

WHITE PAPER

AI in Healthcare: Insights From IT, Clinical, and Revenue Cycle Leaders

Table of Contents

Executive Summary 3

Background 5

Perspectives on AI: IT Executives 6

Perspectives on AI: Clinical Leaders 12

Perspectives on AI: Revenue Cycle Leaders 17

The Evolving Promise of AI in RCM.....22

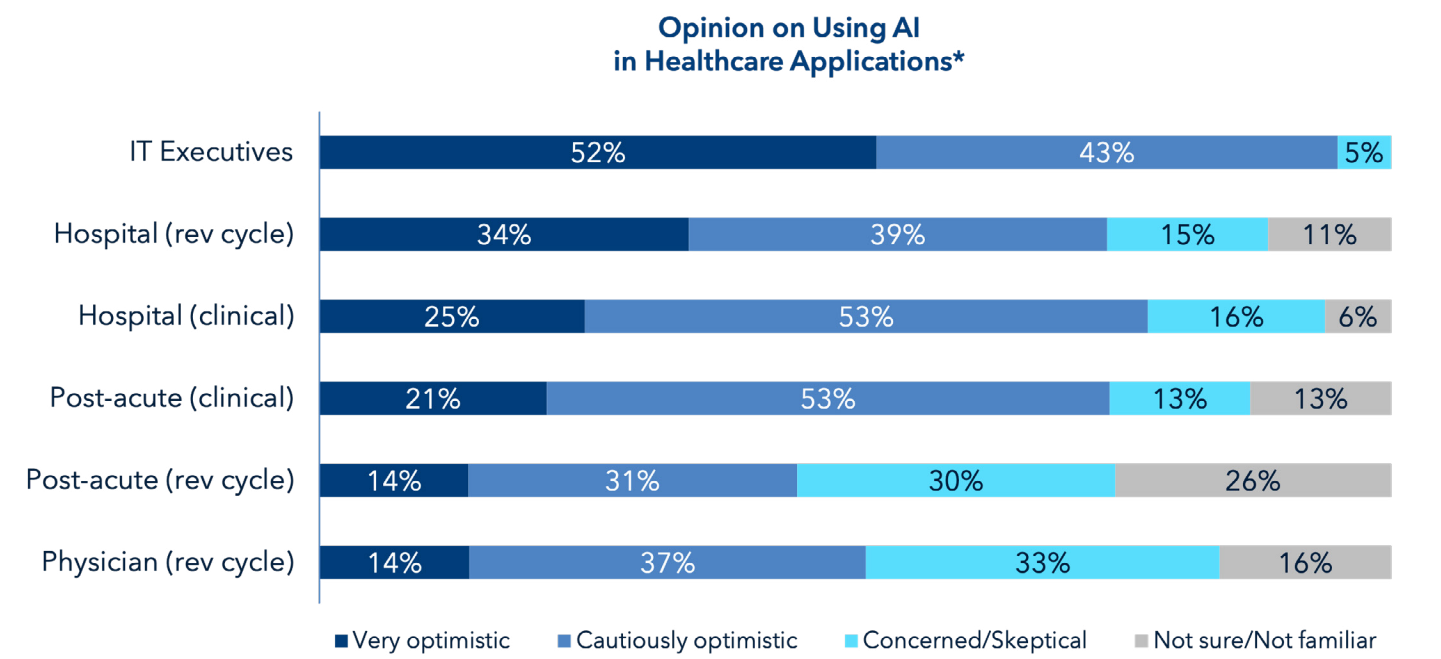
Moving Forward With AI in Healthcare.....23

Executive Summary

In February 2026, Inovalon conducted national research surveys of more than 620 healthcare leaders, including more than 400 revenue cycle leaders and 200 clinical leaders. The surveys assessed sentiment toward AI across healthcare settings and measured AI deployment within provider organizations. An additional qualitative sample of more than 20 information technology (IT) executives provided contextual findings about AI leadership within healthcare enterprises.

Key Findings

- IT executives lead AI development.**
AI development in healthcare organizations is most frequently led by C-level IT leaders — particularly CIOs — who are broadly favorable toward the technology.
- Optimism toward AI is real, but uneven.**
Approximately half of IT executives report being very optimistic about AI in healthcare. Most others express cautious optimism, and only a small minority primarily express skepticism or concern. Hospital-based leaders are far more optimistic about AI in revenue cycle than their ambulatory or post-acute counterparts, a gap that tracks closely with current usage levels.



* AI use cases:

- IT executives (qualitative sample): AI in healthcare
- Clinical leaders: AI in patient safety and quality
- Revenue cycle leaders: AI in revenue cycle software

- **Revenue cycle leaders report their AI sentiment has become more positive over the past two years.**
Revenue cycle leaders in hospitals report the greatest positive shift in sentiment.
- **Goals and opportunities for AI track to key priorities:**
IT executives articulated goals for AI are echoed by revenue cycle and clinical leaders: reducing burdens on staff and bringing efficiencies to workflows through automation of repetitive tasks, ultimately benefiting patients and helping healthcare provider organizations thrive.
- **Outside acute/hospital settings, AI development is typically in nascent stages.**
Insights from IT executives, clinical and revenue cycle leaders indicate a cautious, measured approach to implementing AI.

Implications for expansion of AI in healthcare. Taken together, the following survey findings bode well for future AI expansion in healthcare:

- Broad, cautions and conditional positivity about AI, coupled with increasing healthcare AI favorability reported over time.
- Leaders' connections between AI and challenges surrounding mission enablement.
- The gradual, measured, risk-aware AI implementation seen to date.



AI has already proven value in automating administrative burdens such as processing invoices, medical billing, predictive analytics, medical charting, admissions.”



Utilize AI where it makes efficient sense to do so, in a safe, controlled manner that enhances the patient experience and leads to ROI from a fiscal perspective.”



Background

Exploring the landscape of AI in healthcare

AI has emerged as one of the most visible and potentially transformative technologies in healthcare. Breakthrough results achieved by large language models (LLMs), generative AI, and agentic applications are increasingly highlighted through success stories about AI achievements led by technology developers working with leading health systems.

Less visible, however, are the perspectives and plans of healthcare leaders across care settings who may be considering or implementing AI. Many of these leaders face a fundamental tension: a desire to realize AI's potential benefits for staff, patients, and the enterprise, balanced against concerns about adopting these technologies without clear understanding of risks, appropriate use boundaries, and necessary safeguards. This research examines the perspectives and actions of healthcare leaders across care settings, providing a view into how they are currently evaluating and adopting AI.

The research analyzes AI sentiment and adoption across multiple domains. It includes perspectives from executive leaders responsible for technology strategy (e.g., CIOs, CTOs), as well as operational perspectives from revenue cycle executives assessing AI within key workflows, and from clinical leaders who provide insight into AI applications in patient safety and quality management.

While not an exhaustive assessment of AI adoption across all areas of the healthcare ecosystem, this research provides a structured view across care settings and applications about how healthcare leaders are approaching AI today.

About the research

In February 2026, Inovalon surveyed over 620 healthcare leaders on AI and other topics. Participants included:

- **Revenue cycle leaders.**
More than 400 revenue cycle leaders working in hospitals, post-acute and ambulatory settings, primarily physician practices. Participants were asked a series of questions designed to gauge their opinions about, and use of AI in revenue cycle management (RCM).
- **Clinical leaders.**
More than 200 clinical leaders from hospitals and post-acute facilities were asked core questions about AI in safety and quality.
- **Technology Executives.**
To provide an overarching view of AI deployment across organizations, a qualitative sample of more than 20 IT executives were included in the study. Executives who offered qualitative insights were primarily working in hospitals. Representative titles included CIO, CTO, Director of Information/Technology, and VP of IT.

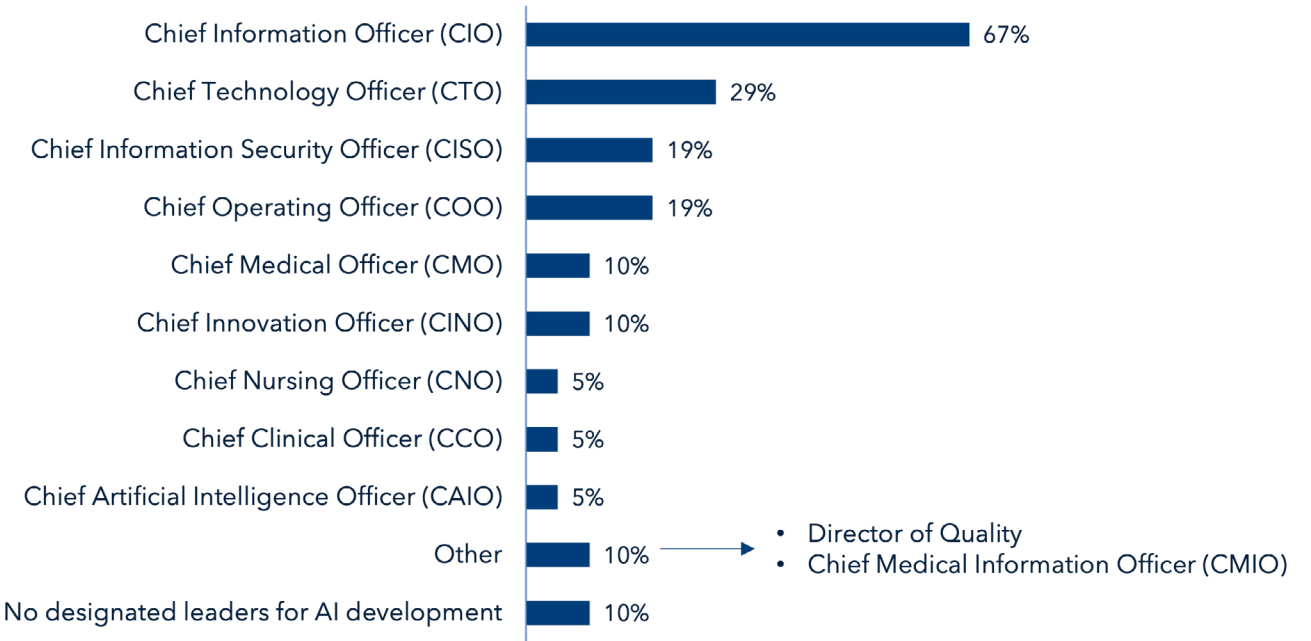
Perspectives on AI: IT Executives

Roles leading the development of AI

Executives were asked about the roles responsible for leading the development of AI in their organizations. C-level technology roles dominate, including Chief Information Officer, Chief Technology Officer, Chief Information Security Officer, and Chief Medical Information Officer.

Leaders were less likely to identify clinical executives as driving the development of AI. Clinical roles such as Chief Medical Officer, Chief Nursing Officer, Chief Clinical Officer, or Director of Quality each were mentioned by fewer than 20% of leaders (Figure 1).

Figure 1: Roles Leading the Development of AI
(Multiple responses allowed)



Q: Which role (or roles) in your organization are leading development of AI? Select all that apply.

Enterprise AI goals and opportunities

Two primary enterprise goals for AI articulated by IT executives are: process improvement (efficiency and error reduction) and improving the patient experience primarily by supporting and enabling staff.

Goals as Articulated by IT Executives

Process improvement: lean, efficient with reduction in errors

- “Back of the house optimization.”
- “Reducing human error in complex tasks, accelerating innovation, and using predictive analytics to optimize resources and decision-making.”
- “Insurance companies are denying more claims without adequate reasons for denial and more and more claims go into review. We are getting preapproval even with plans that do not require preapproval.”
- “Using AI agents to combat human error and helping us tackle repetitive and tedious tasks.”
- “Automation of un-lean, manual processes, freeing up FTE’s for work that AI cannot perform without human intervention.”

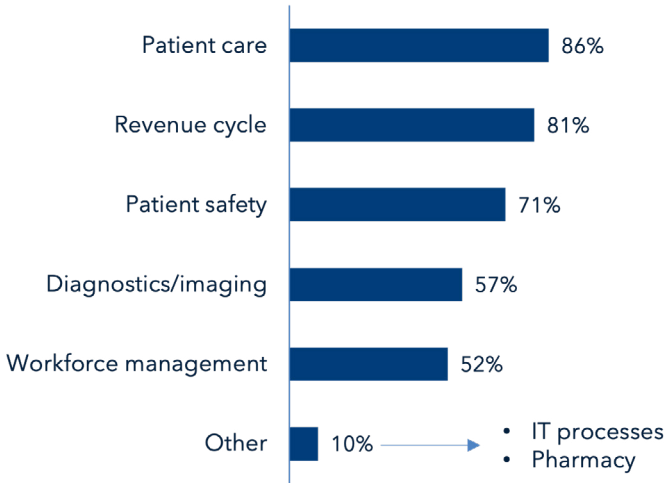
Support workers as enablers of patient care: minimize burden, while maximizing value and end-user productivity

- “To free up time for staff to focus on higher value tasks or perform more tasks.”
- “We hope that it will replace repetitive tasks and allow us to reassign workforce to higher priority tasks.”
- “We are using Gemini for end-user productivity and speech dictation. Looking at ways to implement agents to help with RCM denials and collections.”

Q: Please briefly describe your organization’s goals in using AI.

IT Leaders see numerous domains to which AI can be applied. Patient care and safety, and the revenue cycle are the most frequently mentioned opportunities for the application of AI (Figure 2).

Figure 2: Areas of Opportunity for AI
(Multiple responses allowed)



Q: In which areas do you see significant opportunity for application of AI? Select all that apply.

Opinions about AI in healthcare

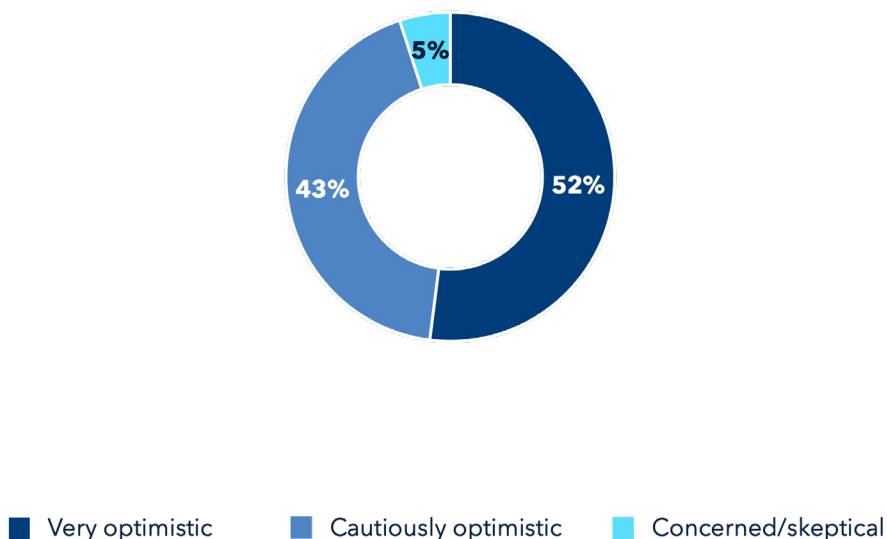
In terms of overall sentiment, IT executives are aligned in their optimism about AI.

Directionally, more than half of IT executives are very optimistic about AI, and a similar proportion are cautiously optimistic (Figure 3).

Whether optimistic or skeptical, all IT executives were asked to weigh in, in their own words, on what they saw as the opportunities and risks of using AI in healthcare. IT leaders' optimism primarily stems from opportunities to improve administrative processes and unburden physicians and care teams.

While optimism is the prevailing sentiment, significant AI reservations co-exist. IT leaders' concerns are primarily focused on the possibility of patient harm via errors or misuse of information, and data security.

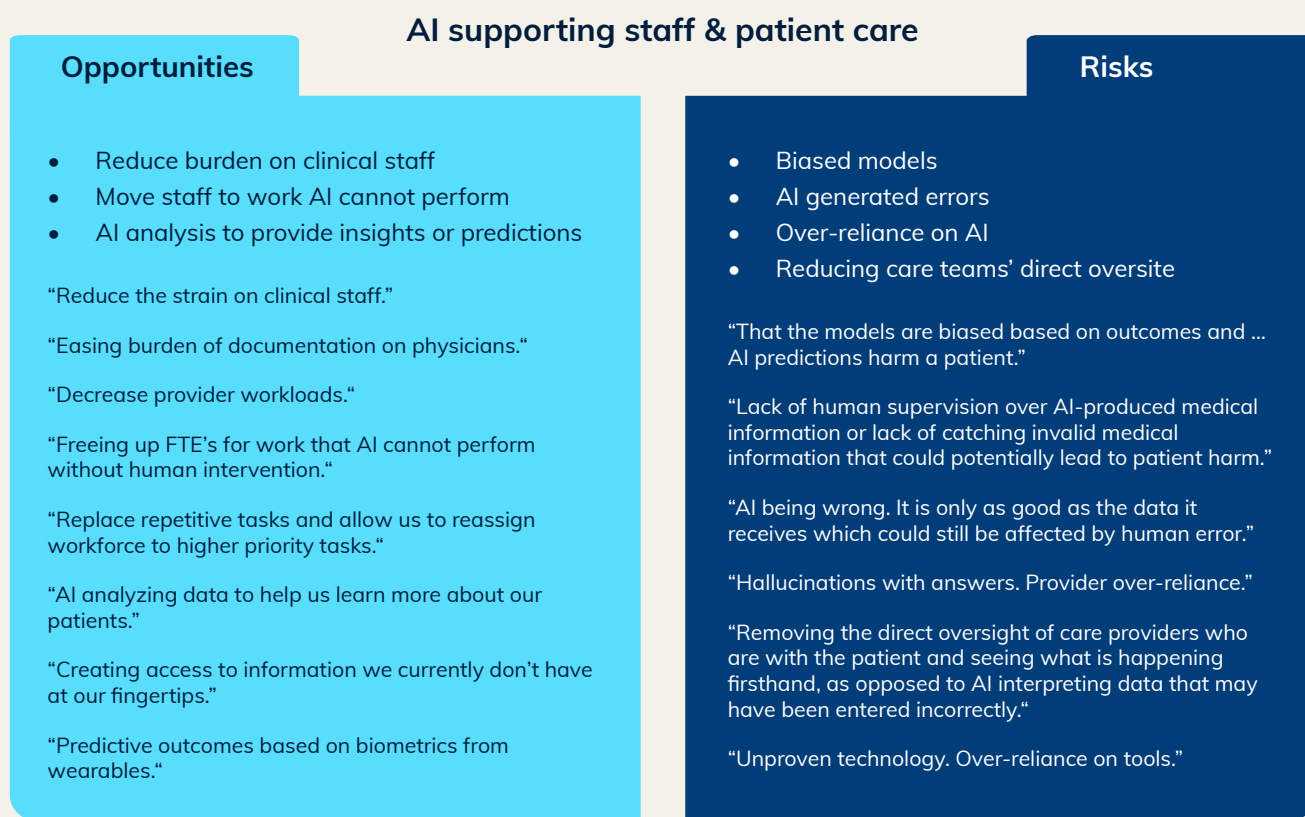
Figure 3: Opinion on Using AI in Healthcare Organizations



Q: What is your opinion about using artificial intelligence in healthcare organizations?



Figure 4: AI Opportunities and Risks: Perspectives of IT Executives



Q: How do you see artificial intelligence (AI) addressing your organization's challenges, and enabling goals? (Base: Very/cautiously optimistic about AI)

Q: What are your concerns about using artificial intelligence (AI) in healthcare organizations?

Implementing AI

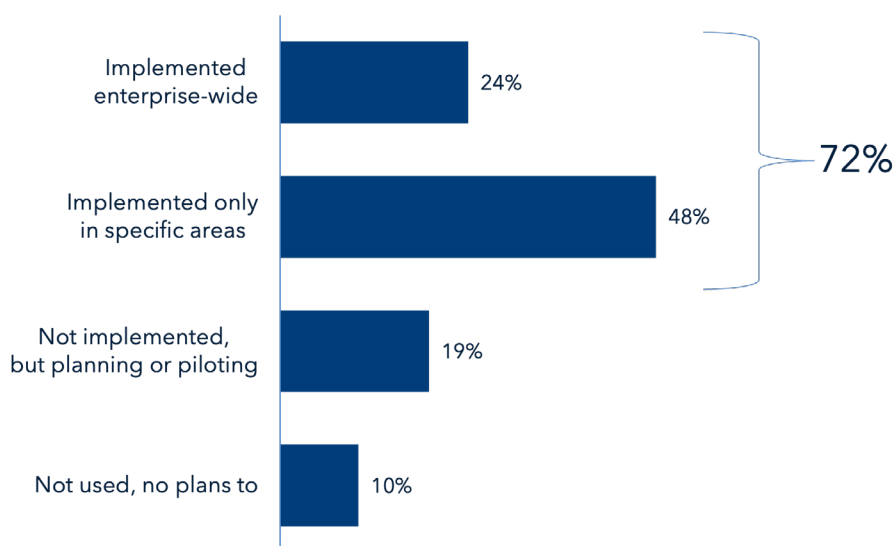
Among this largely hospital-based cohort of IT executives, enterprise-wide use of AI is far from the norm. Executives most frequently characterize their organizations' use of AI as limited to specific areas within the organization (Figure 5).

About 7 in 10 have implemented AI in some form.

About 2 in 10 are planning or piloting AI.

Only 1 in 10 said they are not using AI, with no plans to do so.

Figure 5: Use of AI Within Healthcare Organizations



Q: How extensively is AI used in your organization?



AI has already proven value in automating administrative burdens such as processing invoices, medical billing, predictive analytics, medical charting, and admissions.”



Utilize AI where it makes efficient sense to do so, in a safe, controlled manner that enhances the patient experience and leads to ROI from a fiscal perspective.”

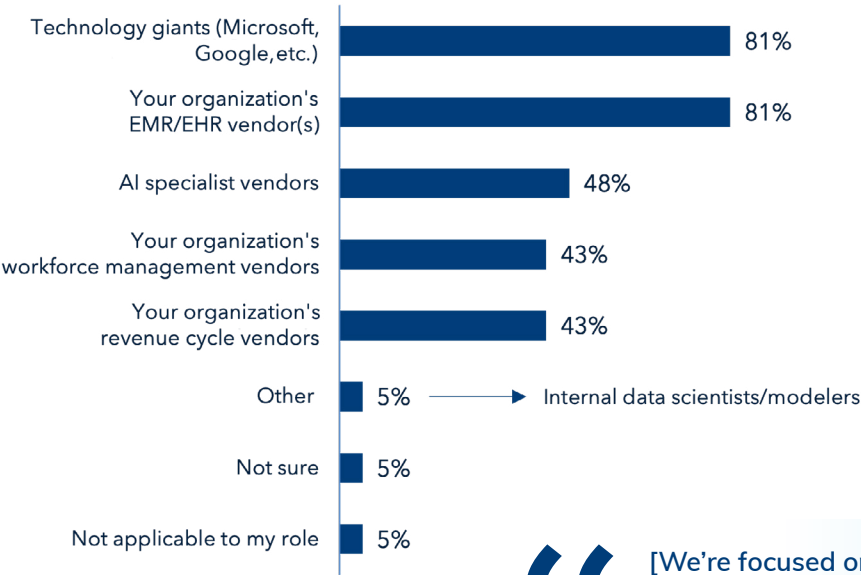


Right now we are trying to identify uses for it. We don't have anything concrete. We do not want to adopt it and create a problem for it to solve. We need a problem that we think it will solve.”

Preferences for purveyors of AI

Large, well-known technology companies, as well as incumbent EMR/EHR companies were most often cited as vendors who would be considered for AI (Figure 6).

Figure 6: Vendor Sources for AI
(Multiple responses allowed)



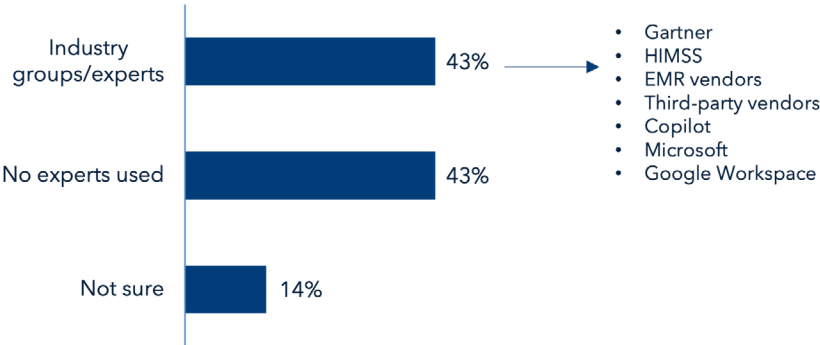
Q: Which types of companies would you consider to source AI? Select all that apply.



[We're focused on the] responsible deployment of internally developed AI solutions, in conjunction with fully vetted third-party partners. [This is] across operational divisions in health plan and health system to drive optimization, reduce overhead, and continue to drive our exceptional clinical safety."

More than 40% of IT executives look to experts for guidance on AI. These experts include consultants, EMR/EHR vendors and tech companies (Figure 7).

Figure 7: Entities Used for Advice/Guidance on AI



- Gartner
- HIMSS
- EMR vendors
- Third-party vendors
- Copilot
- Microsoft
- Google Workspace

Q: Which organizations or experts does your organization look to for guidance on AI?

Perspectives on AI: Clinical Leaders

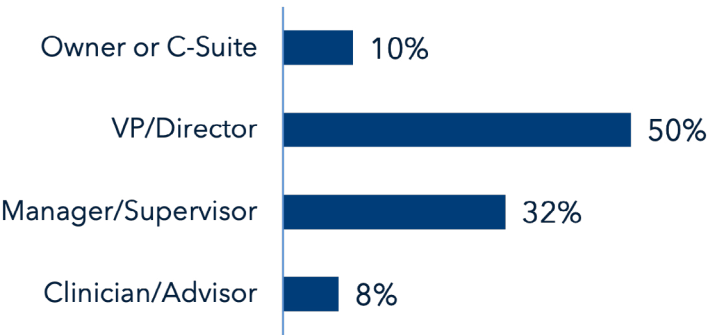
Balancing AI value and risk across the healthcare enterprise

While IT leaders are focused on the enterprise-level strategy and infrastructure for AI, it is the clinical leaders who must navigate its implementation at the point of care. This section explores their unique perspective on AI.

To form a holistic and representative view of clinical leader perspectives on specific clinically focused AI, more than 200 clinical leaders from hospitals and post-acute residential settings were asked their opinions and expectations about using AI in patient safety and quality.

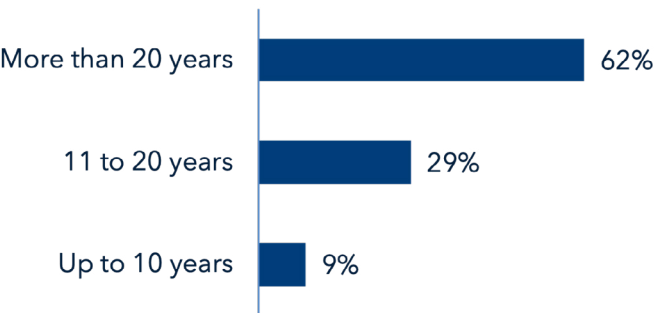
These leaders primarily represent hospitals and post-acute facilities. They are a highly experienced group, with titles including Director of Nursing, Nurse Manager, Clinical Director and Chief Nursing Officer (Figure 8 and 9).

Figure 8: Role in Healthcare Organization



Q. Which of the job categories below best describes your position?

Figure 9: Years Working in Healthcare

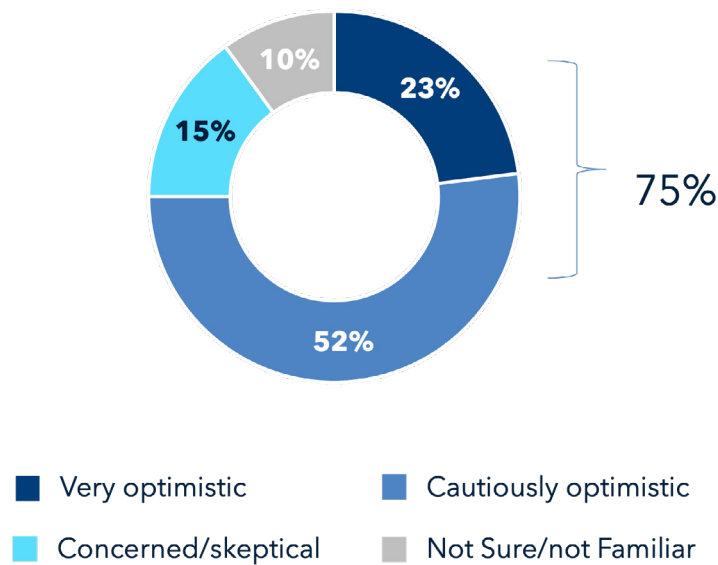


Q. For how many years have you worked in healthcare provider organizations in any role?

Opinions about AI in patient safety and quality management

Clinical leaders are approaching AI pragmatically, with cautious, conditional optimism. Most leaders were at least cautiously optimistic about using AI in patient safety and quality management software (75%) and almost one-quarter were very optimistic (Figure 10).

Figure 10: Opinions on AI in Patient Safety and Quality Management



Q. What is your opinion about using artificial intelligence (AI) in software used for patient safety and quality management?



I think it will go a long way. I haven't personally seen in specific software, but I know there are lots of advancements happening to help assist in our line of work."

In terms of specific care settings, leaders in hospitals and post-acute facilities were similarly optimistic; however, post-acute facility leaders may have less familiarity with AI (Figure 11).

Figure 11: Opinions on AI in Patient Safety and Quality Management



Q. What is your opinion about using artificial intelligence (AI) in software used for patient safety and quality management?



I've not totally made my mind up about AI. I really hope as a techy type person that it adds a lot of benefit to my profession. I have reservations about its accuracy. I need to learn a lot more about it and have opportunities to use it."



Perspectives on AI from Clinical leaders

Opportunities and Risks



Clinical leaders are steadfast advocates for their care teams and patients – a conviction that shapes their views on AI. They are conditionally open to AI if it will deliver proven benefits to patients and staff.

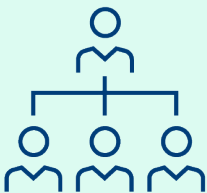


“I feel that whatever can assist with increasing residents’ quality of life by ensuring informed staff is worth trying.”

“We need to be careful to prove benefits with well done studies - not just promises and fancy dashboards. We need to prove that AI is benefitting patients and staff.”



Those who are optimistic about AI saw opportunities for AI to benefit care teams and patients. AI might predict severity of illness, reduce documentation time, or unburden care teams. Clinical leaders also cautioned about over-reliance on AI given the possibility of inaccuracy or failure. (Figure 12)



“Nothing replaces critical thinking and the human touch.”

“I would hate for nursing staff to lose the patient experience and bedside manner that brought us into nursing to be replaced by AI.”

“A reservation includes how clinical staff view AI tools and change in practice.”

“Patient care is humanistic; don’t know how AI would contribute to this.”



Additionally, clinical leaders noted the potential inconsistencies and incompatibilities of introducing AI in human-centered patient care delivery.



Figure 12: AI Opportunities and Risks: Clinical Leader Perspectives

Opportunities to benefit patients and staff

- Reduce administrative burden
- Predict illness severity, deterioration
- Support root cause analysis and follow-up on safety events
- AI-enhanced staff scheduling to optimize coverage and match skills to patient needs

"Useful to reduce documentation time."

"AI can be integrated to oversee clinical work and lessen the clinical burdens that staff face. For example, medication administration can be entirely automated with fewer errors than when handled by humans."

"The greatest asset of AI is using the technology to predict patient harm or severity of illness."

"AI can review a lot of data quickly to create flags. Humans need to do the decision making based on the whole person and person-specific knowledge."

"Very open to see how this technology improves tracking and trending events as well as identifying commonalities amongst the data."

"Root cause analysis and action steps to follow."

"Having AI program that would help to manage staff scheduling would be of great assistance and a time saver."

"Speeding up processes and assessments, developing solutions for staff engagement."

Clinical and security risks

- AI inaccuracies or system failure/downtime
- Security and HIPAA concerns
- Staff training
- Staff overreliance
- Subordination of clinical judgement

"I would have concerns around HIPAA, and some concerns around accuracy of data."

"I think AI has a place in healthcare, I am just cautious in what it would be utilized for with there being such a risk for data leaks already in our world. We currently use it to help build policies and procedures, however letting it have access to patient records is what concerns me."

"Do not trust AI with human predictions. We provide humans to provide care to humans."

"At the current level of development, AI is too error-prone for use in healthcare related to patient care decisions"

"Staff have variable experience with technology so some would really struggle."

"Staff would need education."

"I have concerns about new staff not being able to think critically when situations outside of the norm arise, or when technology is not available due to downtime."

"AI is a wonderful tool but should never replace clinical judgement."

Q. Please give us your thoughts about using AI to enable better quality patient care and/or engaged, productive staff. We're interested in any opportunities you see as well as any reservations you may have.

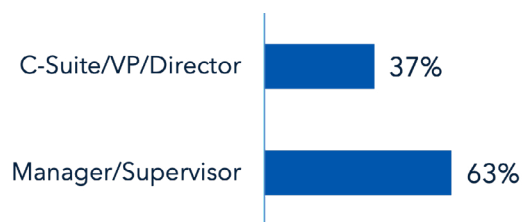


Perspectives on AI: Revenue Cycle Leaders

Participating revenue cycle leaders

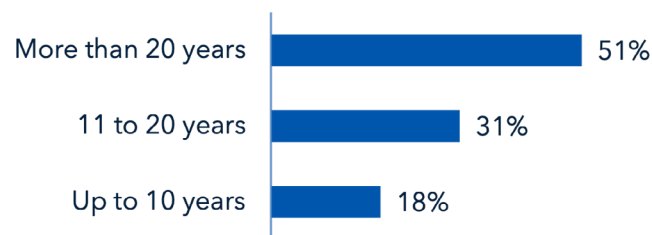
More than 400 revenue cycle leaders working in hospitals, post-acute, home health, hospice, skilled nursing, and ambulatory settings (primarily physician and specialty practices) were asked a series of questions designed to gauge their opinions about, and use of, AI in revenue cycle management. Nearly 40% were VP level and above; others were managers (Figure 13). This was a highly experienced group with; over half had been working in healthcare for more than 20 years (Figure 14).

Figure 13: Role in Healthcare Organization



Q. Which of the job categories best describes your position?

Figure 14: Years Working in Healthcare



Q. For how many years have you worked in healthcare provider organizations, in any role?

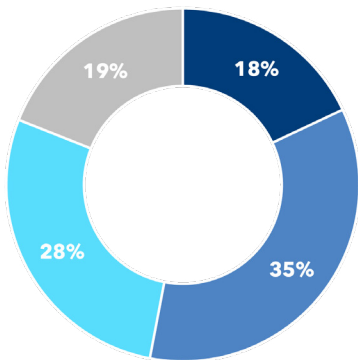


Opinions about AI in revenue cycle software

Provider organizations have continued to operate under sustained financial strain, driven by declining reimbursement rates, rising rates of claim denials, and increasing costs. The application of AI in RCM workflows presents a credible avenue for mitigating these pressures.

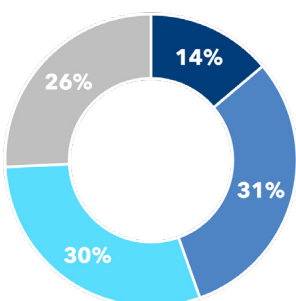
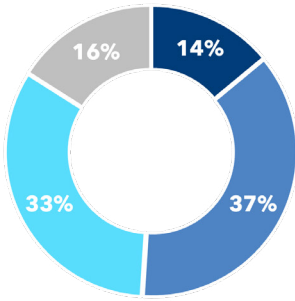
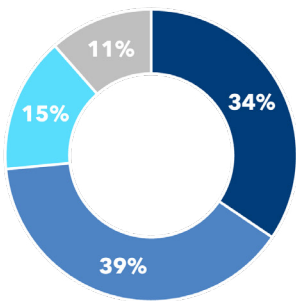
Among revenue cycle leaders surveyed, 53% expressed optimism regarding the integration of AI capabilities within revenue cycle software (Figure 15).

Figure 15: Opinion on Using AI in Revenue Cycle Software



Revenue cycle leaders in acute hospitals and health systems are much more optimistic about AI use in the revenue cycle than those in other care settings.

Figure 16: Opinion on Using AI in Revenue Cycle Software



Very optimistic Cautiously optimistic Concerned/Skeptical Not sure/Not familiar

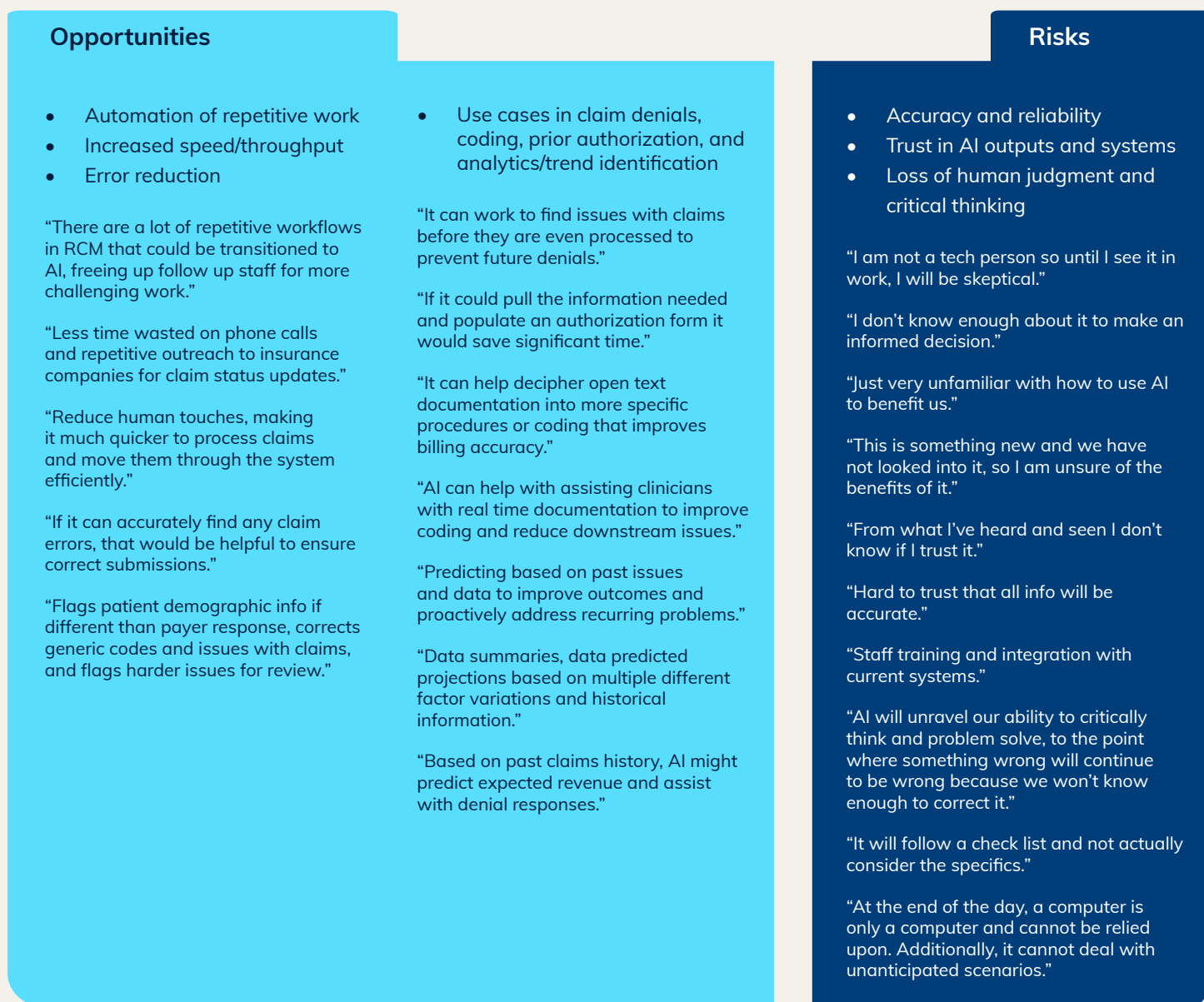
Q. What is your opinion about using artificial intelligence in revenue cycle software?

Perceived opportunities and risks of AI

Revenue cycle leaders who are optimistic about AI anticipate that its potential value is in greater efficiency: automation of repetitive work, increased throughput and error reduction in revenue cycle workflows. Use cases such as prevention and management of claim denials, prior authorization and coding.

Those concerned about AI cited accuracy and reliability risks, coupled with worries about AI eroding human judgment and critical thinking skills.

Figure 17: Revenue Cycle Leader Perspectives on AI Opportunities and Risks



Q. How might artificial intelligence enhance performance or address challenges in your revenue cycle?
(Base: Very/cautiously optimistic)

Q. What are your concerns about using artificial intelligence in revenue cycle software?
(Base: Concerned/Not sure)

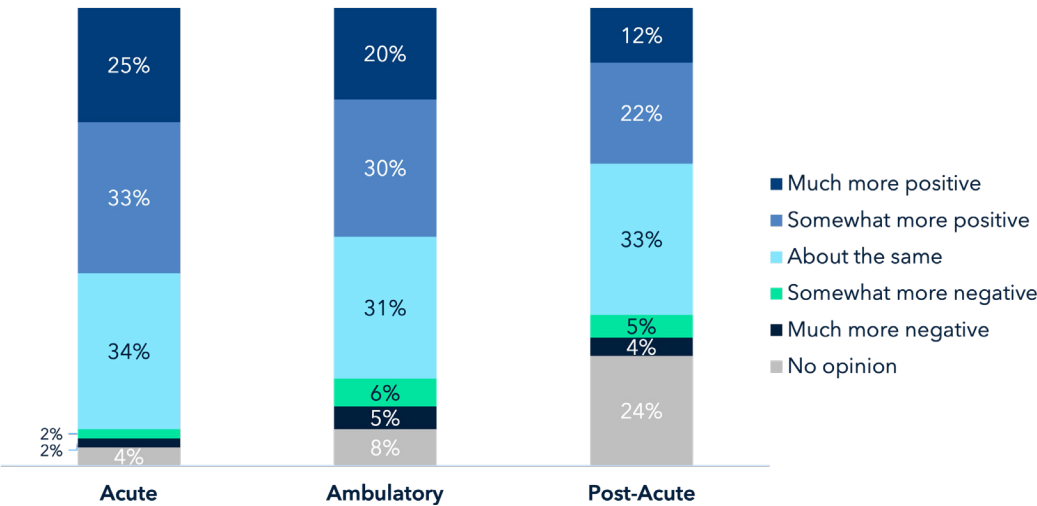
Sentiment toward AI has improved

Over the past two years, sentiment toward AI among revenue cycle leaders has shifted measurably in a positive direction, with hospital financial leaders reporting the most pronounced gains in optimism (Figure 19).

The trend is also positive in ambulatory and post-acute organizations, although in these settings approximately 10% indicate that 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.

“ AI has been around for a long time. However, I think in the past year or so it has become a major player due to the current work environment.”

Figure 19: 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?



AI adoption in the revenue cycle

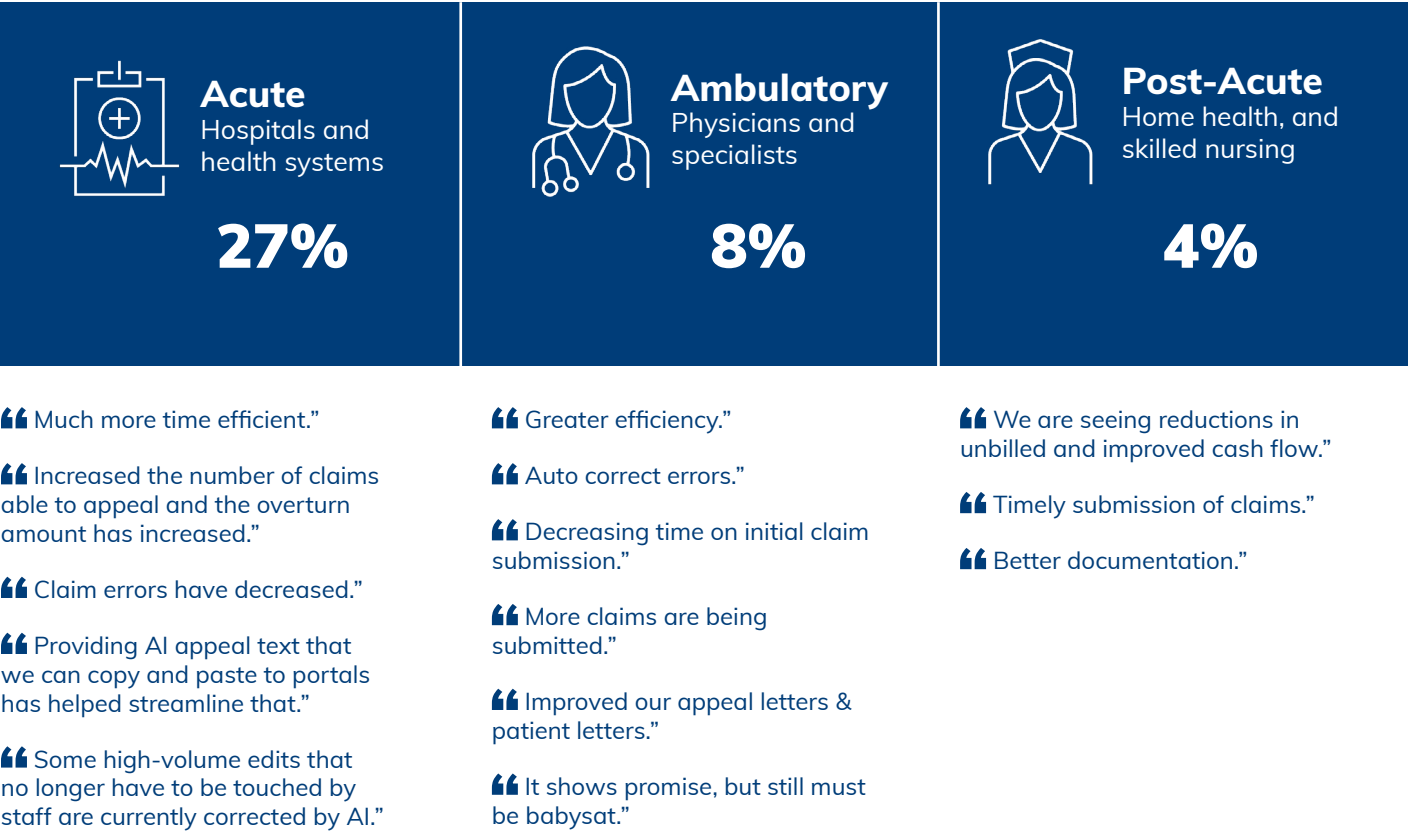
Most organizations have not yet begun using AI in revenue cycle software, but those that have report improvements.

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

Implementation rates are highest in the hospital sector at 27%, followed by ambulatory organizations at 8% and post-acute facilities at 4% (Figure 18).

Organizations that have implemented AI report measurable improvements in revenue cycle performance.

Figure 18: Use of AI in RCM, and Impact by Care Setting



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?

The Evolving Promise of AI in RCM

Today's revenue cycle leaders have specific expectations for AI in crystallized use cases like coding assistance, automated appeal letter generation, contract modeling, and predictive analytics.

Beyond such task automation, leaders are now envisioning AI that functions across the revenue cycle, building on and connecting the AI-enabled task automation implemented within single workflows.

On the horizon is a broadening from AI-enabled task automation to intelligent workflow orchestration. AI's value is seen in reducing friction across interconnected workflows and helping organizations move from reactive revenue cycle management to more predictive and proactive operations with greater revenue realization.



It has potential throughout every phase of the process, from intake and authorization, to claim submission and back-end denial management and appeals.”



Moving Forward With AI in Healthcare

AI trendline in healthcare: expansion to continue

The AI wave is upon healthcare, although across care settings, most leaders have not yet directly experienced AI in their workflows. However, given these research results, the trendline points to expanding AI-enabled innovation in healthcare.

1. **Optimism about AI in healthcare is relatively high.** Despite the longer-term unknowns in the broader AI ecosystem (regulatory uncertainty, environmental limitations, model bias and/or manipulation, privacy concerns, etc.), positivity and openness to AI are consistent across care settings.
2. **Leaders report that their level of optimism about AI has increased over the past two years.** Data from revenue cycle leaders surveyed show a significant positive shift. This shift was greatest among hospital leaders whose organizations are more likely to be using AI.
3. **There is excellent alignment between AI capabilities and leaders' imperatives.** AI is seen as a tool for efficiency gains, unburdening staff, and furthering mission enablement – a central goal of IT leaders moving forward with AI development.
4. **Leaders are receptive to multiple sources for AI.** IT executives, the leaders of AI development, are open to partnering with an array of entities with AI expertise, from large tech companies, to AI specialists, to companies with both subject matter and AI expertise.

Taken together, these survey findings bode well for future AI expansion in healthcare.



Looking Ahead

The promise of AI is becoming clearer across healthcare, but lasting adoption will depend on trust. Organizations need solutions that are transparent, responsible, and proven to deliver meaningful results. Inovalon is committed to helping build that trust through thoughtful innovation and solutions that support better decisions across healthcare.

Explore related research that takes a deeper look at how AI is shaping key areas of healthcare operations.



Revenue Cycle

Preventing Claim Denials Before They Happen

Learn what's driving claim denials across provider organizations and how healthcare leaders are using AI and other strategies to improve front-end workflows, reduce rework, and support cleaner claims.

[See the Findings](#)

Workforce

Supporting the Healthcare Workforce

Discover how clinical leaders are responding to staffing shortages to support, engage and retain staff.

[Read the Report](#)

Clinical

Improving Patient Safety and Quality

Discover clinical leaders' challenges with patient safety, and the roles of staffing, clinical information, and leadership/culture in driving patient safety performance.

[Get the Results](#)

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.

Inovalon
4321 Collington Road
Bowie, MD 20716
(301) 809-4000

www.inovalon.com