

FALL/WINTER 2024



# AI Adoption in the Value-Based Era

**Humana**<sup>®</sup>

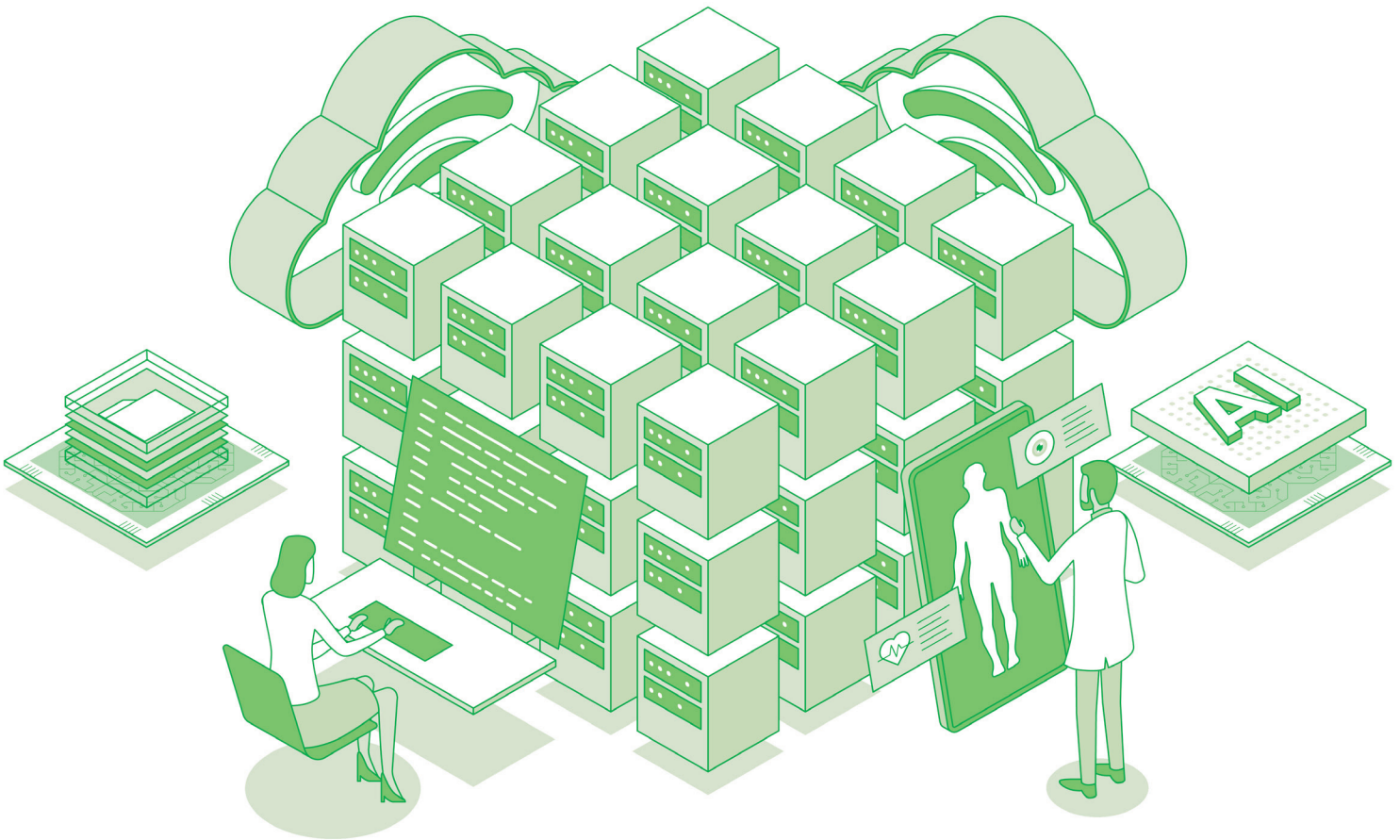
**MGMA**<sup>®</sup>

AN MGMA AND HUMANA JOINT RESEARCH STUDY REPORT

# Introduction

When smartphones ushered in a new era of technology in the mid-2000s, one phrase summed up the wondrous new array of tools: “There’s an app for that.”

Today, the burgeoning list of artificial intelligence use cases across healthcare might have us updating it slightly: “There’s an AI for that.” In some larger organizations, it has spurred the addition of “Chief AI Officer” to the C-suite ranks.



But these leaps forward aren’t being made at every medical practice, and the journey away from legacy technological systems can be a slow one for many organizations. For AI adopters, the seemingly transformative solutions largely focus on reducing mundane, repetitive administrative burdens — to keep delivering care the same way it had been before, just faster, more cost effective and with less clinician burden.

In many respects, this gradual and uneven technological evolution is akin to the ongoing shift from fee-for-service (FFS) care to value-based care arrangements, which begs another question: Is AI accelerating the shift to value or just making healthcare better at FFS?

MGMA and Humana partnered in June and July 2024 to survey healthcare leaders about their perceptions and implementation of AI solutions in their organizations, specifically:

- The motivations for and barriers to AI adoption
- Governance of AI use, including policies and policy review
- Important factors for organizational buy-in.

Questionnaires and interviews followed to better understand how AI is used in different payment models, as well as medical groups’ results of AI implementation and future plans.

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The research found:

## 1 AI adoption is limited but growing, focused largely on speech recognition or clinical diagnostic tools.

- **Adoption rate:** Around one-third of the surveyed healthcare organizations have implemented AI applications, with nearly half of these implementations occurring within the past year.
- **Types of AI used:** The most commonly used AI applications are ambient AI/transcription/scribing and clinical diagnostic tools. These tools are mainly used in primary care and are frequently integrated with EHR systems.

## 2 Process efficiency motivates, while costs and lack of training are barriers.

- **Motivations for adoption:** The primary motivations for adopting AI include improving process efficiency, reducing the burden on providers/staff, and improving patient outcomes, reflecting the pressing need to enhance operational efficiency and alleviate healthcare professional workloads.
- **Barriers to adoption:** The top barriers to AI adoption are a lack of education/training, high costs, and a lack of trust/buy-in (20%). Organizations that have already adopted AI also cite regulatory hurdles and a lack of skilled personnel as significant challenges.

## 3 Formal AI governance structures and policy review are sparse.

- **Governance structure:** Most organizations (73%) do not have a formal governance structure for AI use, which could hinder the effective and ethical use of AI. Among those that do, common features include data privacy policies, ethical guidelines, and AI oversight committees.
- **Policy updates:** The frequency of AI policy reviews varies, with most organizations reporting that they update their policies on an as-needed basis.

## 4 Slower adopters need to see the ROI before they build or buy.

- **Crucial factors for buy-in:** Demonstrating a clear return on investment (ROI) is considered crucial for gaining organizational buy-in. Other important factors include evidence of improved patient outcomes and strong leadership support.

**“It’s a very exciting time to be working in healthcare. [While] administrative burdens and staffing shortages are likely at all-time highs, there are finally some cost-effective AI tools that show real promise. AI is really the only bridge that I can see that can get us through the future.”**

— Survey response

- **Leadership buy-in:** Demonstrating ROI is also seen as very important or critical to gaining leadership buy-in, particularly in groups experienced with AI.

## 5 Revenue cycle AI is part of the future — so is additional technical training.

- **Future AI investments:** Ambient AI and revenue cycle management (RCM) AI applications are a focus for organizations to invest over the next three years.
- **Training needs:** Technical training for staff is the most desired type of support to increase AI adoption. Physician leaders and clinical support staff are identified as the roles that would benefit most from additional AI training and support.

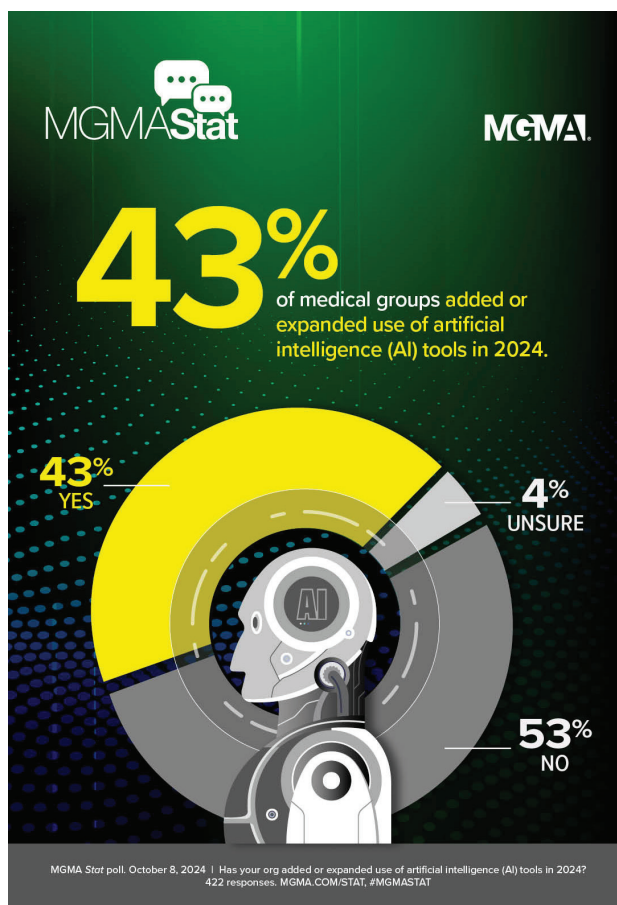
## 6 AI is showing results enough to be seen as a long-term strategy.

- **Effectiveness of AI:** More than seven in 10 respondents (72%) from organizations that use AI believe their implementations have been at least somewhat effective.
- **Long-term strategy:** AI is considered important in the long-term strategy of these organizations, with most respondents who have implemented AI finding it very important or critical.

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# AI adoption: Measuring the market

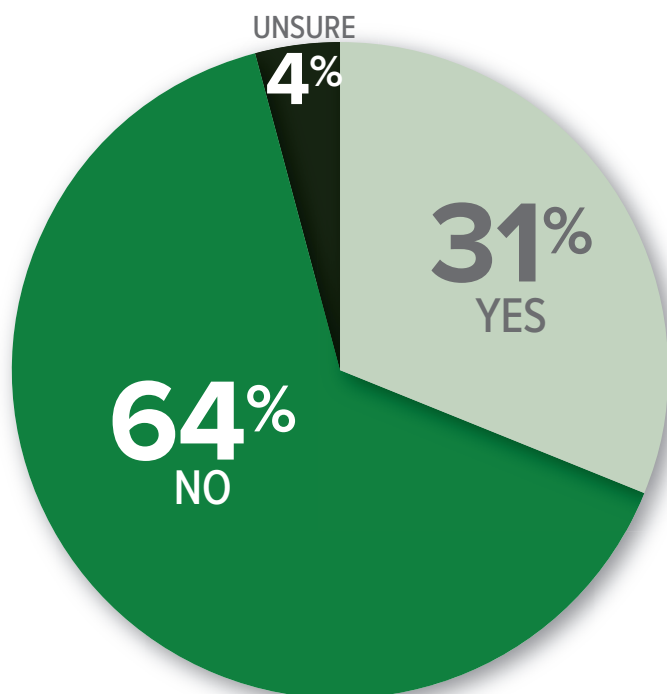
Entering 2024, there were still plenty of provider organizations that had not dipped their toes into the waters of AI tools yet, as only about one in five (21%) had added or expanded the use of AI tools in 2023, per [MGMA Stat polling](#) last year. [New polling from this October](#) shows that figure has grown to about 43% in 2024.



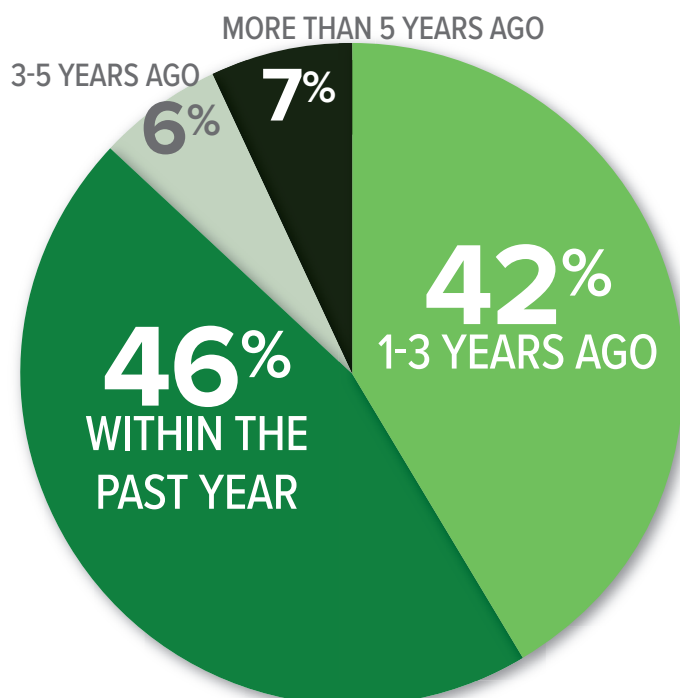
The Humana-MGMA survey offers an updated look at the pace of implementation in the ambulatory/outpatient space:

- Less than one-third of responding practices noted they had adopted an AI application by summer 2024, while another 4% were unsure.
- AI application adoption largely has been a recent trend, as 88% of practices note they started with AI

## HAS YOUR ORGANIZATION ADOPTED AN AI APPLICATION?



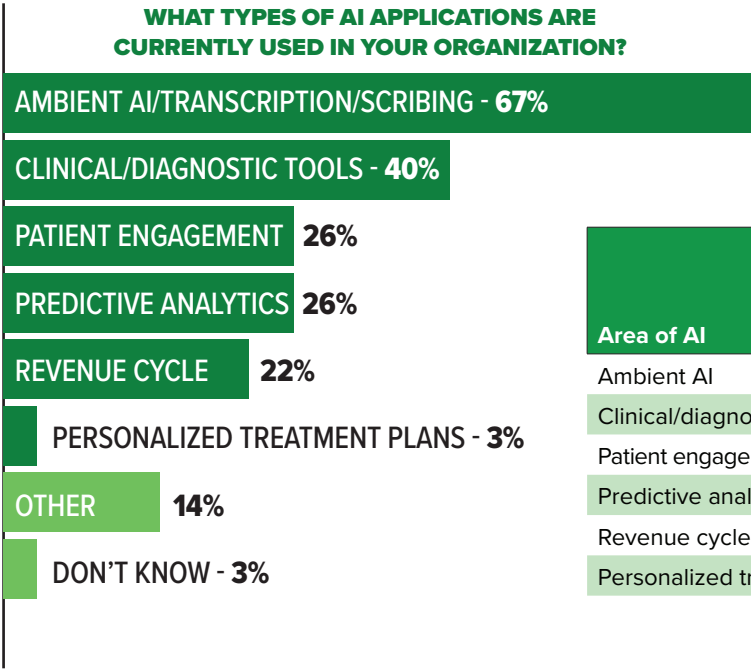
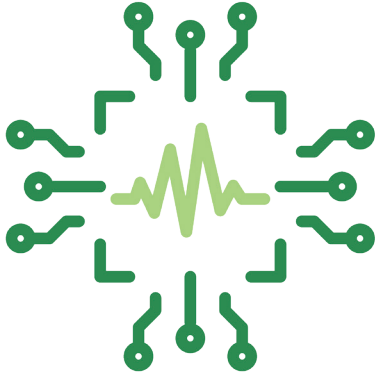
## WHEN DID YOUR ORGANIZATION FIRST START USING AN AI APPLICATION?



within the past three years — 46% of them within the past year alone. Only 13% of practices have been using AI for more than three years. [Note: Results do not add up to 100% due to rounding.]

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# What forms of AI are being used, and by whom?



**BREAKDOWN**

Area of AI	Practices with value-based care plans	Practices without value-based care plans
Ambient AI	68%	63%
Clinical/diagnostic tools	40%	36%
Patient engagement/outreach	30%	23%
Predictive analytics	30%	18%
Revenue cycle	26%	18%
Personalized treatment	2%	5%

The survey found that the most broadly adopted types of AI applications were those closest to the foundational patient-provider relationship:

- Ambient AI (e.g., used for transcription or scribing of clinician dictation or patient visit recordings) was the most common answer, noted by two-thirds of practices using any type of AI tool.

- Clinical/diagnostic tools were the next most common type of AI in use, cited by four in 10 practices.

AI tools for patient engagement/communications (26%), predictive analytics (26%) and revenue cycle (e.g., billing, coding, claims, risk adjustment) rounded out the top five most common areas of AI tools in use today. Another 14% responded “other .”

**Combining AI with value-based care**

How practices get paid may have an impact on what types of AI they pursue. Organizations participating in value-based care arrangements had broader adoption of AI applications than practices not in value-based arrangements, especially in the areas of patient engagement, predictive analytics and revenue cycle — areas previously identified as key focal points for shifting to value-based care in a 2022 MGMA-Humana research report (see table).

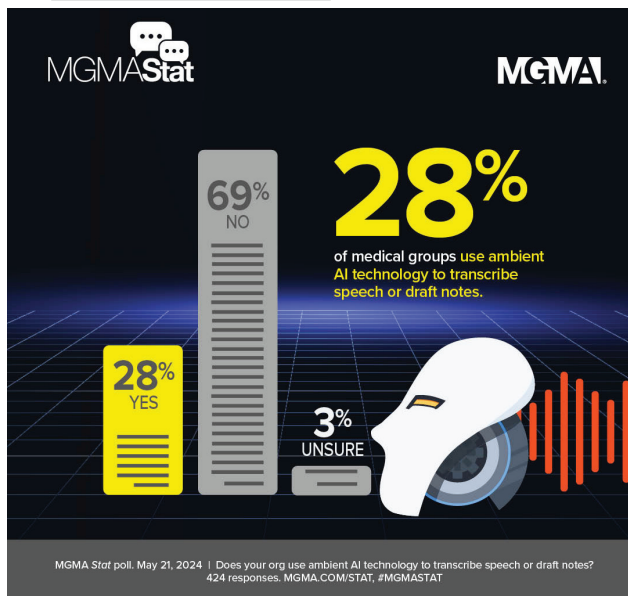
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# AI use cases

The promise of easier documentation and reduced burden on clinicians are major selling points for today's ambient AI technologies, as natural language processing (NLP) or speech recognition capture context from patient visit recordings and help them translate into transcripts and clinical notes.

While ambient AI tools were very common among practices in the Humana-MGMA survey, there may yet be a large share of the overall ambulatory care space to embrace this technology: Only 28% of groups reported using ambient AI in a [May 2024 MGMA Stat poll](#).



No matter how widely used, the list of uses for AI in healthcare is likely too long for any single publication. One example is AI used to power [virtual agents assisting remotely monitored patients](#) to help patients with diabetes. Additionally, there's an entire realm of tools and education centered around understanding AI readiness and appropriate use:

- Health systems such as OSF HealthCare in Illinois developed [training around generative AI](#) required for all employees to better prepare them for the future.
- New frameworks [are being developed](#) to assess the quality of data for use in ML products.
- The World Health Organization (WHO) recently released an [updated toolkit for public health organizations](#) to assess their readiness for AI.

No discussion of AI in healthcare can be complete without recognition of the ongoing work to ensure AI applications produce valid results that are free from errors that could endanger patient safety.

For all these new tools, there are countless efforts to study how reliable they are, especially with regard to large language models (LLMs) and [the issue of "hallucinations"](#) (e.g., false or misleading results). These issues speak to the need for careful governance and policies around testing AI applications, as discussed later in this report.

## AI INTEGRATIONS IN SUPPORT OF VALUE-BASED CARE

Medical groups and health systems aiming to succeed in value-based care (VBC) often use a combination of technology products, analytics platforms, care management tools and AI-powered solutions. Here are just a few of the types of products and how AI is increasingly playing a role:

**1. Population health management (PHM) platforms.** These platforms collect and analyze data from multiple sources, such as EHRs, claims, and patient-reported outcomes, to identify high-risk populations and tailor care.

- **AI integration:** AI is used to predict patient risk, identify gaps in care and recommend tailored interventions.

**2. Care coordination and management tools.** These systems help healthcare teams communicate across settings, track patients and manage care plans, especially for chronic disease management.

- **AI integration:** AI-powered tools analyze patient data to suggest best practices, streamline workflow, and identify patients who need the most attention.

**3. Clinical decision support (CDS) systems.** CDS systems assist clinicians in making evidence-based decisions by providing real-time information at the point of care.

- **AI integration:** AI algorithms analyze patient data, suggest diagnoses, and propose treatment options based on patterns in large datasets.

**4. Predictive analytics and risk stratification tools.** Similar to some care management applications, these tools are used to predict which patients are at high risk for hospital admissions, ER visits or complications.

- **AI integration:** AI models use historical data to forecast patient risk, enabling proactive intervention.

**5. Remote patient monitoring (RPM) and telehealth.** RPM tools allow healthcare providers to monitor patients with chronic conditions remotely, reducing unnecessary hospital visits.

- **AI integration:** AI analyzes data from wearable devices, identifying trends and triggering alerts for abnormal values.

**6. Revenue cycle management (RCM).** RCM platforms are crucial for handling billing and ensuring that payments align with the value delivered.

- **AI integration:** AI can automate coding, detect billing errors, and forecast payment trends.

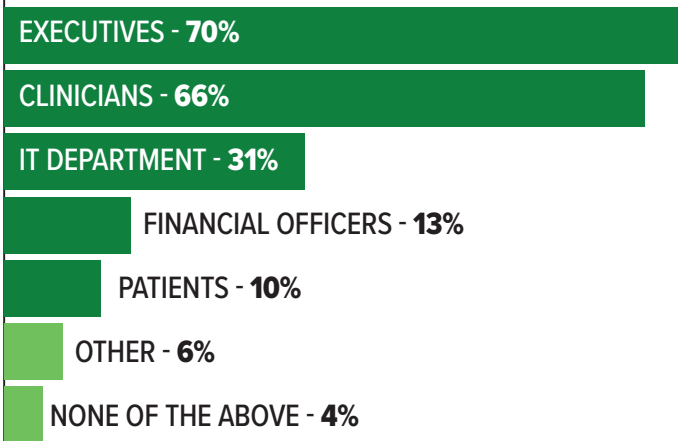
**7. Patient engagement and communication platforms.**

These platforms focus on improving communication with patients, offering education, and supporting self-management.

- **AI integration:** AI chatbots, personalized reminders, and virtual health assistants are used to engage patients.

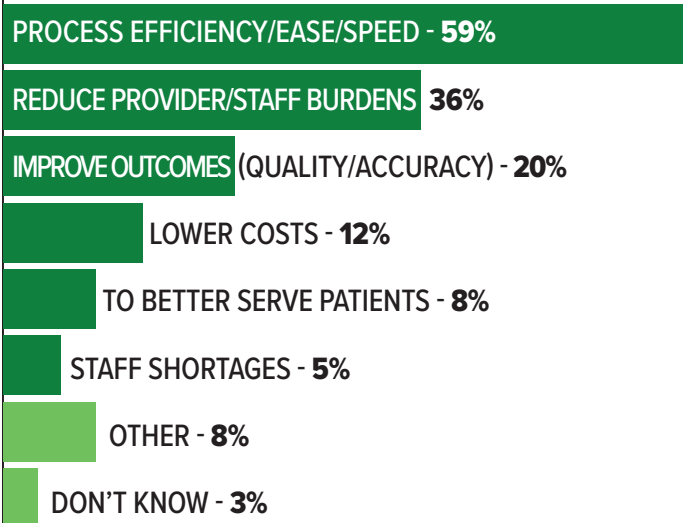
# Who makes the call on AI adoption — and why?

## WHO WERE THE KEY STAKEHOLDERS PUSHING FOR AI ADOPTION IN YOUR ORGANIZATION?

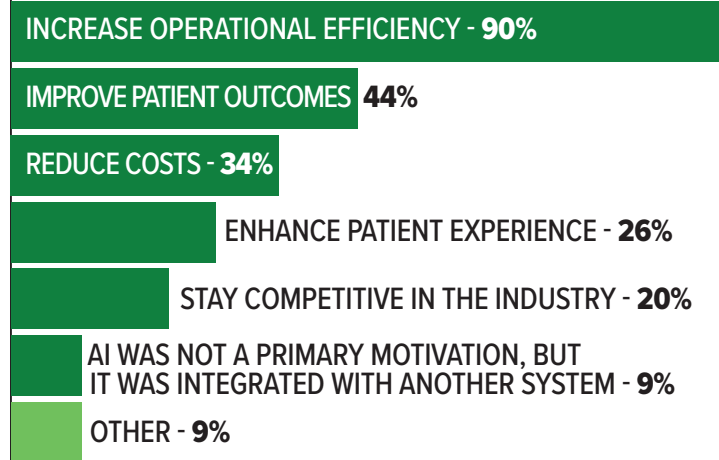


- Clinicians were nearly as often to be a key stakeholder in the push for AI adoption as executives, while patients were included as key stakeholders in only about one group out of 10.
- Looking at pre-adoption motivating factors, process efficiency/ease/speed (59%) stood out ahead of reducing provider and staff burdens (36%) and improving outcomes for quality/accuracy (20%). Major concerns for the industry such as lowering costs (12%) and staff shortages (5%) ranked much lower.
- The resounding most significant factor for organizations to formally decide on adopting AI applications was increasing operational efficiency (90%), with improving patient outcomes (44%) and reducing costs (34%) ranked much further behind as the second and third most significant factors, respectively.

## WHAT WERE THE PRIMARY MOTIVATIONS FOR ADOPTING AI IN YOUR ORGANIZATION?



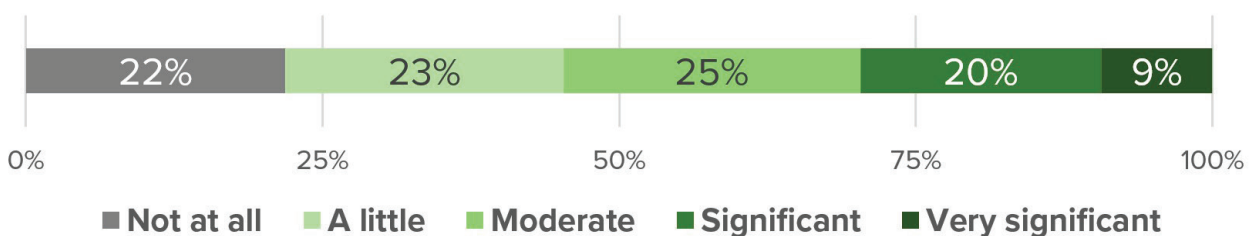
## WHICH FACTORS WERE MOST SIGNIFICANT IN THE DECISION TO ADOPT AI?



While a great deal of industry headlines in recent years have focused on AI as a vehicle to address staffing shortages, the Humana-MGMA survey found that staffing was ranked very low among the primary motivations for AI adoption. When looking just at healthcare organizations that already have implemented AI:

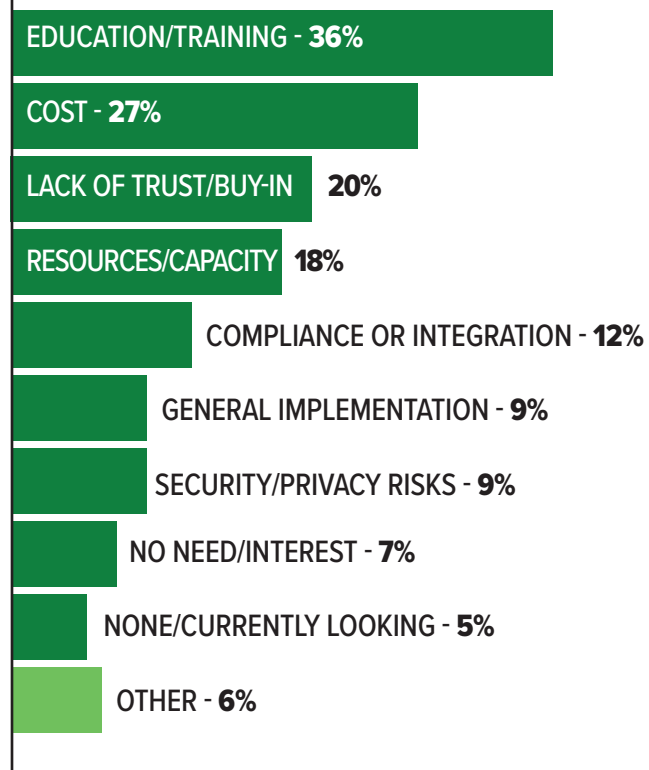
- 22% said staffing shortages had not influenced the decision at all
- Only 29% said staffing had a “significant” or “very significant” role in the decision.

## TO WHAT EXTENT DID STAFFING SHORTAGES PROMPT YOUR ORGANIZATION'S IMPLEMENTATION OF AI?



# What barriers and hurdles constrain AI adoption?

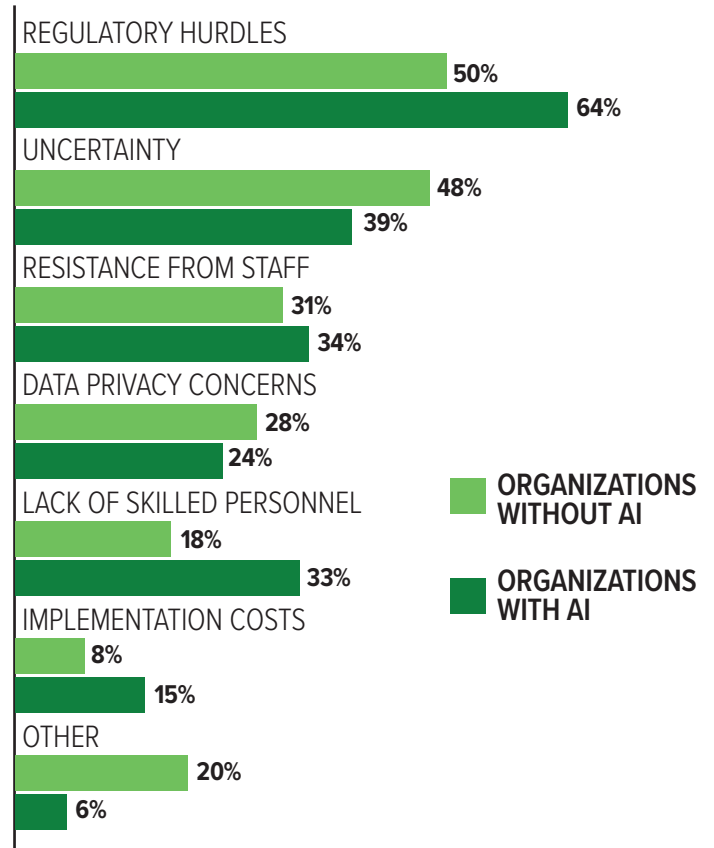
## WHAT ARE THE PRIMARY BARRIERS TO ADOPTING AI IN YOUR ORGANIZATION?



Across all surveyed healthcare organizations:

- Ensuring proper education and training stood out as the primary barrier to AI adoption.
- Cost concerns were also a major barrier. Issues with [a potential divide of “AI haves” and “AI have-nots”](#) driven by high costs of implementation are on the minds of many healthcare leaders.
- The issue of lack of trust or buy-in, as well as having the appropriate resources and capacity for implementation round out the top four barriers.

## WHAT ARE THE MOST SIGNIFICANT BARRIERS TO AI ADOPTION IN YOUR ORGANIZATION?



Breaking down respondents by those who have yet to implement an AI tool and those who have find certain shifts that occur following the addition of AI:

- The awareness of regulatory hurdles and the issues of cost and having skilled personnel becomes increasingly clear in organizations that have added AI.
- Organizations following AI implementation have lower reported concerns around uncertainty and data privacy.

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## HEALTHCARE LEADER VOICES

Among practice leaders that have adopted AI and participate in value-based care arrangements, the primary barriers to adopting AI were:

- **Cost, limited IT resources and integration:**

- “Adding advanced AI solutions is expensive and requires add-ons to current EHR or external applications. Very slow moving process to integrate AI solutions.”
- “Consistent cohesive connectivity between the overlay and the EHR: How to integrate into provider workflow, limitations on initial criteria built into the AI platform.”
- “So many competing applications, all need interfaces, have upfront costs and are yet unproven.”
- “When the integration breaks or goes down due to one system or the other.”

- **The unknown - Understanding products/tools, training/education**

- “Lack of awareness of what is available. Cost. Potential difficulty of adoption.”
- “The unknown, costs, getting older clinicians to adopt new technology.”

- **Price and return on investment**

- “Showing the cost vs benefit.”
- “Realization that AI isn’t a perfect technology just yet (unrealistic expectations).”

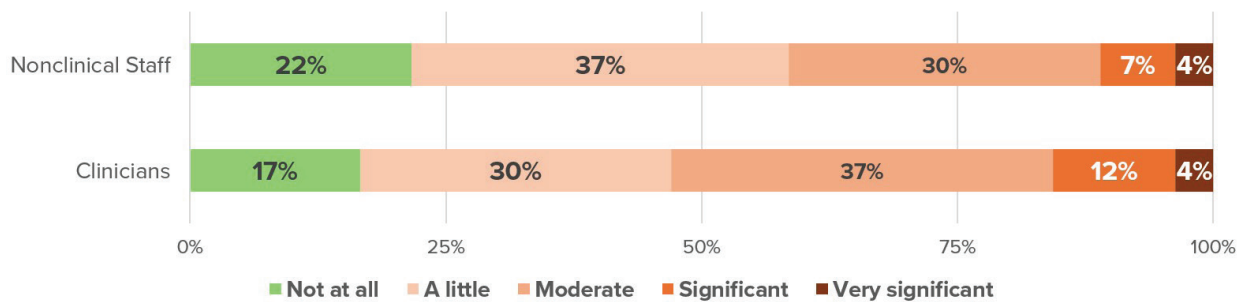
- **Resistance to change**

- “Changes in provider workflows which lead to resistance at first, but through change management the adoption in many AI arenas is nearly 100%”
- “A narrow mindset regarding leveraging technology”

- **Risk of being early adopters, data security, being mindful**

- “Some applications are too new and we’d be the alpha testers of the application.”
- “I think we are very open to adopting it but will be selective on where it will be used. It cannot completely replace quality care.”
- “Initially it was the requirement for a single interface for each application, but the platform approach resolved that issue. Second became cybersecurity concerns, which were addressed by utilizing a platform that could deploy behind our firewall or on our private cloud. Now validation for clinical applications is becoming a concern but the platform we utilize does validation so I doubt that will be a concern either.”

### LEVEL OF RESISTANCE TO AI IN ORGANIZATION



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While a lot of the reporting on AI in healthcare in recent years has focused on clinician hesitation or resistance to AI implementation, healthcare leaders surveyed earlier this year only reported slightly higher levels of resistance to AI from clinicians compared to their nonclinical staff. In fact, the share of those with “a little” and “moderate” resistance to AI was the same (67%) in leaders’ perception of both the nonclinical staff and clinicians.

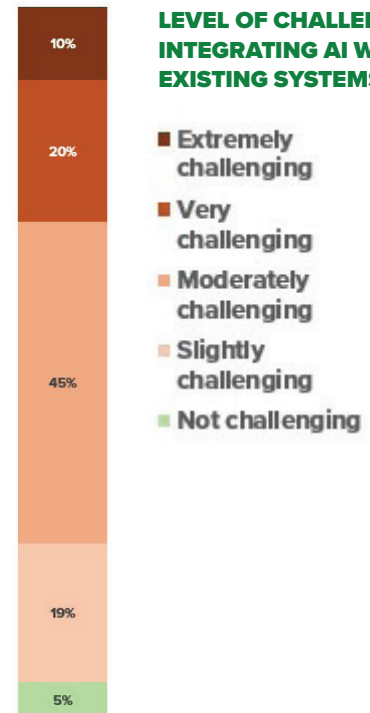


In follow-up questionnaires and interviews with practice leaders who adopted AI, one of the most common concerns was the ability of an AI application to integrate with the existing EHR, PM or other systems.

- Among surveyed leaders, nearly half (45%) rated this as “moderately challenging,” while 30% noted it was “very” or “extremely challenging.”

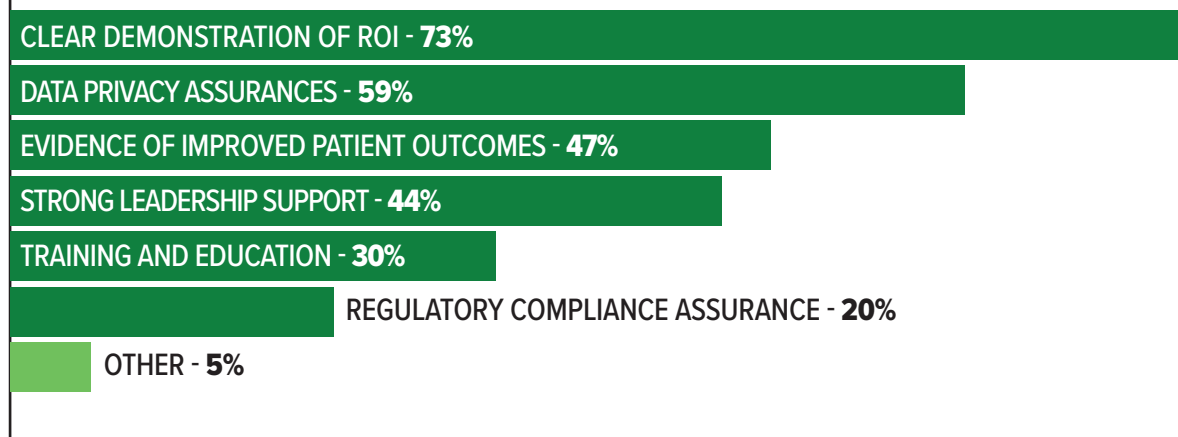
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### LEVEL OF CHALLENGE INTEGRATING AI WITH EXISTING SYSTEMS



# What leaders have learned

## FACTORS CRUCIAL TO GAIN ORGANIZATIONAL BUY-IN FOR AI ADOPTION



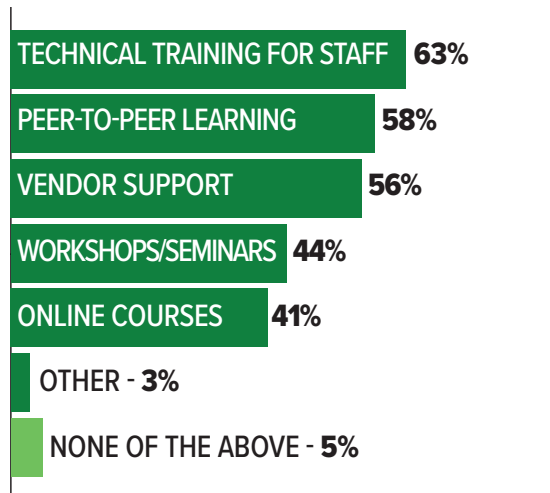
Practice leaders using AI today reflected on which factors were most crucial to build the organizational buy-in to proceed with AI adoption:

- Almost three out of four (73%) noted the need for a clear demonstration of ROI
- About six in 10 (59%) highlighted data privacy assurances
- Evidence of improved patient outcomes from the use of AI was ranked third-highest (47%)
- Strong leadership support rounded out the top four factors (44%)

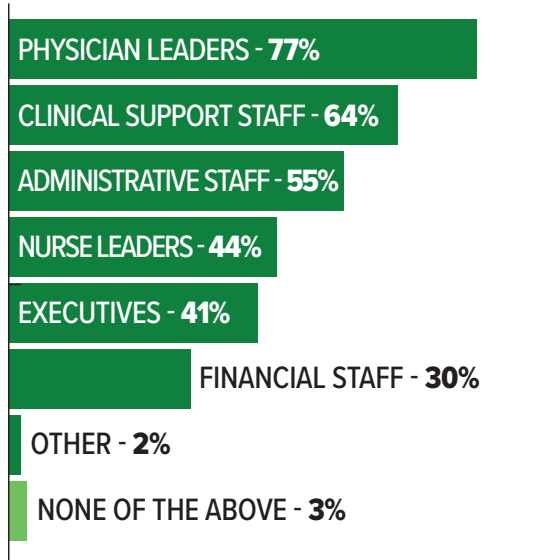
Practices using AI report technical training for staff, peer-to-peer learning and vendor support as their top choices for training and support options that would help increase future AI adoption in their organizations. Surveyed leaders noted that physician leaders and clinical support staff (e.g., physician assistants, nurse practitioners, medical assistants) would be the roles that would benefit the most from receiving additional training or support on new AI solutions.

- Leading organizations such as the Mayo Clinic have [invested in AI education programs](#) for their clinicians and staff to ensure their teams have a resource to understand ethics of AI use and best practices in deployment.
- For more on staff education, read [“Getting beyond nurses’ fears of AI”](#) from *Healthcare IT News*.

## TYPES OF TRAINING OR SUPPORT THAT WOULD HELP INCREASE AI ADOPTION IN ORGANIZATION



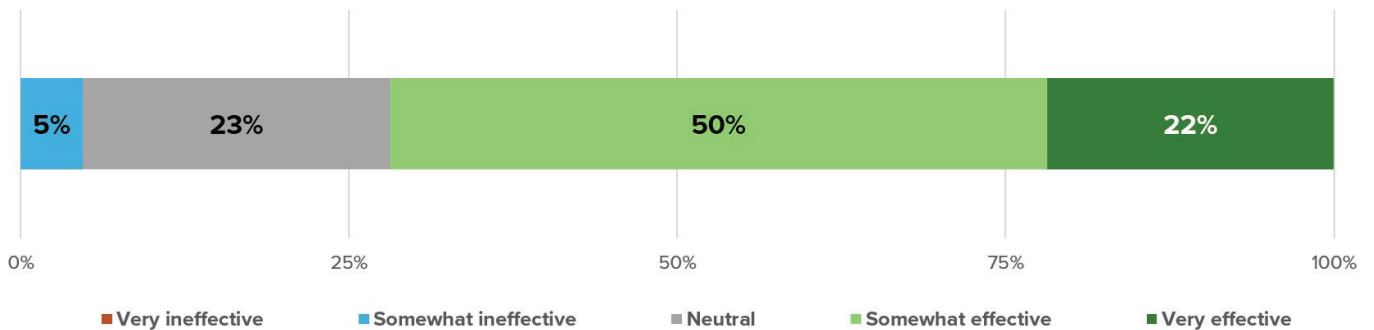
## ROLE(S) THAT WOULD BENEFIT THE MOST FROM ADDITIONAL TRAINING OR SUPPORT ON AI SOLUTIONS





# Measuring success

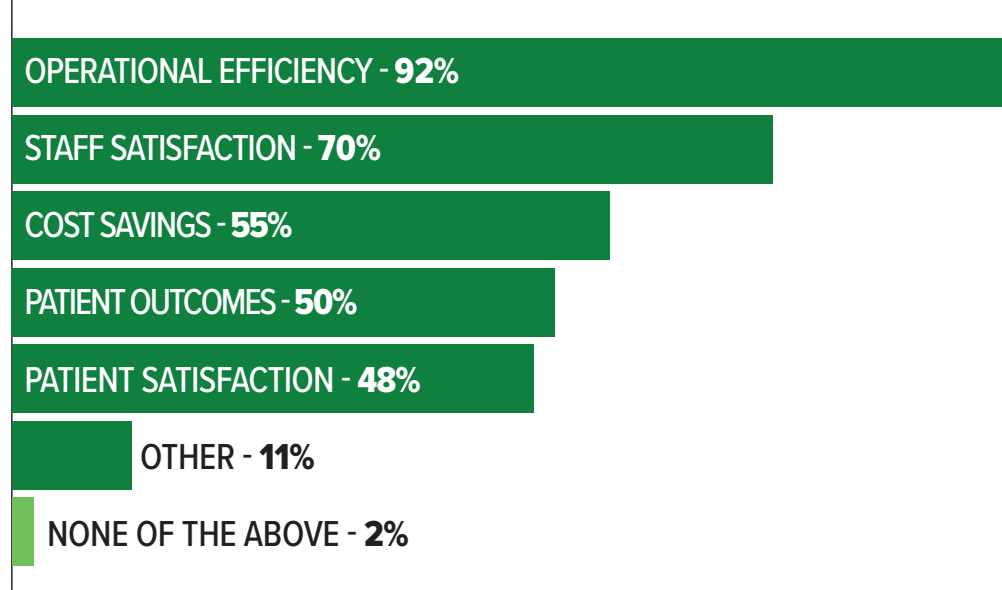
## EFFECTIVENESS OF ORGANIZATION'S AI IMPLEMENTATION



Despite the challenges and change management required in practices implementing AI applications, relatively few healthcare leaders surveyed viewed their organizations' foray into implementation as ineffective. More than seven in 10 (72%) rated their AI implementation as somewhat (50%) or very effective (22%).

To better understand how practice leaders perceive effectiveness, they were asked how they measure success of AI initiatives. Beyond the top response of operational efficiency (92%), the impact on staff satisfaction (70%), cost savings (55%), patient outcomes (50%) and patient satisfaction (48%) were the measures noted by most AI adopters.

## MEASURES OF SUCCESSFUL AI INITIATIVES IN ORGANIZATION



# How should AI use be governed and monitored?

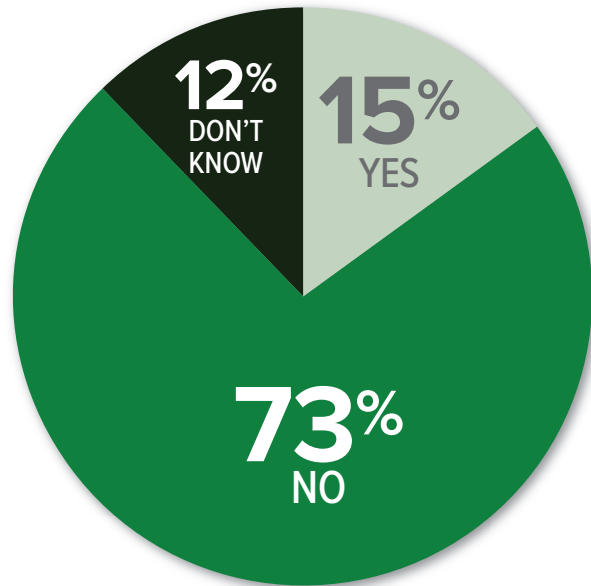
A crucial element for the initial and long-term successes of medical group practices and health systems using AI is ensuring the proper governance of its use. Despite many practice leaders signaled they have moved slowly and with caution when seeking out the right AI tools to add, more than 70% in the Humana-MGMA survey acknowledge their organization does not have a formal governance structure for AI use. This significant number does not account for practices that rely solely on vendor AI tools, nor does it control for practices that still take steps toward ethical and appropriate use of AI without enshrining it formally.

However, among the practices that do have formal governance structures around their AI use, they typically have multiple components to help them guide providers and staff:

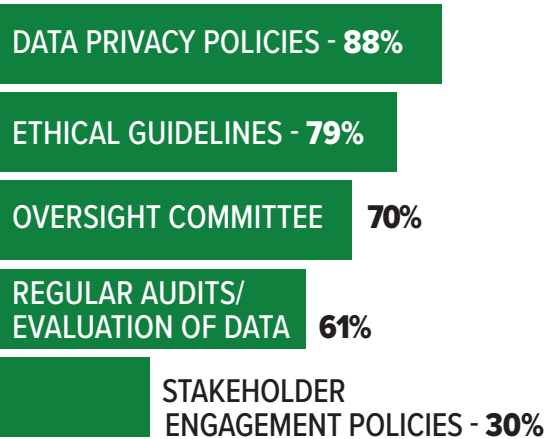
- 88% have data privacy policies in this governance structure
- 79% have specific ethical guidelines
- 70% have AI oversight committees
- 61% perform regular audits or evaluation of data used in AI.
- 30% have policies around AI stakeholder engagement.

Given the rapidly evolving nature of new technologies, it's important for healthcare leaders to regularly review their AI policies and governance to ensure they continue to meet the needs of the organization and

## DOES YOUR ORGANIZATION HAVE A FORMAL GOVERNANCE STRUCTURE FOR THE USE OF AI?

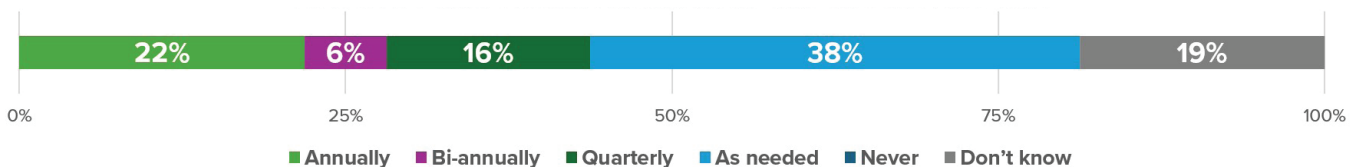


## FEATURES INCLUDED IN AI GOVERNANCE STRUCTURE



adequately reflect the changing state of workflows and AI capabilities. The largest share of AI adopters in the Humana-MGMA survey note that their leadership will review and update AI policies “as needed” as opposed to only doing so quarterly, annually or biannually.

## FREQUENCY THAT ORGANIZATION REVIEWS AND UPDATES AI POLICIES



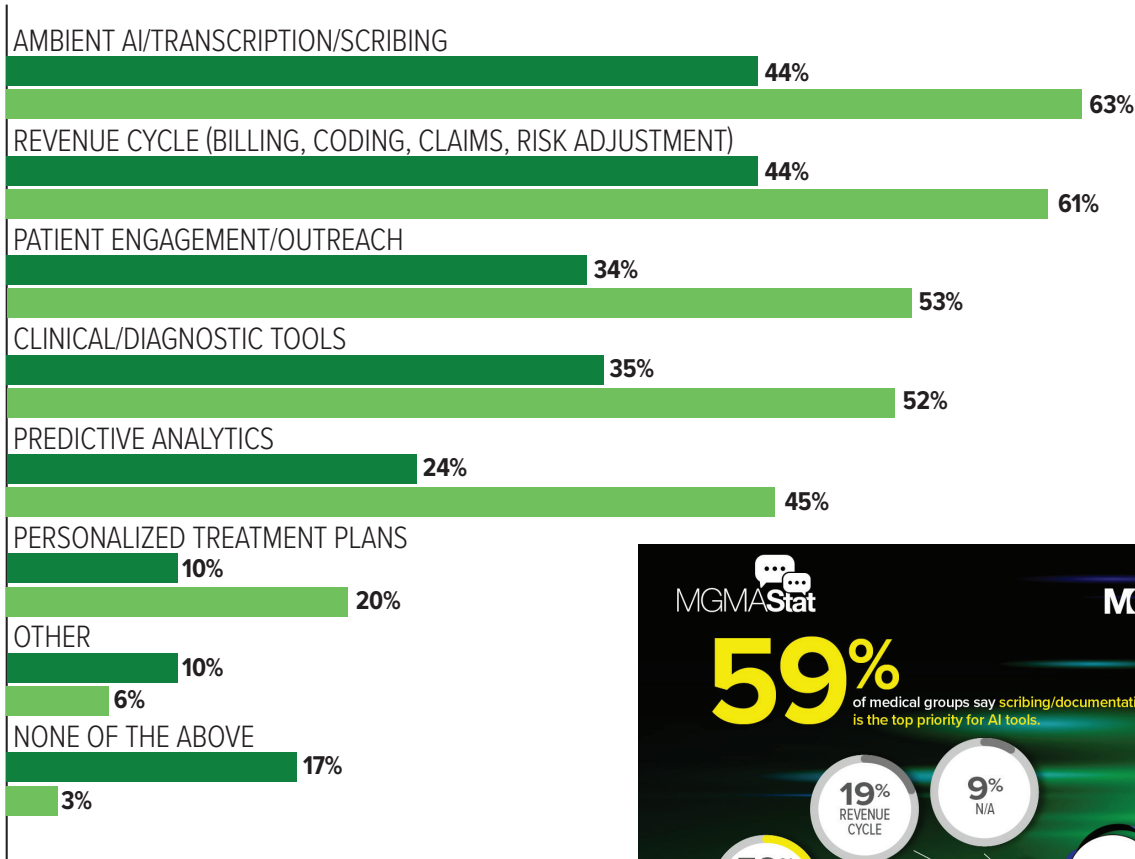
## FRAMEWORKS FOR AI USE

One framework to consider for developing best practice governance and ongoing guidance for AI in healthcare is the set of principles developed by the College of Healthcare Information Executives (CHIME):

1. Patient safety
2. Administrative efficiencies
3. Regulatory oversight
4. Innovation and research
5. Discrimination, bias and equity
6. Affordability
7. Privacy
8. Cybersecurity
9. High-speed broadband
10. Education and workforce

# Looking to the future

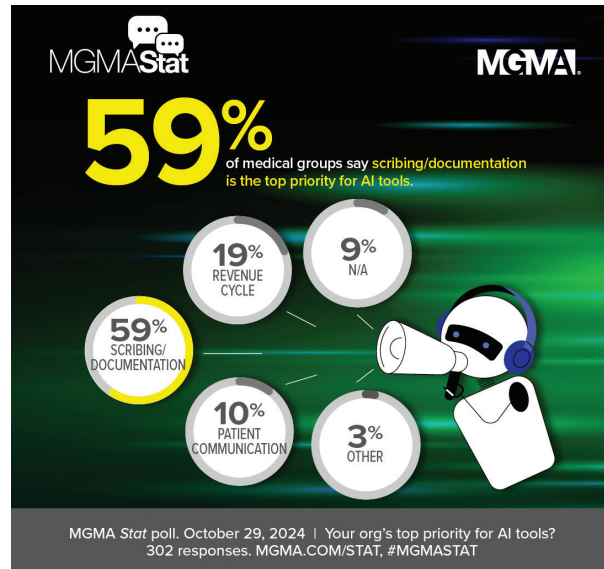
## AREAS OF PLANNED INVESTMENT IN AI IN THE NEXT THREE YEARS



While AI adoption has been gradual, almost two-thirds (64%) of surveyed healthcare leaders rate AI as important, very important or critical for their organizations' long-term strategies, and that figure jumps to 82% among those already working with AI.

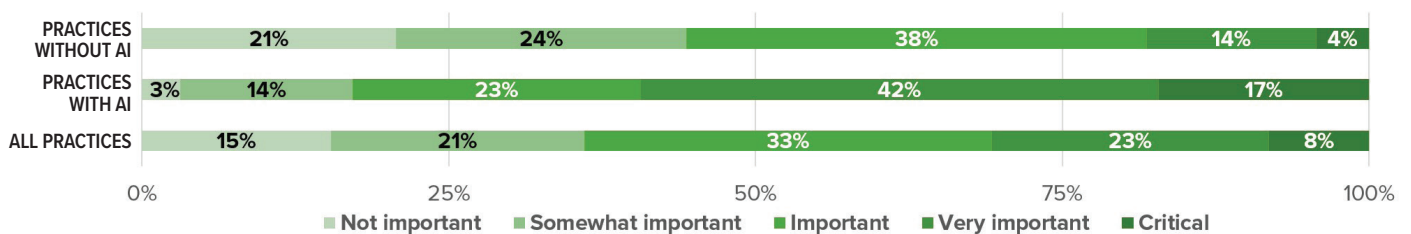
Surveyed practice leaders often pointed to ambient AI, AI for revenue cycle management, patient engagement and clinical/diagnostic tools as their focal areas for investment in the next three years.

Throughout the AI adoption process, all healthcare organizations should keep in mind where their patients are in their own understanding and comfort levels with AI. In KFF Health Misinformation Tracking polling from summer 2024:



- Nearly two-thirds of the population (65%) use or interact with AI once a week or less, while only 19% report interacting with AI once a day or more.
- More than half of adults (56%) are not confident that they can verify an AI chatbot's information as true or false.
- Not all age groups of patients are familiar with using AI chatbots for health information and advice.

## IMPORTANCE OF AI IN ORGANIZATION'S LONG-TERM STRATEGY



# Conclusion

AI adoption in healthcare is accelerating, but not always just as a reaction to staffing shortages. Practice leaders are always looking for smarter ways to run their businesses, and their focus on greater efficiency as the reason for making the decision to implement AI solutions is echoed in their insistence on understanding the expected return on investment.

The barriers of training hurdles, high costs and regulatory concerns remain, as well as the concerns around organizations adopting robust governance and guidelines for AI use.

As organizations continue to integrate AI, it will be important that the operational focus be met with a similarly intense focus on how new technologies can be leveraged to produce better patient outcomes and also act as a bridge for organizations seeking a path from FFS dominance to more value-based performance.

## RESPONDENT PROFILE

### JOB ROLE

Physician	1%
Administrator/Nonclinical leader	86%
Billing/Finance/Revenue Cycle worker	1%
Health Information Technology worker	1%
Other	11%

### ORGANIZATION TYPE

Medical Group Practice	64%
Hospital	5%
University Hospital	4%
Other Academic Medical Setting	3%
Federally Qualified Health Center (FQHC)	3%
Rural Health Clinic (RHC)	2%
Integrated Health or Delivery System (IHS/IDS)	5%
Management Services Organization (MSO)	4%
Freestanding Ambulatory Surgery Center (ASC)	0%
Other	10%

### SPECIALTY OR AREA OF PRIMARY WORK

Primary care	33%
Nonsurgical specialty care	29%
Surgical care	27%
Imaging and diagnostics	11%
Patient services	9%
Administration	42%
Other	15%

### COMMUNITY TYPE

Urban	49%
Suburban	56%
Rural	28%

### TOTAL EMPLOYEES

1	7%
2-14	42%
15-50	22%
51-100	8%
More than 100	22%

### METHODOLOGY

The survey was conducted in June and July 2024 by Corona Insights. The sample was drawn from healthcare professionals from Medical Group Management Association's database, targeting those in medical groups and health systems about their perceptions of artificial intelligence (AI) and usage. Participating respondents were incentivized with the chance to win one of two \$250 gift cards.

In total, 244 individuals responded to the survey, with 203 complete responses. The survey took about 10 minutes to complete.

### ABOUT MGMA

Founded in 1926, the Medical Group Management Association (MGMA) is the nation's largest association focused on the business of medical practice management. MGMA consists of 15,000 group medical practices ranging from small, private medical practices to large national health systems, representing more than 350,000 physicians. MGMA helps nearly 60,000 medical practice leaders and the healthcare community solve the business challenges of running practices so that they can focus on providing outstanding patient care. Specifically, MGMA helps its members innovate and improve profitability and financial sustainability, and it provides the gold standard on industry benchmarks such as physician compensation. The association also advocates extensively on its members' behalf on national regulatory and policy issues.

[mgma.com](https://mgma.com)