



WHITE PAPER

AI in the Healthcare Revenue Cycle: Perspectives From RCM Leaders

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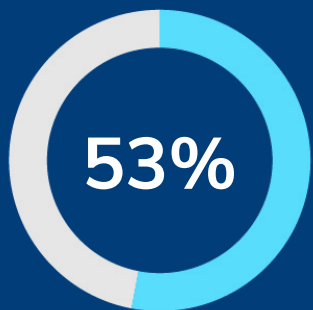
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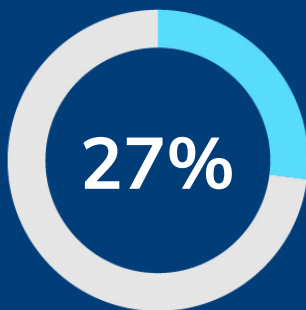
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Executive Summary

In February 2026, Inovalon surveyed over 400 healthcare revenue cycle leaders across hospital, post-acute, and ambulatory physician practice settings to understand how artificial intelligence (AI) capabilities in revenue cycle management (RCM) are being perceived, evaluated, and adopted. The findings below summarize the key themes.



of revenue cycle leaders are optimistic about AI in revenue cycle software



of hospitals have implemented AI in revenue cycle software, vs. 8% of ambulatory and 4% of post-acute organizations

2 in 3

acute and ambulatory leaders already use generative AI tools like OpenAI's ChatGPT at work

Key findings

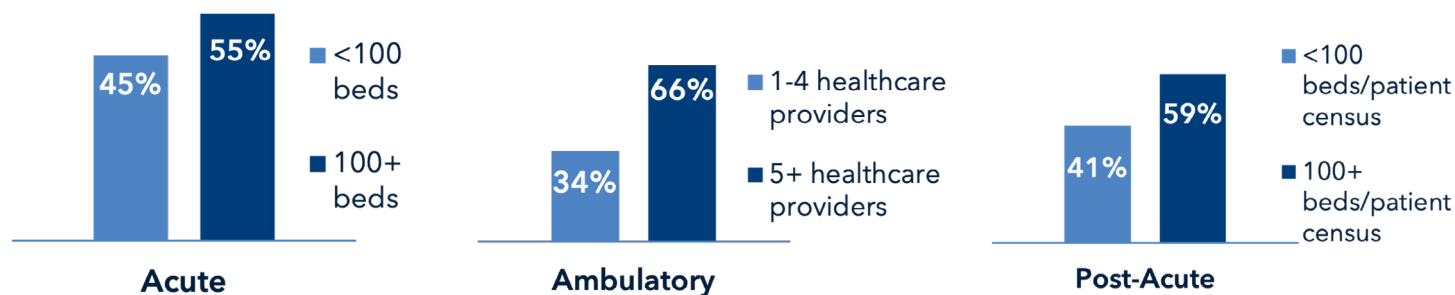
- **Optimism is real, but uneven.**
Hospital-based leaders are far more optimistic about AI in revenue cycle software (73%) than their ambulatory (51%) or post-acute (45%) counterparts, a gap that tracks closely with current usage and exposure to the technology.
- **Sentiment is trending more positive.**
Attitudes toward AI have grown more favorable over the past two years, especially among hospital leaders, though roughly one in ten ambulatory and post-acute leaders have grown more skeptical, citing accuracy concerns and loss of human judgment.
- **Denials and prior authorization offer the clearest opportunity.**
Leaders most often expect AI to deliver efficiency gains, with the strongest interest centered on the workflows they find most administratively burdensome: claim denials and prior authorization.
- **Accuracy and reliability are the top concern.**
Among skeptics, fear of AI errors in complex, payer-specific scenarios dominates, followed by a general lack of familiarity with the technology – a gap that education and hands-on exposure could help close.
- **Formal adoption remains limited, but is already paying off.**
Few organizations have implemented AI in revenue cycle software today, yet those that have report measurable gains in efficiency, accuracy, and cash flow — and adoption drivers center on operational capacity rather than headcount reduction.
- **Generative AI use is outpacing formal RCM adoption.**
Most acute and ambulatory leaders already use general-purpose tools such as OpenAI's ChatGPT and Microsoft Copilot at work, and this hands-on exposure correlates strongly with greater optimism about applying AI to the revenue cycle specifically.

About the Research

In February 2026, Inovalon surveyed over 400 healthcare RCM leaders on their attitudes, concerns, expectations, and current usage of AI in the revenue cycle. Participants included financial leaders representing hospitals, post-acute organizations, and ambulatory practices, spanning large, mid-size, and smaller providers, as well as, both specialists and generalists across care settings.

Participant Profile

- Acute hospitals and health systems
- Ambulatory physicians and specialty organizations
- Post-acute home health, hospice, and skilled nursing facilities



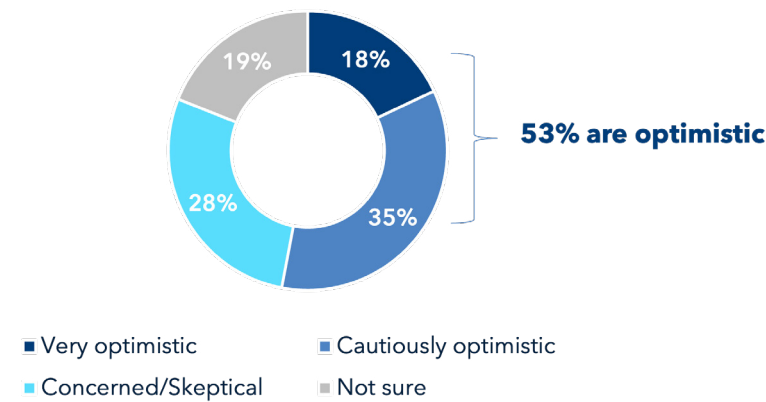
AI Sentiment in the Revenue Cycle

RCM leaders are generally optimistic, but levels vary by care setting

Provider organizations have continued to operate under sustained financial strain, driven by declining reimbursement rates, rising rates of claim denials, and increasing costs. When asked about the revenue cycle challenges they face, leaders across all care settings point to claim denials as their most significant revenue cycle challenge.

The application of AI to RCM workflows presents a credible avenue for mitigating these pressures. Among revenue cycle leaders surveyed, 53% express optimism regarding the integration of AI capabilities within revenue cycle software.

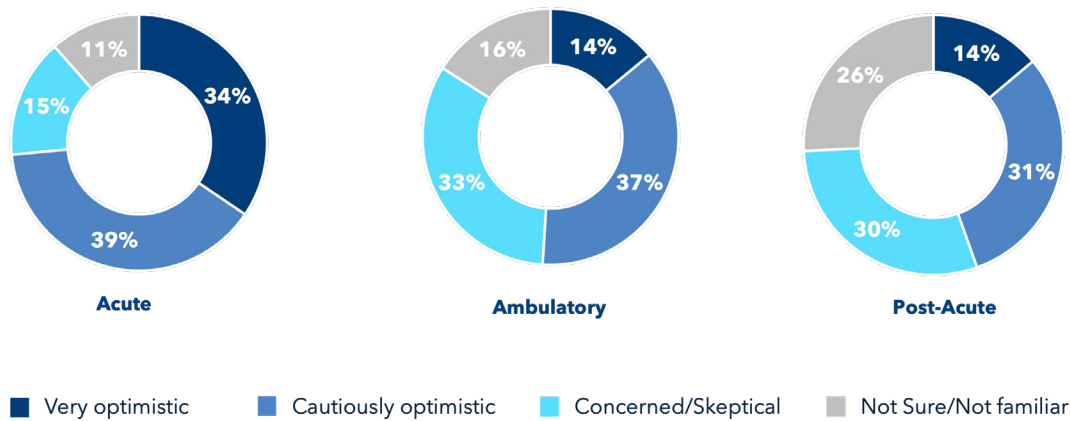
Opinion on Using AI in Revenue Cycle Software: Overall



Q. What is your opinion about using artificial intelligence in revenue cycle software?

Sentiment about AI in revenue cycle software varies by care setting: acute hospital-based revenue cycle leaders report notably higher levels of optimism (73%), whereas leaders in ambulatory (51%) and post-acute organizations (45%) remain comparatively cautious in their outlook. Hospitals are more likely to use or plan to use AI in the revenue cycle, which likely contributes to their greater optimism about the technology.

Opinion on Using AI in Revenue Cycle Software by Care Setting



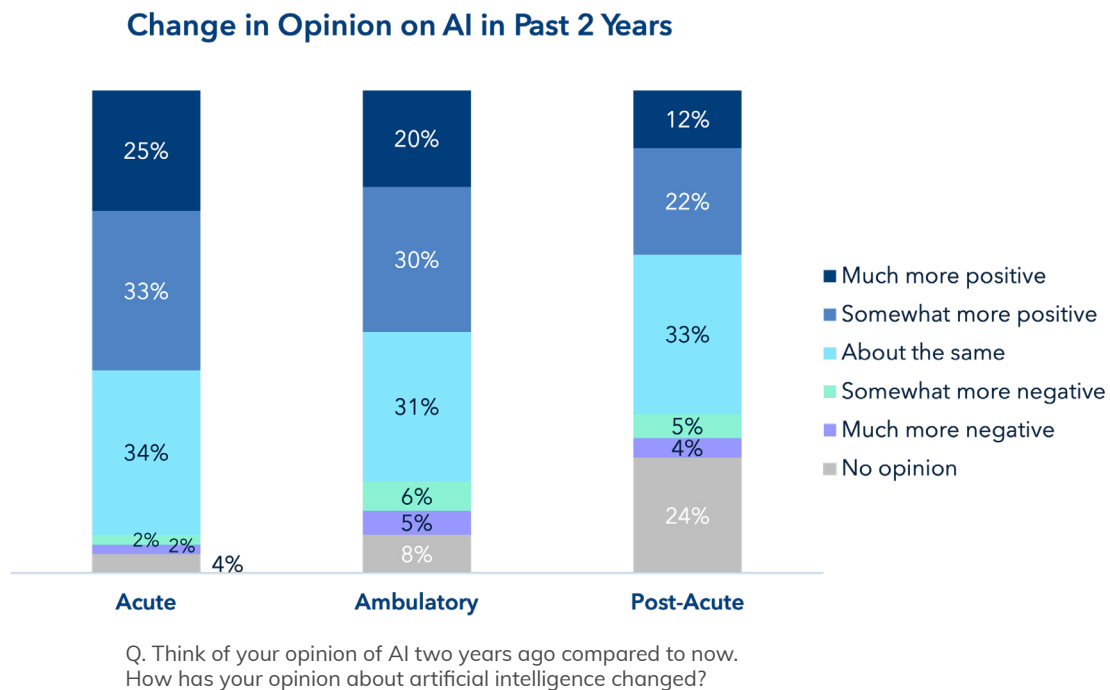
Q. What is your opinion about using artificial intelligence in revenue cycle software?

Attitudes toward AI have become more positive, especially for hospital leaders

Over the past two years, sentiment toward AI among revenue cycle leaders has shifted measurably in a positive direction, with acute hospital financial leaders reporting the most pronounced gains in confidence.

The trend is also positive in ambulatory and post-acute organizations, although in these settings approximately 10% indicate their outlook has grown at least somewhat more negative over the same period.

Their growing skepticism is primarily rooted in concerns about AI's accuracy, the potential for a reduction in critical human judgment, and a general distrust of algorithmic decision-making in complex RCM scenarios.



“It shows promise, but still must be babysat.”

“By taking out the human factor you are opened up to only what the algorithm suspects and does not anticipate. AI is not the way to go.”

Where Revenue Cycle Leaders See the Greatest Opportunity

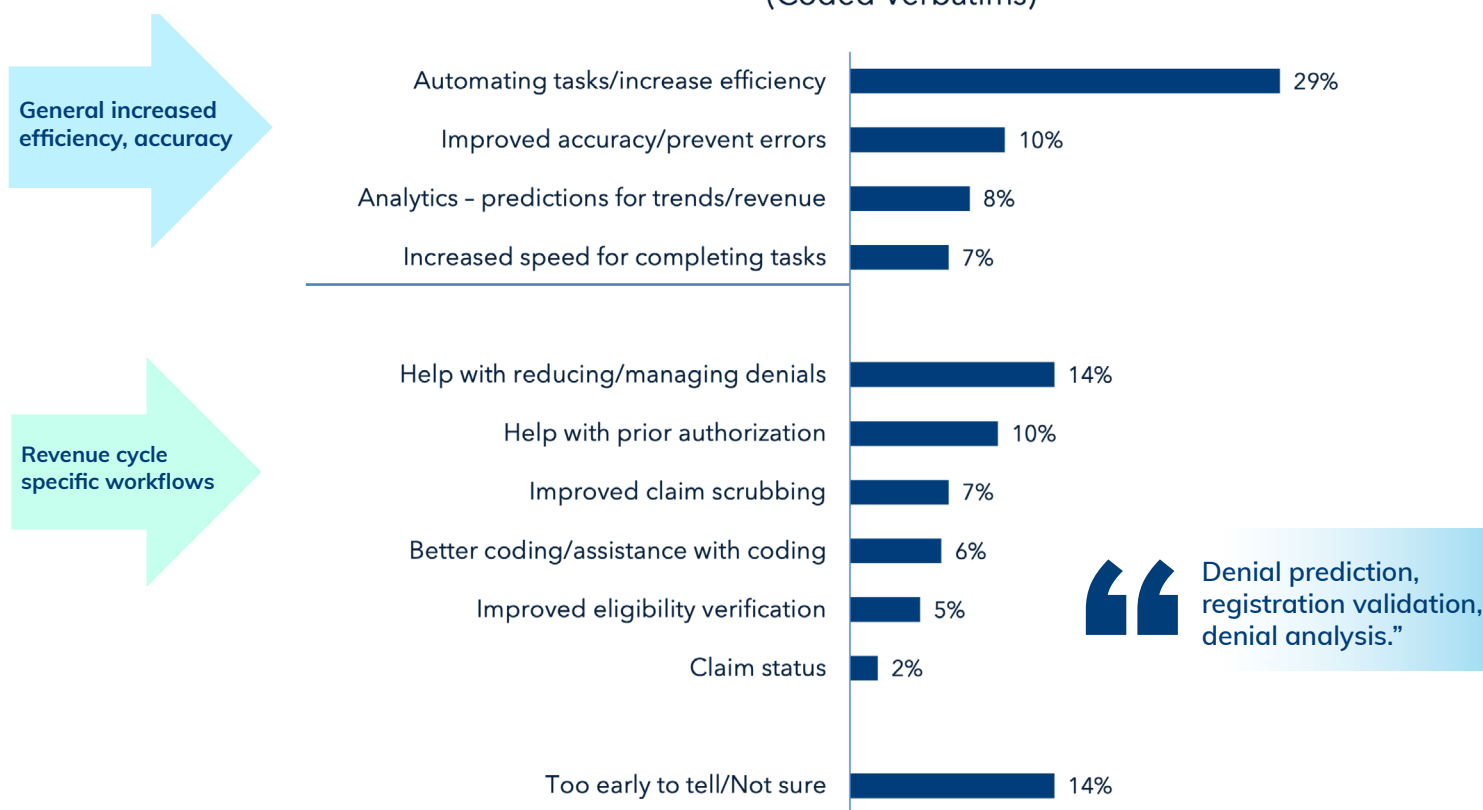
Perceived value of AI: efficiency and high-impact RCM workflows

Leaders who are optimistic about AI anticipate that its primary contribution will be enhanced operational efficiency. Among specific workflows, claim denials and prior authorization were the most frequently cited as having significant potential for AI-driven improvements.

Smaller pockets of interest in claim scrubbing, coding, and eligibility verification (5-7% each) point to opportunities across nearly every stage of the revenue cycle.

Notably, 14% said it was “too early to tell,” suggesting that enthusiasm for AI is real but still outpacing familiarity or hands-on experience.

How AI Might Enhance Revenue Cycle (Coded Verbatims)



Q. How might artificial intelligence enhance performance or address challenges in your revenue cycle?



If it could pull the information needed and populate an authorization form. Also, if it could predict the likelihood of the insurance approving based on the insurance reliability.”



Increased identification of problems with claims prior to initial denial.”

The evolving promise of AI in revenue cycle management

In a [similar survey conducted in 2024](#), Inovalon asked revenue cycle leaders how AI could address challenges in the revenue cycle. At that time, survey participants were less familiar with AI and its possibilities. They knew it could help, but their responses were somewhat vague, citing general hopes such as automating processes and streamlining workflows; many expressed too little familiarity with the technology to offer a specific response.

The technology, and knowledge of it, have evolved considerably since then. Compared to previous years, revenue cycle leaders in 2026 articulate far more specific and sophisticated expectations for AI. Initial vague hopes for general automation have been replaced by demands for targeted applications such as coding assistance, automated appeal letter generation, robotic process automation (RPA) for denial management, contract modeling, and predictive analytics.

A notable shift in perspective is the growing demand for integrated AI solutions that function across the entire revenue cycle continuum, rather than isolated point solutions that address only a single workflow.

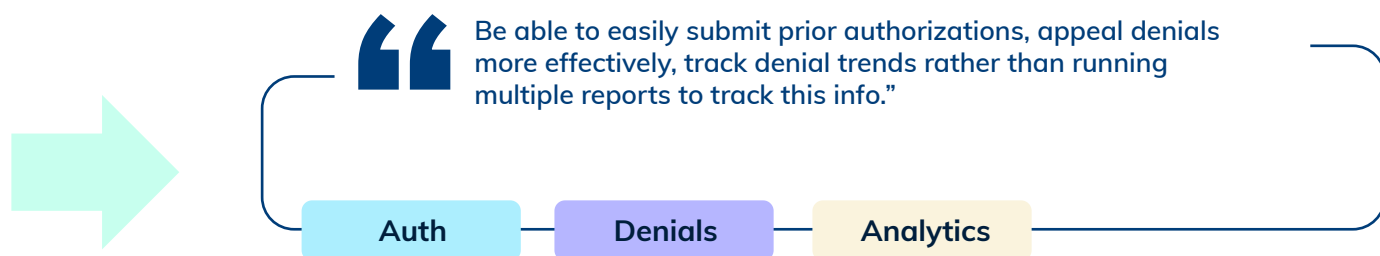
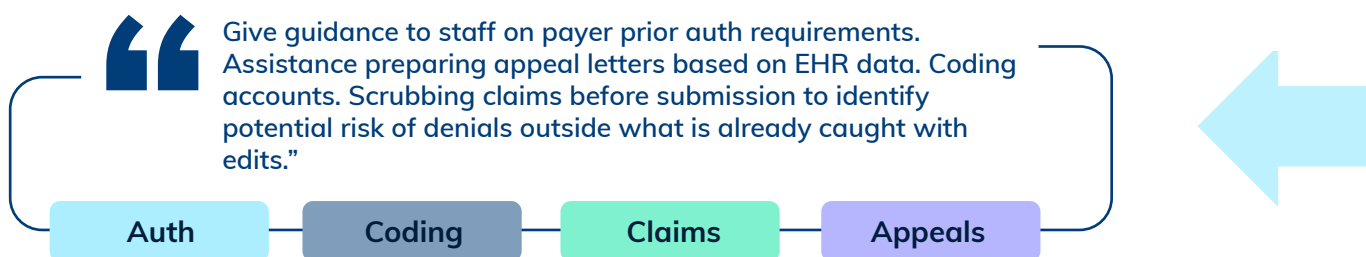
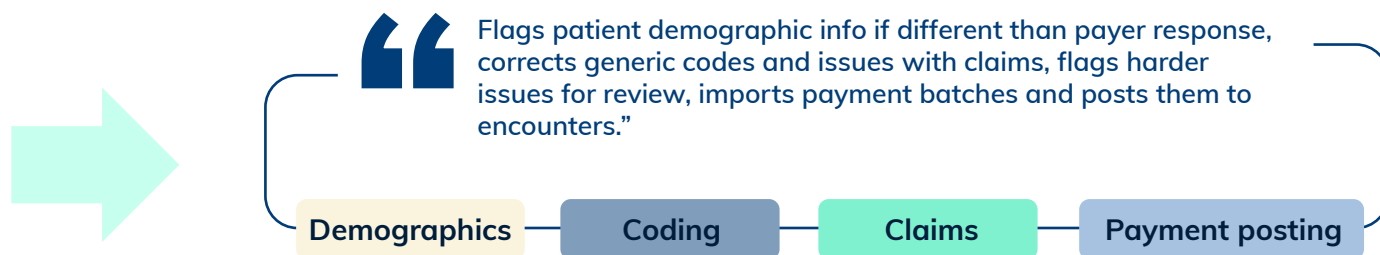
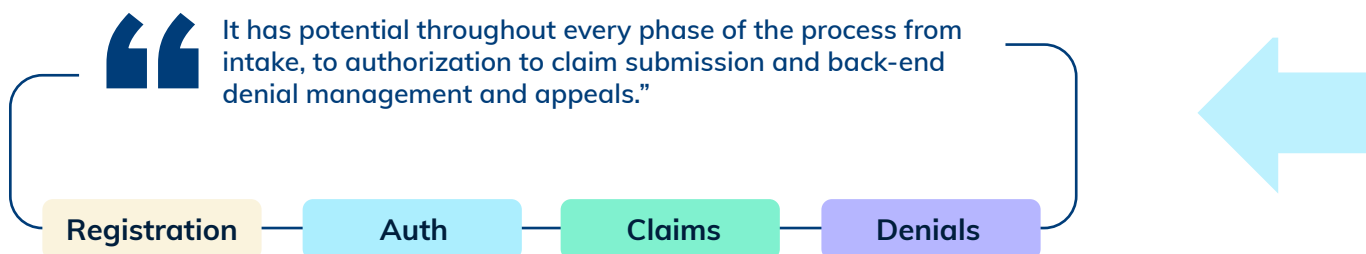


I am hoping that eventually, we can get some form of AI to help in all aspects. Alerting registration about issues, alerting providers about care that will lead to billing issues, getting the claims coded correct and claim built cleanly, etc.”



Incorporating AI across workflows

Some leaders are thinking beyond one specific workflow — envisioning AI helping across multiple or all phases of the revenue cycle.



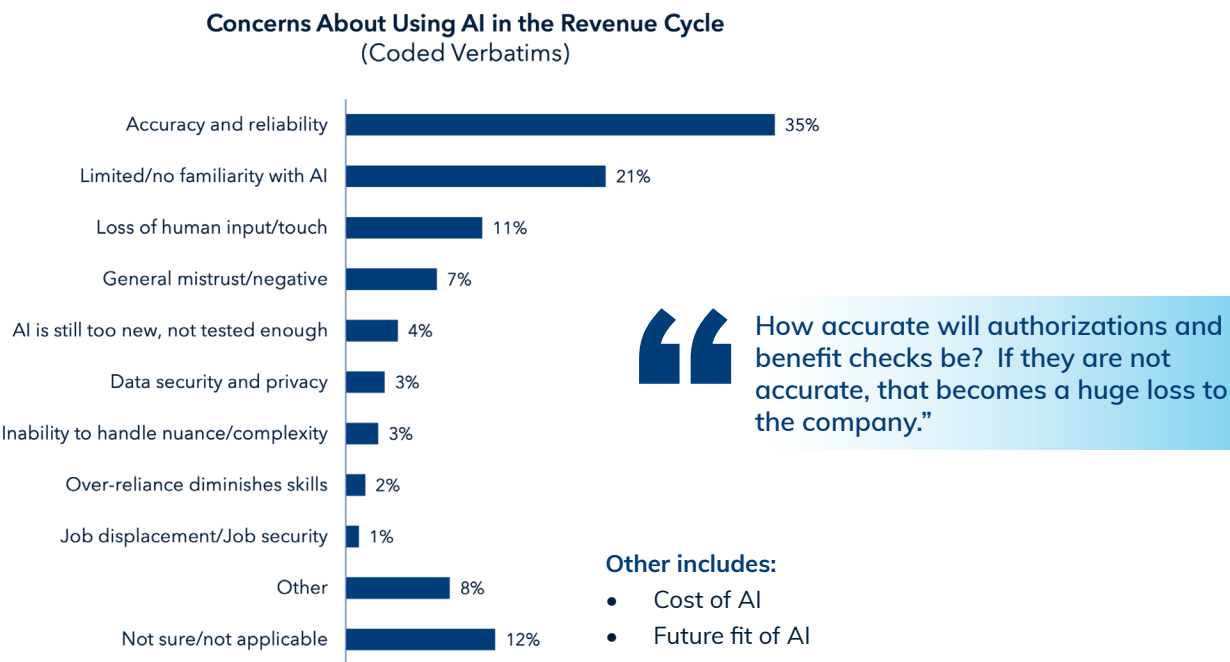
What's Slowing Adoption

Concerns about the accuracy and reliability of AI are the most frequently mentioned hesitations

Although many revenue cycle leaders have considered the promise of AI, those who are skeptical have concerns about using it in the revenue cycle. Asked to explain their concerns in their own words, accuracy and potential for errors dominate. Participants worry specifically about AI making mistakes on complex, multi-variable situations like payer-specific denial logic. Several noted that errors in the revenue cycle have direct financial consequences, making the stakes higher than in other AI use cases.

One-fifth mentioned a lack of familiarity with AI as driving their concern. This does not necessarily represent a rejection of AI – it could be seen as more of a knowledge gap. Leaders are more likely to say “I don’t know enough yet” rather than “I don’t want it,” which suggests education and exposure could shift a meaningful portion of skeptics.

The payer complexity concern is particularly specific to healthcare RCM. Respondents understand that the sheer variability of payer rules, medical necessity criteria, and authorization requirements is genuinely hard for any system to fully capture; this is a sophisticated objection, not just general fear.



Q. What are your concerns about using artificial intelligence in revenue cycle software?

“ By taking out the human factor you are opened up to only what the algorithm suspects and does not anticipate; AI is not the way to go.”

Accuracy tops the list, but seven other themes explain the hesitation

Verbatim comments on AI concerns, grouped into themes and ordered from most to least cited:



Most cited

Accuracy and errors

As a dominant concern, respondents worry AI will make mistakes, process incorrect data, or miss nuanced claim details that a human would catch.

“Too many errors in rigid logic, not enough room for variables.”



Very common

Trust and skepticism

Many respondents simply don't trust AI, whether in general or for revenue cycle, without a concrete reason beyond gut reluctance.

“Hard to trust that all info will be accurate.”

“I don't like AI.”



Common

Loss of human judgment

Concern that AI can't replicate critical thinking or apply the nuanced reasoning that complex denials and payer-specific rules require.

“AI will unravel our ability to critically think and problem solve to the point where something wrong will continue to be wrong because we won't know enough to correct it.”



Common

Unfamiliarity and lack of knowledge

A large portion of respondents say their concern stems from simply not knowing enough about AI yet, rather than dismissing it altogether.

“I don't know enough about it to make an informed decision.”



Moderate

Data privacy and security

HIPAA compliance, patient data exposure, and uncertainty about how AI vendors use sensitive health information are recurring worries.

“Personal data of our patients being submitted to a relatively new product that we do not know exactly how it is being used for future purposes.”



Moderate

Payer complexity and variables

Concern that AI can't handle the sheer variability of payer rules, medical policies, and edge cases, especially for prior auth and denial responses.

“Differing requirements for various payers, difficulty loading all the variables.”



Moderate

Job loss and over-reliance

Fear that AI replaces staff, combined with concern that over-dependence on AI without adequate human oversight creates new risks.

“Even with AI there must still be a person to oversee operations and ensure accurate performance.”



Less cited

Cost and implementation

A smaller but notable group flags cost, integration with existing systems, and the challenge of proper setup as barriers.

“Staff training and integration with current systems.”

“No concern, the price.”

High-profile payer AI controversies may be shaping provider attitudes

Widely reported litigation against major payers has drawn public attention to allegations that insurers are deploying AI systems to deny claims and prior authorizations at scale. These developments have heightened provider frustrations and contributed to a degree of skepticism among some revenue cycle leaders toward AI adoption more broadly, even as the technology holds significant promise on the provider side of the revenue cycle.

— Allegations About Payers' Use of AI —



AI uses a computer algorithm to approve the authorization not based on medical records. If you click the wrong buttons it is made to deny the authorization.”



Easy to get wrong and has caused so many erroneous denials.”



We are seeing a lot of denials from AI software that is incorrect.”



The last several years, we averaged around 20-25% denial rate; with the integration of AI, that number has spiked to about 70%.”



Sometimes with AI things get denied with no purpose...AI is not fool-proof.”

AI Adoption in RCM

Considering the entire healthcare revenue cycle landscape, the formal adoption of AI within dedicated revenue cycle software is in a nascent stage.

AI implementation rates are highest in the acute hospital sector at 27%, followed by ambulatory organizations at 8% and post-acute organizations at 4%.

Organizations that have implemented AI report measurable improvements in revenue cycle performance. These reported gains include increased operational efficiency, a reduction in claim error rates, and enhanced first-pass claim submission success.

Formal usage by care setting appears low, but yields dividends for organizations that implemented it



- “Much more time efficient.”
- “Increased the number of claims able to appeal and the overturn amount has increased.”
- “Claim errors have decreased.”
- “Providing AI appeal text that we can copy and paste to portals has helped streamline that.”
- “Some high-volume edits that no longer have to be touched by staff are currently corrected by AI.”

- “Greater efficiency.”
- “Auto correct errors.”
- “Decreasing time on initial claim submission.”
- “More claims are being submitted.”
- “Improved our appeal letters & patient letters.”
- “It shows promise, but still must be babysat.”

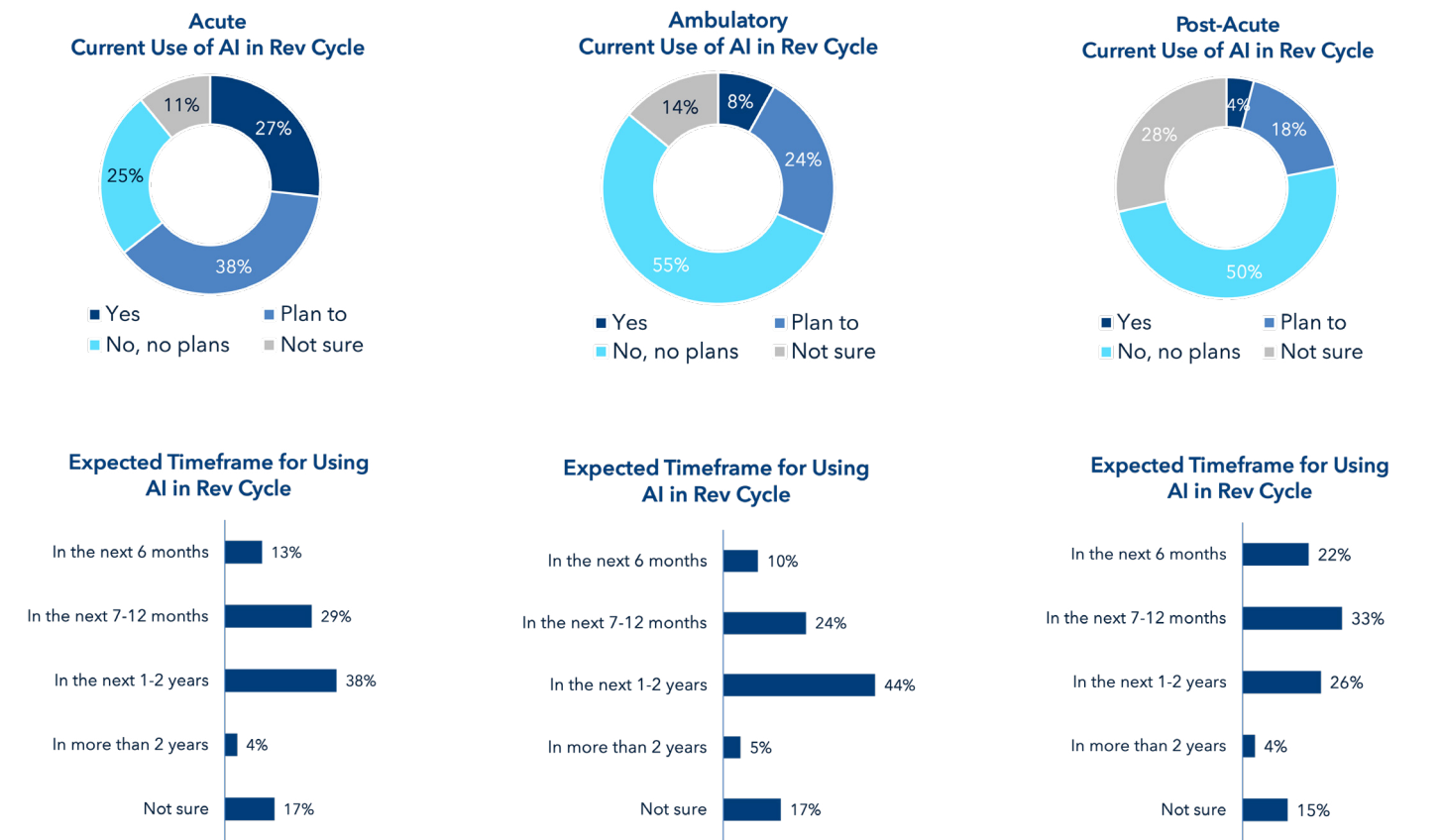
- “We are seeing reductions in unbilled and improved cash flow.”
- “Timely submission of claims.”
- “Better documentation.”

- Q. Does your organization currently use artificial intelligence in revenue cycle software?
- Q. What is your opinion about how AI has impacted your organization’s revenue cycle performance?

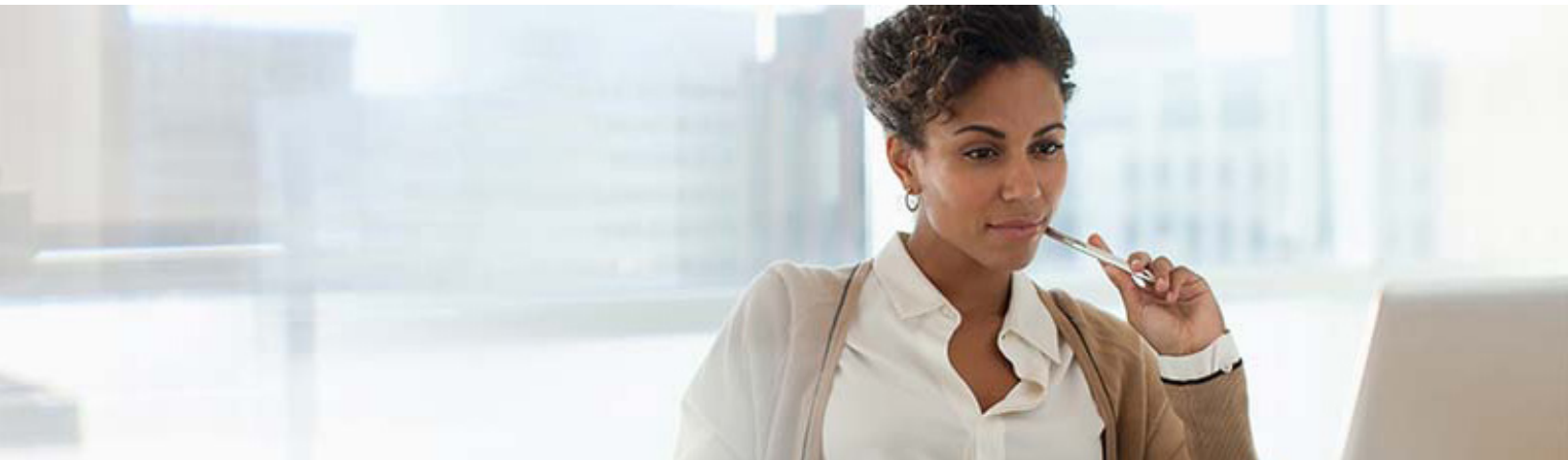
Plans to use AI in the revenue cycle

Acute hospitals are at the forefront with 65% either currently using or planning to use AI within their revenue cycle. Conversely, roughly half of ambulatory and post-acute organizations say they have no plans to use AI in revenue cycle software.

Within the ambulatory sector, practice size is a significant determinant of AI adoption plans. A substantial 86% of small practices (1-2 providers) have no plans for AI implementation, whereas this figure drops to 37% for larger practices (11+ providers), indicating that scale is a key factor in technology investment decisions.

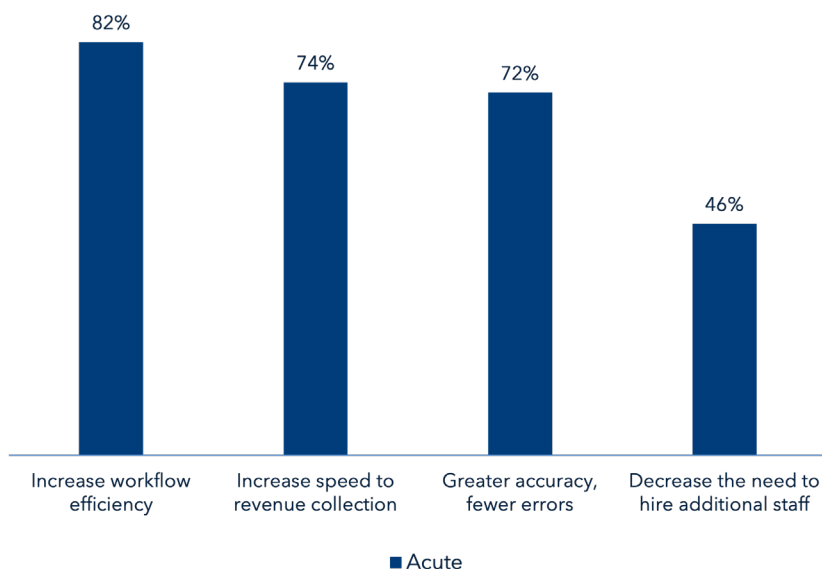


- Q. Does your organization currently use artificial intelligence in revenue cycle software?
- Q. When do you expect to be using artificial intelligence in your organization's revenue cycle?



The primary motivations for AI adoption are consistent across all care settings: enhancing workflow efficiency, accelerating speed to revenue collection, and reducing errors. Decreasing the need to hire additional staff is the lowest-ranked driver for revenue cycle leaders across all care settings. This suggests that organizations currently view AI not as a tool for headcount reduction, but as a strategic asset for expanding operational capacity and optimizing revenue capture with existing personnel.

Drivers of Using AI in Revenue Cycle
Among Those Currently Using or Planning to Use AI
 (Multiple responses allowed)



Q. Which of the following are drivers of using artificial intelligence (AI) in your organization's revenue cycle? Select all that apply.



We have used it to improve coding, diagnosis specificity, and author appeal letters. We are able to get to denied claims more efficiently by reducing the time spent per appeal."



We currently utilize RPA technology to mass appeal level of care denials for several payors, we are exploring uses for claim status and correspondence."



We are currently implementing software that models our contracts and predicts what we should be paid, and then we are able to go back claim by claim and appeal those that aren't paid correctly."



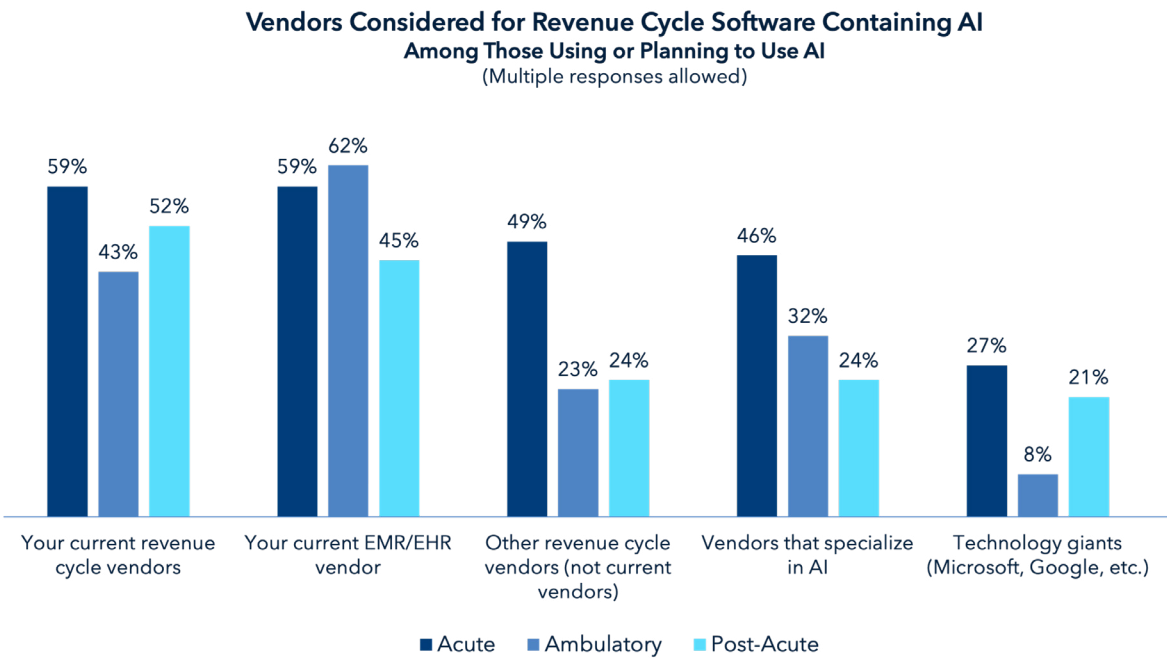
Verify eligibility, scrub claims to payer standards – enhancing edits on claims, things we do in 'batch' may be done automatically, reducing time. We use AI on many prior authorizations now and it has been helpful to reduce time needed to complete processes, only see this improving in future."



We're already using certain AI to analyze claim dispute success likelihood and to automate our document management front-end processes."

In evaluating AI-enabled RCM software, acute hospitals demonstrate a greater openness to a diverse vendor landscape compared to other care settings. Hospital leaders would give equal consideration to their incumbent RCM and EMR/EHR vendors (59% each), while a significant portion (49%) are also willing to evaluate new, specialized RCM vendors.

Ambulatory providers show a strong preference for their current EMR/EHR vendor (62%). Their willingness to consider non-incumbent RCM vendors is substantially lower at 23%. Post-acute organizations favor current revenue cycle vendors (52%) and existing EMR/EHR vendors (45%).



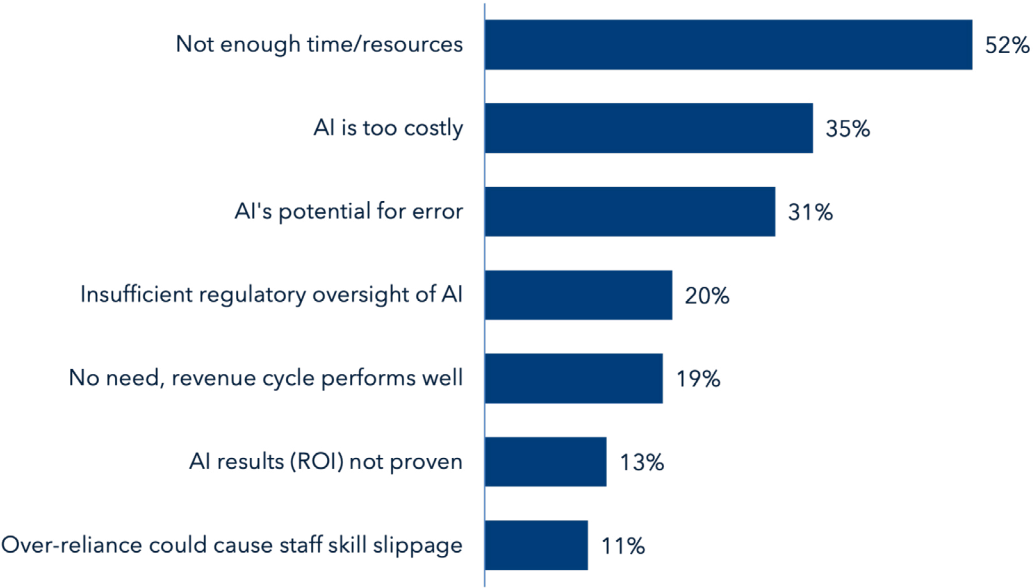
Q. Which types of companies would you consider for revenue cycle software containing AI? Select any that apply.



Among higher level revenue cycle executives whose organizations have no current plans to use AI in the revenue cycle, not having enough time or resources is the most frequently mentioned barrier.

Roughly one-third said AI would be too costly. Despite their more skeptical view of AI, its potential for error is a secondary concern, behind resource limitations and cost.

Reasons Organization Is Not Planning to Use AI in Revenue Cycle: Higher Level Executives
(Multiple responses allowed)



Q. What are the reasons your organization is not planning on using artificial intelligence (AI) in revenue cycle? Select all that apply.



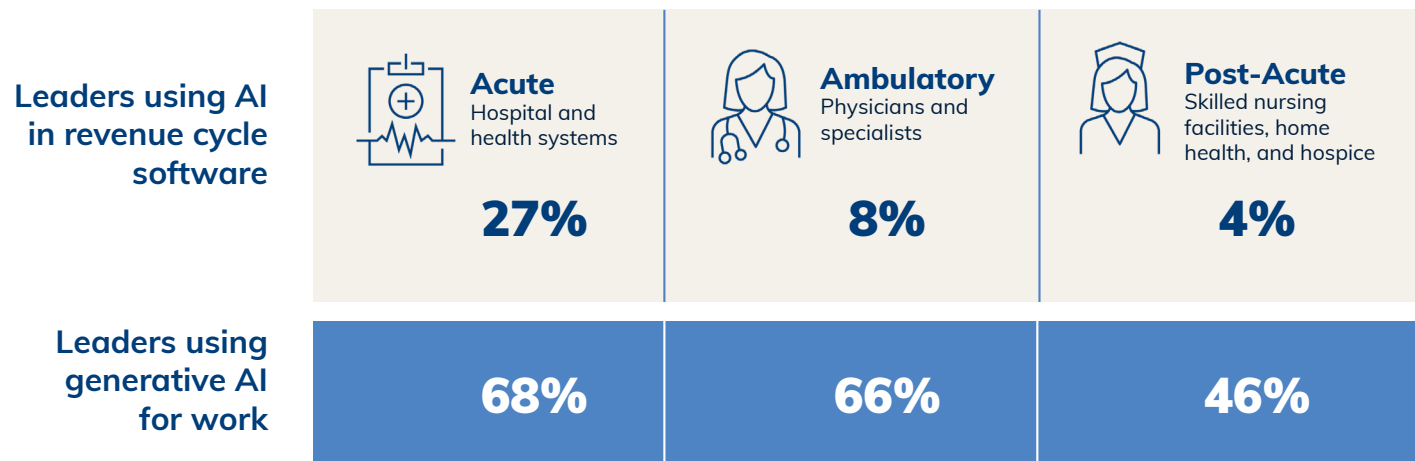
Generative AI and the Future of the Revenue Cycle

Hands-on experience is building confidence in AI

While formal implementation of AI in the revenue cycle remains more of a goal than an operational reality, many leaders have already adopted generative AI for work purposes. Two-thirds of acute and ambulatory revenue cycle leaders report using generative AI at work in some capacity, compared with less than half of post-acute organizations.



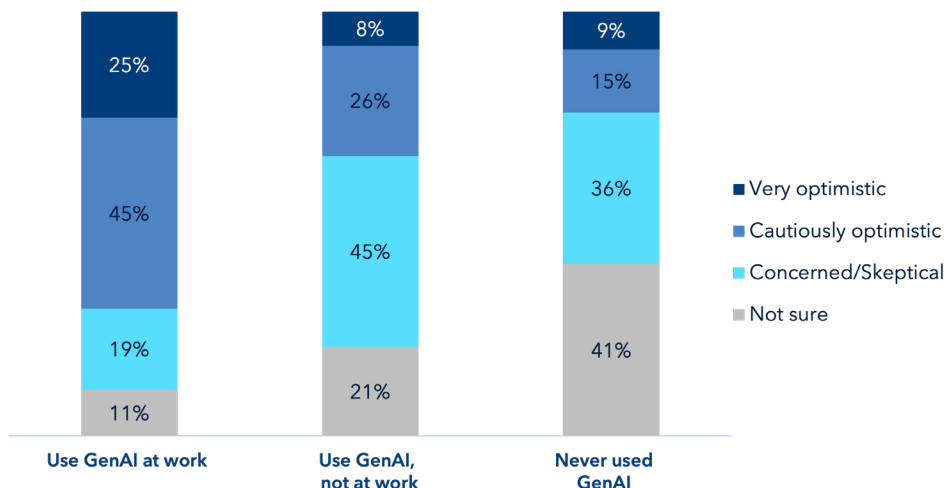
Use of generative AI does not vary meaningfully by years of experience in healthcare, age, job level, or size of organization.



Usage of generative AI at work leads to more positive views of using it in the revenue cycle

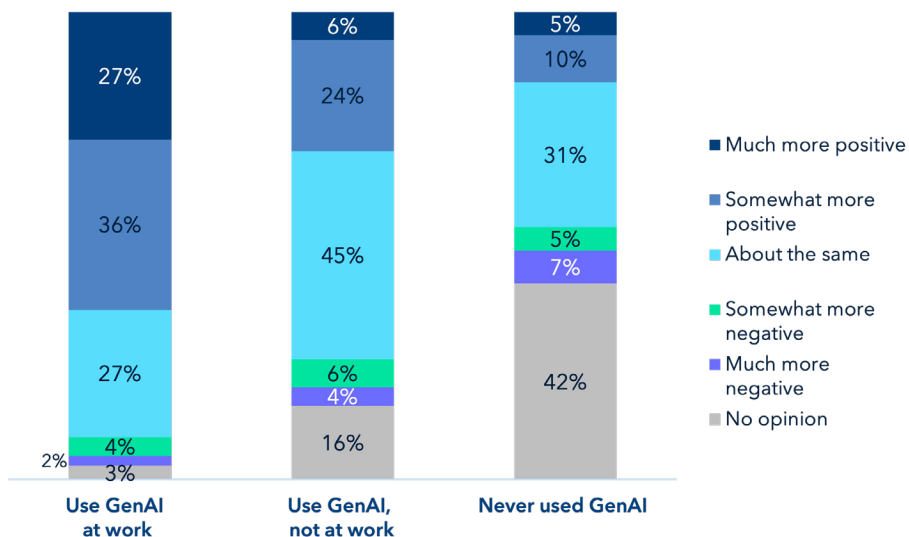
Revenue cycle leaders currently using generative AI in their jobs show more optimism about using it in the revenue cycle, and they have become more positive about it over the past two years, suggesting that hands-on experience is a key driver of positive sentiment and adoption readiness. By contrast, those who have not been using generative AI (either at work or at all) show much more hesitancy about it, perhaps due to a lack of familiarity.

Optimism About AI in the Revenue Cycle by Use of GenAI



Q. What is your opinion about using artificial intelligence in revenue cycle software?

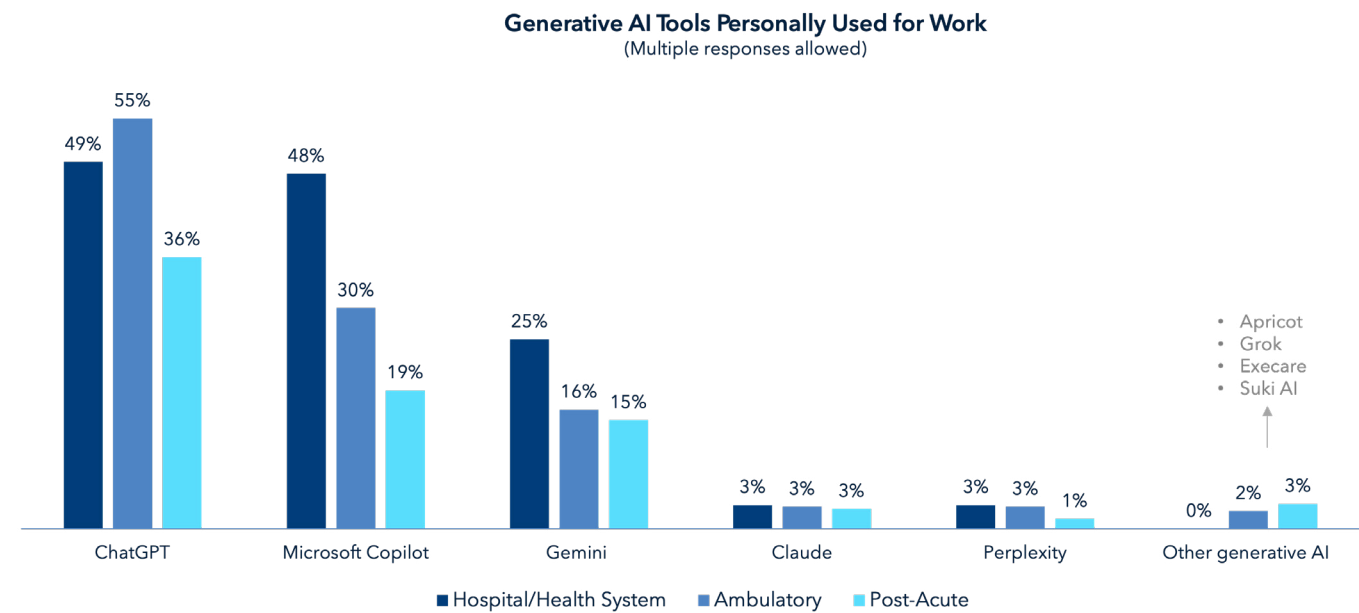
Change in Opinion on AI in Past 2 Years



Q. Think of your opinion of AI two years ago compared to now. How has your opinion about artificial intelligence changed?

Generative AI tools used most

OpenAI’s ChatGPT and Microsoft Copilot are the generative AI tools revenue cycle leaders mention most often for use in their jobs. More ambulatory organizations use ChatGPT than other tools; hospitals are evenly split between ChatGPT and Copilot.



Q. Which (if any) Generative AI tools have you personally used for work purposes related to your role in healthcare? This could include learning, analyzing, summarizing, writing, etc. Select all that apply.



Revenue Cycle AI Is Beginning to Deliver Measurable Impact

AI is no longer a future concept in RCM. It is becoming a practical tool for helping provider organizations improve efficiency, strengthen financial performance, and reduce administrative burden.

While formal adoption of AI within revenue cycle software remains in its early stages, the findings suggest the direction is clear. Leaders are becoming more optimistic, practical use cases are emerging, and organizations already using AI are reporting measurable operational benefits. At the same time, healthcare leaders continue to emphasize the need for thoughtful implementation, balancing innovation with accuracy, transparency, and human oversight.

Organizations that focus on solving meaningful revenue cycle challenges, rather than implementing AI simply because it's available, will be best positioned to realize lasting value.

Continue the Conversation

AI is creating new opportunities to improve revenue cycle performance, but successful adoption depends on more than technology alone. Inovalon remains committed to helping healthcare organizations apply AI responsibly, [simplify complex revenue cycle workflows](#), and improve operational and financial outcomes.



About us

Inovalon is a leading provider of data and solutions empowering data-driven healthcare. We bring together national-scale connectivity, real-time primary source data access, and advanced analytics into a sophisticated platform empowering improved outcomes and economics across the healthcare ecosystem. The company's analytics and capabilities are used by over 50,000 active, licensed customers. Learn more at www.inovalon.com.

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