



HEALTHCARE & LIFE SCIENCES

STATE OF THE INDUSTRY

A primary-research-backed perspective on how AI is reshaping healthcare and life sciences — built from a survey of director-level and above decision-makers and practitioner input from Perficient's Healthcare and Life Sciences Team.

WHERE HEALTHCARE & LIFE SCIENCES STANDS RIGHT NOW

U.S. healthcare spending is projected to reach nearly \$9 trillion by 2034, representing 20.6% of GDP, according to the Centers for Medicare & Medicaid Services. Meanwhile, the Association of American Medical Colleges projects that physician shortages could exceed 86,000 by 2036, and a recent Pew Research Center survey found nearly seven in 10 Americans are concerned about the cost of healthcare. Across life sciences, organizations face mounting pressure to bring therapies to market faster as R&D costs remain high, and regulatory agencies manage increasing volumes of complex submissions.

These challenges are converging as AI reshapes expectations for productivity, personalization, and innovation. Healthcare organizations must control costs while expanding access. Life sciences companies must accelerate development while navigating regulatory complexity. Leaders are being asked to improve outcomes, experiences, and operational performance simultaneously, often with fewer resources and tighter margins.

What makes this moment different is that these pressures have moved from long-range forecasts to operating realities. They are reshaping what care patients can access, which therapies reach the market, and what organizations can afford to deliver. According to KFF, one-third of adults already skip or delay care because of cost. Affordability is no longer a concern. It is a barrier to access, trust, and outcomes.

Sources: [Centers for Medicare & Medicaid Services](#) | [Association of American Medical Colleges](#) | [Pew Research Center](#) | [KFF](#)



HEALTH INSURERS

Health plans face margin pressure and growing demand for transparency across coverage and reimbursement. AI is reshaping prior authorization, Stars performance, risk adjustment, and member self-service, where automation accelerates work but raises accountability concerns.



HEALTHCARE PROVIDERS

Providers are modernizing amid workforce shortages, rising acuity, administrative burden, and margin pressure. AI is moving fastest in ambient documentation, care management, access optimization, and workflow support, where the goal is practical: give clinicians time back and reduce friction in care delivery.



PHARMACEUTICALS, RESEARCH & BIOTECH

Pharma, research, and biotech organizations are working in an environment where science is moving faster than many operating models can support. AI pressure is most acute in trials, protocol digitization, regulatory workflows, and medical information, where delay raises cost and slows scalable impact.



MEDICAL DEVICE

Medical device companies face a governance inflection point. Expanding SaMD and adaptive AI systems require regulatory frameworks, IEC 62304-compliant processes, and post-market monitoring that enable innovation without compromising FDA clearance, patient safety, or quality system integrity.

AI IS REAL. SCALING IT ISN'T.

AI is active across healthcare and life sciences, but mostly in pockets. A health plan runs models against prior authorization requests. A provider pilots an ambient scribe. A pharma team tests algorithms on a single trial protocol. A medical

device team uses AI to draft initial software requirements for a single product. These efforts are real, but in most organizations, they remain isolated use cases running in parallel, not connected workstreams that change how work gets done.

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The greatest barrier isn't technology. It's the inertia of legacy operating models. The winners in AI will not be those with the best models, but those with the best systems for putting them to work.

PRIYAL PATEL

Associate Vice President, Healthcare Practice, Perficient

Fragmentation has reshaped investment priorities. Rather than funding isolated AI pilots, organizations are increasingly directing spending toward workflow-driven initiatives and the foundational capabilities required to scale AI across the enterprise. Forrester projects that U.S. healthcare providers will increase their technology budgets to \$69 billion in 2026, up 7.6% year over year, with \$25 billion flowing to software, including AI-enabled analytics, cloud-based platforms, and modular solutions. The priority is clear: build the infrastructure and operational foundations needed to connect AI to workflows, decisions, and outcomes.

But spend is not the same as scale. According to IDC, nearly 50% of AI-driven digital use cases will miss their ROI targets in 2026 due to unclear business gains, weak human-machine collaboration, and poor data foundations. In healthcare and life sciences, those blockers appear as fragmented data, lagging governance, workforce readiness gaps, legacy integration challenges, and trust deficits. Organizations are spending and experimenting, but enterprise value is still harder to unlock.

**U.S. HEALTHCARE
PROVIDERS ARE
PROJECTED TO SPEND**

\$25B

**ON SOFTWARE IN 2026,
YET NEARLY**

50%

**OF AI-DRIVEN DIGITAL USE
CASES MAY MISS THEIR
ROI TARGETS.**

PERFICIENT'S VIEW

**The differentiator is not the AI model.
It is the operating model around it.**

AI creates value when it solves a defined problem, fits into real workflows, and is governed from the start. The goal is not more AI activity. It is AI people can use, trust, and scale.

WHAT HEALTHCARE & LIFE SCIENCES LEADERS TOLD US

AI adoption is advancing faster than many organizations' ability to demonstrate its value. In Perficient's research, 82% of healthcare and life sciences leaders said their organizations cannot clearly or consistently demonstrate ROI from AI investments. The finding reflects a broader challenge: organizations are moving AI into increasingly important workflows while still establishing the accountability, governance, workforce readiness, and trust needed to scale it.

68%

**SAY GOVERNANCE
AND OPERATIONAL
READINESS ARE
A BARRIER TO
SCALING AI.**

01 GOVERNANCE AND PERFORMANCE MUST SCALE TOGETHER

Business teams want AI to move faster. Risk, compliance, legal, clinical, quality, and regulatory teams need it to move with control. As AI moves from pilots into operations, many organizations are discovering that scaling AI is both a governance and a technology challenge. In fact, half of the surveyed leaders view governance and model performance as equally significant barriers, underscoring that neither can be addressed in isolation. In medical devices, that balance is not optional. It is the difference between an AI implementation that survives an FDA audit and one that creates regulatory liability.

Source: Perficient / 1Q survey, 2026

78%

**OF RESPONDENTS SAY
ACCOUNTABILITY
FOR AI-INFLUENCED
DECISIONS IS NOT
CLEARLY DEFINED
AND DOCUMENTED.**

02 ACCOUNTABILITY REMAINS UNCLEAR

When AI influences a clinical, coverage, research, product, or safety decision, someone must own the outcome. Leaders need to know who is accountable for the decision, who can explain the recommendation, who can challenge it, and who is responsible when it affects care, access, evidence, or patient safety. Without clear ownership, organizations risk scaling decisions no one is fully prepared to defend.

METHODOLOGY

Perficient surveyed 50 director-level and above healthcare and life sciences decision-makers in August 2026 through 1Q, a mobile research platform. Findings were supplemented by insights from Perficient's Healthcare and Life Sciences practitioners.

62%

**OF RESPONDENTS SAY
AI-DRIVEN AUTOMATION
IS INCREASING CONCERNS
AROUND TRANSPARENCY,
TRUST IN OUTCOMES, AND
ACCOUNTABILITY BETWEEN
PAYERS AND PROVIDERS.**

03 WHEN AI MEETS AI, PATIENTS RISK GETTING LOST IN THE MIDDLE

AI-generated prior authorization submissions are meeting AI-powered denial workflows, leaving patient care caught between automated systems. While automation speeds the handoff, questions about the resulting decisions remain. Nearly half of leaders cite trust in outcomes or decision transparency as a top concern as AI-driven adoption increases. The highest-risk failures occur at the intersections of payers and providers, clinical and administrative teams, and patients and digital front doors. Regulatory exposure ranked among the lowest-cited priorities, raising questions about organizational focus as AI adoption accelerates.

52%

**OF RESPONDENTS SAY
WORKFORCE ADOPTION,
CHANGE READINESS, OR
WORKFLOW REDESIGN ARE
THE BIGGEST OBSTACLES TO
REALIZING AI VALUE.**

04 AI VALUE REQUIRES A WORKFORCE READY TO ACT

A smarter system doesn't create better outcomes if people aren't ready to use it. When AI changes a workflow without helping employees understand, trust, and act on its outputs, it adds friction instead of removing it. Real adoption means treating AI as an operating model change, with workforce readiness, workflow redesign, and outcome measurement built in from the start.

82%

**OF RESPONDENTS
SAY THEIR
ORGANIZATIONS
CANNOT CLEARLY
AND CONSISTENTLY
PROVE AI ROI.**

05 ROI IS HARDER TO PROVE THAN TO PROMISE

AI is easy to justify in theory and harder to defend in practice. Usage costs, validation, oversight, correction, workflow disruption, and change management can erode expected value before benefits show up. The era of funding AI on promise is ending. Leaders need clearer evidence that they're investing in the right use cases, with a credible path to return.

Source: Perficient / 1Q survey, 2026

WHAT LEADERS GETTING IT RIGHT ARE DOING DIFFERENTLY

The organizations making real progress are not moving faster — they are moving differently. Across Perficient’s work with healthcare and life sciences clients, several patterns distinguish leaders from the field.

SIGNAL 1

They Treat AI as an Operating Model Change

Organizations getting value from AI are not trying to make it everything to everyone. They focus on specific, high-impact use cases, then build the workforce readiness, governance, and workflows needed to scale and sustain outcomes. In healthcare, AI is not just another technology layer. It is reshaping how clinicians, coverage teams, and researchers work.

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The industry is moving toward using AI to achieve the best outcome, then turning that outcome into **a repeatable, deterministic process that doesn’t require AI processing** every single time.

MICHAEL PORTER

Associate Vice President, Healthcare Practice, Perficient

SIGNAL 2

They Prioritize Decision Velocity Over Data Volume

For years, healthcare and life sciences organizations have focused on collecting more data from more sources. The organizations pulling ahead start with the decisions that matter, from Stars performance and care management to trial enrollment and safety monitoring, then connect trusted data directly to those moments. Value is defined by how quickly teams can turn that data into measurable action.

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The question is no longer, do we have the data? The question is, can we put **the right insight in front of the right person** at the exact moment a decision needs to be made? And the organizations that can, will outperform those that simply collect more information.

PRIYAL PATEL

Associate Vice President, Healthcare Practice, Perficient

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We still see companies pursue big-bang transformational projects and fail. **A phased rollout works better:** deliver measurable value every few months, learn from each phase, and build momentum before scaling further.

PRABHA RANGANATHAN

Associate Vice President, Life Sciences Practice, Perficient

SIGNAL 3

They Prove Value in Phases, Not Big Bang Programs

Organizations making progress are avoiding all-at-once transformation plans. They start with focused use cases, prove business value early, and use each phase to test regulatory fit, patient safety, and workflow integration before moving into production. That discipline builds momentum while reducing the likelihood of expensive AI programs that fail to gain adoption.



SIGNAL 4

They Define Where AI Advises and People Decide

Trust has to be built before AI can scale. Leading organizations define how AI will be governed before it enters critical workflows, from rules and guardrails to escalation paths and human review points. That discipline keeps oversight connected to outcomes and prevents AI systems from moving faster than organizations can explain, govern, or trust.

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As AI accuracy improves, reviewer vigilance can erode. In medical device development, **a plausible wrong answer that gets approved creates more risk than an obvious error that gets caught**, and that gap widens as AI gets more convincing.

SHANE DULTZ
Ph.D., Associate Vice President,
Medical Device Practice, Perficient

SIGNAL 5

They Focus on Capacity, Not Just Cost

Organizations making the most progress are using AI and automation to create capacity, not just reduce costs. They streamline administrative work, accelerate decision-making, and help teams manage growing demand with greater focus and efficiency. The capacity they create shifts back to the work that matters most: improving care, strengthening operations, and advancing research.

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Organizations creating the most value from AI are expanding what their teams can accomplish. By scaling expertise and accelerating execution, they can **advance strategic priorities that often stall** under the weight of day-to-day demands.

PRIYAL PATEL
Associate Vice President,
Healthcare Practice, Perficient

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THE QUESTION

As AI becomes part of how work gets done every day, what will determine whether your organization creates measurable value or simply generates more activity?

The organizations that move ahead will not be the ones with the most AI activity. They'll be the ones that prove value early, govern risk clearly, enable the workforce, and apply AI where it improves outcomes that matter.



Perficient is the global AI and technology consulting firm disrupting the traditional consulting model. Powered by our 7,000+ advisors, engineers, and designers, Perficient implements AI-first solutions that break conventions and deliver outcomes that matter. Proudly serving clients that represent the world's most innovative brands, and in collaboration with our powerful technology partner ecosystem, we bring deep industry expertise and data-driven design to redefine how businesses run and succeed.

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