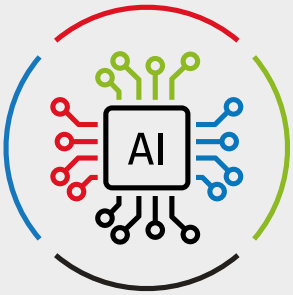
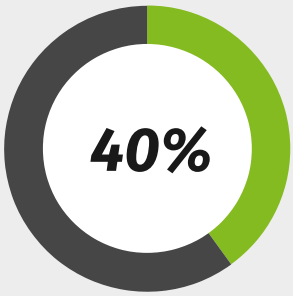
For healthcare, AI is less a revolution than an evolution

Focusing on trust, transparency, and partnership will allow healthcare organizations and innovators to responsibly and sustainably create the next wave of AI-enhanced decision-making support

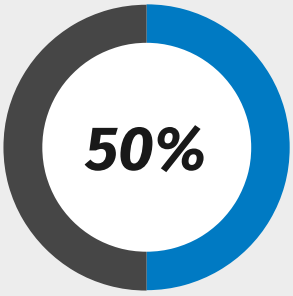
Wolters Kluwer



AI's potential could manifest itself as a



improvement in health outcomes and



reduction in treatment costs.[5]

Healthcare is facing new and unique challenges as the world steps into the era of artificial intelligence (AI), and care providers are seeking leadership and assistance to quickly realize the many benefits of AI while effectively mitigating its considerable risks.

As reported in Forbes[1], a Bain & Company analysis found that conversations about generative AI have become "more earnest, moving from excitement and hype to more realistic assessments."

Healthcare leadership across the ecosystem is approaching AI integration into their companies' and health systems' workflows with varying levels of caution and oversight. Many see value in exploring the more nascent technology with careful planning and mindful vetting.

The opportunities AI offers to expedite information gathering, support diagnostic and treatment decisions, and reduce administrative burden have been widely discussed, along with the challenges it presents to digital security, trust in information, health equity, and more[2]. As a reliable partner to healthcare organizations with decades of experience helping professionals navigate clinical and administrative challenges, Wolters Kluwer has a clear-eyed view of the uncharted horizon of AI. Working with proactive leaders across the healthcare ecosystem, we see that successful clinical generative AI strategies depend on:

- Responsible AI adoption and a commitment to growing your implementation.
- Prioritizing trust and transparency.
- Developing long-term vendor partnerships rather than settling for quick-fix solutions.

Questioning the true value of being first to market

"For healthcare, despite possible skepticism, generative AI shows a significant amount of promise in the ability to help the industry become better, safer, and more efficient," says Greg Samios, president and CEO of the Clinical Effectiveness business at Wolters Kluwer, Health. "GenAI can improve workflows, which, in turn, helps reduce clinician burnout by streamlining administrative tasks[3] and freeing up clinicians' time for more patient-focused activities."

Global spending on AI is expected to increase to over **$28 billion** in 2024, and much of that growth within healthcare and beyond is tied to a belief in AI's potential to improve effectiveness and efficiency, which Gartner reports it can do by **86%**. It also presents great opportunity for return on investment (ROI), as a Forbes study found that AI-based predictive analytics could save businesses **$18 billion** in tasks, expenses, and pricing.[4]

As shared by the Harvard School of Public Health, that potential could manifest itself in the healthcare industry as a **40%** improvement in health outcomes and **50%** reduction in treatment costs with the use of AI.[5]

With this level of potential investment on the line, there is the inevitable risk of vendors rushing to be first to market with no solutions and tools to capitalize. But there isn't "a ton of utility in being first in and of itself" for healthcare organizations whose focus needs to be on clinical reliability, patient safety, and ethical and legal considerations, notes Yaw Fellin, Vice President, Product and Solutions, for Clinical Effectiveness at Wolters Kluwer, Health.

While rushing to be the first doesn't always serve the high-stakes needs of healthcare from a vendor perspective, Fellin explains there is often great value to be gleaned from early adopters and users being willing to partner with developers exploring potentially transformative clinical technology like generative AI. Early adopters position themselves to work alongside innovators in the testing and development of clinical AI solutions to provide mutual feedback on everything from use cases to reliability of results, to governance, honing solutions of proven utility before they are introduced to the wider market.

"It is very powerful to learn from early adopters in terms of ultimately crafting the solution or value proposition or use case that you want to get to over time," says Fellin.

'Positive urgency' and ability to evolve

"Healthcare organizations tend to be incredibly savvy about their own potential use cases" for AI, says Fellin. After spending more than a decade pursuing gradually diminishing tech gains through optimization of their electronic medical records (EMR), he says that healthcare organizations are now eager and ready for a big shift toward the next phase of technology investment and a next set of challenges to tackle and hopefully conquer.

An advantage for organizations building these solutions with a focus on early adopters and "graduating" only the best features instead of pushing for first, is that it creates a "positive urgency" within organizations to experiment, change, and challenge themselves to find ever-better solutions than those first disrupters, says Fellin.

When it comes to AI solutions for healthcare, early adopters are not looking to revolutionize or build something brand new, he points out. They are looking to evolve and advance how they approach existing use cases and problems by using new capabilities:

- Explore how to improve at solving problems for which there are already existing, reasonable solutions.
- Tackle problems that were historically thought of as unsolvable using new technologies and capabilities.

As healthcare organizations use the urgency of the moment to drive AI development and discovery, Fellin says that part of the importance of the early adopter position is not becoming mired in a method or solution that cannot evolve with your needs, goals, and lessons learned. The industry will determine certain elements of generative AI to be more useful and efficacious for healthcare use cases, and others may be cycled out of best practice over time. Being prepared to grow, adapt, and evolve within your solution is essential.

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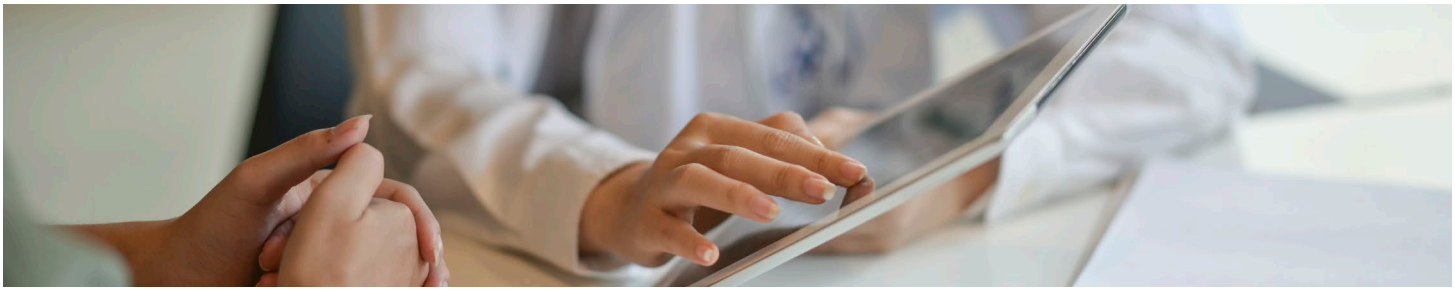

Successful AI will be an aid to human-centered decision-making

"While GenAI and machine learning are revolutionizing healthcare, it's important to remember that no innovation will happen without a human's involvement in clinical decision-making," says Samios. "The trust and expertise of healthcare professionals are not just invaluable and irreplaceable, they are the very foundation on which GenAI integration in healthcare stands. Their involvement builds patient trust."

It isn't just patient trust that is imperative to the success of an AI solution. Clinicians and healthcare professionals must feel secure in the results generated by clinical AI solutions. Unlike open-source AI, a responsible clinical generative AI solution must "maintain the context of your question" and understand how to guide you through your query "much the same way that you might ask a master clinician to do that," says Dr. Peter Bonis, chief medical officer for Wolters Kluwer, Health. "I'm concerned, particularly in a healthcare domain, which is very high stakes, that that's done safely and effectively. So, for healthcare IT leaders, I think there's opportunity there, but there's also a threat to make sure we're not jumping the gun and onboarding things that perhaps aren't … ready for use in the clinical domain."

To help protect patients and practitioners, the Department of Health and Human Services through the Office of the National Coordinator for Health Information Technology (ONC) published the "Health Data, Technology, and Interoperability" (HTI-1) final rule in 2024 to institute federal requirements for AI-based predictive software in healthcare in the U.S.[6]

To truly win the trust of clinicians, solutions must not only meet but exceed those basic requirements for information sourcing and transparency, says Fellin. "To me, trust in healthcare is the outgrowth of high quality," he says. "Trust is what happens when you get all the other pieces right. The question for a lot of these new technologies that will ultimately be reflected in how people trust them is: What's the quality of the output?"

In a 2024 Wolters Kluwer Health survey of physicians on their perceptions of generative AI[7], the majority respondents **(58%)** said the single most important factor in selecting an AI tool is knowing the content it is trained on was created by medical professionals. Additionally, **91%** of physicians said they would have to know the materials from which an AI tool is sourced were created by doctors and medical experts before they used it to inform their clinical decisions.

An essential part of building trust in the quality of AI-powered decision support is being transparent about its sourcing, Fellin says. Like any traditional clinical decision support solution, transparency of the evidence is what sets responsible clinical AI solutions apart from open-source AI and allows healthcare professionals to confidently use the tool effectively in their practice and in how they communicate with patients.

Accordingly, **89%** of physicians responding to the AI perceptions survey said they would be more likely to use AI in clinical decision-making if the vendor was transparent about where information came from, who created it, and how it was sourced, and **76%** would be more comfortable using AI if it came from established vendors.

Physician Perceptions of AI[7]

91%

want to know it's sourced from medical experts

89%

more likely to use if sourcing is transparent

76%

more comfortable with established vendors

59%

think AI can save them time

How do patient perspectives on AI effect solution adoption?

A high standard of trustworthiness in an AI solution helps encourage clinician and professional adoption. It can also go a long way in patient acceptance.

Like the survey of physician perceptions, Wolters Kluwer Health surveyed adult U.S. patients about their thoughts on AI in healthcare in 2023.[8] That study reveals one of the biggest concerns that most Americans **(86%)** have about generative AI in healthcare is not knowing where the medical information being used came from or how it is validated.

When Americans think of AI being used in healthcare, the most common initial feeling they reported is concern **(44%)**. Nonetheless, **52%** of respondents said they would be confident in the results if they knew their own provider was using AI to assist in their care, while only **17%** said they feel scared about the use of AI in healthcare.

The two surveys reveal a notable disconnect between patients and providers in their readiness to embrace AI: Only one out of five physicians believe their patients would be concerned about the use of AI in a diagnosis, while most Americans – **80%** – say they would, in fact, be concerned. But Fellin does not view this statistical gap as an insurmountable practical concern.

Providers have long interpreted clinical information through a human lens to connect to their patients, he explains. For the many imaging, laboratory, and computer-assisted diagnostic and surgical technologies that are already part of an organization's established treatment offerings, patients rely upon their care team to properly explain the procedure or process which is being recommended to them. "There's probably a lot of options that patients could, would, or should trust based off their relationship that they have with their physician," he says.

Informed consent around AI[9] is often complicated by patient perceptions based on larger societal views about the technology outside of healthcare and how it is discussed in popular culture. But in cases where consent is ethically required, when a healthcare professional trusts the technology, how it works, and its sourcing, and can confidently explain its purpose and use in a given treatment scenario, they can clearly express the risks and benefits and allay any patient fears – as with any other healthcare technology.

That is rooted in the credibility and commitment to ongoing transparency and verification of sources from the solution.

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Greg Samios, CEO, Clinical Effectiveness Wolters Kluwer, Health

Patient Perceptions of AI[8]

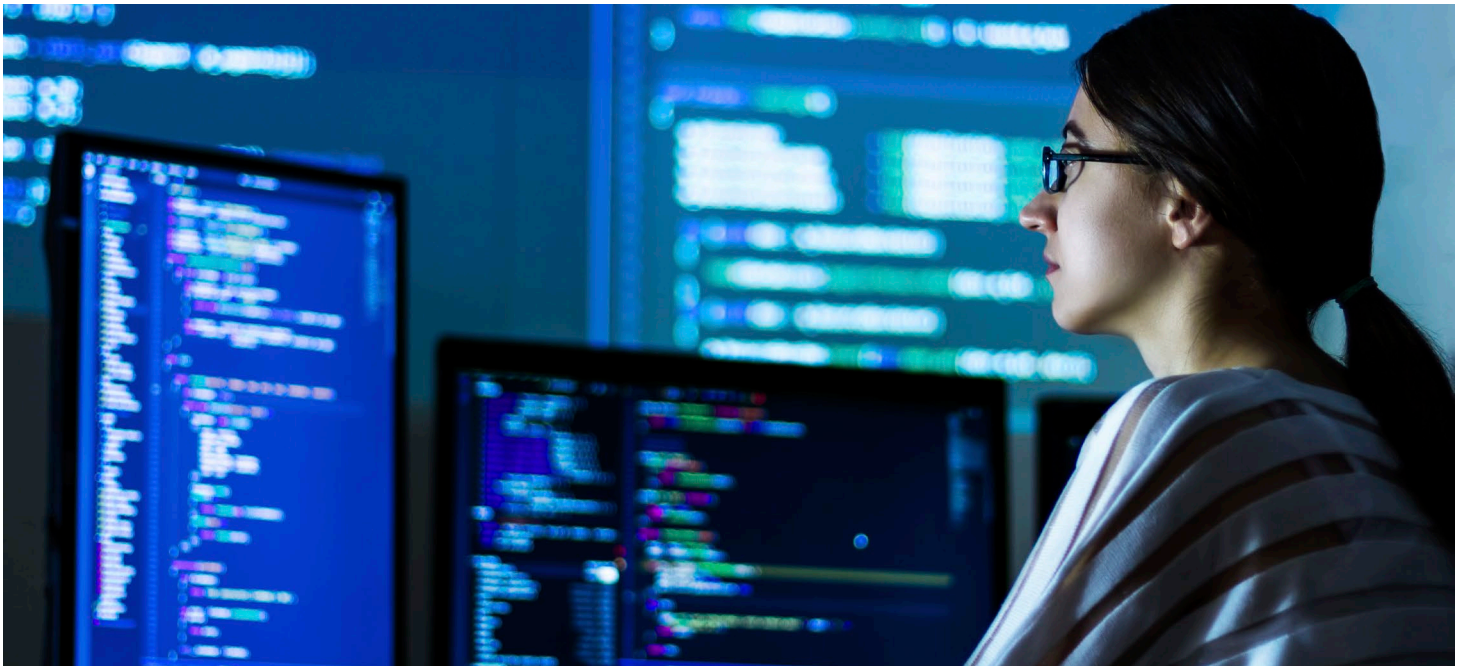
89%
want providers to be transparent about using AI

86%
worried about where the content comes from

63%
would switch to another provider if theirs was using AI

52%
would be confident in the results if their provider used AI

48%
think AI can help improve care



The role of the solution developer as an AI team partner

“Even for the most established players looking to enter into healthcare, it’s quickly apparent that the promise of greater affordability, equity, and outcomes isn’t possible without partnership,” says Wolters Kluwer Clinical Effectiveness CEO Samios. “Collaboration among partners that brings fresh thinking and an established understanding of the nuances of healthcare is not just welcomed, it’s essential.”

In his experience with clinical AI development and in working with industry players, Fellin has found that, “The highest quality content possible is where all the action is on AI, and that’s probably the story that's not being told. I'm seeing less focus on ‘training models’ right now. Training models are important, but I think there's potentially even more action around: How do you ground these foundational models in sources of truth so that they give you a reliable answer?”

This means that once a healthcare provider organization, business, or technology developer commits to an AI strategy and software, the vendor’s job is not over, Fellin explains. To support growth of AI toward better and best practices and continue to build trust, the vendor has to become part of the organization’s AI team in order to responsibly evolve the solution in concert with the organization’s goals and responsible evolution of their strategies.

“We have a role, period,” Fellin says.

UpToDate: Directly addressing AI users’ challenges

As part of the team developing AI-enhanced clinical decision-making and care delivery support innovations for UpToDate® and its 2.4 million global clinical users, Fellin says the approach from the beginning was never about building a refreshed version of a traditional solution. Rather the vision was to create a new technology environment in which UpToDate could serve as a reliable partner to work with healthcare organizations on responsibly delivering recommendations that operate in harmony with customer values and workflows. “Patient safety and care quality are paramount, and introducing additional risk with AI is unacceptable,” he says.

For UpToDate, this involves directly addressing its users’ expressed challenges and concerns with AI:

Information overload and AI overcomplications
With the rapid expansion of medical knowledge, ever-growing regulatory demands, and the increasing weight of modern patient expectations, healthcare decisions have become more complex than ever. Adding to the information overload, the critical knowledge professionals need is often siloed in separate solutions or among disparate care teams. Fears abound that unreliable AI will only make filtering through this information even more challenging.

To help simplify access to the most relevant information and bridge communication gaps, you need a reliable and accessible decision-making partner that offers real-time, contextually relevant, and interactive suggestions akin to the support expected from a community of expert clinician colleagues. Also, it is easier to feel confident when you have tested and know your clinical intelligence solution responsibly utilizes AI capabilities, trained exclusively on rigorously developed and evidence-based clinical content, with human governance at the center.

Insufficient returns on investment
Despite heavy investment over the years in EMRs and other healthcare technology, organizations may feel their progress in improving the efficiency of high-quality healthcare delivery is insufficient in relationship to their spend and effort. And even with their best tools and solutions, there is a lack of standardization across all systems, leading to variability in care, gaps in communication, and poorly integrated solutions that exacerbate worker burnout.

The first step toward alleviating this pain point is introducing a care delivery support system that is personalized and workflow-native and that provides patient-specific diagnostic and treatment suggestions. The addition of AI will be used to unlock new care delivery and quality improvement opportunities, constantly generating new efficiencies, supporting alignment across teams, and enhancing care outcomes.

Administrative burdens create care delays
Poorly coordinated administrative requirements, often misaligned with clinical care, create friction. This may lead to fragmented communication, increased risk of errors, and a less cohesive patient or member experience. Many AI-enabled solutions are only designed to address a single administrative challenge and lack the necessary clinical context, resulting in new inefficiencies and complications.

With clinical guidance that also informs and streamlines administrative activities – like quality analysis, documentation support, and policy development – your AI partner can help ensure seamless integration and enhance overall efficiency in patient care.

"We are obsessed with getting things right for professionals and patients, so we are committed to safe and effective use of AI. Because the domain is high stakes. It's clinical care. It's clinical decision-making," says Wolters Kluwer Health CMO Bonis. "Working with our health system partners enhances that clinical decision-making. We have the potential to have major impact in how information is sought and retrieved, and hopefully that will make a difference."

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