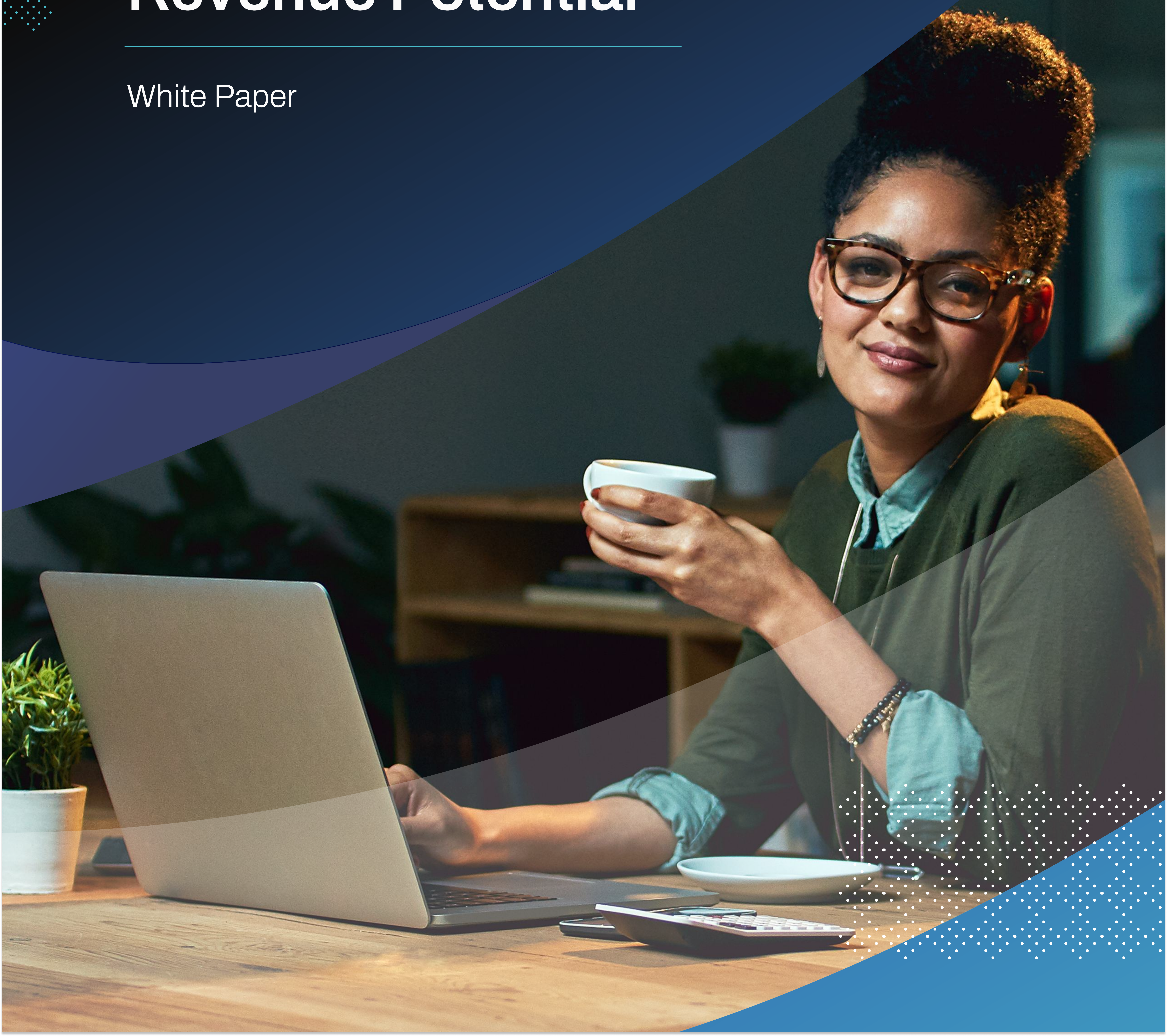


# AI-Powered CDI: Combating Burnout and Maximizing Revenue Potential

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White Paper





# AI-Powered CDI: Combating Burnout and Maximizing Revenue Potential

While physician and nurse burnout dominates healthcare headlines, there's another group of clinicians quietly facing an equally challenging battle: CDI specialists. These professionals are the unsung heroes of hospital revenue cycles, and their work is growing more complex by the day.

## 42%

Nearly 42% of American adults have multiple comorbidities



## 15%

Almost 15% of claims submitted to private payers are initially denied



Their work is increasingly complex due to several forces: More patients present with comorbidities ([nearly 42%](#) of American adults have multiple comorbidities), more mandatory quality programs and reporting are introduced, and payers increase claims denials at a steady clip — almost 15% of claims submitted to private payers are initially denied. Not to mention hospitals and health systems enduring a global pandemic that brought new regulations, cost stressors, and labor shortages.

Suffice it to say, we weren't surprised to read in the 2023 AHIMA Health Information [Workforce Survey](#) that two-thirds of respondents reported that their organizations were understaffed, leading to increased employee burnout and dissatisfaction, higher turnover, lowered data quality, decreased reimbursement, slower claims processing, and increased claims denials.



**CDI needs a lot more than another cup of coffee (although they may not turn it down!). The field needs a paradigm shift.**



# The Role of AI in CDI

Given the vital role CDI plays in the hospital revenue cycle supporting both revenue and quality — which is especially important in value-based care environments — it's crucial that CDI teams are given the right tools to succeed.

Yet fewer than half (45%, according to the same AHIMA survey) of provider organizations are using artificial intelligence (AI) and machine learning (ML) tools for coding, documentation, and other health information-related workflows. These organizations may be aware that AI/ML technology could improve their CDI programs, but they don't know where to begin.

Specifically, 41% of respondents not using AI/ML cited concerns about workflow integration. **Other reasons for lack of AI/ML adoption included:**

39%

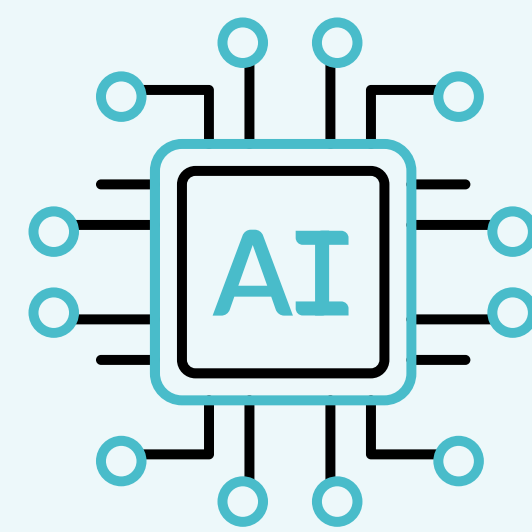
cited lack of organizational policy or governance framework for AI/ML

27%

expressed doubts about accuracy

20%

stated ethical concerns



**A true sign of investing in the right AI is that the returns outweigh the risks.**

Using advanced clinical AI to help validate the work of your CDI team and only create changes to patient charts when the CDI team agrees helps eliminate the risk of simply relying on AI to do the work. The validation process helps CDI teams review 100% of charts for 100% accuracy, finding missed revenue and quality opportunities along the way.

Most respondents already using AI/ML reported multiple benefits that directly addressed the serious performance and productivity issues caused by understaffing and staff burnout, despite acknowledging several challenges including increased oversight and technical burden. Three-quarters of respondents to the AHIMA survey said computer-assisted coding improved productivity and helped ease worker burnout, and 67% credited autonomous coding for accomplishing the same.



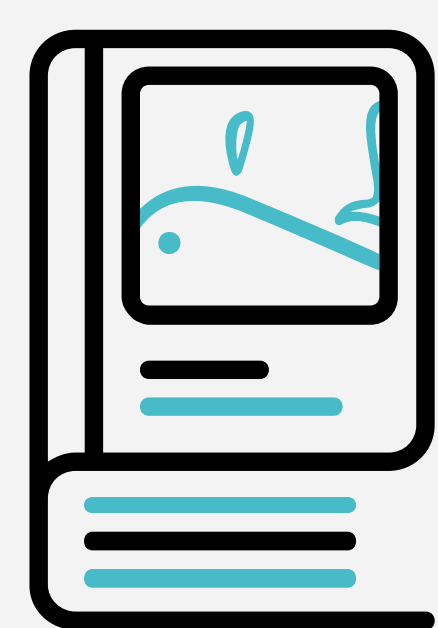
**When used correctly, the benefits of AI and ML can't be ignored.**



# The Power of Advanced Clinical AI

It's not as if CDI specialists have been working with oil lamps and quill pens; technology has been integral to the CDI process for several decades. Older coding technologies and CDI workflow best practices captured 70, 80, and even upwards of 90% of potential diagnoses. And today's technologies can capture 99.5% — an impressive success rate in many other contexts. However, even .05% of a \$2 billion health system adds up to \$10 million in lost revenue opportunities each year and adversely affect measures of quality of care.

Further, these older technologies and traditional processes are unable to scale as CDI work increases in volume and complexity. Manually scouring 30,000 data points for one patient visit to confirm the diagnoses are complete and accurate would be tedious, time-consuming...and virtually impossible.

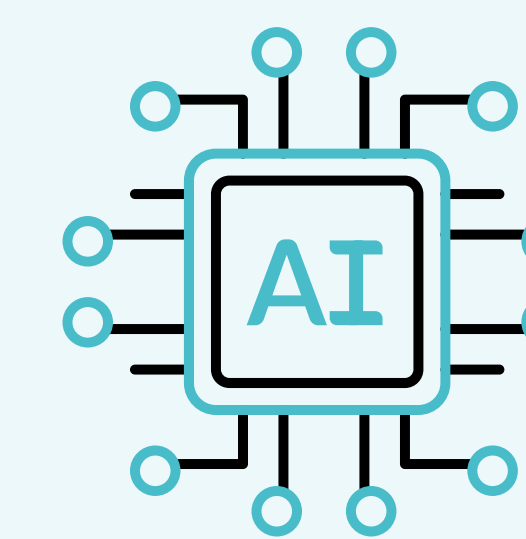


**It would be like attempting to read a 30,000-page novel (e.g., “A Christmas Carol” by Charles Dickens) in a half hour. Impossible, right?**

Today, many CDI teams use technology in ways that help but don't fully solve their issues. Teams either perform a deep review on a small number of DRGs, or review more DRGs on a surface level, often relying on prioritization software.

Both leave revenue and quality opportunities on the table, and neither do much for job satisfaction or burnout when the CDI specialist is still responsible for the deep review work.

But when CDI teams use advanced clinical AI to help, reviewing for 100% accuracy on 100% of charts is entirely possible. Plus, it's fully capable of taking on the manual, rote review work and helping empower CDI teams to practice at the top of their license — more on this in a minute.



**Clinical AI uses traditional machine learning techniques, deep learning, and large language models (LLMs).**

To put it simply, that means clinical AI has the power to quickly ingest the entire patient record — including notes, lab results, medications, vital readings, and ICD-10 codes. The result? CDI teams can get the information they need to make sure hospitals are paid accurately for the care they provide.

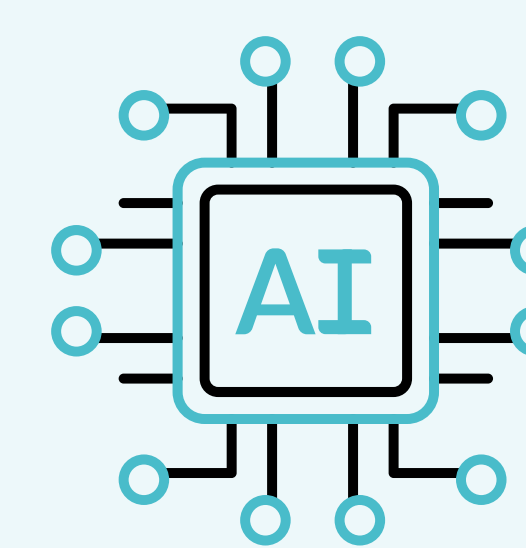


# Not All AI is Created Equally

In a world where AI has become a buzzword, it's important to note that not all AI is created equally. Clinical AI can often be confused with less sophisticated types of AI, like rules-based algorithms and robotic process automation (RPA). These types of AI are helpful for clinical documentation and coding for DRGs, but they can't solve some of CDI's biggest challenges due to a lack of flexibility.

For example, many CDI specialists have experienced rule-based techniques where if a patient is on 5L NC, CDI teams are prompted to query for acute hypoxic respiratory failure. This may be true for some of the cases, but not all, and causes lost time reviewing charts for a diagnosis that isn't there. It also potentially creates tunnel vision for the specialist to overlook another potentially more correct diagnosis. In this case, if you are looking only for respiratory failure, you may miss atelectasis, or maybe it's pneumonia or a different diagnosis.

Advanced clinical AI also has the power to review 100% of charts, while other prioritization algorithms miss uncommon diagnoses. For example, most newborns have the same common complications or conditions. Because of this, it doesn't make sense to prioritize newborn charts to look for unexpected diagnoses. The time for a CDI team to pore through thousands of data points just to look for a needle in a haystack isn't time well spent. Some algorithms even skip these charts because the likelihood of uncovering missing diagnoses are slim. But with advanced AI algorithms, AI is able to uncover findings across thousands of charts, which really adds up in terms of missed revenue and measures of care quality.



**Advanced clinical AI also has the power to review 100% of charts, while other prioritization algorithms miss uncommon diagnoses.**



**Rules are helpful, but remember that rules are made to be broken because they don't apply to every single case.**



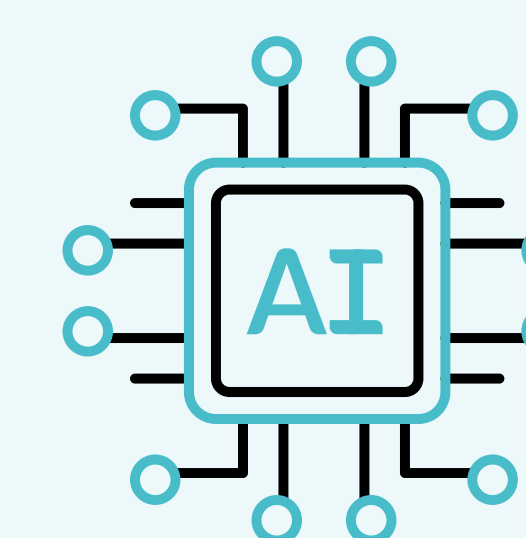
# Empowering Your Team with Clinical AI

The flexibility and analytical ability of clinical AI, along with its capacity to learn from data (as opposed to relying on set rules) allows users to ask generalized questions that yield information that wouldn't be easily accessible under a rigid rules-based system. AI doesn't just make CDI work faster — it makes it work smarter. By helping do the most tedious tasks, clinical AI reduces burnout, allowing CDI specialists to focus on what only they can do, like applying clinical judgment and physician education. Talk about a morale booster!

**“Practicing at the top of your license”** has long been touted as an advantage of technology, but with AI that can truly take on workload, it may be finally fulfilled.

While better morale on the CDI team alone can be a major boost to revenue cycle operations, clinical AI's high rate of accuracy significantly reduces the types of errors commonly made by humans — mistakes that lead to claim denials and delays in payment. And predictive algorithms can be used to flag claims at a higher risk of denial based on analysis of denial patterns. For provider organizations, these clinical AI capabilities translate into shorter time to reimbursement and lower cost per claim.

Clinical AI helps hospitals ensure a complete and accurate receipt for every patient that comes through their doors, creating revenue and quality opportunities that otherwise would have been overlooked. Hospitals that have implemented AI for prebill review have added millions of dollars in revenue with minimal operational or financial risk. Plus, missing details in documentation can misrepresent the patient's true complexity and severity, lowering quality metrics like mortality and readmissions. Filling in holes in your documentation to tell the most complete and accurate story of the patient and the care you provided means you get the quality of care metrics your staff works so hard to earn.



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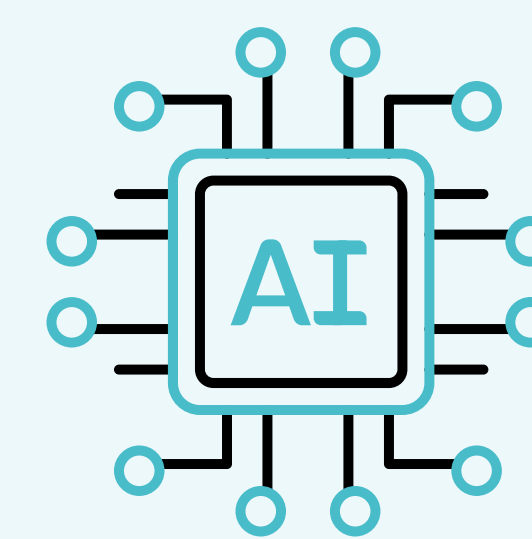
# Clinical AI In Practice

## \$2.9M

annual net new revenue by making quality recommendations to the CDI staff for review and approval that would have otherwise been missed.

**Take this Midwest health system for example:**

They used clinical AI to help uncover \$2.9 million in annual net new revenue by making quality recommendations to the CDI staff for review and approval that would have otherwise been missed. The reviews added up to less than one chart per day per team member, all while reviewing 100% of patient charts for accuracy.



**Clinical AI can pinpoint both revenue and quality-impacting diagnoses while accelerating the billing process.**

This is due to its ability to simulate the provider thought process and analyze vast amounts of data from EHRs — including patient history, lab results, medications, vitals, radiology reports, and clinician notes.

## The Bottom Line: Why it Matters

In a rapidly evolving healthcare landscape, advanced clinical AI isn't just a tool — it's a necessity.

By **reducing burnout, improving accuracy, and unlocking new revenue opportunities**, AI empowers CDI teams to perform at their best.



## Let's Chat

If you're ready to learn more about how clinical AI can help your CDI team review for 100% accuracy on 100% of charts helping capture millions in net new revenue, we'd love to chat.

Feel free to [grab time with one of our experts.](#)

