk bigger issues with staff development. Here’s why:

- Inexperienced coders may learn to trust CAC too much, leading to costly inaccuracies while the coder fails to develop their own skills.
- Skilled coders often begin to distrust CAC after spotting a few mistakes, eventually choosing to ignore the tool entirely.
- If a CAC recommendation is incorrect, the organization will only learn about it after the claim has been denied, just as if a human coder had erred. Thus, the issue can be repeated ad nauseam with no idea how to mitigate impact.

As a result, many organizations have realized that their expensive investment in CAC isn’t yielding the results they originally expected.
Interdependent Interests

Coding accuracy impacts multiple areas of hospital performance and human interventions, yet it is not uncommon to find each involved department has independent governance. There often exists a lack of integration between these functions as well, further inhibiting the ability to establish best practices that drive quality. An accurately coded chart represents a series of complex interdependencies among different stakeholders of mid-revenue cycle management. Like a row of dominoes, a change in one element can cascade into a series of others but the siloed approach to managing these changes reduces visibility and collaboration between teams. In an inpatient setting, CDI teams are usually the first to focus on coding accuracy by establishing a working set of codes and coordinating activities to refine the clinical documentation that support the codes. At the same time, QI teams are looking for potential patient safety issues, HAIs, and HACs.

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Like the CDI team, the QI team may send queries to the clinical care team to clarify documentation. For example, the QI team may be concerned about a patient who experienced a fall and they see that the patient is also on an anti-seizure medication. The QI team may request clarification in the form of a physician note that addresses whether the patient was experiencing a seizure when the fall occurred. If the response to that query results in clearer documentation of active seizures, that should be coded.

When the coding is properly adjusted to reflect this change, what does that do to the validity of the DRG? How does it impact the HCC risk adjustment? These questions are answered and compliant/accurate data is generated before the claim is released for billing.

Case Management and Utilization Review teams also work concurrently to ensure that care teams adhere to institutional protocols and therapeutics that are covered by respective insurance plans. Their efforts to clarify the patient’s clinical story may also impact other functional areas of the mid-revenue cycle.

The final DRG and supporting codes that are submitted for billing will impact how each encounter is reflected in myriad metrics that measure performance and drive revenue.

Moving downstream, typically after patients are discharged, the HIM department abstracts the clinical documentation to the codes that are eventually sent for billing. This is where accuracy counts the most. Coders are highly trained mid revenue cycle professionals who do their best to accurately capture the story of the patient’s experience in ICD-10 and CPT codes. In many organizations, the HIM coders do not intervene in establishing a working DRG; concurrent intervention is made by CDI teams. Instead, they use the documentation available after a patient’s discharge to generate their codes. In some instances, coders integrate and interact with CDI coding on a real-time, concurrent basis. But often coders have to operate retrospectively, separate from the CDI initiative, which often causes delays and inaccuracies in the final coding. This is an opportunity for integration and efficiency improvement.
Case Study
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In an outpatient setting, professional fee billing, ACO performance metrics, and MIPS score for MACRA are all influenced by the coding of the encounter.

As you can see, there are seemingly endless opportunities for coding and quality measure accuracy to go off the rails due to poor communication, lack of integration and other issues.

Post-bill Coding Audits

To ensure accuracy today, most organizations conduct internal coding audits after billing submission is complete. While avoiding billing delays, this approach makes it more difficult to improve accuracy prospectively since the feedback typically comes from reconciliation discussions between different functional areas. Usually the “lessons learned” are communicated to the coder with the hope that they are applied the next time, which can be months later. Not very reassuring. Further, because of internal auditing bandwidth, audits typically are performed on only two to three percent of encounters and are often a small random sample. The majority of the revenue leakage and compliance exposure will remain unchanged.

There’s also the issue of timing with regards to leveraging the insights from auditing. Once a bill is submitted to CMS for payment, providers only have sixty days to review and resubmit a case that’s found to be under coded and thus underpaid. However, for over coding (when the submitted case generates higher payment for the services provided), there’s no time limit as to when CMS can review cases, discover overbilling, and confront the provider to return the overbilled amount — often plus penalties and the specter of future audits. So, when it comes to provider billing: missed revenue disappears after sixty days, while exposure to compliance penalties lives on forever.

Technology to Drive Interventions Earlier for Greater Accuracy

When it comes to coding and documentation accuracy, there are many barriers to success, driven by disparate data, systems and processes that impact multiple coding and quality measure variables simultaneously. Additionally, there’s limited opportunity to compile, review and adjust them without incurring substantial billing delays, revenue leakage and compliance exposure.

What could help you address all of these issues? Start with the end in mind and develop a technology-enabled, concurrent and repeatable auditing system that can assess each case in real time prior to submission for billing. Using technology instead of human auditors, this automated system would have the bandwidth to analyze 100 percent of cases, not just a small sample, and do so prior to billing when there’s maximum opportunity for optimization.

For example: for each day of an inpatient encounter, the system would estimate all elements of the patient bill, such as diagnoses, procedures, charges, the DRG, and all relevant performance metrics (QIs, HACs, HAIs, etc.) to determine what may need more attention.

In the outpatient setting, this is similar to a quick accuracy checklist before the encounter is finished. Think of that hotel bill that is waiting under the door on check-out morning. The guest can still review and discuss any discrepancies, but the foundation of charges has been confirmed the night before.

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In this scenario, technology is an unlimited resource that could conduct repeated concurrent analysis on 100 percent of all encounters. Human auditors could then be leveraged as strategic resources to be engaged when the technology identifies cases warranting their attention. To achieve this, the system must:

- Estimate DRG and other metrics in real time, refreshing these as new documentation is generated;
- Provide some level of confidence that the estimations are correct, and
- Proscriptively drive concurrent workflow based on these estimates to take the guess work out of the equation.

Under such a system, organizations would be able to develop criteria regarding which cases need priority human intervention (assigned to human auditor); which cases need minor human intervention (assign to coder, CDI specialist, etc.) and which cases are suitable to release to billing. The end result: minimal impact on bill release, while making sure the cases that represent significant threats or lost opportunity are prioritized and addressed for correction accordingly prior to billing.

How would you develop such auditing technology? The answer is Artificial Intelligence (AI) and Machine Learning (ML), both of which “learn” from a team of expert auditors. The accuracy AI journey begins with over a thousand expert rules that are defined and validated by veteran auditors with experience auditing cases that represent virtually every encounter possible. Encounters with potential accuracy problems are flagged by one or more rules, then returned for review along with detailed, proscriptive advice on how to correct and complete.

...this powerful analysis can drive accuracy earlier in your revenue cycle for greater financial and operational results.

Using the data compiled from over 100,000 audited cases, ML can be leveraged to identify patterns in the coding data that either triggered a recommendation to change the codes or not. Once patterns are identified, a multivariate algorithm can augment the expert rules to estimate accuracy of a given DRG and/or other metrics driving revenue and reimbursement. As additional data becomes available, all rules leveraging it can be automatically reassessed and adjusted accordingly. And this powerful analysis can drive accuracy earlier in your revenue cycle for greater financial and operational results.

**Turn Tangled Revenue Cycles into Dynamic Revenue Streams**

Previously, we explored the challenge of managing data accuracy as it pertains to coding and quality measures. Imagine what is possible when different functional areas of revenue cycle management start concurrently assessing the same intelligence on coding accuracy and impact. All respective metrics are estimated simultaneously and the impact of any proposed changes is visible to all stakeholders. Like the dominoes referenced earlier; adjustments are made, documented and reviewable in near real time. This would enable much needed prioritization of issues and greater, more targeted utilization of strategic human resources across virtually all mid-revenue cycle processes.

Greater accuracy in coding and quality measures that reduce compliance risk, increase revenue integrity and enhance financial performance. That’s what you’ll receive from Streamline Health® eValuator.™