

May 2026



AI's Real Disruption: Rewiring Healthcare Operating Models



Executive Summary

Artificial intelligence (AI) is reshaping healthcare by forcing executives to rethink existing operating models. While news headlines suggest AI is a job killer, we see something different unfolding. AI is rewiring operating models and elevating automation purposefully while amplifying—not replacing—professional and clinical expertise through governed, AI-enabled decision support.

Healthcare leaders we spoke to for this report indicate that while AI is rapidly reshaping how work gets done, its value depends on human guidance to strengthen decision-making rather than replace it. In BRG's 2024 report [AI and the Future of Healthcare](#), we described AI as the use of computer systems and machine processes to simulate aspects of human intelligence and perform complex automated tasks related to health and medicine. Much has changed since then, but BRG still does not view AI as a “replacement” story.

In healthcare, the highest-value applications are technologies that save money and boost productivity and capacity. Healthcare has been building toward this moment for decades, from outsourced administrative work to rules-based automation and robotic process automation. Today's AI-enabled and agentic workflows take a meaningful step forward and can orchestrate multistep processes, adapt to context, and surface decisions for human oversight. That shift changes the nature of work and raises new questions leaders must

answer regarding where AI should act independently, where human accountability is needed, and how performance will be measured and audited.

The organizations that will find the greatest value from using AI will successfully integrate workflow redesign, data discipline, and strong governance, ensuring that AI's first durable value is operational. Leaders will separate from laggards not based on the pace of technological advancement, but rather how quickly organizations adapt their operating models to take advantage of it.

Darmendra Ramcharran, PhD, senior director of Safety Innovation & Analytics for GSK, says AI is not a single technology and its rapid evolution is the source of its disruption. Dr. Ramcharran breaks down AI's evolution into four phases, where importantly, each phase adds options, rather than replacing technologies of earlier phases, further expanding the AI toolbox:

- **Rules-based AI and natural language processing:** extracted structured insights from unstructured data (e.g., clinical notes)
- **Machine learning models:** enabled more predictive and pattern-based analysis, expanding scale and speed
- **Generative AI (GenAI):** introduced interpretation, creativity, and variability—along with risks like hallucinations
- **Agentic AI:** represents the next disruptive phase, where AI systems break problems into steps, reason through tasks, and even signal uncertainty

Operational Automation: Healthcare's First Scaled AI Use Case

As healthcare organizations move from evaluation to implementation, AI is increasingly woven into the fabric of large health systems, payer organizations, and life sciences companies. While smaller and rural providers face steeper barriers ranging from cost and data limitations to shortages of internal champions, there is widespread recognition that AI adoption is not optional.

Research from the [Philips Future Health Index 2025 report](#) reinforces this trend: clinicians consistently identify administrative automation as the area where AI is expected to have the greatest positive impact, freeing up time for patient care.

BRG Managing Director [Peter Smith](#), leader of the firm's AI and Decision Intelligence practice, sees near term AI adoption reshaping four core components of the healthcare enterprise:

- **Clinical operations**, where AI underpins real time command centers' forecasting demand, staffing, and utilization.
- **Care delivery**, where AI copilots embedded in electronic health records draft notes, orders, and discharge summaries; and agentic coordinators manage care plans across settings.
- **Revenue cycle and finance**, where AI automates coding, predicts denials, and resolves many edits without human intervention.
- **Supply chain and support services**, where AI forecasts utilization, optimizes inventory, and automates purchasing decisions.

By focusing on operational automation first, organizations will reduce risk while building confidence and capacity for broader transformation.

Mr. Smith shared, "My view is that AI should be used aggressively for low-risk, high-friction tasks and much more carefully for high-stakes clinical or coverage decisions. Good uses of AI include triage support, documentation, patient education, prior-authorization workflow support, care navigation, call center augmentation, and summarization of longitudinal records."

Josh Glandorf, chief information officer (CIO) for University of California (UC) San Diego Health, echoed Smith's sentiments, saying, "There's a tremendous opportunity with any kind of communication with patients." He pointed out that many health systems target revenue cycle and call centers for automation initiatives because there is lower risk, and these are repeatable and measurable actions that can remove traditional operational friction and provide a better patient experience.



Case Study: Proof That Integration Drives Outcomes

UC San Diego Health: Reducing Colonoscopy Cancellations

UC San Diego Health identified a high cancellation rate for colonoscopy procedures driven by patient noncompliance with preparation instructions. To address this, the organization deployed an AI powered, outbound contact agent to guide patients through preparation, review medications, answer questions, and escalate to human agents when needed.

Within weeks, cancellation rates declined from 11 to 4 percent, exceeding the goal (and industry standard) of 5 percent, helping to preserve procedural capacity, improving the patient experience, and delivering meaningful financial results for the organization. That success had less to do with the technology and more to do with how it was integrated into the operational workflow.

Workforce Evolution

Healthcare leaders remain focused on AI's potential impact on workforce because it sits at the intersection of opportunity and risk, offering relief from administrative burden but also raising serious questions about skills, accountability, and organizational readiness.

Executives we spoke with consistently rejected the notion of mass job displacement. In their view, AI will not eliminate jobs; it will change the way people do their jobs. Kirk Wroblewski, CIO for ProPharma, said that automation will "free professionals from tedious, time-consuming repetitive tasks to focus on clinical and operational excellence." However, he pointed out the importance of AI literacy, training, and change management to ensure workforce confidence and prevent misuse as AI adoption accelerates.

[Amy Worley](#), a BRG managing director and the firm's head of global Privacy and Information Compliance and data protection officer, said that AI literacy will play a central role in helping organizations navigate workforce disruption by building confidence, improving oversight, and mitigating misuse. However, she noted that broader systems of governance and policy lag behind the reality on the ground: "I don't think there's a government in the world that's ready for the job revolution that's about to happen."

AI Is Rewiring the Drug Development Lifecycle

As AI forces healthcare payers and providers to rethink their operating models, life sciences organizations are experiencing a similar shift in the drug development lifecycle, reshaping and expediting workflow from early discovery through post marketing surveillance. These gains are seen in myriad ways, including reduced time required to submit regulatory filings with the aid of AI assisted medical writing and expert review. AI driven patient identification and site selection are accelerating trial setup, with bottlenecks in drug development shifting away from documentation and data processing toward biological feasibility and clinical complexity.

"We've seen the time it takes to submit a new drug application to the FDA slashed from six months to three to four weeks because the medical writing is

handled by AI and review is performed by human experts," said Mr. Wroblewski. "Setting up drug trials is accelerated by AI-driven patient identification and site selection. The bottlenecks in drug development are shifting from administrative and analytical constraints to biological realities."

[Wendy Cheng](#), PhD, BRG managing director, pointed out that AI is reshaping how long term safety and effectiveness are assessed in real world settings beyond development and approval. Organizations are applying AI upstream to clean, harmonize, and contextualize imperfect data sources such as claims and electronic health records to form a foundation for real world evidence that enables faster hypothesis generation and supports more adaptive trial design.

Dr. Ramcharran pointed out that these advances will create increased dependence on data quality, traceability, and governance. As synthetic data, digital twins, and advanced analytics are introduced into patient safety critical decisions, human validation, transparent standards, and disciplined oversight remain essential. In life sciences, as elsewhere in healthcare, AI's value is maximized not by autonomy but by how it will be embedded into workflows. Both Dr. Cheng and Dr. Ramcharran expressed the need for clear accountability and trust.

Building Digital Trust: Developing Guardrails for Growth

As AI systems grow more capable, they increase reliance on data quality. Leaders cited risks associated with hallucinations, bias, data provenance, and reidentification of patient information as central constraints on adoption.

"My biggest concern is overconfidence. AI systems are good at sounding authoritative. In medicine, that can create a false sense of certainty," said Andy Hickl, chief technology officer for the Allen Institute. "The guardrail I worry about most is data provenance. Many organizations can't clearly explain what data trained their models or how it was processed, and that's dangerous in medicine. If we want clinical-grade AI, we need the same discipline we expect in clinical trials: reproducibility, transparent evaluation, and ongoing monitoring."

The organizations making the most progress are embedding governance directly into their AI operating models: centralizing access; enforcing data standards; integrating oversight across compliance, legal, ethics, and clinical leadership; and investing in enterprise wide AI literacy.

Ms. Worley said, “AI literacy is critical. It reduces workforce anxiety, helps prevent misuse, and strengthens oversight.”

Effective governance accelerates innovation, whereas insufficient governance exposes organizations to legal and regulatory risk. Effective governance has emerged as an accelerant, not a brake. Where governance is weak or unclear, organizations face regulatory exposure, erosion of trust, and stalled implementation.

Mr. Glandorf shared UC San Diego Health’s approach, which has a deeply inclusive governance model to fit an academic medical center setting. “Our governance structure includes IT, HR, physicians, nurses, compliance, legal, ethics, and operations leadership. AI governance is as much about organizational alignment as technical oversight.

Technology Is the Engine; Leadership Is the Compass

As AI becomes an operating capability, its impact will be determined more by leadership decisions than technology. Healthcare executives need to move beyond the binary matter of “buy versus build” toward partnership based models that combine internal oversight with external scale.

Mr. Glandorf explained his organization’s approach: “We now see the value in using AI embedded in enterprise platforms we are already using, like Epic Cosmos. We codevelop selectively and flip on a feature when we are confident the app is good enough. We only use third-party tools when a gap in availability exists. Build is now our last option.”

As the paradigm shifts to a partnership-based model, organizations need to orient their technology adoption roadmap to answer these questions:

- Where should AI function autonomously versus as a decision-support tool?
- How will we ensure and maintain accountability?
- What data protocols are nonnegotiable?
- How do we embed AI literacy across our workforce?

These choices will ultimately dictate whether AI becomes a source of sustained advantage or ongoing risk for an organization.

Conclusion

AI is changing healthcare. The nature of that change will be shaped by how leaders design, govern, and integrate AI into their organizations, rather than just by technological breakthroughs. As AI becomes embedded in daily operations, it will increasingly function as an enhancer capable of amplifying human expertise and strengthening organizational performance.

The executive team’s ability to connect their operating model with technological advancement will become the primary differentiator for value creation as AI and automation adoption accelerates. Organizations that integrate AI thoughtfully by aligning workflows, data, governance, and talent will create long-lasting, competitive advantages that will be increasingly difficult to replicate by those that fail or are slow to embrace this approach.

Subject-Matter Experts

Josh Glandorf

Chief Information Officer, University of California San Diego Health

Andy Hickl

Chief Technology Officer, Allen Institute

Darmendra Ramcharran, PhD

Senior Director, Safety & Quantitative Innovation, GSK

Kirk Wroblewski

Chief Information Officer, ProPharma

BRG Experts

Wendy Cheng, PhD

Managing Director

James McHugh

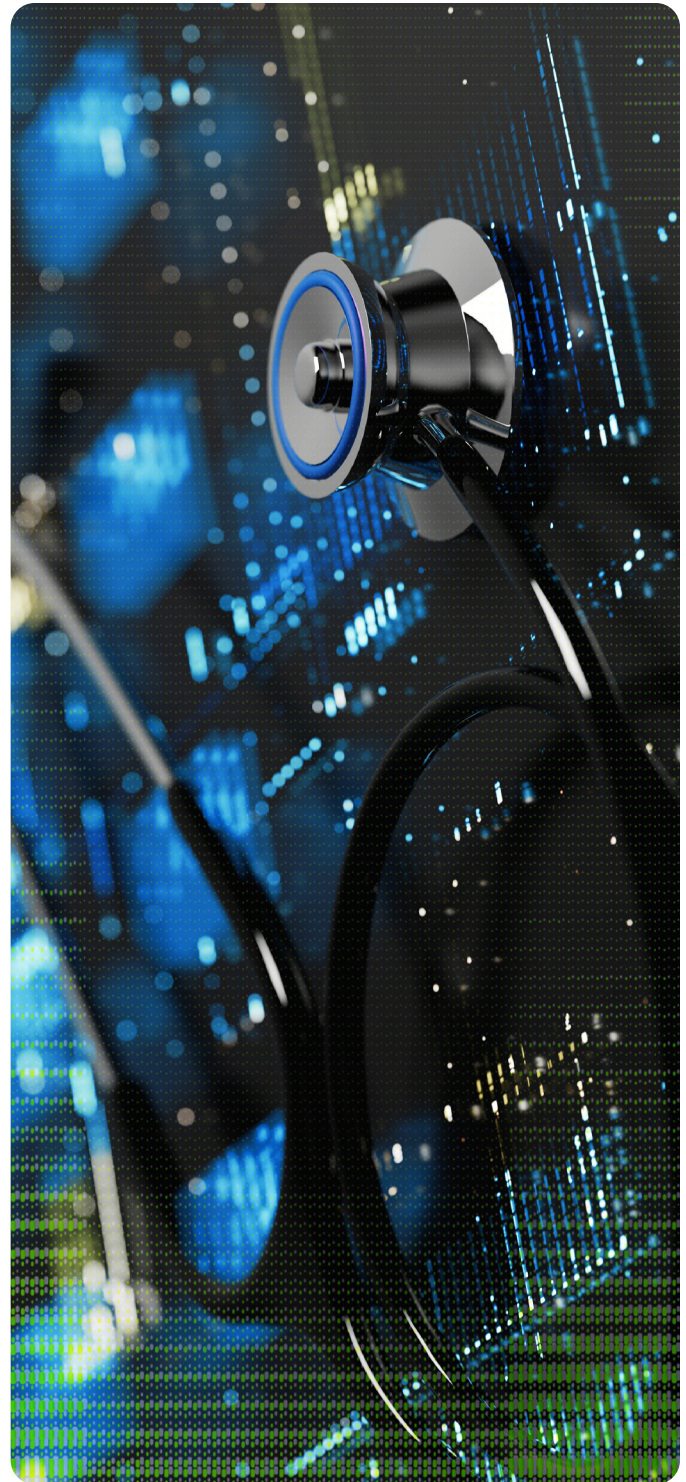
Managing Director

Peter Smith

Managing Director

Amy Worley

Managing Director and Data Protection Officer



BRG combines world-leading academic credentials with world-tested business expertise, purpose-built for agility and connectivity.

Our top-tier professionals include specialist consultants, industry experts, renowned academics, and leading-edge data scientists that bring real-world experience to economics, disputes, and investigations; corporate finance; and performance improvement services that address complex challenges for organizations across the globe.

Our unique structure nurtures the interdisciplinary relationships that give us the edge, laying the groundwork for more informed insights and more original, incisive thinking from diverse perspectives that, when paired with our global reach and resources, make us uniquely capable to address our clients' challenges.

THINKBRG.COM

Copyright ©2026 by Berkeley Research Group, LLC. Except as may be expressly provided elsewhere in this publication, permission is hereby granted to produce and distribute copies of individual works from this publication for non-profit educational purposes, provided that the author, source, and copyright notice are included on each copy. This permission is in addition to rights of reproduction granted under Sections 107, 108, and other provisions of the US Copyright Act and its amendments.

Disclaimer: The opinions expressed in this publication are those of the individual author(s) and do not represent the opinions of BRG or its other employees and affiliates. The information provided in the publication is not intended to and does not render legal, accounting, tax, or other professional advice or services, and no client relationship is established with BRG by making any information available in this publication, or from you transmitting an email or other message to us. None of the information contained herein should be used as a substitute for consultation with competent advisors.