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Health of Health Index 2025

A Rios Partners report

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About

Rios Partners



Founded in 2016, we are a mission driven strategy consulting firm that works with public, private, and nonprofit organizations to tackle complex challenges and deliver measurable, sustainable results.

We bring deep experience across healthcare, government, and social impact sectors, with a focus on understanding systems as they function in practice.

Healthcare is a core focus of our work. Through initiatives such as the Health of Health report, we evaluate the U.S. health ecosystem using trusted public data to surface trends, tradeoffs, and key questions. Our nonpartisan, data-driven approach is designed to inform decision-making, elevate shared understanding across stakeholders, and support more effective and equitable health systems.

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Health of Health

Introduction

Over the past several years, through the Health of Health report, our analysis has focused on understanding the disruption COVID-19 introduced to the U.S. healthcare system. As we now examine data through 2024, and assess 2025 data as it becomes available, we evaluate a system that has moved beyond acute pandemic shock into a period of stabilization, while structural challenges continue to shape performance across the ecosystem.

The data reflects a more uneven trajectory than a simple recovery. U.S. health outcomes remain below those of peer high-income nations despite higher per capita spending, while rising chronic disease burden, access constraints, and uneven engagement continue to strain system performance. Early improvements in headline indicators have not yet translated into sustained gains across populations.

At the same time, there are clear signs of evolution. Care delivery is expanding beyond traditional settings, with growth in ambulatory and home-based models and broader adoption of digital tools. Innovation in pharmaceuticals, medical technologies, and AI-enabled solutions remains strong, supporting the system's ability to adapt to changing needs.

In the 2025 report, we place greater emphasis on how trends interact across the healthcare ecosystem. Alongside core metrics in the Health Ecosystem Index, we include focused spotlights on key drivers shaping performance across access, cost, trust, and innovation.

Building a resilient, affordable, and high-quality healthcare system will require more than isolated improvements. It will depend on alignment across stakeholders, sustained investment, and a focus on the tradeoffs shaping system performance over time.
We hope this report supports informed dialogue and thoughtful, mission-driven action to strengthen the future of healthcare.

Chan Harjivan, Dr. Anjali Kastorf, and Kyle Johnson
Partners at Rios Partners

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Health of Health

Report Overview

Rios Partners' Health of Health report provides a holistic, data-driven assessment of the U.S. health ecosystem. The 2025 edition builds on prior years by continuing to examine health through four interconnected pillars while incorporating updated metrics, new indicators, and targeted spotlights that reflect recent shifts in healthcare delivery, financing, and innovation. As in our previous reports, in 2025 we assess the state of U.S. healthcare across four pillars:

Patient	Representing the demand side of healthcare, this pillar includes metrics measuring individual health treatment and associated health outcomes.
Provider	Representing the supply side of healthcare, this pillar includes metrics measuring healthcare's human resources and physical infrastructure.
Payer	Representing the funding structures of the healthcare system, this pillar includes metrics measuring the cost of healthcare and who pays for it.
R&D	Representing innovations in biotechnology and pharmaceuticals, this pillar includes metrics measuring investment and innovation activity.

To support this analysis, we maintain the Health Ecosystem Index, an integrated set of metrics designed to provide a consistent view of system performance over time. The index includes a core group of measures reviewed year over year, along with rotating metrics introduced to illuminate emerging themes and evolving system dynamics. Together, these measures enable comparison across time and domains, allowing changes in one pillar to be understood within broader system shifts. This structure highlights how progress in one area may be offset by strain in another and surfaces tradeoffs that shape system performance, rather than presenting isolated improvements or declines.

In addition to examining each pillar individually, the Health of Health report assesses how trends interact across the ecosystem. The 2025 edition includes focused spotlights on self-management of care, trust in healthcare institutions, AI's impact on clinical practice, enrollment policy changes, and pharmaceutical supply chain resilience. Together, these analyses surface key intersections, identify areas of strain, and highlight opportunities that shape the health and sustainability of the U.S. healthcare system.

While published as the 2025 report, most data analyzed reflect trends through 2024 due to inherent lags in public health data reporting. Federal and state datasets require substantial time for collection, validation, and release. Even with these delays, the 2025 Health of Health report incorporates newly available data and updated indicators to provide the most current and comprehensive view possible of the U.S. health ecosystem.

Taken together, these findings point to a healthcare system that has stabilized following the disruption of COVID-19, but has not fundamentally improved. While select outcomes have recovered, underlying structural challenges, including chronic disease burden, affordability constraints, uneven access, and low system-level trust, continue to limit overall performance. The central question is no longer whether the system can recover from acute disruption, but whether it can meaningfully improve the baseline to which it has returned.

Patient

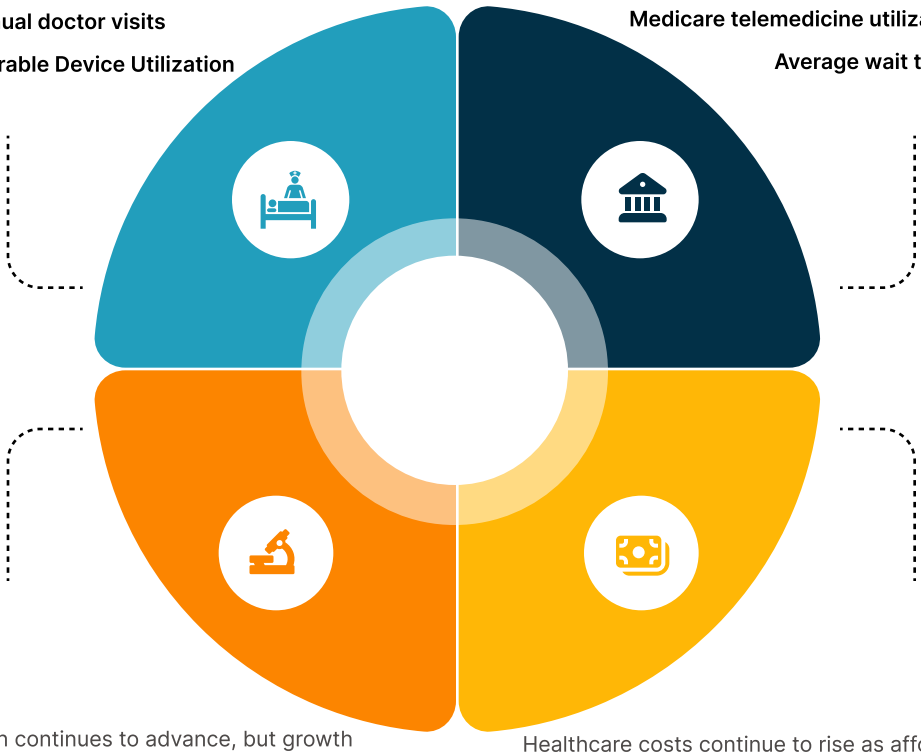
Partial recovery in outcomes, but chronic disease burden and disparities continue to shape long-term health.

- Life expectancy
- Chronic disease prevalence
- Annual doctor visits
- Wearable Device Utilization

Provider

Expanding provider capacity, but persistent access constraints and operational pressures continue to limit care delivery.

- Physicians per capita
- Number of hospital beds
- Medicare telemedicine utilization
- Average wait times



R&D

Innovation continues to advance, but growth remains uneven as investment, approvals, and global dynamics shift.

- Pharma industry R&D investment
- Number of novel FDA drug approvals
- US share of clinical trials

Payer

Healthcare costs continue to rise as affordability pressures increasingly shape access, coverage, and patient decision-making.

- Total annual US health expenditures
- Annual out-of-pocket health expenses
- Percent of Americans insured by any insurance

Patient Pillar

Stabilization in headline outcomes masks persistent disparities and an expanding long-term chronic disease burden



The Patient pillar reflects a system that is stabilizing across several headline outcomes, but not improving at a structural level. We score the pillar as Yellow overall: key indicators such as life expectancy and maternal mortality have improved following pandemic-era declines, and patients have returned to care at higher rates. However, these gains primarily reflect recovery from acute disruption rather than sustained improvement. Chronic disease burden continues to increase, disparities in outcomes remain persistent, and trust in healthcare institutions continues to decline. As a result, the system is returning to pre-pandemic performance patterns rather than transitioning to a meaningfully stronger baseline.

2025 data on patients show a country emerging from the acute phase of covid into something that looks, at first glance, like recovery. Life expectancy has risen again, to 79 years. COVID-19 deaths have collapsed from their peak. Maternal mortality is falling. Diabetes and suicide deaths have declined. More adults are seeing doctors. More are using devices to monitor their own health. The emergency, in other words, has receded.

But America has not returned to health. It has returned to its old bargain: astonishing medical capability, mediocre population outcomes and large gaps between those who benefit from the system and those who are failed by it.

Start with the most basic measure. Americans are living longer than they did during the pandemic, but still nearly four years less than people in comparable rich countries. Maternal mortality is improving, but Black women still die at far higher rates than white women. Infant mortality has ticked down overall, but Black infant mortality has not. Averages are moving in the right direction; inequities are proving far more stubborn.

This distinction matters. A health system can improve its national score while leaving its weakest patients exposed. That is the American pattern. The country is good at rescue, less good at prevention; good at innovation, less good at diffusion; good at treating disease once it has become expensive, less good at keeping people well before it does.

The deeper burden is chronic illness. More than three-quarters of American adults now live with at least one chronic condition. Obesity and depression have been among the fastest-growing contributors over the past decade. These are not marginal conditions. They are the operating system of modern American health care. They drive prescriptions, visits, hospitalizations, disability, family stress and public spending. Mortality may be improving, but the stock of illness is growing.

Policy in 2025 has sharpened the contradiction. Medicare's new cap on annual out-of-pocket drug spending under Part D is a genuine patient gain. For older adults with costly medicines, it reduces one of the cruelest features of American care: the possibility that treatment exists but cannot be afforded. In a country where prescription use is rising, that reform matters.

Yet other policies may push in the opposite

direction. Medicaid changes and new administrative requirements threaten to make coverage more contingent. The expiry of enhanced ACA premium tax credits creates another affordability shock for people buying insurance in the individual market. These changes may not immediately show up in life-expectancy tables. But coverage is the front door to vaccination, prenatal care, mental-health treatment, diabetes control and medication adherence. When that door narrows, the effects appear later and unevenly.

The same pattern is visible in obesity treatment. GLP-1 medicines could become one of the most important patient-level interventions of the decade. They may alter the trajectory of diabetes, cardiovascular disease and obesity-related morbidity. But access remains fragmented. Public programs are cautious; employers are anxious about cost, and prior authorization is becoming the rationing mechanism of choice. America may have discovered a powerful tool against chronic disease only to distribute it through the familiar machinery of ability to pay, plan design and administrative friction.

Mental health is an even clearer warning. Nearly a quarter of adults report mental illness, while use of mental-health services has stopped rising. Suicide deaths have fallen, but it is too early to declare a durable turn. Medication use is rising, suggesting that long-term pharmacological management is becoming a bigger part of the patient experience. But the mismatch remains: need is growing faster than the system's capacity to respond. Mental-health parity rules were meant to close part of that gap, but implementation and enforcement uncertainty mean patients may still find that nominal coverage does not equal usable care.

Prevention is also becoming more complicated. Adult flu vaccination remains below half the population. COVID-vaccine policy has shifted toward more individual decision-making. That may sound sensible in clinical terms. In practice it puts more weight on the quality of the patient-clinician relationship, the clarity of public-health communication and the ability of patients to navigate conflicting advice. In a high-trust system, nuance helps. In a low-trust system, nuance can become another barrier.

That trust problem now runs through the whole Patient pillar. Americans continue to trust their doctors more than they trust the health system. They increasingly track their own health through wearables, yet they are becoming less willing to share that data with providers. This is an important signal. Patients want more control, more information and more convenience. But they are not convinced that the institutions around them will use their data wisely, protect it adequately or translate it into better care.

The promise of digital health is therefore conditional. Wearables, remote monitoring and AI-enabled tools could help move care from the clinic to the home, from episodic treatment to continuous management. But data alone does not produce health. It has to be integrated into clinical workflow, reimbursed sensibly, protected legally and trusted by patients. Otherwise America will have more measurement without more medicine.

The Patient pillar thus tells a story of stabilization without transformation. The country is no longer in the acute covid crisis. Patients are returning to care. Some mortality indicators are improving. New medicines and digital tools create real opportunities. But the underlying model remains strained by chronic disease, inequity, affordability risk, weak prevention and low institutional trust. This gap between engagement and prevention highlights a

broader constraint within the patient experience: frequent interaction with the healthcare system does not consistently translate into effective longitudinal management. Patients are returning to care, but that care is still oriented toward episodic treatment rather than continuous prevention or chronic disease control.

That makes the next phase harder than the last. The first task was to recover from the pandemic shock. The next is to improve the baseline to which America has returned. That will require more than better hospitals, clever devices or breakthrough drugs. It will require a system that prevents illness earlier, manages chronic disease continuously, earns trust consistently and delivers innovation to patients before their conditions become irreversible.

America's patients are doing better than they were. The question is whether the health system can become good enough for them.

While several indicators show stabilization following the pandemic, recent data does not yet confirm whether early gains are sustained. Persistent disparities in mental health, early life outcomes, and equitable access continue to shape patient experience and long-term system performance.

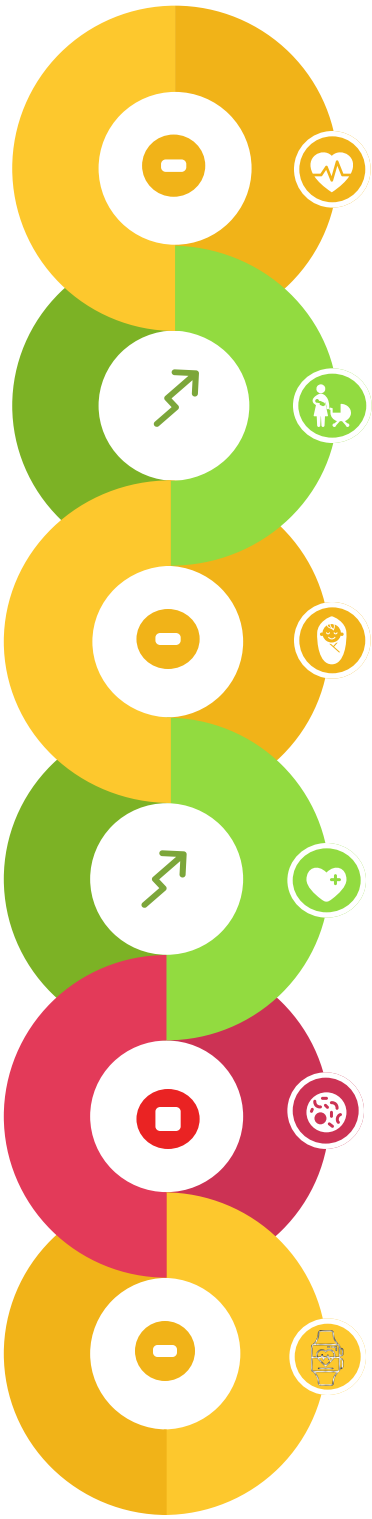
Health Outcomes

Life expectancy increased by 0.79%, rising from an average of 78.4 years in 2023 to 79 in 2024[1]. This follows a larger increase in the prior year and reflects continued recovery from pandemic-era mortality declines rather than a sustained acceleration in longevity gains. The increase occurs alongside a sharp reduction in COVID-19 deaths, which fell to 31.4K in 2024 compared to 416.8K during the 2021 peak, consistent with a rebound as pandemic-related mortality recedes[2]. At the same time, U.S. life expectancy remains nearly 4 years shorter than the comparable country average of 82.6 years[3]. Cross-country analysis attributes a large share of the U.S. life expectancy shortfall to higher premature mortality under age 70 in the U.S., which in 2021 was 408 deaths per 100,000 compared to 228 per 100,000 across comparable countries, with major contributors including chronic disease categories and substance-related deaths[4].

Maternal mortality continued to decrease over a 5-year trend per 100,000 in 2024, returning to pre-2019 levels[5]. However, the distribution of change remains uneven. The non-Hispanic Black population experienced the largest year over year reduction, falling 10% from 50.3 deaths per 100,000 in 2023 to 44.8 per 100,000 in 2024[6]. The non-Hispanic White population experienced the smallest reduction, falling 2.1% from 14.5 to 14.2 per 100,000[7]. The overall decline suggests improvement in the national rate, but differences across groups remain substantial, consistent with persistent differences in risk, access, and care continuity. HHS frames these patterns as shaped by a combination of care delivery, access to care, and social factors, reinforcing that year-to-year improvements in mortality can occur alongside persistent structural drivers of inequity[8].

Infant mortality declined slightly overall, dropping 1.6% from 5.61 deaths per 1,000 live births in 2023 to 5.52 in 2024 after a period where longer term improvements plateaued from the outset of COVID in 2020[9]. However, infant mortality among the Black, non-Hispanic population increased slightly from 10.93 deaths per 1,000 in 2023 to 10.98 in 2024 while other populations decreased or stayed the same[10]. Taken together with maternal mortality trends, the data suggests early life outcomes can move differently across populations even when the national average trends modestly in a favorable direction.

Health Outcome Metrics



Life Expectancy at Birth

Life expectancy increased by .79% from an average of 78.4 years in 2023 to 79.0 in 2024[11]. This continues the post-pandemic recovery following higher gains in prior years. While the U.S. has now surpassed pre-COVID levels, the smaller year-over-year increase suggests a return to more typical incremental growth rather than a sustained acceleration. The U.S.'s life expectancy of 79.0 years is still nearly 4 years shorter than the comparable country average (82.6 years)[12], underscoring persistent structural differences despite recent gains.

Maternal Mortality

Maternal Mortality rates have continued to decrease over a 5-year trend to 17.4 per 100,000 in 2024 in a return to pre-2019 levels. Split by ethnicities, the non-Hispanic black population showed the largest change in rate with a 10% drop from 50.3 per 100,000 in 2023 to 44.8 per 100,000 in 2024. The non-Hispanic white population showed the smallest change with a 2.1% drop from 14.5 per 100,000 in 2023 to 14.2 per 100,000 in 2024[13].

Infant Mortality

Infant mortality rates slightly dropped by 1.6% from 5.61 deaths per 1,000 live births in 2023 to 5.52 in 2024. This shows a cautious reversal in trend since 2020 where long-term improvements plateaued. However, rates for the Black, non-Hispanic population increased slightly from 10.93 deaths per 1,000 in 2023 to 10.98 deaths per 1,000 in 2024 while other populations decreased or stayed the same[14].

Highest Health-Related Mortality Causes

Since 2018, the rates of the top 3 non-COVID health-related causes of death – heart diseases, cancer, and accidents (unintentional injuries) - have remained largely stable, while diabetes mortality has declined since 2021. Suicide deaths also decreased 16%, from 49.3K in 2023 to 41.4K in 2024, and COVID-19 mortality fell sharply to 31.4K from a peak of 416.8K in 2021.These declines reflect broad but incremental improvements across causes rather than changes in the primary drivers of mortality, which remain dominated by chronic disease. As a result, gains in life expectancy have been more limited, with persistent cardiometabolic risk continuing to strain overall progress[15].

Chronic Disease Prevalence

Over the last decade, the prevalence of chronic conditions has grown by 5.6%, with 76.4% of US adults managing at least one condition in 2023. The leading causes of growth since 2013 are obesity (+15.5%) and depression (+14.1%)[16]. In the absence of new data updates until Q3 2026, these findings reflect a continuation of the trends reported last year, largely due to structural lags in national surveillance systems and delays in the release of finalized population health estimates. As a result, current reporting captures established patterns rather than real-time shifts, limiting visibility into more recent changes in disease burden.

Wearable Device Utilization

Wearable device use increased 36% over the last four years, rising from 29.8% of people using an electronic wearable to monitor or track health or activity in 2020 to 40.6% in 2024. This reflects a steady expansion of consumer engagement in tracking personal health data.

At the same time, most wearable users remain willing to share health data with their health care providers, though that willingness has declined over time. In 2024, 73.5% of wearable users reported being willing to share data, down from 78.8% in 2022 and 81.4% in 2020. This indicates that while data sharing is still broadly accepted by a strong majority of users, comfort with sharing patient-generated health data has gradually decreased in recent years, potentially reflecting growing concerns around privacy, trust, or how such data are used in clinical care[17].

Patient Pillar

Outside of COVID-19, the country's mortality profile remains anchored by the same leading causes. Since 2018, rates for the top 3 non-COVID causes of death – heart disease, cancer, and accidents – have remained stable[18]. Even as most leading causes remain steady, a few indicators suggest movement in a more favorable direction. Diabetes-related deaths declined 7.7% from 102.1K in 2020 to 94.3K in 2024[19]. The timing of this decline reflects movement away from pandemic-period peaks for this condition, even as the broader causes-of-death profile remains largely unchanged, with persistent chronic disease burden continuing to shape overall mortality trends.

Chronic disease prevalence continues to place sustained pressure on health outcomes, even as several mortality indicators improve. Over the last decade, the share of U.S. adults managing at least one chronic condition increased 5.6%, reaching 76.4% in 2023[20]. his reflects a steady expansion in the number of individuals requiring ongoing management, medication, and care coordination. Growth is concentrated in both physical and behavioral health conditions. Since 2013, obesity rates have increased 15.5% while depression rates increased by 14.1% in the same period, reflecting growth across both physical and behavioral health conditions[21]. The CDC identifies a short list of underlying risk factors that drive many chronic diseases, including tobacco use, poor nutrition, physical inactivity, and excessive alcohol use, aligning with sustained obesity growth and downstream chronic disease burden[22]. Together, these trends point to rising chronic disease and underlying risk factors, increasing the need for sustained, long-term management across the healthcare system. With no updated data expected until Q3 2026, current reporting reflects an elevated and persistent baseline but does not yet capture whether recent trends in chronic disease prevalence are stabilizing or continuing to rise.

As chronic disease becomes more widespread, a greater share of health management may increasingly extend beyond traditional care settings. This potential shift is reflected in the growing use of wearable devices and other forms of patient-generated data that track health in real time. Wearable device use increased 36% over 4 years, rising from 29.8% in 2020 to 40.6% in 2024[23]. Adoption at this scale suggests that more individuals are engaging in ongoing monitoring of their health, particularly in areas tied to chronic condition management such as activity, heart rate, and sleep. At the same time, however, willingness to share that data with providers is declining, introducing friction between data generation and clinical use. The share of individuals willing to share wearable generated data fell from 81.4% in 2020 to 73.4% in 2024[24]. Growing privacy scrutiny may be a contributing backdrop: the FTC updated the Health Breach Notification Rule in 2024 to clarify coverage for many health apps and connected devices outside HIPAA and to treat unauthorized disclosures as breaches, reinforcing consumer sensitivity to how non-HIPAA health data is shared and protected[25]. This divergence reflects both increasing patient autonomy in managing health data and persistent uncertainty around how that data is used within the healthcare system. Even with these data limitations, the broader pattern points to increasing patient engagement in health monitoring alongside growing challenges in how that information is shared and integrated into care - dynamics explored further in the **Self-Management of Care** and **Sharing Health Data** spotlights in this pillar.

If this gap persists, the effectiveness of these tools will depend on whether patient-generated data can be incorporated into care in a consistent and trusted way. As chronic disease management continues to shift beyond clinical encounters, the ability

Spotlight

Self-Management of Care: Surging adoption and Tech advancements make self-maintenance the future of healthcare

Pillar Connections

Self-management describes a method of care delivery in which patients take an active role in monitoring and responding to their health needs outside of traditional clinical encounters. For effective implementation at scale, self-management requires a robust transition away from care delivery models that rely upon in-person clinical visitation. In the Patient pillar, those dynamics are reflected in the metrics below:

Annual Doctor Visits

(In 2024, 85.2% of adults visited a doctor at least once within a 12-month timeframe)

The rate at which U.S. adults make at least one in-person visit to a doctor has remained stable over the past decade. This potentially signals that many adults still rely on in-person care, rather than using opportunities for digital care.

Health-Related Mortality

(Two leading causes of mortality remained stable at 1.3 million deaths in 2024)

The top two causes of death in the U.S., heart disease and cancer, have stabilized since 2015. Both are typically chronic conditions that are managed over time rather than cured. This highlights the need for greater adoption of self-management models which allow patients to better track and maintain their health independently.

Chronic Disease Prevalence among U.S. Adults

(In 2023, 76.4% of U.S. adults reported experiencing at least one chronic condition)

Chronic conditions affect most U.S. adults, making visit-based care models insufficient. These conditions require continuous monitoring and ongoing care adjustments, which cannot be achieved through intermittent clinical encounters alone and instead depend on effective self-management.

Adoption of Wearable Health Devices

(36% growth from 2020, reaching 40.6% in 2024)

Year-over-year increase in wearable health device usage signals growing interest in tracking health markers outside of traditional clinical record-keeping.

Care delivery is shifting from episodic encounters to a more continuous model, in which patients are empowered to self-manage their health between visits rather than only during them. Several developments are making self-management more viable than ever before. Remote patient monitoring can collect patient-generated health data from home and transmit it into clinical workflows. Digital therapeutics can deliver structured interventions for chronic disease management. Consumer adoption of wearable devices has normalized health tracking and created broader familiarity with digital tools. Together, these developments are expanding the possibilities for chronic care beyond the walls of hospitals and clinics. Historically, patient health management occurs with limited visibility from clinicians.

Self-management models seek to close that gap by pairing patient agency with remote monitoring and structured clinical workflows.[26] The expansion of self-management reflects a shift toward a continuous care model that recognizes a basic reality: most health management happens between visits, not during them.[27,28] Critically, the most effective approaches do not transfer responsibility away from health systems but instead embed patient-generated data within care delivery structures, ensuring that home-based management functions as an

Spotlight Contd.

Self-Management of Care: Surging adoption and Tech advancements make self-maintenance the future of healthcare

extension of clinical care, rather than a substitute for it.[29]

Self-Management at Scale

The importance of self-management is largely driven by the scale at which it can be utilized. The prevalence of chronic conditions underscores why visit-based, clinician-only models cannot fully meet the demand for ongoing management. Health systems need scalable approaches that support patients continuously while preserving clinical capacity for acute needs, complex decision-making, and escalation.

Self-management helps address this scale by distributing routine monitoring and support across a broader care model. Patients can track symptoms, receive prompts, follow structured interventions, and communicate concerns before problems become acute. This allows clinicians to focus more on diagnosis, treatment changes, complex needs, and escalation.

Moving Care Home

The availability of self-management is enabled by a set of complementary capabilities that collectively move care beyond traditional clinical settings and into patients' daily lives. Remote patient monitoring provides ongoing visibility into patient status by capturing and transmitting patient-generated data into clinical workflows, allowing care teams to identify early warning signs and intervene sooner.[30] At the same time, digital therapeutics can deliver condition-specific interventions which support medication adherence, behavior change, and symptom management outside the clinic.[31]

Widespread adoption of wearable devices further reinforces this model by increasing patient familiarity with health tracking and digital tools, creating a foundation for sustained engagement.[32] Together, these capabilities transform home-based care from an isolated activity into a connected extension of care delivery, where patient self-management is supported by continuous data flows and integrated clinical oversight.

Better Outcomes, Lower Utilization

Self-management can improve outcomes and reduce utilization when it complements, rather than replaces clinical care. The goal is to help patients manage conditions earlier and more consistently, reducing the need for in-person visits.[33]

Remote monitoring is especially useful during high-risk moments, such as the transition from hospital to home. Systematic reviews find that remote monitoring interventions are often associated with improved adherence and reductions in hospital admissions.[34] By giving care teams better visibility into symptoms, adherence, and warning signs, self-management tools can support earlier intervention before issues become acute.

Design for Equity and Trust

Poorly designed models increase the burden on patients and widen inequities caused by resource barriers which impede effective self-management entirely. Limited broadband connectivity, lack of smart-device access, and low digital health literacy can create barriers to digital health care, and these challenges may be greater

Spotlight Contd.

Self-Management of Care: Surging adoption and Tech advancements make self-maintenance the future of healthcare

for older adults, people with lower income or education, racial and ethnic minorities, and people who do not speak English. People with disabilities may also face barriers to digital health tools, including limited access to affordable high-speed internet, computers or smartphones, and digital literacy support.[35,36]

The most effective approaches are likely to be those that combine digital enablement with thoughtful governance. Self-management is not simply a technology trend. It is a care delivery strategy that must be implemented carefully to improve outcomes, support clinicians, and avoid transferring responsibility without support.[37]

Implications for the Future of Care Delivery

Self-management is extremely well positioned to become a central practice of healthcare delivery. As advancements and adoption of remote monitoring, digital therapeutics, and wearable health devices rise, so will opportunities for care to extend beyond the traditional clinical setting.

For health systems, this requires the infrastructure to receive, interpret, and act on information generated outside traditional care settings. Patient-generated data is only useful if it is connected to workflows that define when and how clinicians should intervene. Without those structures, self-management risks becoming fragmented or burdensome rather than supportive.

For clinicians, the expansion of self-management changes the nature of care delivery. Clinical teams will increasingly be asked to manage patients through remote signals and alert systems. This creates opportunities for earlier intervention and more personalized care, but it also requires careful attention to workload, accountability, and the risk of alert fatigue.

The issue is whether self-management will be implemented in ways that genuinely improve care. Risks related to interoperability, unequal access, and patient burden must be taken seriously. Health systems and policymakers should focus on designing self-management models that are equitable and clinically integrated.

Considerations for Self-Management at Scale

Just because self-management is becoming viable through remote monitoring, digital therapeutics, and adoption wearable devices does not mean it can be implemented seamlessly across care delivery. Expanding care into the home introduces dependencies on patient capability, digital infrastructure, and clinical workflows, while raising questions responsibility and oversight are distributed. The following considerations highlight key tensions shape self-management can be integrated into care models moving forward:

- What workflows are needed to ensure that patient-generated data leads to appropriate action without increasing clinician burden?
- How can care teams balance patient autonomy with clinical oversight for patients managing chronic conditions at home?
- What factors influence whether patients are willing and able to self-manage at home?

to bridge that gap between patient-generated data and provider use will shape how effectively these tools translate into improved outcomes.

Care Engagement

Doctor visit rates indicate that most patients have resumed regular contact with providers post-COVID. In 2024, 85.2% of adults reported visiting a doctor in the past 12 months, exceeding pre-pandemic levels and reaching the highest rate since 2015[38]. This suggests that access to and utilization of routine care has largely stabilized.

Despite high levels of engagement with providers, gaps remain in how effectively care is managed outside of acute encounters. At the same time, higher visit rates do not fully translate into consistent outpatient management. The Prevention Quality Index tracks hospitalizations for conditions that are typically manageable through timely and effective primary care, serving as a proxy for avoidable utilization. Rates peaked in 2020 and improved steadily in the years that followed, reaching 1,040 preventable hospitalizations per 100,000 in 2024[39]. A slight increase to 1,069 per 100,000 in 2025 suggests that these gains are not yet consistent over time[40]. Even after accounting for elevated respiratory conditions during the pandemic period, this uneven pattern reflects recovery from peak disruption rather than a sustained return to lower baseline levels, pointing to persistent system-level drivers beyond short-term disruption. AHRQ research using ED prevention indicators finds that ambulatory-care-sensitive use is significantly more common where economic resources and primary care capacity are scarce, reinforcing that these fluctuations are driven in part by structural access constraints rather than patient behavior alone[41].

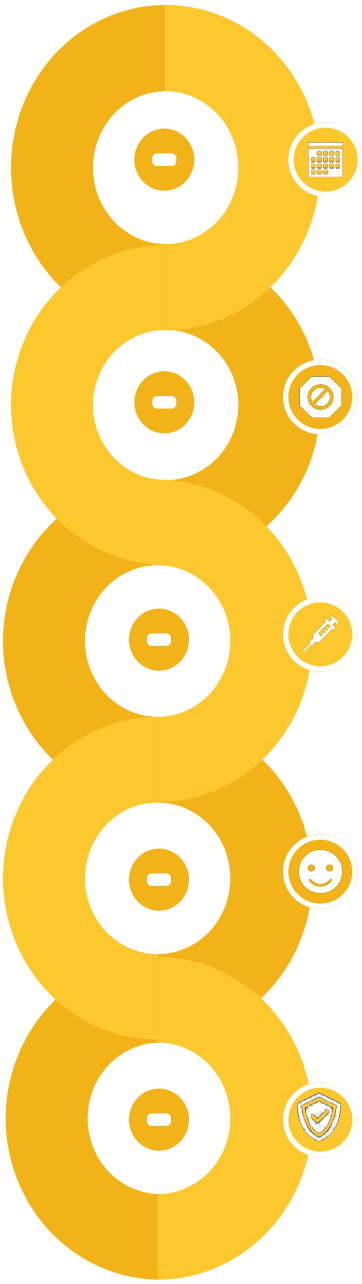
Patient experience measures reflect a similar pattern of stability without clear improvement. The Hospital Consumer Assessment of Healthcare Providers and Systems (CAHPS), a standardized survey that captures patient perspectives on hospital care, provides a consistent view across years. Approximately 73% of respondents continue to rate hospitals highly, a level that has remained steady since 2019[42]. At the same time, only 53% report receiving adequate discharge information, indicating ongoing gaps in care transitions and communication following treatment[43]. Gaps in discharge communication point to broader limitations in care coordination and continuity, even as overall patient ratings remain stable.

Preventive care engagement remains more limited. Adult influenza vaccination rates have remained relatively stable since 2023, fluctuating between 43.5% and 45.5%[44]. Vaccine uptake is shaped not only by access, but by perceived value and trusted recommendation at the point of care, making prevention especially sensitive to confidence and messaging rather than utilization alone[45]. Fewer than half of adults are receiving recommended vaccines, indicating that routine interaction with the healthcare system does not consistently translate into preventive care. Because vaccination is strongly influenced by trusted messengers, gaps in preventive uptake can persist even when routine care contact is high.

Trust in health information sources adds another dimension to engagement. Confidence in the healthcare system remains relatively low and stable, with 33.3% of respondents reporting high trust in 2024 compared to 35.1% in 2022, while trust in government is lower at 26.2% with similarly limited movement over time[46]. In contrast, 70.5% of respondents report high trust in doctors, even after declining from 75.7% in 2020, leaving a wide and persistent gap between trust in individual

clinicians and trust in the systems that shape access and care[47]. This gap suggests that while patients maintain confidence in individual relationships, that trust does not extend to the broader systems that shape access and decision-making. At the same time, trust in personal networks has continued to erode, with only 6.2% reporting high trust in family in 2024, down from 9.8% in 2020, narrowing the set of sources patients consistently rely on for health information[48]. This concentration of trust at the point of care, rather than across the broader system, limits how patients engage with care beyond individual provider relationships and underscores the importance of trust dynamics explored further in the **Trust in Institutions Spotlight.**

Care Engagement Metrics



Annual Doctors Visits

In 2024, 85.2% of adults visited a doctor in the last 12 months. Overall, annual visits have remained relatively constant in the last 5 years, with a slight decrease from 2019-2021 due to the COVID-19 pandemic. 2024 had the highest rate of annual visits since 2015.[49]

Preventable Hospitalizations via PQI

The Agency for Healthcare Research and Quality (AHRQ) publishes a Prevention Quality Index (PQI) each year to identify cases of hospitalization that could have been avoided. The overall composite score (PQI #90) summarizes trends in preventable hospitalizations. After a peak in 2020, the PQI has improved year over year until a slight reversal in 2025 at a rate of 1,069 per 100,000.[50]

Immunization Rates

The percentage of adult recipients of the influenza vaccine has been stable since 2023, fluctuating between 43.5 - 45.5%. This leaves room more improvement, since less than half of American adults are regularly getting their flu shots.[51]

Patient Satisfaction (via CAHPS)

The Hospital Consumer Assessment of Healthcare Provider and Systems overall Hospital Rating has remained stable since 2019 at about 73% of respondents rating the hospital a 9 or 10 out of 10. Care transition remains a challenge, with only a little over half of respondents (53%) confirming they received adequate discharge information.[52]

Trust in Health Information Sources

Trust in the healthcare system remains low and largely unchanged, with 33.3% reporting high trust in 2024 compared to 35.1% in 2022, well below trust in individual actors and highlighting a persistent gap between confidence in the system and those delivering care or generating knowledge. By contrast, trust in healthcare professionals remains high, with 70.5% expressing strong trust in doctors in 2024, while trust in scientists held steady at 53.3%, reinforcing that confidence in clinicians has not translated into broader system-level trust. Trust in government and other institutions remains even lower and flat, with only 26.2% reporting high trust and fewer than 10% expressing high trust in charities or religious organizations. Trust in family has also declined to 6.2%, indicating erosion even among traditionally trusted nonclinical sources.[53]

Spotlight

Health Data Sharing in 2025: Digital health transition challenged by gaps in access, integration, and data sharing behavior

Pillar Connections

Health data sharing most clearly shapes how patients, providers, and systems interact across care settings, particularly where coordination depends on the ability to move and use data effectively. In the Patient pillar, those dynamics are reflected in the metrics below:

Chronic Disease Prevalence

(76.4% of U.S. adults managing at least one condition in 2023)

The growing burden of chronic disease expands the volume and frequency of patient data generated outside traditional encounters, increasing reliance on continuous data sharing to support long-term management and care coordination.

Consumer Adoption of Wearable Health Devices

(29.8% to 40.6% from 2020 to 2024)

Wearable device usage signals a shift toward the normalization of personal health data collection. The rise in familiarity and comfort with wearable health technology will increase the likelihood of data sharing behavior, as patients become more accustomed to a data-driven health ecosystem.

Trust in Health Information Sources

(33.3% high trust in system vs. 70.5% in doctors)

Low trust in the healthcare system constrains willingness to share health data broadly, even as trust in individual clinicians remains high, shaping where and how patients are willing to participate in data-sharing ecosystems.

Preventable Hospitalizations

(1,069 per 100,000 in 2025)

Persistent rates of avoidable hospitalizations indicate gaps in how patient data is shared and used to manage conditions proactively, limiting the ability to translate available information into coordinated, preventive care.

The proliferation of digital health technology has created a central tension between the availabiiity of health data and the infrastructure required to effectively use it. Electronic health record (EHR) systems can work in combination with remote monitoring technologies, and the patient's personal digital health tools to generate an unprecedented volume of health data. These technologies are redefining possibilities and expectations for how care is delivered and managed. When effectively utilized, they offer substantial benefits across the dimensions of care coordination, clinical decision-making, and patient engagement. However, the rate of technological change could outpace the ability of many care delivery systems to process the available data, creating gaps between data integration and equitable access. These challenges limit both the extent to which willing patients can share their data and the effectiveness of data sharing itself.

Adoption of Electronic Health Devices

Consumer adoption of digital health devices like wearable health monitors has enabled easier patient health data sharing, and many are willing to participate. Research finds that 78.4% of wearable users are willing to share their data with health care providers,

Spotlight Contd.

Health Data Sharing in 2025: Digital health transition challenged by gaps in access, integration, and data sharing behavior

although only 26.5% actually have.[54]

These trends illustrate a health system in transition. The widespread adoption of EHR systems provides a strong foundation for digital care, while the rapid growth of consumer health technologies expands the scope of available data. Yet adoption alone does not guarantee effective use.

Challenges of Access, Security, and Trust

The gap between willingness to share data and actual sharing behavior suggests that challenges facing digital health care delivery stem more from technical and system limitations than from patient preference.

Data Integration Gaps

A primary challenge is the fragmentation of health IT infrastructure. Although many providers use EHR systems, these systems often operate in silos, limiting the seamless exchange of data. Differences in technical standards, system capabilities, and organizational practices create barriers to interoperability, reducing the availability of complete patient information at the point of care[55]. This variability undermines the potential benefits of digital health and highlights the need for continued investment in interoperability standards and infrastructure[56].

Inequities in Access and Digital Infrastructure

Digital health adoption is not evenly distributed across populations, reducing opportunities for many individuals to participate in health-data sharing. Rural communities face significant barriers to accessing digital health services. EHR utilization is lower in non-metropolitan areas compared to urban areas, despite the potential for virtual care to improve access in these settings.[57]

Addressing these inequities will require targeted investments in infrastructure, policy reforms, and programs designed to increase access to digital health technologies in underserved communities[58].

Privacy, Security, and Data Governance

As health data flows across more platforms and stakeholders, concerns about privacy and security become increasingly important. Patients may be willing to share their data, but their willingness is influenced by trust in how that data will be used, stored, and protected. The next phase of digital health transformation will depend on the normalization of medical frameworks that promote trust and transparency of data governance.

Implications for the Future of Care Delivery

The future of care delivery will depend not only on the availability of digital health data, but on the ability of health systems to integrate that information into clinical workflow. When data can be securely shared and integrated across providers and care settings, they create the foundation for more proactive and personalized care. However, these benefits will remain limited if health data continues to be fragmented across disconnected systems or if digital health tools are only accessible to certain populations.

Spotlight Contd.

Health Data Sharing in 2025: Digital health transition challenged by gaps in access, integration, and data sharing behavior

Clinical Decision-Making and Care Coordination

When clinicians can quickly access complete records, including data from external providers, they are better equipped to identify trends, detect anomalies, and tailor treatment plans to individual patient needs. This capability is particularly important for managing complex or chronic conditions, where care often involves multiple providers and frequent monitoring.

Real-time access to patient information also enhances care coordination, which reduces testing burdens on patients and providers. Access to comprehensive, longitudinal patient data enables reduces fragmentation across care settings and allows clinicians to view prior test results, treatments, and diagnoses, minimizing duplicative testing and ensuring continuity of care[59].

Patient Engagement and Self-Management

Research suggests that wearable technologies can facilitate early disease detection, personalized treatment, and improved adherence to care plans. These tools support self-management of chronic conditions by providing actionable insights and enabling patients to share relevant data with providers.[60] By empowering patients with data, digital health tools contribute to a more collaborative care model in which patients and providers work together to achieve better outcomes[61].

Considerations for Effective Health Data Sharing

While the benefits of effective health data collection are clear, realizing these benefits will require addressing persistent challenges in infrastructure and access. As digital health continues to evolve, the ability of care delivery systems to keep pace with technological advancements will determine whether the promise of electronic health data can be fully realized. The following questions illustrate key considerations for digital health:

- What are the biggest interoperability barriers preventing health systems from integrating data across EHRs?
- Can health systems incorporate patient-generated data into clinical workflows without increasing administrative burden for providers?
- What types of patient-generated health data are most clinically useful for improved care coordination and decision-making?
- Could social barriers or stigmas around digital health explain the discrepancy between patients' willingness to share data, and the behavior itself.

> **The availability of health data continues to outpace the ability to use it effectively.**

Spotlight

Trust in Healthcare Institutions: Declining System Confidence Amid Enduring Trust in Clinicians

Pillar Connections

Trust in healthcare institutions most clearly affects how patients engage with care, particularly in areas where follow through depends on confidence in system guidance. In the Patient pillar, those dynamics are reflected in the metrics below:

Immunization Rates

(43.5% - 45.5% adult influenza vaccination since 2023)

Preventive care engagement remains limited even as routine contact with providers has rebounded. Because vaccination decisions rely heavily on trusted recommendation, lower institutional confidence weakens follow through even when access is stable.

Patient Satisfaction, via CAHPS

(73% hospital rating, 53% discharge communication)

Patient experience scores remain stable overall, but gaps in discharge communication highlight limitations in continuity and clarity. These breakdowns shape how patients interpret reliability beyond individual encounters, influencing whether they stay engaged after treatment.

Preventable Hospitalizations

(1,040 per 100,000 in 2024 to 1,069 in 2025)

Uneven trends in preventable hospitalizations reflect variation in how consistently patients seek and follow outpatient care. Trust influences whether care is sought early and whether guidance is followed outside acute settings.

Trust in Health Information Sources

(33.3% system trust, 26.2% government trust, 70.5% trust in doctors)

Trust is concentrated unevenly across sources, with clinicians maintaining significantly higher credibility than the broader system. This imbalance shapes how patients interpret guidance and determines which recommendations they act on.

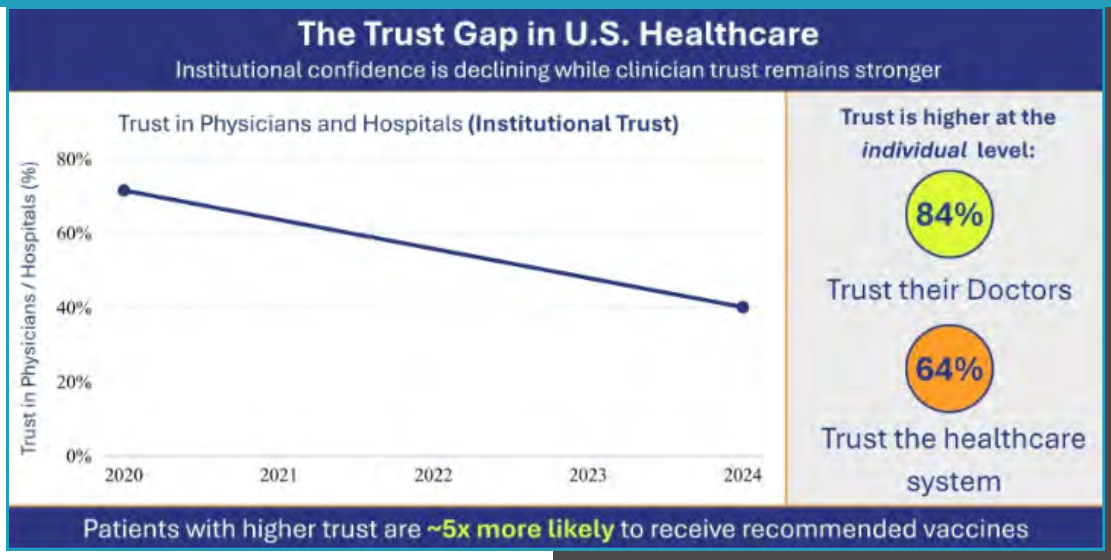
Trust is a core driver of patient behavior, shaping whether individuals seek care, follow recommendations, and act on health information. Within the Patient pillar, it reflects not just access to care, but whether the system is viewed as credible enough to warrant consistent engagement. In recent years, trust has not declined evenly across the healthcare landscape, but has instead fragmented, with confidence in health systems, public institutions, and governance declining while trust in individual clinicians remains comparatively strong. This shift creates a widening gap between interpersonal trust and institutional confidence, altering how patients engage with care, interpret recommendations, and decide whether to act.

Trust in health systems has declined substantially, signaling weakened confidence in core care institutions

Trust in healthcare institutions has declined significantly in recent years, reflecting a broader erosion in confidence across the healthcare system. A 50-state study found that trust in physicians and hospitals fell from 71.5% in April 2020 to 40.1% in January 2024, representing a consistent decline across sociodemographic groups[62]. This shift is not limited to sentiment.

Spotlight Contd.

Trust in Healthcare Institutions: Declining System Confidence Amid Enduring Trust in Clinicians



Individuals with higher levels of trust are significantly more likely to receive recommended vaccines, including COVID-19 vaccination with an adjusted odds ratio of 4.94, influenza vaccination at 5.09, and booster uptake at 3.62[63]. These differences indicate that trust directly shapes whether recommendations translate into action, particularly for preventive care where engagement depends on belief in system credibility rather than immediate need.

Patients place relatively greater trust in individual clinicians than in healthcare institutions

Despite declining system confidence, trust persists at the clinician level, creating a structural imbalance in how patients interact with care. While 64% of the public reports some level of trust in the healthcare system overall, a substantial share remains neutral or distrustful[64]. In contrast, approximately 84% of adults report trusting their own doctor at least a fair amount, suggesting that patients separate the credibility of individual providers from the institutions that organize care[65]. Trust therefore concentrates at the point of care, elevating clinicians as primary interpreters of guidance while reducing the independent influence of health systems and associated messaging.

Trust in government and public health institutions has declined, weakening institutional authority.

Declines in trust extend beyond healthcare systems to public health and regulatory agencies, weakening the authority of centralized guidance. Trust in the CDC decreased from 66% in June 2023 to 61% in January 2025, while trust in state and local public health officials declined from 64% to 54% over the same period[66]. These changes reflect not only outcomes but perceptions of how institutions operate. Many individuals believe public health agencies are not sufficiently guided by science and may be influenced by political leaders or pharmaceutical companies, while confidence that these institutions operate independently is held by fewer than 32% of U.S. adults[67]. At the same time, polarization further fragments trust, with a roughly 30 percentage point

Spotlight Contd.

Trust in Healthcare Institutions: Declining System Confidence Amid Enduring Trust in Clinicians

gap in confidence in federal health recommendations between Democrats and Republicans, measured at 73% and 42% respectively[68]. As trust becomes more conditional and filtered through belief systems, the reach of consistent, system-level guidance becomes more limited.

Institutional trust varies by generation, healthcare experiences and perceived system incentives

Trust is not uniform and is shaped by lived experience within the system. Younger populations, including Gen Z, report lower levels of trust than older cohorts, and many patients perceive healthcare systems as prioritizing financial performance over patient-centered care[69,70]. These perceptions are reinforced through experiences that signal institutional priorities, particularly financial exposure. Analysis shows that 18% of emergency visits and 16% of in-network hospital admissions include at least one out-of-network charge, exposing patients to unexpected costs even when care is sought within coverage[71].

These experiences are not isolated operational gaps but are interpreted by patients as signals of institutional priorities, shaping whether the system is viewed as aligned with or acting against their interests. At the same time, concerns about accountability extend beyond traditional care delivery into emerging areas such as artificial intelligence. Survey data indicates that 65.8% of adults report low trust in their health system's ability to use AI responsibly, and 57.7% lack confidence that healthcare systems will protect them from AI-related harm[72]. Trust is therefore increasingly shaped not only by clinical outcomes, but by transparency, governance, and how institutions manage risk on behalf of patients.

Implications for Health System Performance and Patient Engagement

As institutional trust declines, influence shifts away from systems and toward individuals and relationships. Patients are less likely to rely on institutional authority and more likely to evaluate guidance based on perceived alignment and credibility, helping explain why utilization can recover while preventive uptake remains limited. Engagement becomes more conditional, varying by source and perceived trustworthiness rather than access alone.

This dynamic introduces execution risk for system-led initiatives. Population health efforts depend on consistent engagement, but participation increasingly varies based on trust in both the messenger and the system behind it. Clinicians play an expanded intermediary role, while operational experiences such as billing and navigation are interpreted as signals of institutional intent. When these experiences fall short, they reinforce distrust beyond a single interaction, making trust a constraint on whether system capabilities translate into outcomes.

Considerations for Patient Trust and Care Engagement

Trust is increasingly shaping whether patients follow through on care, particularly as preventive uptake, care transitions, and engagement beyond visits remain uneven despite stable utilization. The following questions highlight where health systems

Spotlight Contd.

Trust in Healthcare Institutions: Declining System Confidence Amid Enduring Trust in Clinicians

will need to adjust how they deliver care, communicate guidance, and signal credibility in practice:

- How should health systems design preventive care and immunization strategies in a way that increases follow-through without relying solely on institutional authority?
- Which patient experience interactions, particularly in discharge communication and care transitions, most strongly influence trust and downstream engagement?
- How can health systems better align financial and administrative experiences with patient expectations, particularly in areas where unexpected costs undermine trust?
- How should health systems maintain credibility as patients increasingly rely on alternative information sources and emerging technologies when making care decisions?

> **Trust is a core driver of patient behavior, shaping whether individuals seek care, follow recommendations, and act on health information.**

Mental Health & Substance Use

In 2024, nearly a quarter of adults, 23.4%, reported having a mental illness, continuing a steady increase over the past decade[73]. In contrast, 22.9% of adults reported receiving mental health services in the past year, a level that remained essentially flat from 2023 to 2024 after years of steady increases[74]. The combination of rising prevalence and stable utilization suggests that need is continuing to grow while engagement with services is no longer increasing at the same pace. This divergence helps explain why treatment is increasingly shifting toward maintenance modalities even when service utilization plateaus.

Treatment patterns provide additional context for how care is being delivered. Prescription medication use reached 70.5% of adults in 2024, the highest level in the past five years and part of a steady increase from 66.3% in 2017[75]. The rise in medication use alongside increasing rates of mental illness and stable service utilization suggests a growing reliance on ongoing medication management, with the expansion of home delivery and other direct to consumer pharmacy models potentially reducing friction for continuity outside traditional care settings.

Outcome measures remain mixed. Suicide deaths per capita declined 3% from 14.12 deaths per 100,000 to 13.7 in 2024[76]. This

Mental Health & Substance Use Metrics



Rates of Mental Illness

As of 2024, nearly a quarter of adults in the U.S. have reported having a mental illness. Rates of mental health illness increased slightly from 22.8% in 2023 to 23.4% in 2024. Rates of mental health illness continue to follow a disturbing trend of increasing by over 5 percentage points over the last 10 years from 18.1% in 2014 to 23.4% in 2024[77].

Mental Health Service Utilization

Rates of mental health utilization continued to steadily rise since 2015. However, there was a slight plateau between 2023 and 2024, with rates staying relatively the same at 22.9% of adults reported receiving mental health care in the past year[78].

Suicide Deaths per Capita

Suicide deaths per capita decreased 3% from 14.12 deaths per 100,000 to 13.7 deaths per 100,000. Although a bit too early to tell, it appears to be a slight reversal in a nearly 25-yearlong trend of suicide rates steadily increasing by 31% since 2000[79].

Rates of Substance / Drug Misuse

Use of illicit drugs continues to remain relatively stable around 9%, with a 0.6 percentage point increase since 2018. Rates have remained the same since 2022. Opioid use has continued to slowly decrease from 3.8% in 2018, 3.2% in 2023 to 2.8% in 2024. Nearly 25% of adults reported using Marijuana in 2024, which has increased by an astonishing 12 percentage points over nearly the last 10 years from 13.6% in 2015, likely due to a relaxing of local and federal policies surrounding its sales and usage[80].

Prescription Medication Use

Prescription medication used peaked in 2024 with 70.5% adults reporting usage. This is the highest rate in the last 5 years as rates have continued to steadily increase from 66.3% in 2019[81].

This decline follows a longer-term upward trend, making it unclear whether the most recent change represents a sustained shift or short-term variation within a broader trajectory.

Substance use trends vary by category. Overall illicit drug use remains relatively stable around 9%, with only a modest increase since 2018 and little change since 2022[82]. Opioid use continues to decline gradually, falling from 3.8% in 2018 to 2.8% in 2024[83]. In contrast, marijuana use has increased substantially, with nearly 25% of adults reporting use in 2024, up 12 percentage points since 2015[84]. These patterns suggest that while some higher-risk use is easing slowly, broader substance use behaviors continue to shift.

Across these measures, a consistent pattern emerges: the system is effective at restoring utilization and managing acute episodes, but less effective at preventing illness, managing chronic conditions, or delivering equitable outcomes. Improvements in national averages are largely driven by recovery dynamics, while underlying structural drivers, including chronic disease prevalence, uneven access, and declining trust, remain unresolved. This distinction is critical, as it suggests that current gains may be difficult to sustain without changes to how care is delivered and accessed over time.

Provider Pillar

Workforce growth and technology adoption face persistent access constraints and operational pressure

The Provider pillar reflects growth in overall system capacity alongside persistent limitations in how that capacity is distributed and utilized. While the healthcare workforce has expanded in several key roles and digital tools have improved access to information and coordination, these gains have not translated into consistent improvements in access, timeliness, or care experience. In practice, provider capacity is constrained by uneven geographic distribution, rising administrative burden, and operational inefficiencies that limit throughput across care settings.

Healthcare Workforce

These dynamics suggest that the primary constraint is not absolute supply, but alignment between supply and demand. Workforce growth does not automatically translate into improved access if providers are concentrated in certain specialties or regions, or if administrative requirements reduce available patient-facing time. As a result, increases in workforce size can coexist with persistent access challenges, particularly in underserved or high-demand areas.

Physician supply has increased steadily in recent years, growing approximately 2.1% annually from 2021 to 2024 and outpacing overall population growth[85]. This upward trend suggests expanding provider capacity at a national level, though variation in geographic distribution and specialty areas may continue to affect how that growth is experienced in practice.

Trends across other clinical roles are more uneven. The nurse workforce declined 1% from 2023 to 2024 following significant growth during the earlier pandemic period[86]. Despite this recent contraction, the workforce remains substantially larger than in prior years, having grown more than 10.8% from 2020 to 2024, over three times the rate of U.S. population growth[87]. In contrast, mental health professionals continued to expand, growing 6.2% from 2023 to 2024, aligning with sustained demand for behavioral health services[88].

Not all roles are keeping pace with demand. The number of physician assistants declined by 5% from 2023 to 2024, stabilizing after a post-pandemic surge but failing to grow relative to the U.S. population over the same period[89].

Differences across roles mean that workforce growth is not evenly aligned with areas of demand, limiting how increases in supply translate into access. While overall capacity continues to expand in some areas, contraction or slower growth in others may limit how those gains translate into access, particularly in areas tied to rising demand. However, increases in workforce capacity do not fully address how care is delivered across settings or regions, where infrastructure and distribution play a central role.

Healthcare Infrastructure

The number of hospital beds per capita has declined steadily over the past two decades, decreasing by nearly 20%[90]. This long-term trend reflects a shift away from inpatient care toward outpatient and alternative care settings, though updated data are not yet available, limiting visibility into more recent changes.

Access to facilities remains uneven across geographies. Hospital closures continue to be concentrated in rural areas, with all six closures in 2025 occurring in rural counties[91]. HHS ASPE estimates that about 1 in 7 Americans (46 million) live in rural communities and reports rural uninsured rates of 12.6% in 2023, reinforcing why facility losses and distance barriers have outsized access implications[92].

These patterns reflect structural differences in how care is distributed, rather than temporary fluctuations in facility availability. Even where coverage has improved, geographic distance, infrastructure limitations, and provider shortages still constrain access in rural areas; hospital closures therefore amplify existing gaps for communities with limited local options.[93,94]

Healthcare Workforce Metrics



Doctors Per Capita

Doctors per Capita has shown consistent growth year-over-year since 2021, increasing at a faster rate than that the U.S. population at about 2.1% annually from 2021 to 2024.[95]

Nurses Per Capita

The nurse workforce contracted by 1% from 2023 to 2024; However, the profession is still showing remarkable long-term gains, growing 10.8% from 2020 to 2024, over three times the rate of U.S. population growth.[96]

Mental Health Professionals Per Capita

The workforce of Mental health professionals grew 6.2% from 2023 to 2024, further signaling increased demand for their services and producing back-to-back years of noteworthy growth for the profession.[97]

Physician Assistants Per Capita

PAs reduced by 5% from 2023 to 2024, stabilizing relative to its post-pandemic surge in 2021, but failing to grow relative to the U.S. population during the same period.[98]

Capacity pressures are also evident in care delivery. Emergency department wait times have increased 12.8% over the past five years, reaching a median of 163 minutes in 2025[99]. Prolonged ED wait times are closely tied to inpatient capacity constraints rather than front door demand alone: studies show that boarding of admitted patients waiting for a hospital bed is the primary driver of ED crowding and delays, reflecting a sustained mismatch between acute care demand and available inpatient resources[100]. As a result, delays are increasingly driven by internal capacity constraints rather than variability in patient arrival alone, as well as misalignment in where and how care is delivered across settings. This dynamic suggests that rising utilization is not only increasing demand for services, but also straining system throughput, limiting the ability to move patients efficiently across care settings even as segments of the workforce continue to expand.

> **Patients are continuing to shift how and where they access care.**

Measures of system operations reflect similar strain. Physician satisfaction with electronic health record systems declined from 71.9% in 2018 to 59.7% in 2021 before rising to 66.7% in 2024, indicating partial recovery but not a return to earlier levels[101]. At the same time, physicians reported spending an average of 20.3 hours per week on paperwork and administrative

tasks in 2024[102]. Administrative time remained relatively stable at approximately 15.6 hours per week during the COVID period and through 2023, making the 2024 increase a clear shift from that baseline rather than a continuation of prior trends[103]. The increase likely reflects a combination of expanded documentation requirements, prior authorization demands, and continued optimization of digital tools. The AMA's 2024 prior authorization survey reports that 93% of physicians experience care delays associated with prior authorization and documents patient harm and workflow burden, offering a quantified mechanism consistent with rising administrative strain[104]. However, more recent data are not yet available for administrative workload, limiting visibility into whether this increase is sustained.

In response to these operational pressures, providers are increasingly adopting digital tools to improve efficiency and coordination. Telehealth capability among providers rose sharply during the pandemic and has since stabilized, averaging approximately 83.5% between 2021 and 2024[105]. Interoperability, or the ability of different healthcare systems and providers to share and use patient information electronically, has also improved. The share of hospitals able to send, receive, find, and integrate patient data across systems increased from 55% in 2019 to 76% in 2025[106]. This expansion supports more coordinated care by reducing the need for manual record transfers and enabling providers to access more complete patient information across care settings. At the same time, gains in interoperability have not translated into reduced administrative burden or fully streamlined workflows, indicating that increased data access has not translated

Healthcare Infrastucture Metrics



Hospital Beds Per Capita

The number of hospital beds per 100,000 people decreased slowly by nearly 20% over the last two decades, reflecting a shift from inpatient to outpatient care. In the absence of updated data for the current year, this finding reflects a continuation of trends reported in prior years, shaped in part by reporting lags and the time required to finalize national capacity and utilization data.[107]

Hospital Closures by Rurality

Rural hospital closures still drastically outpace closures in urban areas. With six closures in 2025, all in rural counties across the country, concentration of closures in rural areas persist despite the slowing rate of closures since 2023.[108]

Average Wait Times for Health Care Services

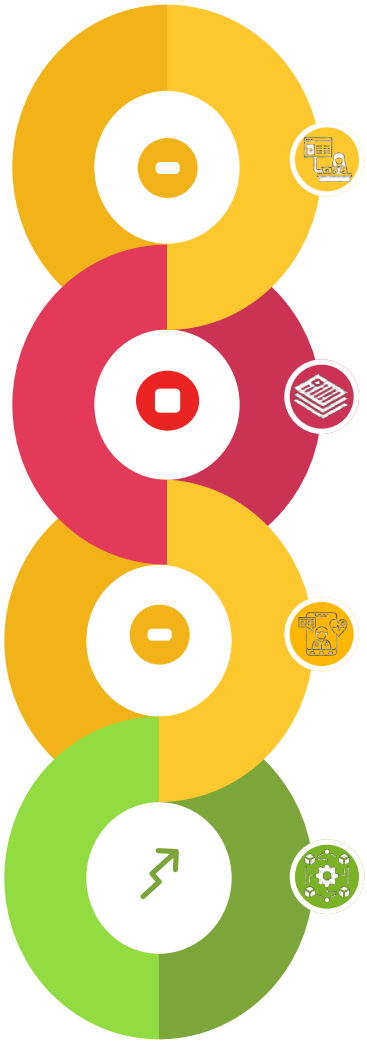
Emergency care wait-times have increased 12.8% over the last five years, reaching a median of 163 minutes in April 2025, potentially reflecting increased care delivery burden as well as imbalances in provider distribution and care settings.[109]

into more efficient care delivery.

While these capabilities provide the foundation for more efficient and coordinated care delivery, they have not yet resulted in measurable reductions in administrative burden or meaningful improvements in clinical workflow efficiency. Near-term benefits remain concentrated in documentation and information access, with more limited impact on clinical decision-making or overall system throughput.

Taken together, system capacity is expanding, but constraints in infrastructure, workflows, and access continue to limit how effectively that capacity is deployed. Declining inpatient capacity, rural access gaps, rising wait times, and administrative burden continue to shape care delivery despite expanded digital capabilities. Addressing these constraints will require not only expanding capacity but improving how that capacity is distributed and utilized across the system. Against this

Healthcare Infrastucture Metrics (contd.)



Provider Satisfaction with EHR Systems

Satisfaction with EHR systems fluctuated over 2018 to 2024, declining from 71.9% in 2018 to 59.7% in 2021 before increasing to 66.7% in 2024, still below pre-pandemic levels. While the overall decline and partial recovery align with COVID-era disruptions and subsequent stabilization, smaller year-to-year changes may reflect survey variability and differences in user experience rather than discrete shifts in system performance.[110]

Allocation of Work Time Spent on Bureaucratic / Paperwork Tasks

Physicians spent an average of 20.3 hours per week on paperwork and administrative tasks in 2024, a 5.1-percentage-point increase in weekly administrative time. During the COVID-19 period (2020–2021), administrative burden remained relatively stable at approximately 15.6 hours per week and showed little change through 2022 and 2023, indicating a sustained plateau following the pandemic. The increase observed in 2024 may reflect a combination of factors, including expanded documentation requirements, ongoing adoption and optimization of digital health technologies, and growing administrative demands related to quality reporting, billing complexity, and prior authorization. While some of this increase may correspond with reduced time spent in direct patient care, recent data suggest that administrative work also extends total working hours rather than fully displacing clinical time. More recent data for 2025 and 2026 are not yet available due to lags in national data reporting, driven by limited large-scale tracking of physician time use and ongoing shifts in data collection efforts, resulting in delayed visibility into recent changes in administrative burden.[111]

Provider Telehealth Capacity

Telehealth adoption surged between 2018 to 2021, spiking from 12.9% to 86.5% for the two years respectively, most likely due to its necessity during the COVID-19 pandemic. From 2021 onwards, telehealth adoption has stabilized at an average of 83.5% for the years 2021 and 2024.[112]

Provider Engagement in Interoperable Exchange

Hospitals have made steady progress toward interoperability over the last decade. Interoperability is measured across four functions: sending electronic summaries of care, receiving health information from outside sources, finding or querying patient information, and integrating external data into the electronic health record so it can be used in care delivery. The share of U.S. non-federal acute care hospitals engaging in all four interoperability domains increased by 21 percentage points from 2019 to 2025, rising from 55% in 2019 to 76% in 2025. This trend indicates broad movement toward more complete data exchange, which is foundational for AI-enabled clinical workflows that rely on timely, usable information across care settings.[113]

Spotlight

AI in Clinical Workflows: Near-Term Gains in Documentation, Slower Progress in Clinical Decision-Making

Pillar Connections

AI's clinical impact shows most clearly where it touches the day-to-day friction of care delivery: documentation load, EHR usability, information flow, and throughput constraints. In the Provider pillar, those pressures are reflected in the metrics below:



Provider Satisfaction with EHR Systems

(66.7% satisfaction in 2024)

As ambient documentation tools are embedded into EHR workflows, they reduce manual note entry and navigation during and after visits. This shifts how clinicians interact with the EHR, though ongoing review and editing requirements limit sustained improvements in satisfaction.



Allocation of Work Time Spent on Bureaucratic / Paperwork Tasks

(20.6 hours weekly admin time)

AI tools target tasks such as note drafting, coding support, and inbox triage, reducing manual steps per encounter. Gains depend on how much verification and correction offset these efficiencies, leading to uneven reductions in administrative time.



Average Wait Times for Healthcare Services

(163-minute median ED wait time)

AI driven workflow optimization, including triage support and documentation acceleration, can reduce bottlenecks in patient flow. These improvements remain localized, while broader constraints such as staffing and bed availability continue to drive wait times.



Provider Engagement in Interoperable Exchange

(55% - 76% of hospitals)

Expanded interoperability increases access to structured patient data, enabling more effective AI integration into workflows. Variability in data quality and standardization limits how consistently these tools scale across health systems.

Artificial Intelligence is moving from experimental deployments into routine clinical workflows, but its impact remains uneven across use cases. Applications focused on documentation and administrative support are already delivering measurable operational gains, while those influencing clinical judgment, such as diagnostic assistance and clinical decision support, show more variable performance and adoption.

This spotlight examines three categories of AI in provider workflows: (1) documentation and workflow support tools, (2) diagnostic and imaging models, and (3) clinical decision support tools that include both predictive models and emerging large language models. Across these categories, AI performs most reliably in structured, repeatable tasks and becomes more variable as clinical uncertainty and decision complexity increase.

AI adoption is expanding, but remains uneven across health systems

Clinical AI adoption is accelerating, but distribution remains uneven across use cases and organizations. Among hospitals using Epic, 62.6% have adopted ambient AI documentation tools, with adoption concentrated among nonprofit systems and organizations with greater implementation capacity[114]. Early gains are therefore concentrated in

Spotlight Contd.

AI in Clinical Workflows: Near-Term Gains in Documentation, Slower Progress in Clinical Decision-Making

health systems able to absorb integration and workflow change, while others remain in pilot phases or delay adoption.

Documentation AI is driving the most consistent near-term gains, with ongoing verification requirements

Documentation remains the most mature and widely adopted clinical AI use case. In a 2025 survey of 43 health systems, it was the only generative AI application with 100% adoption activity. Clinician use is increasing in parallel, with over 80% of physicians reporting AI use in a professional context and the average number of use cases rising from 1.1 in 2023 to 2.3 in 2025[115,116]. Measured impact is concentrated in workflow efficiency. Ambient AI scribes are associated with reductions of roughly 16 minutes in daily documentation time, 13 minutes in total EHR time, and a 21.2% decrease in burnout prevalence after 84 days[117,118]. These gains allow clinicians to shift time back toward patient interaction, but they do not eliminate documentation burden. Generated notes still require review, and variability in real-world use means efficiency gains are often accompanied by additional verification work.

Clinical decision support is still dominated by predictive models, with limited real-world evidence and emerging LLM variability

Most clinical decision support tools in use today rely on predictive supervised machine learning, deployed as risk stratification, triage, or guideline-based recommendations. While these models often demonstrate strong technical performance, evidence of real-world clinical impact remains limited. In a systematic review and meta-analysis, only 24% of studies involved prospective deployment, and 64% reported technical metrics without workflow evaluation[119].

Large language models are emerging alongside this predictive layer and are being used to synthesize patient information, structure documentation, and support diagnostic reasoning. Performance can be strong in controlled settings but declines as clinical complexity increases. More importantly, incorrect outputs can remain plausible and be incorporated into decision-making. In a randomized clinical trial, exposure to erroneous AI recommendations reduced physician diagnostic accuracy from 84.9% to 73.3%, illustrating how model outputs can influence decisions even when incorrect[120]. Evidence from non-clinician use reinforces this gap. In a randomized study with 1,298 participants, models identified conditions correctly in 94.9% of cases when evaluated alone, but users working with the same models did not improve decision-making, performing no better than control groups[121]. This gap reflects breakdowns in how outputs are interpreted and applied, rather than limitations in model performance alone.

Regulatory approvals are expanding, but remain limited in what they signal about performance

Regulatory activity around AI-enabled medical devices has accelerated, with the number of authorized tools increasing 190% over five years from 114 in 2020 to 331 in 2025[122]. Approvals are concentrated in predictive and imaging-based systems, with no generative AI tools fully authorized for

Spotlight Contd.

AI in Clinical Workflows: Near-Term Gains in Documentation, Slower Progress in Clinical Decision-Making

clinical decision-making. Many devices are cleared through the 510(k) pathway, which enables faster scaling but does not require demonstration of long-term clinical outcomes or consistent performance across real-world settings[123]. As a result, approval establishes a baseline for use but does not reflect how tools perform once integrated into clinical workflows, leaving health systems responsible for evaluating real-world impact and managing associated risks.

Patient use of AI is reshaping the starting point of clinical encounters for providers

Patients are increasingly using AI to interpret symptoms and guide health-related decisions before interacting with providers. About 32% of adults report using AI tools for health information or advice, and 14% report not seeking care they otherwise would have pursued after receiving AI-generated input[124,125]. This shifts the starting point of clinical encounters. Rather than beginning with unfiltered information, providers are working from interpretations that have already been formed, sometimes incorrectly, before the visit. At the same time, patient-facing tools such as wearables and remote monitoring devices are increasing the volume and continuity of data entering clinical workflows.

Clinician response reflects this shift. While 75% of physicians report that AI improves their ability to deliver care, acceptance varies by use case[126]. Providers are generally comfortable with patients using AI for lower-risk information gathering, but express concern when it is used for interpreting diagnostic results or making clinical decisions, where incorrect conclusions can directly affect care[127].

Governance and organizational readiness determine whether AI translates into clinical impact

Implementation challenges remain a primary constraint on clinical AI adoption. In survey data, 77% of organizations cite immature tools as a major barrier, alongside financial concerns and regulatory uncertainty[128]. Health systems remain cautious due to unclear liability and the absence of standardized approaches to validation, monitoring, and clinician training.

Even in deployed systems, outcomes depend on how outputs are interpreted and validated in practice. Documentation tools require ongoing verification, and clinical decision support introduces risks such as automation bias. In a randomized clinical trial, diagnostic reasoning accuracy declined from 84.9% to 73.3% when clinicians were exposed to incorrect model recommendations, demonstrating how credible but incorrect outputs can influence decision-making[129]. As a result, governance is not a one-time validation step but an ongoing operational capability. Health systems that can monitor performance, enforce safeguards, and define accountability are more likely to realize benefits, while those without these capabilities face increased risk alongside efficiency gains.

Implications for Clinical Practice and Adoption

The most consistent gains from AI are concentrated in documentation and administrative workflows, where tools can be integrated without altering clinical decision-making. In contrast, applications

Spotlight Contd.

AI in Clinical Workflows: Near-Term Gains in Documentation, Slower Progress in Clinical Decision-Making

that influence diagnosis and treatment remain more variable, as performance depends not only on technical accuracy but on how outputs are interpreted and used in practice. At the same time, patient use of AI is shifting clinical encounters upstream, requiring providers to evaluate and recalibrate pre-interpreted inputs before decision-making can proceed. This introduces new variability into both the timing and content of care.

Taken together, adoption is less about whether AI works in isolation and more about where it can be safely embedded within real-world workflows. Near-term progress will continue to focus on workflow support, while higher-stakes use cases depend on stronger validation, clearer accountability, and governance models aligned to how these tools are actually used.

Considerations for Clinical AI Adoption

AI is beginning to shift how clinical workflows operate, but its impact is uneven and shaped by how it is used in practice. The following questions highlight key areas where providers and health systems will need to define boundaries, safeguards, and priorities moving forward:

- How should providers integrate AI into clinical decision-making in a way that improves accuracy without increasing reliance on model output?
- Where is AI delivering measurable value today for providers, and where are benefits offset by additional review, verification, or correction work?
- How should clinicians and health systems respond to AI-informed patient input, particularly when it influences care-seeking behavior or introduces incorrect assumptions?
- What governance structures are needed to ensure safe adoption, particularly in the absence of clear standards for validation, monitoring, and accountability?

> **Adoption is less about whether AI works in isolation and more about where it can be safely embedded within real-world workflows.**

backdrop, the previous spotlight, **AI in Clinical Care**, examines how emerging tools are reshaping care delivery amid persistent capacity constraints.

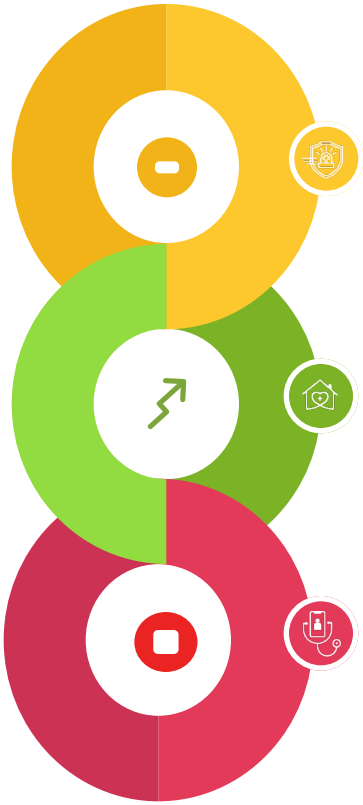
Healthcare Utilization

Patients are continuing to shift how and where they access care. Urgent care use declined in 2024 to 27.3% of adults, down from 31.6% in 2023[130]. Even with that year over year drop utilization remains elevated relative to earlier periods, with the three-year average rising to 30% for 2022 to 2024 compared to 28% for 2019 to 2021[131]. The pullback in 2024 suggests some rebalancing across care settings, while the higher sustained average points to a lasting role for urgent care as a flexible access point within the system.

Shifts in care delivery models are also reflected in telehealth use.
Telehealth utilization declined significantly in 2024, falling from 181 million users in 2023 to 87.7 million[132]. Overall use is down substantially from its pandemic-era peak and continues to trend downward following a brief increase in 2023[133]. This pattern aligns with a broader return to in-person care, while also suggesting that telehealth remains a durable but more targeted component of care delivery rather than a primary modality.

At the same time, utilization continues to expand in home-based settings. Home health use among adults age 65 and older has increased steadily over the past decade, rising from 82.4% in 2012 to 91.9% in 2022[134]. This sustained growth reflects a longer-term shift toward delivering care outside traditional facilities, particularly as chronic conditions and functional support needs become more prevalent with age. As care continues to extend beyond hospitals and clinics, coordination across providers, settings, and data systems becomes increasingly central to maintaining continuity of care.

Healthcare Utilization Metrics



Urgent Care Clinic Utilization

Urgent care use fell to 27.3% in 2024 from 31.6% in 2023, though the three-year average rose to 30% for 2022–2024 from 28% for 2019–2021.[135]

Home Health Care Services Utilization

For individuals of 65, home healthcare service utilization has increased over the past ten years from 82.4% in 2012 to 91.9% in 2022.[136]

Telehealth Trends

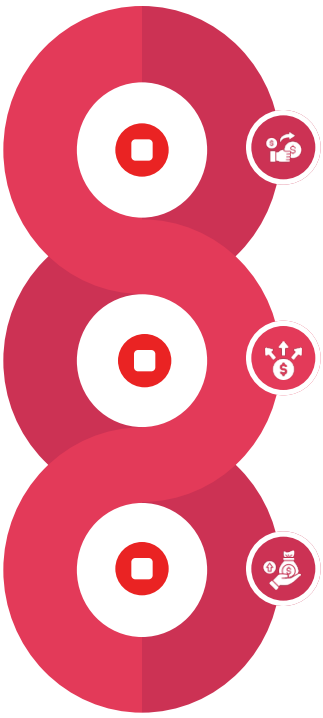
Telehealth Users dropped nearly 51% over the last year, going from nearly 181M users in 2023 to 87.7M in 2024. Telehealth usage has continued to steadily decrease nearly 55% from its peak of 192M users during COVID in 2020, other than a slight increase in users in 2023 (181M). This follows the end of the pandemic as a marker for a return to in-person-based care. White and Urban-based populations tend to use telehealth at higher rates than others.[137]

Payer Pillar

Healthcare spending is growing faster than the overall economy for both payers and patients as insurance companies reduce coverage and individuals delay medical treatment due to costs.

The Payer pillar represents how the US health ecosystem funds healthcare and the cost of care. It includes metrics measuring healthcare costs and the mechanisms patients use to pay for their care, including health insurance. Compared to all other Organization for Economic Cooperation and Development (OECD) member countries, US healthcare spending was over $4,800 higher per capita, and a small but increasing proportion of Americans struggle to access care due to costs.[138]

Healthcare Spending Metrics



Total Annual U.S. Health Expenditures

American healthcare expenditures continue to rise. In 2024, from the most recent National Health Expenditure (NHE) data, total healthcare expenditures reached $5.27 trillion, representing a 4.2% increase from 2023 after controlling for inflation. Spending per capita reached $15,474, exceeding the previous high in 2020 by over $250 per capita.[139]

Total Annual Medicare Expenditures

Spending on Medicare in 2024 reached $1.11 trillion, representing a 4.8% increase from 2023 after controlling for inflation. Largest spending growth was in non-durable medical products (18.8%) and dental services (16.7%).[140]

Total Annual Medicaid Expenditures

Spending on Medicaid in 2024 reached $931.7 billion, representing a 3.6% increase from 2023 after controlling for inflation. Largest spending growth was in home health care (9.2%) and other professional services (8%).[141]

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Medicaid spending in 2024 reached $931.7 billion, representing a 3.6% increase from 2023 after controlling for inflation. Largest spending growth was in home health care (9.2%) and other professional services (8%).[144] This signals a shift in healthcare-seeking behaviors as patients look beyond hospitals and clinics to receive care.

Healthcare Cost

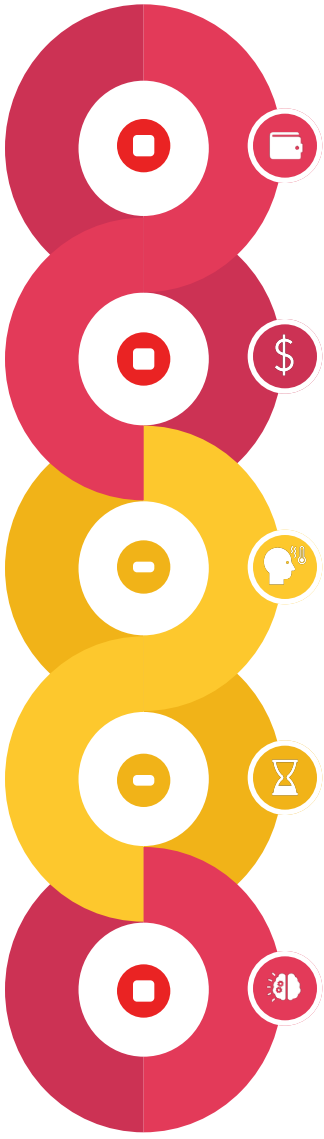
Per capita out-of-pocket (OOP) health care costs reached $1,636 in 2024, representing a 1.4% increase compared to 2023 after controlling for inflation.[145] This puts the United States in the 10 highest OOP cost countries in the world, indicating a high cost of care relative to the rest of the world.[146] Healthcare premiums are a large part of healthcare costs in the US. After controlling for inflation, premiums for employer-sponsored health insurance increased by 1.8% for single worker plans and by 2.7% for family plans from 2023 to 2024, making it more expensive to hold insurance that protects from further OOP costs.[152]

Americans are noticing the increased costs of healthcare. In a recent national survey, 89% of respondents viewed US healthcare costs as too expensive, with 36% of respondents saying that healthcare affordability had "kept them up at night" in the past year.[153] When costs increase, some Americans are forced into difficult choices about their health. While still below pre-COVID levels, more American adults are rationing medical care in 2024 than in 2023. Foregoing medical care due to cost increase by 1.1 percentage points to 7.4% in 2024. Delaying medical care due to cost also increased by 1.4 percentage points to 8.6% in 2024.[154] Although American adults are rationing medication at the same rate in 2024 as in 2023 (7.8%), this persists even as overall prescription medication use continues to rise, indicating that increased access to medications has not fully translated into consistent adherence. An increasing number of Americans can't afford needed mental health care.[155] The proportion of Americans forgoing mental health care due to cost increased by 0.4 percentage points to 5.9% in 2024.[156] Taken together, more and more Americans are losing access to care due to cost barriers.

Healthcare Enrollment

In the US, the rate of insured Americans has stabilized at about 92% since 2019. This

Healthcare Cost Metrics



Annual Out-of-Pocket (OOP) Expenses

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Health Insurance Premiums

After controlling for inflation, premiums for employer-sponsored health insurance increased by 1.8% for single worker plans and by 2.7% for family plans from 2023 to 2024.[148]

Foregone/Delayed Medical Care Due to Cost

While still below pre-COVID levels, more American adults are rationing medical care in 2024 than in 2023. Foregoing medical care due to cost increase by 1.1 percentage points to 7.4% in 2024 (8.3% in 2019; 6.3% in 2023). Delaying medical care due to cost increased by 1.4 percentage points to 8.6% in 2024 (9.1% in 2019; 7.2% in 2023).[149]

Not Taking Medication as Prescribed Due to Cost

American adults are rationing medication at the same rate in 2024 as in 2023. Not taking medication as prescribed due to costs remaining at 7.8% in 2024 (9.6% in 2019; 7.8% in 2023).[150]

Foregone Mental Health Care Due to Cost

An increasing number of Americans can't afford needed mental health care. The proportion of Americans forgoing mental health care due to cost increased by 0.4 percentage points to 5.9% in 2024 (4.4% in 2019; 5.5% in 2023).[151]

is mainly due to enrollment saturation after implementation of the ACA.[157] This measure is still lower than most peer countries: Romania and Mexico are the only OECD member countries with lower insurance coverage rates, with 21 of the 39 OECD member countries boasting 100% coverage.[158,159]

Medicare enrollment rates have mildly and steadily increased by 0.8 percentage points from 2019 to 2024, matching the growing eligible population. The composition of Medicare enrollees has moved from government-managed fee-for-service (FFS) plans to privately-managed Medicare Advantage (MA) plans. In 2018, MA plans represented a minority share (36%) of all Medicaid plans. MA enrollments overtook FFS in 2024, and as of December 2025, MA holds a 51% share of all enrollments. This rapid change shows that the government is increasingly relying on private providers to manage Medicare insurance plans.[165,166]

The percentage of Americans enrolled in Medicaid dipped for the first time since 2019. An estimated 20.5% were covered by Medicaid in 2024, 0.8 percentage points lower than 2023 estimates. The number of individuals enrolled in Medicaid and CHIP grew by 22.9% from April 2020 to April 2023, but more recent data shows a reverse in the trend. Since the end of the continuous enrollment requirement for COVID-era federal funding in April 2023, Medicaid enrollment has decreased by 20% from 94.6 million to 75.7 million as of December 2025, reverting enrollment to June 2020 levels.[167,168] State-funded Medicaid expansion programs are reliant on taxes to provide coverage for eligible Americans. A recent nationwide reduction in allowable provider taxes is expected to reduce nationwide enrollment by 2.4 million people over the next 10 years.[169]

Healthcare Enrollment Metrics



% of U.S. Insured by Any Insurance

In the US, the rate of insured Americans has stabilized at about 92% since 2019110. This is mainly due to enrollment saturation after implementation of the ACA. This measure is still lower than peer countries: the US is the only OECD country with under 95% population health coverage, and 20 of the 38 OECD member countries boast 100% coverage.[160]

% of U.S. Covered by Medicare

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Spotlight
Coverage, Cost, and Administrative Friction in 2025–2026: How ACA Marketplace and Public Payer Policy Shifts are Reshaping Healthcare

Pillar Connections

Policy decisions both directly and indirectly affect observed healthcare performance and outcomes. 2025 introduced sweeping policy changes to Medicaid and ACA Marketplace insurance plans that will likely impact Payer pillar metrics moving forward:

Total Annual Medicaid Expenditures
(3.6% increase in 2024)

With Medicaid policy changes driven by fiscal responsibility, Medicaid spending growth is likely to slow or even reverse course in 2025 and 2026.

Healthcare Enrollment Rates
(91.8% any insurance, 20.5% Medicaid in 2024)

Changes to ACA Marketplace subsidies and Medicaid eligibility verification will directly affect overall insurance coverage levels. We expect the percentage of US insured by any insurance and the percentage of US covered by Medicaid to fall significantly in 2025 and 2026.

Health Insurance Premiums; Out-of-pocket Costs
(1.8% increase in single worker plans in 2024; 1.4% increase in per-capita OOP health care costs in 2024)

The expiration of enhanced premium tax credits and revised enrollment mechanics influence premium affordability and per-capita out-of-pocket spending on healthcare. Premiums and OOP expenses are both expected to rise in 2025 and 2026 as patients reduce their coverage quality, shrinking the insurance pool and dissolving financial safeguards previously provided by insurance plans.

Foregone or Delayed Care Due to Cost Rates
(7.4% forewent health care, 5.9% forewent mental health care in 2024)

Enrollment losses and higher cost exposure are likely to affect measures of cost-related access barriers. Foregone or delayed medical and mental health care are expected to rise is 2025 and 2026 as more people have to make difficult spending choices without health care coverage.

In 2025, a set of federal policy actions reshaped enrollment and affordability mechanisms for the ACA Marketplace and Medicaid. These policies signal a shift toward stricter verification and reduced subsidy support in the name of minimizing fraud, waste, and abuse in the government. This focus on fiscal responsibility raises questions about how administrative design shapes coverage, costs, and access to care across insurance programs that Americans rely on for their health and well-being.

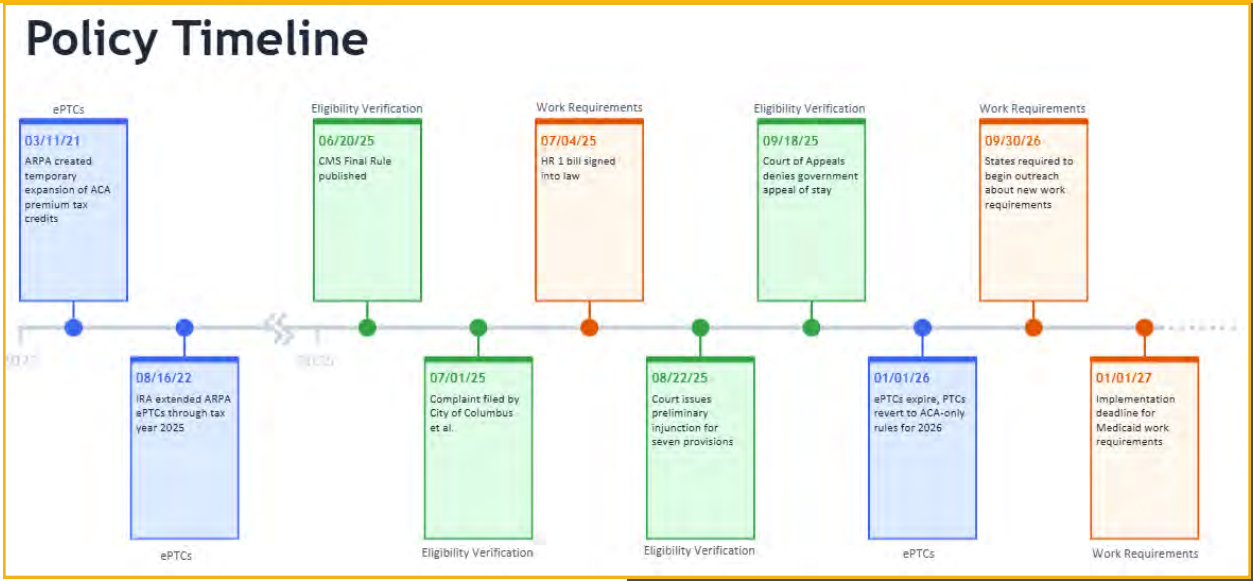
CMS's Marketplace Integrity and Affordability Final Rule increased documentation requirements and narrowed enrollment pathways

This Final Rule, published by CMS in June 2025, expanded income verification requirements, eliminated the low-income Special Enrollment Period (SEP), and introduced pre-enrollment verification for other SEPs.[170] According to the CMS, these changes were intended to "stabilize the risk pool, lower premiums, and reduce improper enrollments with a goal of improving healthcare affordability and access while maintaining fiscal responsibility."

This rebalancing amplifies administrative friction even when elegibility status remains unchanged.

Spotlight Contd.

Coverage, Cost, and Administrative Friction in 2025–2026: How ACA Marketplace and Public Payer Policy Shifts are Reshaping Healthcare



Eligibility verification requirements have historically played a decisive role in whether eligible individuals successfully enroll and remain covered: 69% of Medicaid disenrollments from April 2023 to May 2024 were due to administrative or procedural reasons, not a determination of ineligibility.[171] The Commonwealth Fund observed that these recent policy changes "will disproportionally affect people with low and middle income and likely widen racial and ethnic disparities in peoples' ability to get care."[172] Additionally, litigation filed by local governments argued that several provisions could reduce coverage among otherwise eligible enrollees, with multiple provisions were subsequently stayed by the courts pending review.[173] These enrollment reductions stemming from process barriers are at odds with CMS's stated goal of improving healthcare access, complicating efforts that balance covering eligible Americans with maintaining program integrity.

Federally mandated Medicaid community engagement requirements introduced a new redetermination hurdle

As part of the "One Big Beautiful Bill" enacted in July 2025, Congress established a nationwide Medicaid community engagement requirement of 80 hours per month, with six-month eligibility re-determinations.[174] Prior state experiments with Medicaid work requirements resulted in substantial coverage losses driven primarily by reporting failures rather than employment changes, highlighting the enrollment impacts of administrative complexity.[175]

According to a CBO analysis, these new compliance mechanics will increase the uninsured population by over 7 million over the next decade, while reducing federal Medicaid spending by about $300 billion over the same time period.[176,177] This major loss of coverage alongside cost savings reinforces the tradeoffs between

Spotlight Contd.

Coverage, Cost, and Administrative Friction in 2025–2026: How ACA Marketplace and Public Payer Policy Shifts are Reshaping Healthcare

fiscal objectives and healthcare stability for Americans.

Expiration of the Enhanced Premium Tax Credits shifted Marketplace affordability in 2026

The American Rescue Plan Act established an expanded tax credit to cover healthcare premiums that was extended through the end of 2025 by the Inflation Reduction Act.[178,179] Since Congress did not renew them through further legislation, these credits expired on January 1, 2026.

An analysis by the Kaiser Family Foundation showed that ACA Marketplace insurers are proposing a median premium increase of 18% in 2026. These increased premiums paired with reduced subsidies are estimated to reduce enrollments in Marketplace insurance plans by 7.3 million people in 2026, which will cause ripple effects in healthcare costs and access as a whole.[180]

Policy Options for Discussion

Just because the administrative complexities and eligibility changes introduced in 2025 are projected to reduce health coverage rates for all Americans doesn't mean there aren't ways to minimize undue coverage losses. The following policy options could help reduce t he trade-off between cost savings and healthcare access & affordability:

- Adjusting premium subsidy phase-outs to smooth transitions across income thresholds, reducing sharp affordability cliffs
- Modernizing eligibility systems through cross-program data integration to reduce duplicative verifications and administrative churn
- Developing standardized compliance and reporting tools to support consistent implementation of new Medicaid requirements

> **This focus on fiscal responsibility raises questions about how administrative design shapes coverage, costs, and access to care across insurance programs that Americans rely on for their health and well-being.**

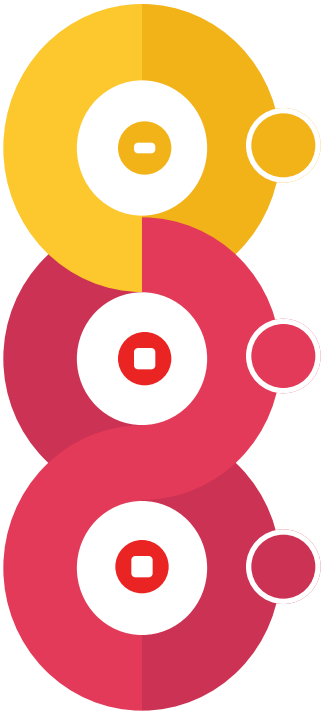
Healthcare Coverage & Market Competitions

Overall claim denial rates remained at 19% for health insurance exchange plans in 2024, matching the decade-high watermark set in 2015.[181] An Experian Health survey of healthcare providers sheds light on why these claims get denied: 54% of respondents said claim errors are increasing, supported by primary denial trigger statistics that show half of all denials are due to missing or inaccurate claim data.[182] This comes at a time when submitting claims is getting increasingly complex, with over two-thirds of providers saying submitting "clean" claims is more challenging than a year ago and over half of providers taking more than 10 minutes to re-run eligibility checks.[183] Claims are also taking longer to submit amidst understaffing —36% of providers cite staffing shortages as the cause for dragging down claim submission and resubmission speeds.[187] This worsening claims environment will likely push claim denials higher in the next few years, making it harder for beneficiaries to receive covered care.

Although Medicare and Medicaid do not publish claim coverage rates, an analysis of Medicare Advantage prior authorization determinations found that 7.7% of determinations in 2024 were adverse or only partially favorable. This is a relative high since 2019 and represents a 1.3 percentage point increase since 2023.[188]

When it comes to selecting health coverage options, many Americans have limited choices. In 2024, 97% of health insurance markets were considered highly concentrated according to the Herfindahl-Hirshman Index (HHI), which calculates the share size of each industry competitor in each market, with higher resulting values in markets with high-share competitors. This represents a 2 percentage point increase since 2023 and a 22 percentage point increase compared to 2021.[189] Public payer markets are equally concentrated. An analysis of Medicare Advantage markets found that 96.8% of US counties were highly or very highly concentrated according to the HHI.[190] This trend of payer consolidation leaves both providers and beneficiaries with fewer alternatives to ensure the best health outcomes at affordable prices.

Healthcare Coverage & Market Competition Metrics



ACA Marketplace Exchange Plan Claim Coverage

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Market Concentration of Insurance Companies

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Pharma(R&D) Pillar

Innovation remains a core strength, but investment volatility and global competition introduce new risks to sustained leadership.

The Pharma / Research and Development (R&D) pillar represents innovations in biotechnology and pharmaceuticals. It includes metrics measuring investment in new technologies and actions to improve healthcare delivery. Overall, R&D is a historic area of strength for the United States that has become more business-driven over the last few decades.

R&D Spending

The United States remains a world leader in biotechnology and pharmaceuticals. Four of the biggest five biotech companies and three of the biggest five pharmaceutical companies are headquartered in the US.[191,192] This market dominance translates to research & development, with the US accounting for about two-thirds of total healthcare R&D spending among all OECD countries[196]. PhRMA member companies, who are responsible for a large portion of private medical R&D activity, have been spending more on R&D over the past two decades. US domestic R&D spending increased by 3% from $101.3B in 2023 to $104.3B in 2024. After a slight dip in spending in 2022, it appears to have rebounded to above pre-2020 levels[197]. While investment continues to grow, major categories of research funding have remained relatively stable over time, making it unclear whether increased spending is fully aligned with shifting areas of need across the health system.

Public funding of healthcare R&D helps drive innovation in the field. The United States' National Institutes of Health (NIH) is the largest public funder of biomedical research in the world[198]. The NIH saw its R&D investment budget decrease by 6% between 2023 and 2024 to below pre-2020 levels. Although the NIH's R&D investmentlevels have fluctuated over the last 20 years, the budget has generally increased by over $15 billion between 2000 and 2024, rising from $32.1 billion to $47.4 billion[199]. The NIH has faced recent political scrutiny, with the presidential budget proposing a $18.1 billion cut to the program; however,

R&D Spending Metrics



Pharma Industry R&D Development

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NIH R&D Budget Authority

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Congress rejected this proposal by increasing its budget authority for the 2026 fiscal year to a total of $48.7 billion, reaffirming the importance of NIH R&D contributions[200].

Areas of Innovation

As medicine has advanced, the categories of R&D investment have evolved. The figure below illustrates the changes in funding levels for the top 10 types of health research funded by NIH. While four of the top five research categories have remained the same from 2013 to 2023, others have shifted significantly[201]. Several highlights include the consistent rise in neuroscience and brain disorder research, the more than doubling of behavioral and social science research, and the relative decreases in biotechnology and science research. These trends reflect the cultural shift toward treating neurological and behavioral disorders as illnesses and highlight new research methods made possible by new imaging and mapping technologies. More recent updates are not yet available, as national research spending data are released with a lag, limiting visibility into shifts that may have occurred since 2024.

Investments translate to results through iterative development and testing. Active R&D activity can be measured through clinical trials. Since 2014, the U.S. has held the highest percentage of shared clinical trials in comparison to other Western countries. The U.S. share of Phase 1-3 Trial Starts by headquarters has stayed relatively steady at 35% over the last

Top 10 NIH Research Spending Categories by Year[202]

2013	2013 USD in billions	2018	2018 USD in billions	2023	2023 USD in billions
Clinical Research	$10.60	Clinical Research	$13.87	Clinical Research	$18.88
Genetics	$7.14	Genetics	$9.11	Neurosciences	$11.87
Prevention	$6.69	Prevention	$8.76	Prevention	$11.68
Biotechnology	$5.70	Neurosciences	$8.22	Genetics	$11.39
Neurosciences	$5.34	Biotechnology	$6.92	Brain Disorders	$8.89
Cancer	$5.27	Cancer	$6.34	Biotechnology	$8.85
Infectious Diseases	$4.89	Infectious Diseases	$6.02	Behavioral and Social Science	$8.52
Women's Health	$3.75	Brain Disorders	$5.88	Infectious Diseases	$8.24
Brain Disorders	$3.71	Rare Diseases	$5.23	Cancer	$7.97
Behavioral and Social Science	$3.54	Clinical Trials/ Supportive Activities	$5.21	Rare Diseases	$6.92

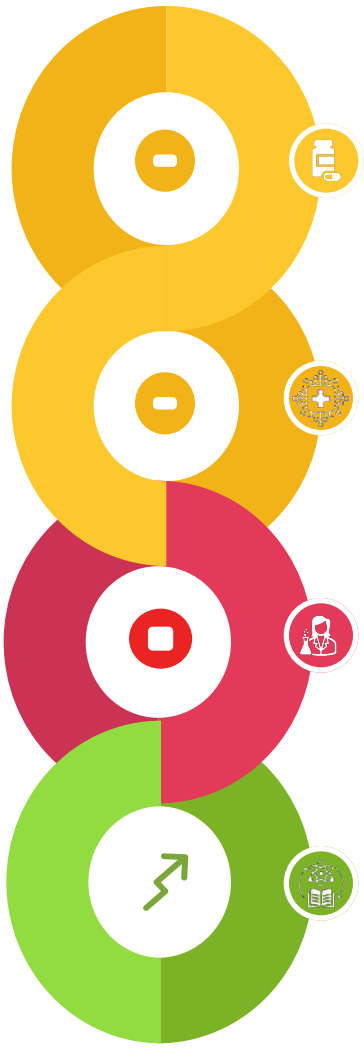
5 years. Over the last 15 years, the U.S., Europe and China have held the highest percentages of shared trials, although Western countries in general have seen a consistent decrease in the share of clinical trials in the same period. However, China has seen their percentage of shared clinical trials increase from 19% in 2019 to 30% in 2024, suggesting that they could potentially overtake the U.S. over the next 5 years if these trends continue.[203]

These trials often produce new drugs that offer patients avenues to improve their health conditions. In recent years, the proliferation of GLP-1 drugs has paved a new pathway for patients to manage diabetes and obesity - prescription spending by Medicaid on GLP-1 drugs has grown from $1.3 million in 2019 to $8.4 million in 2024[204]. In the US, the number of novel FDA drug approvals has decreased 16% over the last two years from 55 in 2023 to 46 in 2025. However, the average number of annual drug approvals has increased by about 10%, with an average of 48.6 approvals between 2020-2025 compared to 44 average approvals between 2014-2019[205].

A fast-growing area of' medical innovation is medical technology, especially devices that enable remote patient monitoring. The market of connected healthcare devices is expected to grow 17.7% annually over the next decade, indicating shifts in the industry toward personal devices to help support patient healthcare[206]. FDA approvals of AI-enabled medical devices increased by 41% from 2024 to 2025, rising from 235 approved devices in 2024 to 331 in 2025. More broadly, FDA-approved AI-enabled devices have increased by approximately 314% since 2019, reflecting rapid growth in AI-enabled medical device development and regulatory clearance over the past several years[207].

Another way to track R&D activity is through published research. In the US, overall health science publication output has grown substantially since 2010, reaching approximately 194K publications in 2023, representing a 33.3-percentage-point increase relative to 2010 levels. Publication volume rose steadily throughout the 2010s, accelerated during the COVID-19 period (2020–2021), and peaked in 2021 at over 216K publications, reflecting heightened research activity and rapid dissemination during the pandemic. Since 2021, annual publication counts have declined, suggesting a normalization of research output in the post COVID period, though levels remain well above pre-pandemic baselines[208]. More recent data for 2024 and beyond are not yet available due to lags in publication indexing and the time required to finalize and aggregate national level bibliometric data, limiting visibility into the most recent trajectory of health research activity.

Pharma (R&D) Innovation Metrics



Number of Novel FDA Drug Approvals

The number of novel FDA drug approvals has decreased 16% over the last two years from 55 in 2023 to 46 in 2025. However, the average number of annual drug approvals has increased 10% to 48.6 approvals between 2020-2025 compared to 44 approvals between 2014-2019[209].

Number of FDA-authorized AI-enabled Medical Devices

FDA approvals of AI-enabled medical devices increased by 41% from 2024 to 2025, rising from 235 approved devices in 2024 to 331 in 2025. More broadly, FDA-approved AI-enabled devices have increased by approximately 314% since 2019, reflecting rapid growth in AI-enabled medical device development and regulatory clearance over the past several years[210].

U.S. Share of Clinical Trials

Since 2014, the U.S. has held the highest percentage of shared clinical trials in comparison to other Western countries. The U.S. share of P1-3 Trial Start by HQ has stayed relatively steady at 35% over the last 5 years. Over the last 15 years, the U.S., Europe and China have held the highest percentages of shared trials, although Western countries in general have seen a consistent decrease in the share of clinical trials in the same period. However, China has seen their percentage of shared clinical trials increase from 19% in 2019 to 30% in 2024, suggesting that they could potentially overtake the U.S. over the next 5 years if these trends continue[211].

Number of Health Science Publications

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Spotlight

Pharma Supply Chain in 2025: A Calmer Than Expected Tariff Shock Before a Coming Storm of Material Shortages

Pillar Connections

The pharmaceutical R&D pipeline depends on the drug materials supply chain to produce high-quality and innovative medications for patients across the world. United States tariff actions and shifting global pharmaceutical markets will likely impact R&D metrics moving forward:

U.S. Domestic R&D Spending

(3% increase in 2024)

Disruptions to the pharma supply chain could impact domestic R&D spending as investors look to locations with cheaper and more accessible materials. We expect US domestic R&D spending to stagnate relative to global R&D spending growth.

U.S. Share of Clinical Trials

(remained at 35% share in 2024; China share increased by 11 percentage points from 2019 to 2024)

Similarly, supply chain disruptions can slow or cancel trials that rely on pharmaceuticals sourced internationally. We expect to see the US share of global clinical trials to decrease in the next few years as the upstream impacts of tariffs affect trial start location decisions.

Novel FDA Drug Approvals

(16% decrease from 2023 to 2025)

New drugs on the market are major outputs of pharmaceutical R&D. Supply chain disruptions could slow the pace of new drug testing and release, resulting in fewer drugs presented to the FDA for approval.

U.S. Annual Health Science Publication Output

(194K publications in 2023)

With pharmaceutical research impacted by market conditions, the pace of publishing output is also likely to slow. We expect to see publication output to continue decreasing over the next few years as tariff-impacted studies are delayed or abandoned.

While recent supply signals suggest stability, these indicators reflect short-term buffering rather than structural resilience. Production increases and inventory stockpiling have masked early impacts of tariff exposure, delaying how disruptions appear in downstream metrics. As a result, current supply conditions provide limited visibility into emerging risks, with upstream pressures likely to materialize over time in R&D activity, trial location decisions, and ultimately drug availability.

Active shortage metrics improved in 2025, but this is more likely due to buffers than true resilience.

When the Trump administration formally announced tariff action in April 2025, Americans braced for price hikes and material shortages.[213] However, pharmaceutical supplies seemed unimpacted to patients looking to fill medications. After a spike in drug shortages during Q1 of 2024 due in part to Hurricane Helene damaging North Carolina facilities, active shortages trended steadily downward from 323 to 216 active shortages in Q4 of 2025.[214]

This stable medication supply amidst market volatility wasn't a fortunate coincidence, it was carefully planned disruption mitigation. Global pharmaceutical manufacturing output

Spotlight Contd.

Pharma Supply Chain in 2025: A Calmer Than Expected Tariff Shock Before a Coming Storm of Material Shortages

surged in 2025 as companies sought to get ahead of tariff risk, with global pharmaceutical production surging by 5.2% in the US and 9.1% worldwide in 2025.[215] Growth in 2026 is expected to decelerate to just 0.9% in the US and 1.6% globally, showing a strong temporal correlation between production and tariff action. This pharma inventory stockpiling has likely delayed the pain from tariffs, as drug shortages are viewed as lagging indicators of supply chain health. Upstream disruptions from sources like drug material inputs, contract negotiations, or supplier exits can take quarters or even years to translate into declared shortages.[216]

While many pharmaceuticals were exempted from broad tariff action, some key starting materials (KSMs) weren't

The April 2025 tariffs included a list of exempted items to define what was subject to the higher import costs. Among these exemptions were many finished medications as well as active pharmaceutical ingredients (APIs) used to manufacture medications.[217] While these exemptions protected end products from import price hikes, the building blocks of these pharmaceutical components weren't as carefully exempted. Unless a key starting material (KSM) was explicitly listed in Annex II of US trade policy or classified under an exempted code tied to API production, it was not exempted from the US tariffs.[218] This is because KSMs are usually grouped under broad chemical categories instead of pharmaceutical products, excluding them from targeted pharma protections—it doesn't matter how the chemical is used, the tariff codes just care about what the chemical is to determine tariff applicability.

The unequal tariff exemption along the supply chain impacts US-based drug manufacturing, as many US-based API facilities rely on imported KSMs to produce their end products. A US Pharmacopeia analysis of KSM sourcing found that 56% of KSMs for US-approved APIs are sourced solely from China (41%) or India (16%).[219] Looking at it from a different angle, about 1 in 6 US-approved APIs source all of their KSMs from a single country, presenting a critical supply chain vulnerability.

Additional trade actions in the last year have further strained the pharma industry. The US opened a Section 232 national security investigation in April 2025 covering finished drugs, APIs, KSMs, and derivative products, keeping longer-term risk active even with Annex II exemptions.[220] The result of this investigation was reported by the White House one year later in April 2026, where the Secretary of Commerce found that the volume of pharmaceutical imports into the US poses a national security threat.[221] Responding to these findings, the Trump administration imposed a 100% tariff on patented pharmaceuticals, with a 15% or lower tariff on specific nations.[222] Although generics were exempted from this action, this action has the potential to destabilize the market as companies decide if and how they want to participate in the US market.

Conclusion: Tariff exposure often hits upstream first, where effects compound into future supply shortages.

APIs and KSMs matter for health policy because they are the core inputs that are

Spotlight Contd.

Pharma Supply Chain in 2025: A Calmer Than Expected Tariff Shock Before a Coming Storm of Material Shortages

required for manufacturers to produce finished medicines. Tariffs and other market disruption risks at the pharmaceutical component level can turn into future higher drug costs, reduced sourcing resilience, and eventual shortage risk.

An analysis of US pharmaceutical imports by the American Enterprise Institute found that 2024 import levels ($210.8 billion in finished meds; $36.2 billion in APIs) translates to about $250 billion in potential tariff exposure from Section 232.[223] Presented with this market roadblock, companies are taking a hard look at their API production. With about 35% of global API production currently coming from China and another 20% coming from India, pharma companies are strategically diversifying their API hubs to includes options outside of China.[224]

In response to the April 2, 2026 pharmaceutical tariffs, the Pharmaceutical Research and Manufacturers of America (PhRMA) emphasized the need for "smart policies to ensure that the US remains the best place in the world to discover and manufacture medications."[225] Drug shortages will continue to plague the US health care system unless industry leaders and policy makers address the root causes of supply chain vulnerability. Academic institutions, such as Duke University's Margolis Institute for Health Policy, have proposed changes to Congressional bills and CMS rulemaking to more effectively combat short-term shortage risk while building supply chain resiliency.[226,227] Policy institutes, such as the Milken Institute, are advancing national conversations on drug supply chain resilience by convening leaders and translating their input into actionable strategies for North American nearshoring, coordination, and investment.[228] We must work together to overcome these regulatory hurdles and prioritize improving material supply while building market resiliency ahead of drug shortages caused by upstream disruptions.

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Health of Health

Conclusion

In this latest annual examination of the health of the US health ecosystem, Rios Partners highlighted trends across four pillars:

Patient	While several headline health outcomes show modest stabilization following the pandemic, patients continue to experience uneven engagement, rising chronic and mental health burden, and declining confidence in healthcare institutions. Trust remains stronger in individual clinicians than in systems, agencies, or leadership.
Provider	While the healthcare workforce has expanded in several key roles and AI-enabled tools are beginning to reduce administrative burden, these gains have not kept pace with demand. Rising wait times, uneven infrastructure, rural hospital closures, and persistent workflow challenges continue to constrain access and experience.
Payer	Both payers and patients are paying more for healthcare while affordability pressures persist. Despite historically high insurance coverage rates, more individuals are delaying or forgoing care due to cost, and market concentration and claim denials continue to raise concerns about the reliability and value of coverage.
R&D	Innovation outcomes remain strong, particularly in pharmaceuticals and AI-enabled medical devices, even as public research investment fluctuates and global competition intensifies. Supply chain disruptions and geopolitical pressures highlight growing risks to the resilience and accessibility of future innovation.

The 2025 report also conducted focused spotlights on six topics relevant to current health discourse:

Self-management of care: Patients are increasingly expected to navigate complex care independently, reinforcing the need for tools and support that enable effective self-management.

Trust in healthcare institutions: Persistent fragmentation in information sources continues to shape how patients assess credibility and engage with the system.

Sharing of health data: Expanding data sharing capabilities improve coordination and insight generation while introducing new challenges around privacy, governance, and interoperability.

AI in clinical workflows: AI adoption is expanding within clinical workflows, offering efficiency gains while introducing new considerations around integration, trust, and oversight.

Health of Health

Conclusion

Healthcare enrollment policy impacts: Ongoing policy shifts are reshaping enrollment patterns, with implications for coverage continuity and access to care.

Pharmaceutical supply chain resilience: Persistent vulnerabilities in the supply chain highlight need for resilience and coordination to ensure access to medications.

This report looks across the overall U.S. health ecosystem to provide context and insight that move beyond siloed conversations. By pairing system-level metrics with targeted spotlights, the Health of Health aims to surface the tensions, tradeoffs, and questions shaping healthcare today. We hope these findings help inform discussion and analysis around the policies, investments, and governance decisions that will shape the future of the U.S. health system.

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