



Industry is our edge

# From breaking point to breakthrough: the \$1 trillion opportunity to reinvent healthcare

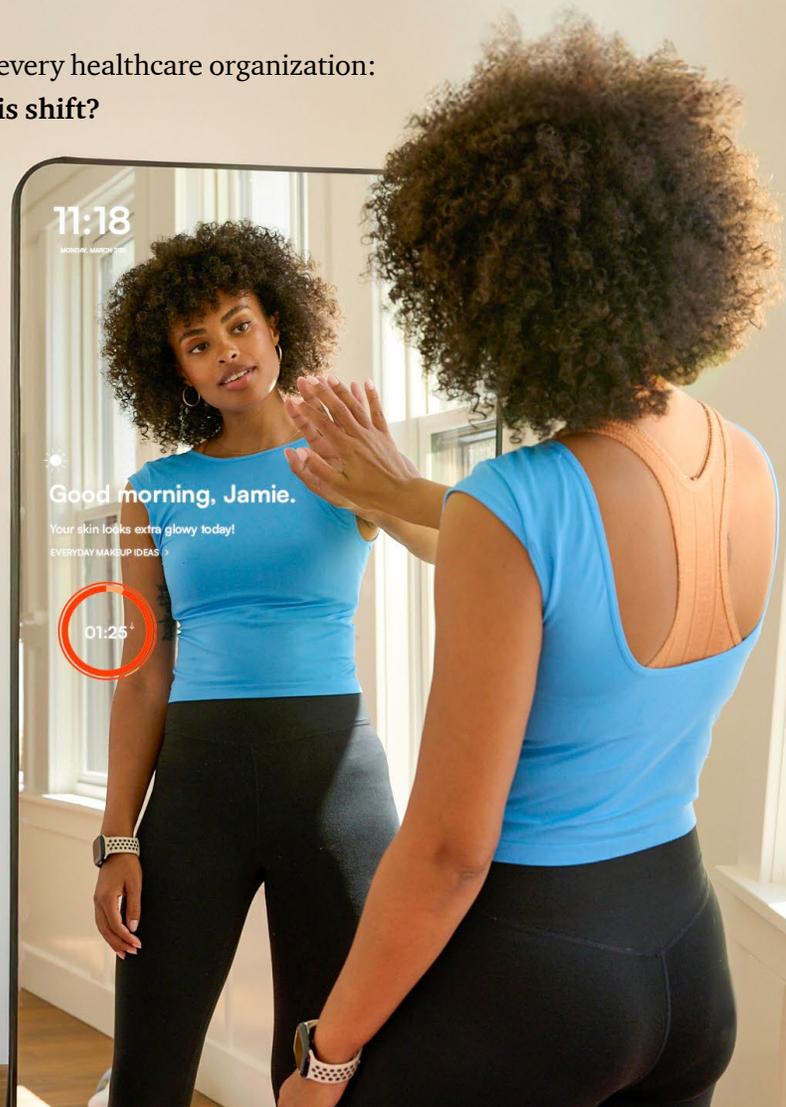


## The US healthcare system is approaching a fundamental transformation.

With more than \$5 trillion in annual spending and costs rising at unsustainable rates, leaders across the industry are being forced to rethink long-held assumptions about how care is delivered, funded and experienced.

Over the next decade, we expect **\$1 trillion of annual healthcare spending to shift** away from fragmented, infrastructure-heavy models and toward empowered “super consumers” and a digital-first, proactive and personalized system of care. This is not science fiction. It is already taking shape in the form of virtual-first delivery, AI-supported decision-making and interoperable, consumer-centered platforms.

The question for every healthcare organization:  
**Will you lead this shift?**





## **America's health system is expensive, fragmented and frustrating for patients and providers**

Rising costs, fragmented care, administrative overload and demographic trends are buckling the system, creating pain points that are acutely felt by patients, providers and the economy.

The cracks are widening:

**Costs are rising.** Medical cost trend remains elevated at ~8%,<sup>1</sup> with no let-up in sight for growth of medical expense and pharmaceutical utilization.

**Care delivery is siloed.** Hospitals, specialists and primary care providers keep separate records, while lab results, claims, prescriptions and even data from wearables sit in isolation — making accountability for quality of care difficult.

**Doctors are administrators.** Physicians spend more than a third of their time on paperwork — over a day and a half each week — while administrative costs climb toward 25% of national health spending.<sup>2</sup>

**The population is aging.** Within 10 years, there will be more Americans over 65 than under 18, foretelling demand for chronic and geriatric care alongside a shrinking supply of healthier young workers to pay for it.<sup>3</sup>

And the fallout is unavoidable:

**Physicians are burnt out.** Nearly 70% of patients say their providers appear rushed.<sup>4</sup> By 2037, physician shortages are expected to double, reaching nearly 200,000.<sup>5</sup>

**Patients are frustrated.** They are asked to provide the same health information repeatedly, manage medical records via screenshots and PDFs, and even undergo (and pay for) redundant tests. They struggle with long wait times, confusing hand-offs between specialists and the maze of multiple bills for the same episodes of care.

**Care is out of reach.** More than a third of US consumers say they have a healthcare need they're not addressing because of affordability concerns.<sup>6</sup>

**Outcomes are worsening.** Despite the highest per capita spending on healthcare in the world, Americans have shorter lifespans than the citizens of peer nations.<sup>7</sup>

**The economics do not add up.** The \$5 trillion system costs increasingly more and delivers less. Unless something changes, healthcare spending will grow to \$9 trillion annually by 2035.<sup>8</sup>

Despite these challenges,  
the future is inspiring.

# By 2035 healthcare will be proactive, automated, robot-enabled and accessible wherever life happens

This isn't science fiction. The future is arriving faster than we think. Step inside and see it now.



Here's how healthcare in 2035 could look:



**A tech-enabled parent and caregiver:** Caregivers benefit from personalized in-home connected care hubs and robot assistants to ease caregiver burden, keep families well and reduce institutional reliance.



**A new kind of house call:** Rural patients are diagnosed before symptoms emerge and receive high-quality, data-rich care at home, eliminating distance, delay and unnecessary escalation through precision virtual infrastructure.



**The return of the physician:** Physicians become data-orchestrators using AI to triage risk, personalize care and focus on clinical judgment over administrative burden.

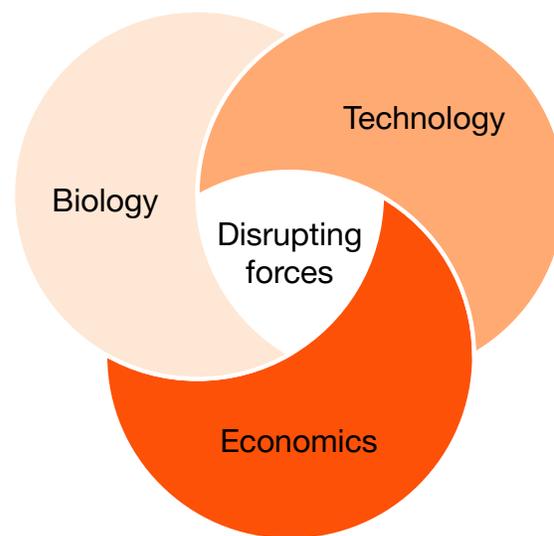


**Hospitals and sites of care reimaged:** Hospitals and sites of care shift from destinations to high-speed care nodes built for brief, precise interventions tightly integrated with virtual-first systems.



# Why now? Costs are breaking the system; innovation can fix it

Unsustainable economics are converging with powerful advances in technology and biology. These innovations are accelerating exponentially and, when united, are creating a unique opportunity to transform healthcare before costs overwhelm the system.



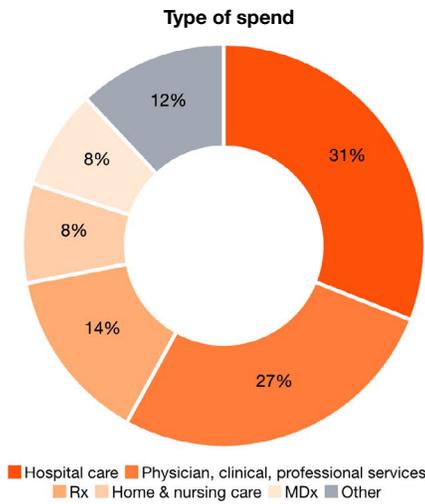
Healthcare costs are untenable – \$5T and growing at ~8% per year, fueled by rising claims and cost of care, administrative overhead and higher spending on drugs and behavioral health.

|  |   |  |
|--|---|--|
| <p><b>~18%</b></p> <p>of the US 2024 GDP is from healthcare costs (up from 4% in 1970's)<sup>9</sup></p> | <p><b>~90%</b></p> <p>of healthcare costs are for patients with chronic and mental health conditions<sup>10</sup></p> | <p><b>~25%</b></p> <p>of US healthcare costs are from administrative overhead<sup>11</sup></p> |
|--|---|--|

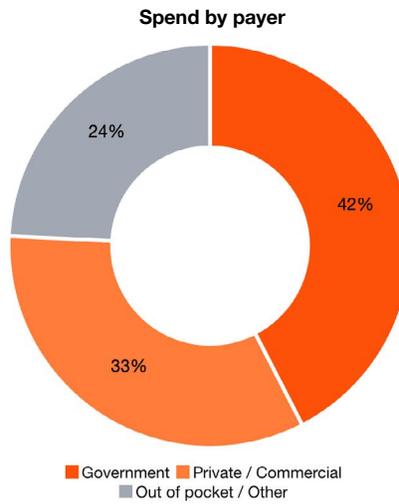
Sources: Health Affairs, CMS, Office of the Actuary, National Health Statistics Group, Department of Commerce, Bureau of Economic Analysis and Census Bureau, CDC, JAMA

## \$5 trillion of costs:

Hospitals and physician spend is ~60%

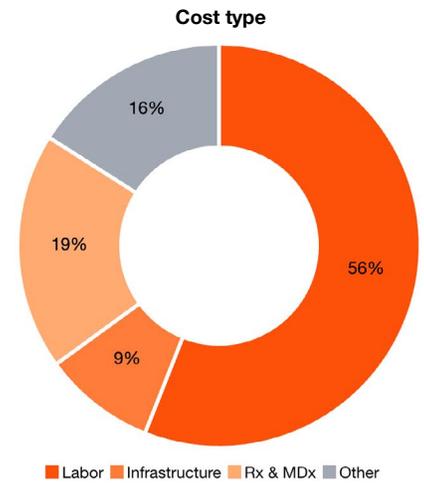


Government spend is ~40%



Government includes Medicare (23%) and Medicaid (19%)

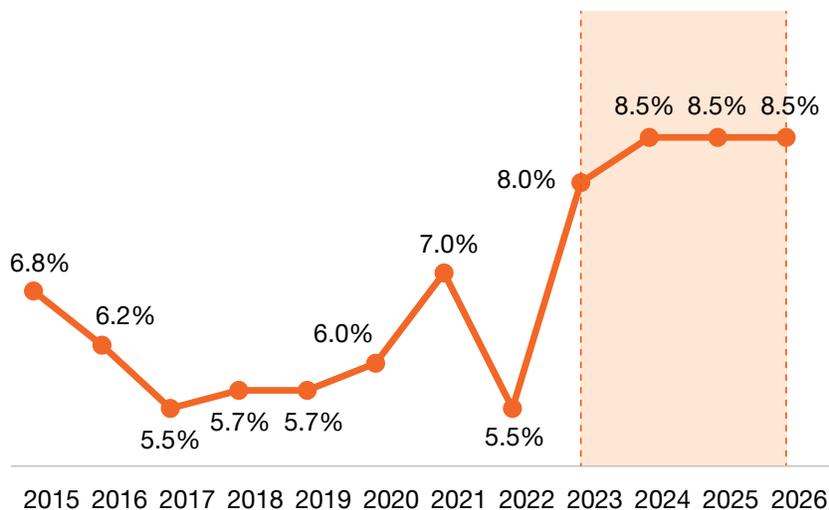
Labor and infrastructure is 65%



Labor includes clinical of 42% and non-clinical of 14%  
 Infrastructure includes real-estate, equipment, IT/technology and operations and includes both opex & capex

Source: NHE Estimate for 2025 as adjusted Rx/MDx and Cost Type / PwC estimates.

## ~+8% per year



Source: PwC Analysis

## Technology is moving exponentially, simplifying how care is delivered at scale

Technology will no longer augment the system— it will become the system. Early adoption is happening. AI algorithms can design new drugs in months rather than years. Robotic-assisted surgeries are helping to reduce complication rates and when paired with wearables and remote monitoring, will extend surgeon reach into hospital-at-home programs replacing inpatient beds.

Together, these advances are setting the stage for a wave of scientific breakthroughs and simplified care models that can truly change the trend on costs, quality and burnout.

- **Robots** will perform services, augmenting and enabling doctors, nurses and at-home care. More than 60% of large hospitals in developed countries already use robotics; usage will expand as the technology advances.<sup>12</sup>
- **AI** will drive drug discovery, diagnosis and eliminate administrative burdens.
- Health systems will share **interoperable application programming interfaces**, streamlining data flow and accelerating care delivery.
- **Drone delivery** will provide faster, last-mile care access, especially in remote and underserved areas.
- **Sensors** (wearables, implants and other devices) will shift care toward earlier intervention and remote delivery.

# >\$5B

invested by large pharma in AI drug discovery promises to compress decades of research into years, delivering breakthrough therapies that were previously thought to be impossible.

## Biology is decoding the human operating system and enabling precision at scale

The advancements ahead won't just treat symptoms; they will intervene at the root cause, often before symptoms appear, reorienting our healthcare system from reactive to proactive and from one-size-fits-all to personalized care. In just a few years, knowledge of cells, genomes, the microbiome and brain-body systems has expanded dramatically. For example, just a few years ago, parts of the human genome remained a mystery. Now, scientists have mapped the entire human genome including critical gaps once thought unreadable, helping to set the stage for a new frontier of understanding. Healthcare is on the cusp of a fundamental shift from reactive treatment to proactive, predictive and personalized care.

- As **digital twin** adoption (~25% today) grows, doctors won't just treat patients after something goes wrong.<sup>13</sup> They'll run real-time simulations of a patient's unique physiology to predict risks, personalize interventions and prevent illness.
- **Multi-omics sequencing** will push diagnostics beyond detection into true prediction, uncovering disease at its earliest and most curable stage.
- **Gene therapies** are beginning to replace lifelong symptom management with one-time cures that strike at the root of disease.
- **Precision medicine** programs, still nascent in most health systems, are poised to scale rapidly, replacing "one-size-fits-all" standards with personalized treatment.
- Large pharma's investment in **AI drug discovery** could compress decades of research into years, delivering breakthrough therapies that were previously thought to be impossible.

## The \$1 trillion transformation: from outdated cost pools to next-gen care

By 2035, \$1T in annual healthcare spending will shift from outdated cost pools like administrative overhead and brick-and-mortar facilities into next-generation models such as AI-enabled intake and in-home care. This shift will trigger four downstream effects that accelerate transformation across the industry:

- **Chronic care gets rewritten from managing to anticipating disease.** Sensors and continuous biometrics feed AI engines that detect risks before symptoms emerge, while predictive algorithms flag early deterioration in conditions before a hospital visit is required. Physicians monitor thousands of patients via real-time dashboards. Digital twins and genomics enable treatment plans tailored to an individual's biology, behavior and lifestyle, shifting the model from generic protocols to personal prevention and intervention.
- **Innovation at scale changes the game.** The traditional hospital model is shrinking in scope, evolving into specialized hubs for trauma, surgery and acute care, while the bulk of routine and chronic care shifts to the home delivered through remote monitoring devices, AI-driven virtual assistants and hospital-at-home programs. For example, continuous glucose monitors, connected inhalers and wearable heart sensors generate real-time streams of health data, allowing physicians to intervene earlier and patients to self-manage more effectively. The era of episodic, reactive care is giving way to continuous, personalized and predictive care in which treatment plans evolve dynamically with the individual, rather than being locked into rigid, one-size-fits-all protocols.

## Consumers are willing to adopt new technology in their care

### AI-powered treatment



45% 49% 39% 46%

AI assistant to provide health updates and triage

Analytics and AI to tailor care plans and treatment

AI-powered mental health companion

AI-assisted diagnosis

### Robots in lieu of people



49% 55% 43% 43%

Drone delivery of test kits and medications

Smart home health sensors to monitor vitals

At-home robotic assistant

Remote surgery assisted by robotics

### Drugs tailored to your DNA



54% 57% 44% 38%

Genomic screening to assess risk and guide care

Personalized meds and treatments based on genetic profiles

Digital twins to simulate health-related decisions

Smart medicines that track adherence

### Unified, digital infrastructure



49% 53% 41% 42%

Sharing medical data to accelerate clinical trials

Unified health record across all care providers

Virtual-only providers

Fully autonomous mobile care clinics

#### Notes:

1. % of respondents, N = 4,030, 2025
2. Q26: How willing would you be to use these options, if they were accessible to you?
3. Additive sum of respondents currently using and willing to use in future

# 47%

of high-income households will invest more in their health, compared with just one-third of others

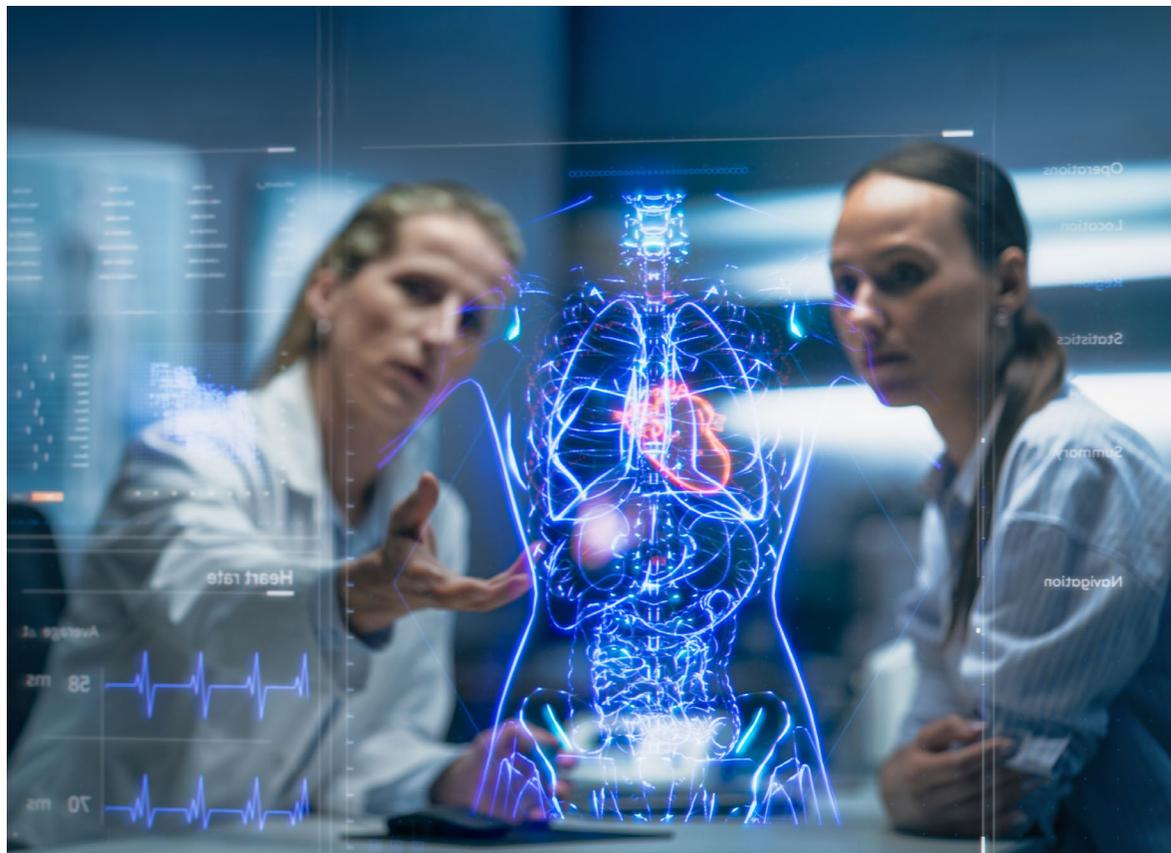
# 40%

of consumers are ready to use unified records, virtual providers, and personalized medicine

# 36%

of high-income consumers would pay more for home-based or personalized care<sup>14</sup>

- **A super consumer emerges: informed, demanding and in control.** A segment of informed, technologically empowered patients with household incomes of \$150,000+ will choose how they spend their healthcare dollars and chart their own health journey. These super consumers will help fund and drive the creation of the next-generation health system, paying out of pocket for innovations that government and commercial players will later build and scale. Today's patient is directed. Tomorrow's consumer will decide.
- **The traditional infrastructure-heavy model collapses, replaced by a distributed, tech-enabled system that delivers care anywhere, anytime.** As hospitals shrink to modular hubs designed for the most acute cases, most care shifts into the home, enabled by wearables, implantables and virtual command centers that orchestrate treatment remotely. AI, robotics and drones reconfigure labor by automating routine tasks, allowing clinicians to focus on complex interventions.



## Cost pools exposed to reallocation by 2035

|  | Cost reductions  | Enablers   |
|--|--|--|
| <b>Administrative overhead</b>             | <ul style="list-style-type: none"> <li>Administrative labor &amp; billing overhead</li> <li>Costs incurred due to prior authorization days</li> </ul>                            | <ul style="list-style-type: none"> <li>Replace human-driven workflows with AI-enabled intake, scheduling and documentation</li> <li>Consolidate redundant admin platforms across entities</li> </ul>                       |
| <b>Facility &amp; infrastructure costs</b> | <ul style="list-style-type: none"> <li>Minimize inpatient utilization and reliance on physical hospitals</li> <li>Reduce costs tied to long-term and end-of-life care</li> </ul> | <ul style="list-style-type: none"> <li>Downsize or repurpose hospital real-estate into flexible, modular care ports</li> <li>Expand hospital-at-home capacity to reduce low-acuity admissions</li> </ul>                   |
| <b>Drug &amp; device waste</b>             | <ul style="list-style-type: none"> <li>Eliminate spending on ineffective or inappropriate treatments and / or technologies</li> </ul>  | <ul style="list-style-type: none"> <li>Accelerate biosimilar adoption and formulary optimization</li> <li>Use pharmacogenomics to align prescriptions to individual metabolic profiles</li> </ul>                          |
| <b>Reimbursement model reform</b>          | <ul style="list-style-type: none"> <li>Remove incentives that promote overutilization and fragmented care delivery</li> </ul>  | <ul style="list-style-type: none"> <li>Expand bundled payments and capitation in chronic and post-acute episodes</li> <li>Redirect funding toward outcomes-based contracts</li> </ul>                                      |
| <b>Labor &amp; staffing needs</b>          | <ul style="list-style-type: none"> <li>Reduction in staff needed, particularly in virtual-first and home care environments</li> </ul>  | <ul style="list-style-type: none"> <li>Augment clinical roles with AI copilots and ambient documentation</li> <li>Workforce mix shift toward community workers, robotic assistants, and tech-enabled physicians</li> </ul> |
| <b>Chronic care event reduction</b>        | <ul style="list-style-type: none"> <li>Prevent costly acute events, hospital stays, ED visits, and SNF admissions due to chronic conditions</li> </ul>                           | <ul style="list-style-type: none"> <li>Use digital twins and predictive models to identify risks before they compound</li> </ul>   |
| <b>Low-value service elimination</b>       | <ul style="list-style-type: none"> <li>Cut unnecessary imaging, lab tests, specialist referrals, and low-impact procedures</li> </ul>  | <ul style="list-style-type: none"> <li>Deploy AI-enabled triage upfront to route care more efficiently and avoid overutilization</li> <li>Tie reimbursement to adherence / evidence-based guidelines</li> </ul>            |

And legacy silos in data infrastructure must give way to a new, interconnected ecosystem which enables this vision of the future.

# Success will require a new operating model

The decisions that leaders make now will determine the existence and relevance of their organizations in the next decade. Competitive advantages will come from a new playbook that drives transformation in key areas.



**Consumer-first.** If you don't win with the consumer, you lose. Earn trust with transparent and personalized care. Companies will co-design experiences with consumers in mind. Services will be bundled into one seamless experience that includes real-time tracking of benefits and costs and adjustments based on how consumers engage.



**Virtual by design.** Physical-first models are vulnerable. The default needs to become seamless and trustworthy digital channels. Digital-native care architecture, automatic intakes, fully virtual specialty clinics and AI-augmented diagnosis and treatment will become commonplace.



**Data-intelligent.** If you're not leading with algorithms and insight, you're falling behind. Use AI-powered insights across real-time data to drive care, workflows and decision-making processes. Data-driven care intelligence hubs will develop clinical engines for personalized care plans, make predictions with data to act before symptoms appear and turn data into insight, action and revenue.



**Ecosystem-enabled.** Strategic partnerships will define who leads in the future. Such partnerships will lead to platforms that enable broad orchestration, measuring success via shared outcome metrics, creating franchise-like care models and sharing data to build tools and scale value.



**Disruption-aware.** If you aren't anticipating new entrants, you'll be outflanked. Adapt quickly as innovations, policies and platforms rewrite the rules and compete for reallocated dollars. Institutionalize disruption and adaptation by building agile teams that shift with innovation, launch internal pilots early, form tech and regulatory units to map changes and designate sandboxes for real-world testing of technology.



# Every sector will need to adapt

Traditional players must commit to structural reinvention, leaving behind legacy systems in favor of intelligent platforms, hybrid workforces and outcome-based strategies.

## Successful sector roles within the industry will look different in the next decade.

### Payers of the future

**Twice the service, half the cost.** With medical cost trend nearing double digits and little willingness from employers, consumers or government to pay more, payers face an unforgiving squeeze. They will be expected to deliver far more with far less. AI and other technologies will help, but they are not a magic wand. To stay viable, payers will build capabilities to deliver medical value and actively manage population risk, coordinating directly (through expanded ownership) or indirectly across networks and supply chains that drive cost and affordability. They will increasingly serve as data clearinghouses, enabling real-time personalization and dynamic cost management. To fund this shift, payers will automate much of what they do today, creating the headroom to invest in new capabilities and assume a larger role as stewards of their members' healthcare dollars, earning loyalty for life at lower cost

### Providers of the future

**Decentralized and designed for consumers.** Under financial strain and consumer pressure, providers will pivot to AI-enabled, human-centered models that deliver affordable, personalized care and harness new advances to sustain and restore health. Care will decentralize and become acuity-adjusted, specialized and increasingly autonomous. The nation's historically understaffed workforce will be strengthened by human-led, digitally assisted teams. New revenue models will emerge, eroding reliance on traditional fee-for-service. As digital natives age into new health needs, they will direct their dollars toward AI-powered models that promise more affordable, convenient and efficient care. These shifts will fracture long-standing provider-patient loyalties, as younger generations abandon their parents' system in favor of care that is immediate, low-cost and accessible from the device in their hand.

**Pharma of the future**

**Breakthroughs at scale.** The thriving pharma companies will be those who are faster to advance and harness transformational science—predicting health problems, curing chronic disease, reversing organ aging, reprogramming immune systems—and redefining the experience of taking medicine. These next generation companies will create clear advantages in their understanding of biology and be in a strong position to help patients predict, prevent and treat disease in highly personalized ways. Breakthroughs will come through a new paradigm for research, powered by advances in AI, and will include new types of partnerships with discovery platform companies, technology companies and academics. Intelligent clinical trials will accelerate the development timeline. Forward-thinking commercial functions will design a new experience where patients benefit from this rich understanding of science well before the first point of treatment. Leaders will build ecosystems and consumer brands around tackling conditions in a more predictive and integrated way (e.g., risk assessments, diagnostics, treatments, monitoring.) Innovation at this scale demands reimagination, not just of science, but of how today’s pharma companies operate. AI-first operations across the value chain will increase the speed and precision of work, change how medical information is disseminated and create new models for customer engagement.

**Medtech of the future**

**Care without walls.** Medtech will evolve from stand-alone hardware to intelligent infrastructure. Embedded intelligence will connect devices directly to care teams, enabling timely interventions whether the patient is at home, in the hospital or on the move. The next wave of differentiation will come from brain-computer interfaces between patient and device, remote monitoring, robotics and neuromodulation as software and connectivity define competitive advantage. To lead, medtech companies will become connectors of care with diagnostics and therapeutics converging into one seamless, adaptive system.

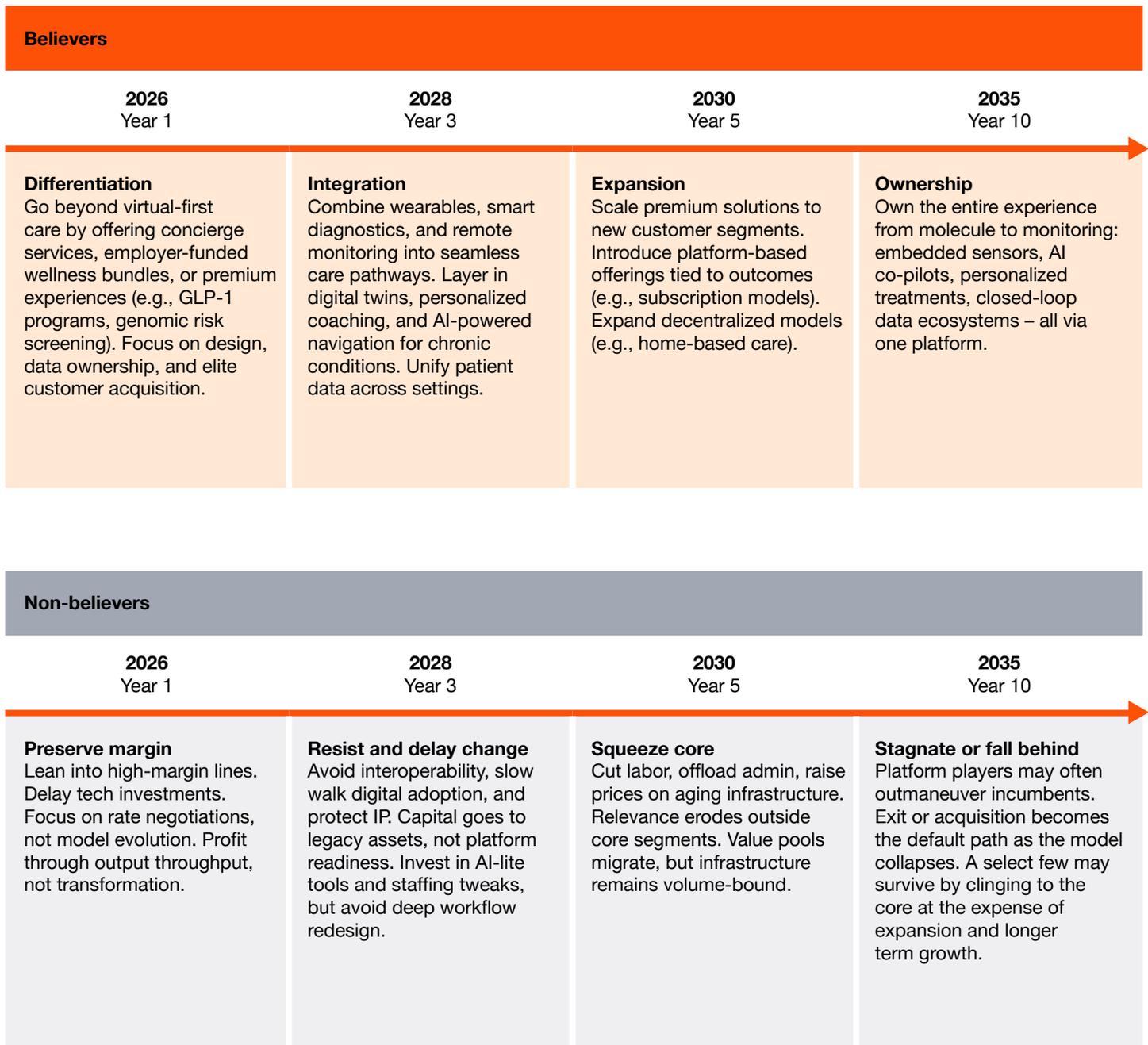
The critical test for the future of health will be whether a major industry outsider—free from legacy infrastructure but armed with capital—will have the vision, insight and resolve to disrupt healthcare.

# Do you believe? Protect the status quo or reinvent what's next

Healthcare leaders face a choice: protect today's model or build tomorrow's system of tech-enabled, predictive, always-on care.

- **The non-believer: protect today, lose tomorrow.** These players preserve margins by delaying tech investments, resist change by clinging to legacy assets, and squeeze aging core businesses as relevance erodes. By 2035, slow adoption, siloed data and outdated models leave them outpaced by platform competitors, forced into exit or acquisition as their model collapses. Regulatory and economic model change will outpace operating model evolution. Data silos will limit insights and care will remain episodic with little shift to predictive or care-anywhere models.
- **The believer: reinvent now, lead the future.** Winners will either deliver premium tech-driven experiences or build scalable, equitable platforms powered by AI and data. Care-anywhere models, hybrid human-digital labor and value-based pay will reshape the system. While we believe these changes are possible, regulatory involvement and collaboration will be critical. Regulations need to be modernized, enable clinicians to practice freely across state lines and support asynchronous and AI-assisted care.

## Do you believe? See how the next 10 years will play out.



# The innovation divide

Even the most advanced transformation won't automatically close healthcare gaps. Fifty-eight percent of Americans believe access to quality healthcare depends on income or societal status. **If equity isn't built in from the start** across platforms, pricing, policy and design, **the system will simply continue to reinforce societal divides.**

As a result, three consumer profiles will emerge:

**Empowered consumers.** These are digitally fluent individuals in urban regions with disposable income to spend on health. They benefit from advanced options such as digital twins, genomics, AI copilots for navigation, home-based diagnostics and personalized medications with same-day fulfillment. Their care is proactive and longevity-focused, with earlier intervention leading to lower costs over time, and a seamless experience that fosters trust within the system. Because they are willing and able to pay out of pocket, these consumers could help fund the evolution of the new healthcare model, creating opportunity for government and other stakeholders to leverage their spending to reduce inequities.

**Mainstream America:** Employers shift greater cost sharing to employees, who increasingly engage in virtual-first options for common standards of care. Enabled by technology, they benefit from significant price drops on select services. For higher cost diseases and treatments, access remains difficult.

**Underserved consumers:** These patients represent an often uninsured segment who may reside in rural areas of the US and lack experience with digital, virtual-first care. Dependent on clinic-only visits, these patients continue to experience delayed access to diagnostics and specialists. Digitally disconnected, they continue to receive episodic, crisis-driven care, resulting in worsening outcomes and higher costs.

# How the future could play out: Lead, follow or fall behind

This future is not guaranteed. We see two forces at work: the industry's appetite for abandoning the status quo and its approach to reconciling the widening gulf between those with disposable income and those without. Incumbents still have the scale to win, but only if they stop optimizing for today and start building for tomorrow. At the same time, disrupters are underway with investments in innovation that could unseat today's incumbents.

If the industry resists the shift and clings to the status quo, progress will stall. The next decade will be defined by those who are willing to do the hard work of rebuilding—not around what exists, but around what's possible.

**The \$1 trillion shift is coming.** The only question: will you lead it?



## Footnotes

<sup>1</sup> PwC Analysis

<sup>2</sup> JAMA

<sup>3</sup> Luminary Labs

<sup>4</sup> 2025 US Healthcare Consumer Insights and Engagement Survey; Q13. In your healthcare interactions over the past 12 months, how often have you felt that your healthcare provider appeared rushed or pressed for time. Base=3,509

<sup>5</sup> HRSA

<sup>6</sup> KFF

<sup>7</sup> KFF

<sup>8</sup> Oliver Wyman

<sup>9</sup> Health Affairs

<sup>10</sup> CDC

<sup>11</sup> JAMA

<sup>12</sup> Global Growth Insights

<sup>13</sup> Forbes

<sup>14</sup> 2025 US Healthcare Consumer Insights and Engagement Survey

Q1. Which statement best describes your approach to health and wellness?

Please select one. "Optimizing my health is most important to me—I view health as my most important investment and actively seek personalized interventions to maximize both my lifespan and optimize my physical and mental performance" Base=4,030

Q26. How willing would you be to choose these options, if they were accessible to you? Base=4,030

Q31. In 2035, I expect the experience of receiving healthcare in the US will be...

"much worse, a little worse, about the same, a little better, much better."

Q32. You indicated healthcare experiences will improve by 2035.

What makes you feel that way? Base=4,030

## **About our insights**

PwC surveyed more than 4,000 adult consumers in the US between June 30 and July 6, 2025. Respondents in the survey were broadly representative of the US population across gender, region or state and generational group.

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**To have a deeper discussion about this topic,  
please contact your engagement partner.**

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