




White Paper

AI's Critical Role in Healthcare RCM Technology



Today's healthcare landscape is full of exciting innovations transforming the industry. Inventions in robotics, data analytics, and artificial intelligence are also revolutionizing treatment protocols and patient interactions.

Yet, with all the advancements come unprecedented complications and setbacks. Amid a dwindling healthcare workforce, increasing payer denials, and inflation, many healthcare organizations are grappling with maintaining cost efficiency while boosting productivity and patient-centered care.

To help providers overcome these challenges, [iCode Workflow 2.0](#) by GeBBS Healthcare Solutions has the technology to meet modern healthcare. This latest workflow software platform offers a comprehensive coding solution, making billing and coding processes seamless and more efficient.

This whitepaper delves into the challenges healthcare organizations face today and how leveraging iCW 2.0 revenue cycle management (RCM) technology can help them keep pace with the rapid shifts in today's healthcare environment.

Challenges Facing HCPs in the Modern Healthcare System

Providers face many obstacles today that impact their revenue, employee experience, and patient care.

Increasing Payer Denials

It's not just your imagination: insurer denials [are steadily increasing](#). The average insurer [denied 17% of in-network claims](#), with one denying an astonishing 80%.

An increase in payer claim denials is one of the greatest challenges for healthcare providers due to their significant operational and financial impact. Denied claims can also lead to financial strain on providers as they interrupt the anticipated payment for services they already provided.



Not only is this a significant financial issue, but it escalates the duties of an already overburdened administrative staff. Denied claims are time-consuming to review and correct, which increases the administrative burden on revenue cycle management teams. It also can indicate operational inefficiencies within patient registration, eligibility verification, coding, or claim submission processes.

Plus, denied management costs are considerable. The added expense and potentially lost revenue from unsuccessfully appealed denials further exacerbate the financial impact on providers.

In addition to providers, payer denials negatively impact the patient experience. Patients are potentially billed the total cost of service in the case of a denial, which leads to confusion and frustration if they thought the service was covered. It could damage patient trust and harm their relationship with the provider.

Growing Code Complexity



To an untrained person, medical codes look like a language all its own. And in a sense, they are. Medical coding is a complex process, and the complexity only increases, leading to many of the claim denials providers face today: [a third of hospital executives](#) said coding was their top concern regarding denial prevention.

With new coding systems for international classification of diseases such as ICD-10, providers face higher specificity and granularity in their coding practices. These complex coding systems require a deep understanding of a patient's diagnosis and provided services. Incorrect or inaccurate coding results in denied claims, underpayments, or overpayments, impacting providers' financial stability.

Coding complexity also leads to increased administrative spending, which has become a significant source of waste for providers due to the need for more extensive training for staff to understand and correctly use the evolving coding systems. Plus, the time and resources providers spend on managing and correcting coding errors further increases administrative costs. Significant effort is required to review, correct, and resubmit claims when mistakes occur, leading to wasteful administrative spending. In fact, experts now claim that [at least 50% of all administrative spending](#) is wasteful, [costing up to a shocking 570 billion a year](#).

A Shift to Value-Based Care

Value-based care has grown in popularity over the past few years: [49% of providers said](#) they use some value-based payment. However, many providers struggle with the fundamental change in how they are reimbursed for their services.

Value-based care is an attractive model for many reasons: payments are linked to the quality of care rather than the volume of services. Providers are rewarded for keeping patients healthy, improving the health of those with chronic conditions, and reducing unnecessary healthcare costs.

Making this shift a reality requires a robust data collection and analysis system to track, report, and improve various quality metrics, which can be a daunting task for many healthcare providers.

Another challenge in the value-based model is that providers bear a greater share of financial risk. They might receive less reimbursement if they fail to meet the established quality or outcome of benchmarks, which is especially problematic for smaller providers.

The transition to value-based care also requires a cultural shift within healthcare organizations. Providers must collaborate with interdisciplinary teams, focusing on preventative care and patient outcomes. This shift is challenging because it transforms long-established workflows and care delivery models.

Staff Shortages and Burnout

While COVID was challenging for healthcare workers, the stress and strain haven't stopped since then. And it's not limited to doctors and nurses.

One recent survey that included healthcare staff showed that [over half of healthcare workers](#) are overworked, stressed, and ready to leave. Staff burnout is a growing concern, fueled by the intensity and complexity of RCM tasks, such as coding, dealing with claim denials, and following up on unpaid bills, leading to high-stress levels. Burnout undermines providers' ability to deliver consistent, high-quality work and rise to the challenge of coding complexity and high customer service.

With the stress level, it makes sense that many workers are looking for the door. [Over half of healthcare employees](#) in another recent survey said they are considering leaving their roles altogether in the past year. This is especially concerning in areas that require specialized knowledge, such as medical coding or claim denial management. Not enough skilled staff to handle these complex tasks leads to mistakes, delays, and inefficiencies, ultimately impacting a provider's bottom line.



Rising Costs

The healthcare industry is under increasing pressure due to rising inflation, high wages, and other costs. Plus, all of this is compounded by workplace shortages. Experts estimate that medical costs will increase by [7.0% in 2024](#). Confronting affordability is one of the biggest challenges for providers today.

Though falling compared with 2021 and 2022, inflation is still at its highest in decades. Providers face increased costs from various sources, including medical supplies,

pharmaceuticals, medical equipment, and utilities. As expenses rise, many providers struggle to maintain their operations without increasing the costs of their services or making cuts elsewhere.

Patient Financial Responsibility

Patients are facing increased co-pays, deductibles, and other out-of-pocket expenses between the higher prices and rising denials. However, they don't always have the means to pay it: [50% of Americans](#) have some medical debt, and [almost 46 million cannot afford](#) quality healthcare.

A significant contributor to this problem can be traced back to the coding process. When inaccuracies occur during coding, patients may be blindsided with higher medical bills than expected, exacerbating their financial burden. Plus, a slow and inefficient coding process often results in patients receiving bills long after their healthcare visit, leading to confusion and frustration. These scenarios not only impact patient satisfaction but also contribute to delayed payments and potential loss in revenue for healthcare providers.

Patient-provider relationships can be strained when discussing financial matters, especially with inaccurate or slow coding processes. Unexpected or high medical bills often result in dissatisfied patients, which may impact their overall care experience and perception of the provider.

How GeBBS' Revolutionary iCode Tech Meets the Needs of Modern Healthcare

Many providers are discovering that technology can help them overcome these challenges and fill crucial gaps. GeBBS Healthcare Solutions' iCode Workflow 2.0 leverages artificial intelligence (AI) enabled features so that healthcare organizations can get the support they need to improve and enhance their coding workflows.





Leverage AI-Powered Coding

AI-powered coding can play a vital role in helping providers overcome the modern challenges that impact their patient care and revenue. It's revolutionizing how healthcare organizations streamline their revenue cycle management, offering solutions to a number of current challenges.

AI in medical coding refers to the application of AI technologies, such as machine learning and natural language processing, to automate and improve the process of coding and billing for healthcare services. AI helps interpret and organize large amounts of data from medical documents, which helps reduce errors, and saves time and costs.

By automating parts of the coding process, AI enhances efficiency and significantly increases productivity. It enables staff to focus on complex tasks, reducing the time spent on manual coding and optimizing resources. Not only does it improve your revenue, but it also helps relieve the administrative burden and reduce burnout.

Artificial intelligence's inherent capability to strictly adhere to coding guidelines helps minimize coding errors, reducing denied claims, saving time and resources, and ultimately smoothing out the revenue cycle. AI systems can be updated regularly to comply with changing coding guidelines, ensuring ongoing compliance and reducing the risk of audits and penalties. Plus, AI can analyze large sets of coding and billing data, identifying trends or anomalies that may provide valuable insights for decision-making and strategic planning.

AI also plays a pivotal role in supporting the shift to value-based care. It ensures codes accurately reflect patient health status and care provided, which is crucial for accurately representing care quality in value-based reimbursement models.

Other benefits of AI medical coding include:

- ▶ Reducing time to code and reducing human errors, leading to a reduction in study duration and costs.
- ▶ Automating the coding process to deliver a scalable solution that is less dependent upon the availability of skilled billing professionals.
- ▶ Improving cash flow by ensuring that accurate patient states are issued in a timely manner.
- ▶ Reducing standard work hours of administrative staff, which helps improve the quality of their work in other areas.

- ▶ Freeing up clinical schedules to allow for more patient interfacing.
- ▶ Improving data accessibility to assist healthcare professionals in taking the right steps to prevent illness.
- ▶ Proving real-time data to better and more rapidly inform diagnosis.

Enhance Quality with Automated Code Validation

Few things are more frustrating than receiving an insurance denial for a simple typo or mistake. Technology can help you avoid that.

Automated code validation leverages AI algorithms to review and validate the codes assigned for medical procedures and diagnoses. The AI checks these codes against predefined rules, guidelines, and regulations to identify potential errors or inconsistencies. The goal is to ensure all assigned codes are accurate and appropriate, given the patient's health record and the services provided.

The process offers providers several benefits. It improves coding accuracy and compliance. AI systematically validates all codes to identify and correct potential errors before providers submit claims, reducing the rate of claim denials and payer rejections. It saves time and resources in the billing process and helps avoid potential penalties associated with non-compliance.

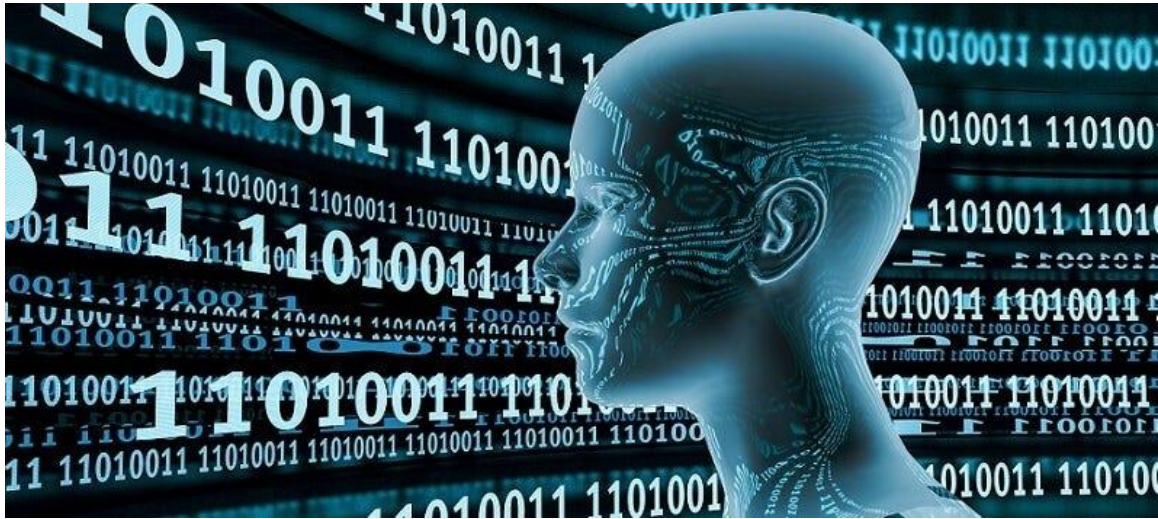
Automated code validation also increases efficiency. Manually reviewing and validating codes is time-consuming, but AI performs these tasks quickly and tirelessly. It allows coders the time and space to focus on more complex cases, enhancing their overall productivity.

Automated code validation also supports training and quality improvement. By identifying common errors or areas of confusion, the AI can offer coders and managers valuable feedback and help them target their training and quality improvement efforts.

Improving Audits with Machine Learning

Machine learning brings substantial improvements to the auditing process in revenue cycle management.

In the traditional approach, audits are often conducted randomly or based on simple rules, which might miss problematic claims and waste resources on valid ones. However,



machine learning leverages historical data to predict which claims are most likely to have errors or trigger denials so that auditors can prioritize their workload more effectively.

Machine learning algorithms can identify complex relationships and trends that human auditors might miss by analyzing patterns in past claims. For example, they might identify that certain combinations of codes are frequently associated with errors or that claims for procedures or from certain departments are more likely to be denied.

The predictive approach increases the efficiency of the audit process, allowing auditors to focus their attention where it's most needed. Such an approach can lead to higher error detection and correction rates, reducing the risk of denied claims and potential penalties.

The insights gained from machine learning audits can feed into training and quality improvement initiatives. By understanding the common causes of errors or denials, managers can target their training and process improvement efforts more effectively, driving continuous improvement in coding and billing processes.

Using Natural Language Processing for Efficiency and Accuracy

Natural Language Processing (NLP) is a subset of AI transforming healthcare RCM, particularly in improving the efficiency and accuracy of coding and billing processes. Specifically, NLP:

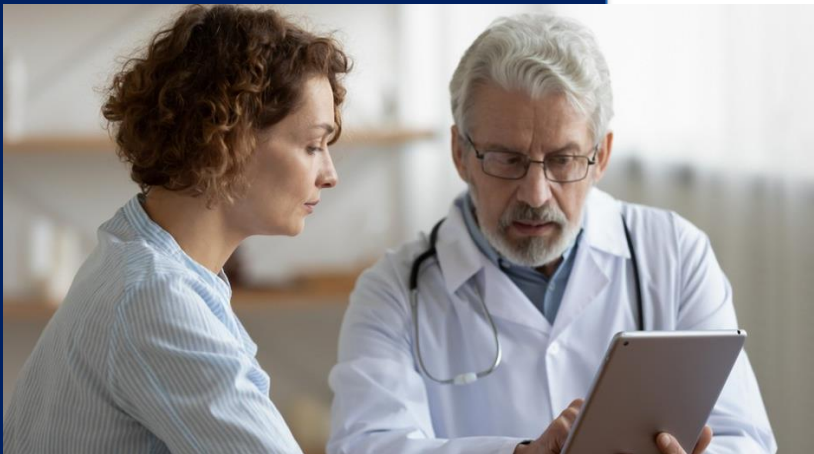
Enables computers to understand, interpret and generate human language, including text. In healthcare, it's used to review and extract relevant information from clinical documentation, such as physician's notes, laboratory results, and radiology reports. Once

the information is extracted, it can be translated into standardized codes used for billing and reporting.

Offers providers a number of benefits. It increases efficiency by automating the time-consuming task of manual data extraction and coding. That way, staff can focus on complex cases or jobs that require human judgment, which enhances their overall productivity.

Improves coding accuracy. By applying complex algorithms, NLP can identify and assign appropriate codes based on the nuances of clinical documentation. This lowers the risk of coding errors and subsequent denials that lead to revenue loss. Plus, it enhances compliance by updating changing regulations and coding standards to remain compliant with the latest guidelines.

Improving Integration and Interoperability



In a landscape as complicated and detail-oriented as healthcare, integration and interoperability are critical to contributing to healthcare providers' efficient and effective operation.

Integration is the ability to connect and collaborate with different software systems and applications. For example, AI-powered coding solutions should integrate seamlessly with an EHR system, ensuring a smooth flow of data that eliminates the need for manual data entry and reduces the risk of errors.

Interoperability is the ability of different healthcare systems — within and across organizational boundaries — to exchange and interpret data. This could mean the ability to send and receive billing data between a healthcare provider and a payer, even if they use different software systems.

GeBBS' iCode Workflow is integrated and interoperable to improve efficiency, reduce administrative burden and minimize errors significantly. For example, it seamlessly

transfers data from the EHR to the coding system to ensure it has all the necessary information for coding and billing, saving time and improving the accuracy of the codes assigned.

Interoperability facilitates coordinated care by allowing different providers to access and update a patient's health record. As a result, this could help prevent duplicate billing or other errors that might lead to claim denials.

Streamlining Processes With Analytics and Reporting

Analytics and reporting play a crucial role in modern healthcare. Powered by AI, they offer critical insights to help improve organizational processes and reduce coding errors.

Advanced analytics identify patterns and trends in coding and billing data, such as common coding errors or frequent reasons for claim denials. This information can be used to target training and process improvement initiatives, reducing mistakes and denials and increasing revenue.



Predictive analytics can help providers forecast future trends, such as changes in claim denial rates or payer behavior. It's vital to help healthcare organizations anticipate challenges and proactively adjust their revenue cycle processes.

Reporting tools provide healthcare organizations with a clear, real-time view of their revenue cycle performance. Reports track key performance indicators (KPIs), such as claim denial rates, days in

accounts receivable, or cash collections, allowing managers to monitor performance and intervene if necessary. Reporting also highlights areas of success or concern, helping to guide strategic decision-making.

Just a few of these reports include:

- ▶ **Batch Status Report.** This report gives users an at-a-glance understanding of batch information, from initial upload to final output creation. It indicates whether a batch has been fully processed and, if not, delineates what proportion of charts are situated in various stages within the system.
- ▶ **Coder Productivity Report.** Coder productivity offers insights into the number of charts coded by individual coders and quality control measures undertaken in the system on varying dates. It delivers granular data concerning the time coders allocate to each chart and the quality of the resultant work.

- ▶ **Coder Accuracy Report.** Users can get comprehensive data about each coder's accuracy. Specific metrics such as sampling percentage, achieved DPO, and DPU, along with any variances, can be accessed by users.
- ▶ **Hold Report.** This report allows leadership access to detailed information on all chart suspensions within the system, including the volume of charts placed on hold, the coder responsible for the hold, and hold duration.
- ▶ **Aging Report.** Users can obtain data on charts that are currently delayed within the system. They can get insights into chart status and identify any system bottlenecks, whether in a hold bucket or an exception pending status. This enables the right user to take the proper steps to keep up with the chart turnaround time.
- ▶ **TAT Report.** Turnaround time is vital to prompt payment. The TAT report gives users information about the chart turnaround time. Users can monitor how many days it takes to process charts and if any missed the target TAT. Plus, users can track chart statuses to get better insights.
- ▶ **Audit Trail Report.** Users get data about any modifications made to a chart. For example, it records the date and time when a chart was initially coded and subsequent quality checks carried out by users.

Advanced analytics also supports providers as they transition to value-based care by analyzing clinical data alongside billing data. It helps healthcare organizations understand the relationship between care processes and financial outcomes, enabling them to optimize both the quality of care and the efficiency of their revenue cycle.

Facing RCM Challenges With Digital Tools

The modern healthcare landscape is a labyrinth full of challenges and opportunities. Providers who tackle these challenges with innovative, automated solutions can enhance the healthcare experience for both patients and staff. A primary strategy to lighten staff load and boost efficiency is refining coding and workflow processes.

[iCode Workflow 2.0](#) equips providers with a multispecialty platform that uses deeper insights and automation to heighten accuracy, bolster productivity, and reduce operational expenses. From its AI-powered coding assistance and built-in CMS-governed edits and rules to scalable cloud architecture and robust systems, healthcare providers have the essential tools to optimize their coding practices.

To discover more about iCW 2.0 and how it can enhance your coding workflow and overall RCM processes, contact one of our experts today at gebbs.com.