Rios PARTNERS

Health of Health Index 2024

A Rios Partners report

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About

Rios Partners

Since its founding in 2016, Rios Partners is committed to designing high-impact solutions that deliver transformative results for our clients. We tackle our clients' most pressing and complex issues by developing a deep understanding of customer, employee, and partner needs to ensure solutions address the root causes of client problems.

With a diverse healthcare client portfolio and staff expertise, Rios Partners can remove research silos that impede high-level dialogues to highlight complex issues and promote engagement across stakeholders. Health of Health leverages our experience working with federal healthcare payers, providers, and patient populations to produce a comprehensive overview of US healthcare that offers cross-cutting insights and thought-provoking questions to drive discussions around improving the health of health for all Americans.

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Health of Health

Introduction

Over the past few years, through the Health of Health report, our analysis of 2021 and 2022 data for the Health Ecosystem Index focused on understanding the trauma and disruption COVID-19 inflicted on our healthcare system. Now, as we examine 2023 data —and incorporate 2024 data as it becomes available—we assess the healthcare system in what can be considered a "post-COVID era," reflecting on the system's recovery, adaptation, and signs of re-normalization.

The data continues to reinforce deeply concerning trends. US health outcomes, such as age expectancy and maternal mortality rate, remain below those of peer high-income nations despite per capita healthcare spending almost twice as high as the comparable country average.[1] Labor challenges, including persistent workforce shortages and widespread burnout, are placing significant strain on system capacity to treat patients and research new solutions to conditions.

Yet, amid these challenges, we are also seeing encouraging signs of transformation. There is momentum behind the shift toward more ambulatory and at-home care models, continued investment in digital health and automated solutions, and innovations in prescription drugs and medical equipment.

In the 2024 report, we conducted deeper dives into specific topic areas to illuminate systemic challenges and areas of promise. One thing is clear: building a resilient, affordable, and high-quality healthcare system is neither a guaranteed outcome of market forces nor a foregone result of government intervention alone. It will require bold leadership, cross-sector alignment, and sustained collaboration.

We are hopeful this index and accompanying commentary will catalyze dialogue among stakeholders and spark the thoughtful, mission-driven action needed to shape 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 aims to provide a holistic assessment of the US health ecosystem. The 2024 edition takes advantage of trusted data sources to assess the state of US healthcare through four pillars: Patient, Provider, Payer, and R&D.

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 do this, we built an integrated set of metrics – the Health Ecosystem Index. This simple index aims to provide a holistic overview of the current state of American healthcare, track changes in health over time, and help identify areas where interventions are needed, as well as the effectiveness of interventions over time. The index has a standard set of metrics that we review year over year. We also ad-hoc rotate in new metrics to complement a specific year's analysis if it will shed further light on a theme or topic we are exploring.

Accordingly, in addition to analyzing each pillar individually, the Health of Health report also assesses the interconnectedness of all pillars and conducts an in-depth exploration of specific topic areas to identify key intersections, uncover shortcomings, and highlight opportunities within the ecosystem. The 2024 report has focused in on three topics we believe are existential for the "health" of the healthcare system: the pharmaceutical supply chain; administrative burden on the healthcare provider system; and Medicare and Medicaid expenditure growth in select areas. We believe in in-depth discussions on these topics will focus stakeholders on conversations that matter and mobilize action.

It is important to note that while this is the 2024 report, most available data referenced in this report reflects trends only through 2023. This is primarily due to the lag in public health data reporting, as most federal and state datasets require extensive collection, validation, and publication time before release. Despite this, our analysis for the 2024 report reflects updated data from our 2023 report which mainly leveraged data through 2022.

Data across the Patient, Provider, Payer, and R&D pillars reveal troubling trends in each area. Suboptimal patient outcomes, insufficient provider infrastructure, rising costs across the system, and slowed R&D investment collectively point to mounting systemic challenges that demand urgent attention. At best, trends in the Provider pillar reflect growing innovation in diversifying access modalities to improve patient care; at worst, increasing market concentration and claim denials in the Payer pillar are driving up the cost burden on patients.

Patient

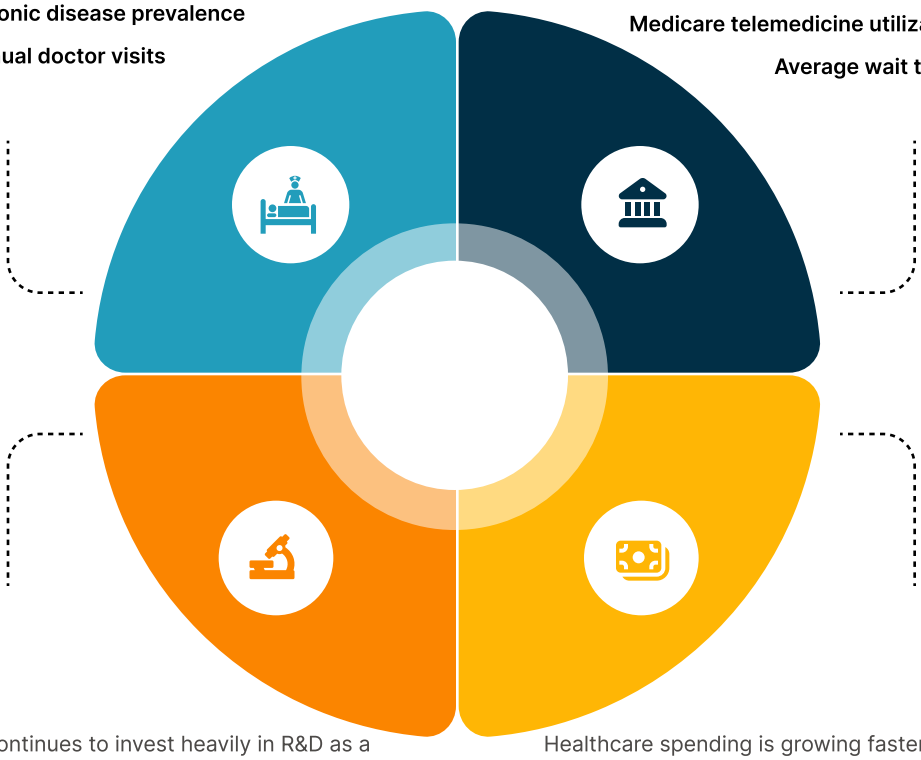
Signs of post-pandemic recovery have emerged yet long-standing health challenges, particularly in mental health and chronic diseases, remain unresolved.

- **Life expectancy**
- **Chronic disease prevalence**
- **Annual doctor visits**

Provider

Workforce expansion continues but persistent shortages and facility constraints expose structural vulnerabilities.

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



R&D

The US continues to invest heavily in R&D as a growing proportion of innovations are funded by private companies and tested abroad.

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

Payer

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.

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

Patient Pillar

Signs of post-pandemic recovery have emerged, yet long-standing health challenges, particularly in mental health and chronic diseases, remain unresolved.

While several indicators show encouraging movement through the end of 2023, the most recent data stops short of capturing whether early improvements have held in 2024 or 2025. Persistent gaps in mental health, early-life outcomes, and equitable access underscore the need for continued reform.

Health Outcomes

Life expectancy rebounded to pre-pandemic levels, rising by approximately 1.2% from 2022 to 2023.[2] These gains are potentially driven by a 70% drop in COVID-19 deaths and a 6% decline in overall mortality.[3,4] Though this recovery is notable, it comes after a period of significant loss and remains vulnerable to broader public health trends. Life expectancy dips during the pandemic hit the US harder than comparable countries: US average life expectancy dipped by 1.8 years from 2019 to 2020 (versus 0.6 years in comparable countries) and fell a further 0.6 years in 2021 (versus a 0.2-year improvement in comparable countries).[5] The sustained impact of COVID-19 in the US compared to other peer countries signals lagging improvements to health outcomes when responding to new health-related threats.

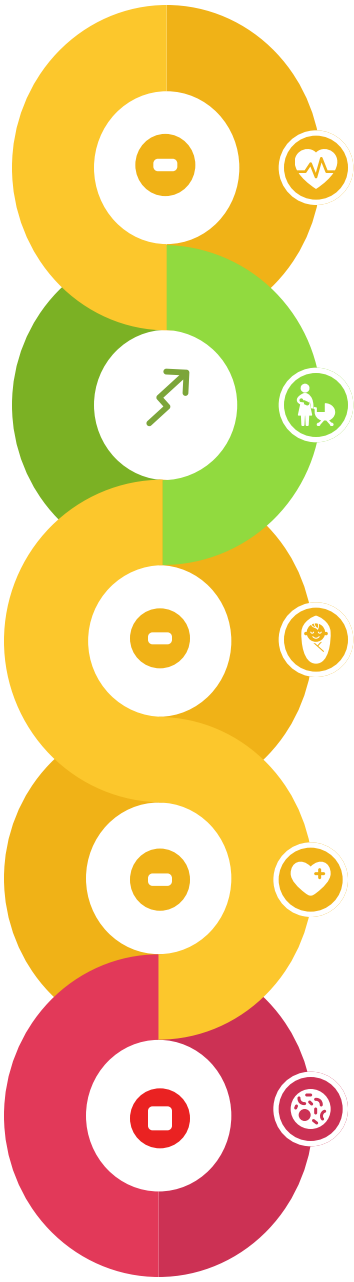
Life expectancy isn't the same for all demographic groups in the US and the disparity is growing. The gap between the racial and geographical demographic categories of Americans with the lowest and highest life expectancy grew from 15.8 years in 2019 to 20.4 years in 2021, with the lowest group comprised of non-Latino American Indian or Alaska Natives living the in the non-coastal American West.[6]

One contributing factor to lower US life expectancy is high rates of maternal mortality compared to peer countries. However, recent US rates have improved, falling nearly 50% from 2021 to 2023.[7] One likely contributor was the implementation of extended Medicaid postpartum coverage under the American Rescue Plan Act enacted in 2022, which changed the standard coverage period from 60 days to 12 months after childbirth.[8] This shift allowed states to provide continuous coverage for a full year postpartum, improving access to critical follow-up care during the high-risk postpartum period.

In contrast, infant mortality held steady at 5.61 per 1,000 live births during this period and the lack of new national initiatives specifically targeting infant mortality may have contributed to the plateau in early-childhood health outcomes.[9] Experts caution that without systemic improvements in care coordination and post-natal support, these gains may not be sustained.[10]

Even with improvements in maternal mortality, childbirth isn't equally as safe across the US. Giving birth in Tennessee is four times as deadly as giving birth in California (41.1 deaths per 100,000 births in TN versus 10.5 in CA, as of 2022).[11] This disparity isn't as simple as the number of providers: Tennessee had more hospital beds per capita than California and a similar number of women's health providers per capita.[19,20] The answer lies more in the prevalence of maternal risk factors. Twice as many deaths per capita are due to drug overdose in Tennessee than in California, and 34% of all pregnancy-associated

Health Outcomes Metrics



Life expectancy at birth

US life expectancy has rebounded to pre-pandemic levels in 2023 after declining in 2020 and 2021 due to the COVID-19 pandemic.[12] However, the US life expectancy of 78.4 years is over 4 years shorter the comparable country average (82.5 years).[13]

Maternal mortality

Since 2021, maternal mortality rates have decreased by nearly 50% to 18.6 per 100,000 in 2023 from 32.9 per 100,000 in 2021. This has been a reversal in the trend that was seen from 2018 – 2021, where maternal mortality rates nearly doubled.[14] Even so, the US has the highest maternal mortality rate of comparable countries.[15]

Infant mortality

Long-term improvements in infant mortality have plateaued over the last 5 years. Rates stayed the same at 5.6 deaths per 1,000 live births between 2022 and 2023.[16]

Highest health-related mortality causes

Since 2019, the rates of the top three non-COVID health-related causes of death – heart diseases, cancer, and cerebrovascular diseases (stroke and aneurysms) – have remained stable.[17] After a peak in 2021, diabetes-related death rates have decreased for two consecutive years, signaling the early impact of insulin access policies.

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.[18] The leading causes of growth since 2013 are obesity (+15.5%) and depression (+14.1%).

deaths in Tennessee were attributed to overdoses.[21,22] This example shows how health outcome measures don't always point to obvious root causes and, if left unexplored, can cause misplaced assumptions.

Health-related causes of death outside of COVID-19 haven't changed much from pre-pandemic rates.[23] One promising trend is a consecutive decrease is diabetes-related deaths since 2021, demonstrating the potential early impacts of insulin price cap efforts by the last two administrations to increase access to disease-managing medication.

Managing chronic conditions like diabetes are becoming more prevalent in the US. In the last decade, the percentage of US adults managing at least one chronic condition increased by 5.6%, reaching 76.4% of adults in 2023.[24] 32.7% of American adults are now obese (up from 28.3% in 2013) and 20.2% are diagnosed with clinical depression (up from 17.7% in 2013), highlighting the need for professional services like mental health and nutrition to be further integrated into health care delivery.

Care Engagement & Preventative Visits

Doctor visit rates in 2023 reached 84.5% of adults, just shy of the 2019 high (84.9%), indicating a return to routine preventive care disrupted by the pandemic.[25] Mental health service utilization also increased by approximately 9.5% from 2022 to 2023, aided by telehealth expansion and cultural destigmatization.[26] [27] Although these trends suggest rising care engagement, persistent issues including affordability, wait times, and uneven provider distribution, continue to limit access to care.[28]

One cornerstone of preventative medicine, vaccines, has plateaued in recent years. Adult influenza immunization rates have remained stable since 2019 but remain below 50%.[29] Childhood influenza vaccinations saw a dip in the latest birth cohort comparisons, along with decreases in coverage of recommended vaccinations during the second year of life.[30] Many of the 12- to 24-month-old vaccinations are follow-up doses in series of vaccinations given to infants, suggesting issues with health care access and effective communication. Vaccination rates vary widely from state to state, demonstrating differences in health infrastructure across the US. During the 2023-2024 flu season, the eligible Massachusetts population got

Care Engagement Metrics

Annual doctor visits

In 2023, 84.5% 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. 2023 had the second highest rate of annual visits, with 2019 holding the highest at 84.9% of adults.[32]

Preventable hospitalizations, using the Prevention Quality Index

The Agency for Healthcare Research and Quality (AHRQ) publishes a Prevention Quality Index (PQI) each year to identify cases of hospitalizations that could have been avoided.[33] The overall composite score (PQI #90) summarizes trends in preventable hospitalizations. After a peak in 2020, the PQI improved year over year until leveling out at a rate of 1,040 per 100,000 in 2023 and 2024. Even after controlling for COPD rate, which were elevated due to COVID-19 complications, PQI #90 still improved, driven by lower admission rates for community-acquired pneumonia.

Immunization rates

The percentage of adult recipients of the influenza vaccine has been stable since 2019, fluctuating between ~47% to ~49%.[34] This leaves room more improvement, since less than half of American adults are regularly getting their flu shots. Coverage of childhood-recommended vaccines declined between 2018/2019 and 2020/2021 birth cohorts, with the largest declines in vaccines during the second year of life and seasonal flu vaccination.[35]

Patient Satisfaction

The Hospital Consumer Assessment of Healthcare Provider and Systems overall Hospital Rating has remained stable since 2019 at about 72% of respondents rating the hospital a 9 or 10 out of 10.[36] Care transition remains a challenge, with only about half of respondents confirming they received adequate discharge information.

inoculated at almost twice the rate of Mississippi (33.4% for MS versus 62.2% for MA).[31] Patient experience has changed much over the last five years, with ~72% of hospital patients rating their overall experience highly each year.[37] Care transition at discharge remains a weak point for in-patient care, with only 52% confirming they worked with providers and got the information they needed for care outside the hospital. Without proper care plans, some hospital patients will end up being readmitted. Aware of this issue, the Centers for Medicare & Medicaid Services (CMS) created a value-based Hospital Readmissions Reduction Program (HRRP) to incentivize improvements in discharge care plans and coordination to reduce avoidable readmissions.[38]

So far, the program has not been effective. From 2020 to 2023, most hospitals (95.2%) reported the same readmission rates across all HRRP measures, but more hospitals got worse (2.6%) than improved (2.2%).[39] When measuring changes in the number of hospital return days for readmitted patients, 16.5% of hospitals reported longer stays in 2023 than in 2020, compared to only 9.5% of hospitals reporting shorter stays. With hospital closures and provider shortages contributing to increased workloads on providers, readmission rates stand to increase without changes to HRRP or incentives from other sources.

Although readmissions are up, the Prevention Quality Index (PQI), which measures admission rates for conditions that are treatable outside of the hospital, improved from 1,306 per 100,000 in 2019 to 1,040 in 2024.[40] The decrease in admission rates is primarily due to a decrease in chronic obstructive pulmonary disease (COPD) admissions, a known COVID-19 complication. Improved respiratory admissions rates also affected pneumonia rates. Diabetes admissions rose during the same period, suggesting not all preventable conditions improved post-pandemic.

Mental Health & Substance Use

Mental illness continued to affect nearly one in four adults, with a slight decrease from 23.1% in 2022 to 22.8% in 2023.[41] Although this marked the first annual decline in recent years, the overall trend over the past decade remains upward.[42] Encouragingly, access to mental health treatment continues to expand, with utilization rising

Mental Health and Substance Use Metrics

Mental health service utilization

Rates of mental health utilization have continued to steadily rise since 2015. In 2023, 23% of adults reported receiving mental health care in the past year, up from 14% in 2015. Rates increased by 2 percentage points between 2022 and 2023.[44]

Suicide deaths

Deaths from suicide declined slightly in 2023 to 14.1 per 100,000 people compared to the peak of 14.3 per 100,000 in 2022. 2023 rates matched pre-pandemic levels (2019) but still follow an overall increasing trend within the last 20 years.[45]

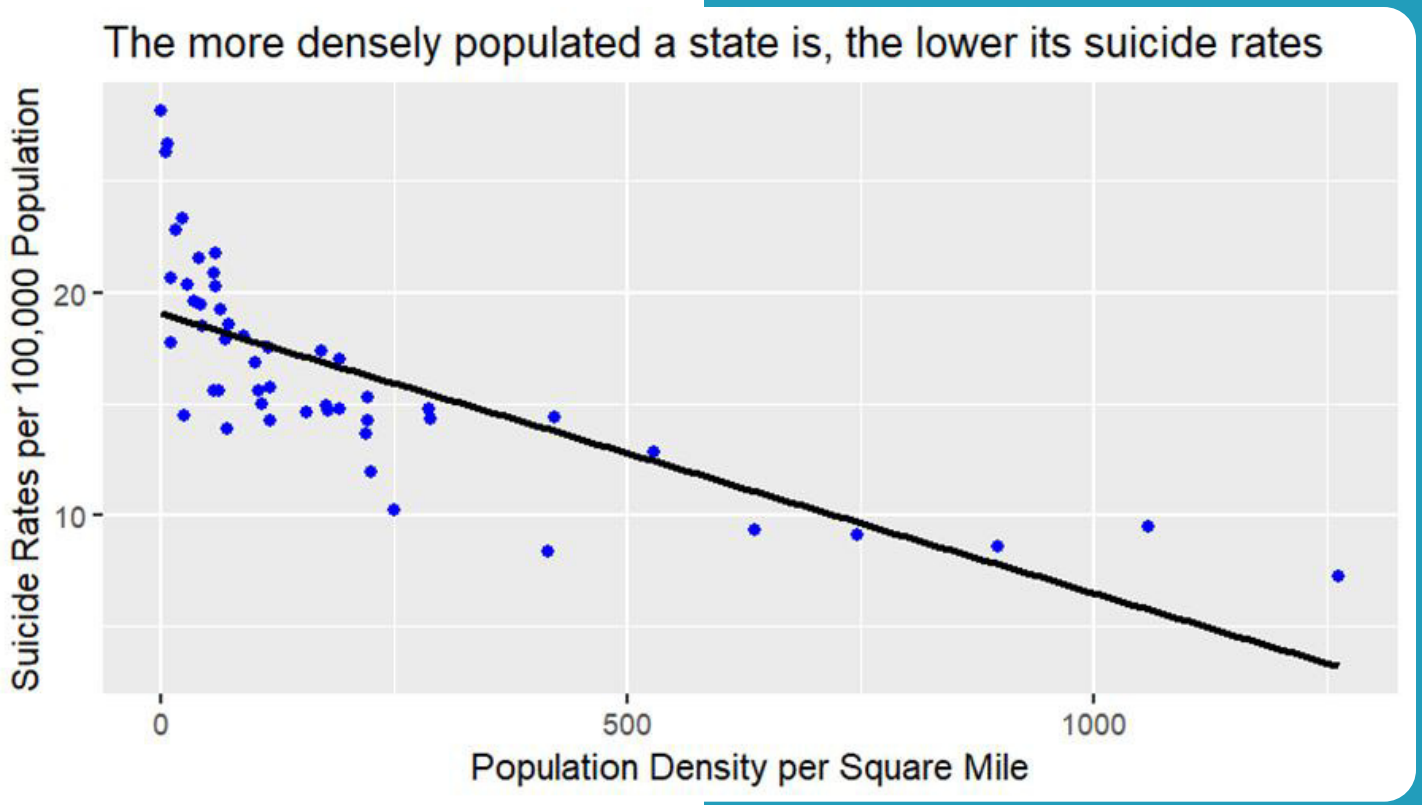
Rates of mental illness

Rates of mental health illness decreased slightly from 23.1% in 2022 to 22.8% in 2023. However, Rates of mental health illness have continued to increase by nearly 25% in the last 10 years, from 18.5% in 2013 to 22.8% in 2023.[46]

Rates of substance/drug misuse

Use of illicit drugs continues to remain relatively stable around 9%, with a 0.5 percentage point increase since 2018. Opioid usage is slowly decreasing, from 3.8% in 2018, 3.3% in 2022 to 3.2% in 2023.[47]

steadily.[43] Together, persistent levels of mental illness and suicide highlight the enduring effects of social isolation, economic instability, and broader societal stressors that extend beyond the reach of clinical care. One of the devastating outcomes of mental illness is suicide. Suicide deaths declined by 1.4% from 2022 to 2023, potentially influenced by expanded crisis access through the 988 Suicide & Crisis Lifeline launched in mid-2022.[48] [49] However, suicide rates remain elevated compared to pre-pandemic levels.[50] Suicide rates are much higher in some states than others. Three states (AK, MT, and WY) experienced over 25 suicide deaths per 100,000 people in 2023 while six states (RI, MD, CT, MA, NY, and NJ) had under 10 per 100,000.[51] There is a strong relationship between suicide rates population density, as Alaska, Montana, and Wyoming are the three emptiest states in the US. The figure below shows the statistically significant relationship between the two measures, highlighting the importance of combating isolation, whether through digital connections, home visits, or other community outreach. Illicit drug use remained stable around 9% in 2023, while opioid misuse declined by about 3% from 2022 to 2023.[52] This reduction reflects the impact of harm reduction strategies such as expanded naloxone distribution and policy reforms targeting the opioid crisis.[53] [54] While these improvements offer reason for cautious optimism, substance use trends still demand continued vigilance and investment.



Provider Pillar

Workforce expansion continues but persistent shortages and facility constraints expose structural vulnerabilities.

Healthcare Workforce

The per capita supply of core clinical staff has grown steadily over the past decade, including a 12% increase in physicians, 30% in registered nurses, and 43% in physician assistants.[55,56] The increased growth rate of RNs and PAs relative to physicians suggests support staff are playing a key role in health care delivery as physicians continue to experience burnout. Mental health provider availability has also improved, with an 8% increase between 2022 and 2023. [57]

The gains in clinical staff supply, however, are not evenly distributed, and projected shortfalls, especially among physicians, highlight ongoing pressure from rising care demand and training bottlenecks. While the overall number of physicians has increased, distribution remains a critical issue. As of March 2025, there are 7,749 designated primary care Health Professional Shortage Areas (HPSAs) in the United States, affecting nearly 77 million residents.[58] This means only 47.5% of patient needs are met with current primary care physicians. Addressing this gap would require an additional 13,364 physicians. Shortages are more severe in some states than others, ranging from 14.6% of need met in Delaware to 77.8% of need met in Vermont. National projections estimate that the US could face a shortfall of up to 86,000 physicians by 2036, highlighting both immediate and long-term workforce alignment challenges.[59] The increased growth rate of RNs and PAs relative to physicians suggests support staff are playing a greater role in health care delivery to fill staff shortages. Among physicians who support removing barriers to allow PAs to practice without physician agreements, 68% cited easing provider shortages and reducing patient wait times as the main reasons to change regulations.[60] Even without regulatory changes, health care centers are becoming more reliant on PAs to deliver care because they are cheaper labor and faster to train, lowering healthcare costs while addressing care shortages.[61] There is a meaningful quality tradeoff—with far less training, PAs have higher rates of diagnostic errors and malpractice, causing an increased need for defensive medicine to prevent lawsuits. The use of defensive medicine stands to become more prominent as the ratio of PAs to physicians increases, raising questions about the sustainability of this trend.

In addition to clinical personnel, over 1.3 million individuals in the U.S. healthcare workforce were employed in administrative roles, such as medical secretaries, assistants, and health services managers as of 2023.[62,63] These roles reflect the healthcare system's growing administrative

> **Workforce expansion continues, but persistent shortages and facility constraints expose structural vulnerabilities.**

complexity. Physicians continue to experience burnout, with burdensome administrative tasks cited as a top challenge in their jobs.[64,65]Read more about increased administrative burden in the **Administrative Burden in U.S. Healthcare** topic deep dive.

Healthcare Workforce Metrics

Number of Physicians and Surgeons Per Capita

The number of doctors rose to 345 per 100,000 people in 2023 compared to 330 in 2021 or 307 in 2013. The number has steadily increased by 12% (with some fluctuations) in the last decade.[66]

Number of Registered Nurses Per Capita

The number of registered nurses (RNs) increased from 1,211 per 100,000 in 2017 to 1,395 per 100,000 in 2023. Over the last decade, the number of registered nurses has risen by 30%, showing a steady increasing trend.[67]

Number of Mental Health Providers Per Capita

The number of mental health professionals increased to 92 per 100,000 in 2023 from 73 per 100,000 in 2017. Increased 8% in the last year.[68]

Number of Physician Assistants Per Capita

The number of Physician Assistants (PAs) in the US has increased greatly since before the pandemic, increasing from 37 per 100,000 in 2017 to 53 per 100,000 people in 2023.[69]

Healthcare Infrastructure

Meanwhile, facility-based capacity continues to decline. The number of hospital beds per capita has fallen nearly 20% over the past two decades, reinforcing the long-term shift toward outpatient and and community-based care.[70] Hospital closures are concentrated in rural areas, representing 98% of all hospital closures since 2015.[71] This shift has been accelerated by value-based reimbursement models, such as diagnosis-related group (DRG) payments, which incentivize shorter hospital stays.[72] Advances in medical technology have also enabled more complex procedures to be safely performed in outpatient settings, reducing the need for inpatient admissions.[73] Additionally, evolving patient preferences for care that is convenient, lower cost, and closer to home have increased demand for ambulatory surgical centers, retail clinics, and urgent care facilities.[74]

Providers are busier than ever, with patients experiencing increased wait times to receive care. [75] In 2022 investigative research, the average wait in US metro areas was 38 days, over three weeks more than the oft-referenced industry standard of 14 days. Another survey tracked wait times over time and found 8% increased waits in 2022 compared to 2017 and 24% increases since 2004. [76]

Sometimes patients can't afford to wait for scheduled appointments and seek care at emergency departments. Getting timely care at an emergency room is unlikely to happen, with the median American spending 163 minutes in the ER before leaving from their visit.[77] In some states, the wait is much longer: the median patient seeking care in Maryland will spend over four hours (250 min.) in the emergency department before leaving their visit.[78] This inefficiency in replacing primary care with emergency room care highlights

Utilization & Care Access Points

Patients are increasingly turning to alternative care models. Utilization of urgent care centers declined slightly by 2.8% in 2023—from 32.5% to 31.6% of the population—but remains well above pre-pandemic levels.[84] Recent studies support this behavior, noting that patients increasingly turn to urgent care due to convenience, timely access, and the desire to avoid emergency departments for lower-acuity issues.[85,86] Telehealth use rebounded by 24% between 2022 and 2023, increasing from 190.4 million to 236.4 million users. Despite this growth, total telehealth utilization has remained nearly flat since the early pandemic, with 2023 usage only 1.5% below 2020 levels.[87] This plateau underscores persistent gaps in digital health infrastructure. Reimbursement uncertainty and regulatory complexity are major barriers: 77% of physicians cite inconsistent payment policies as a deterrent to adoption.[88] In addition, digital access disparities remain a persistent issue, particularly among rural, elderly, and low-income populations lacking internet access or devices needed for virtual care.[89]

Healthcare Workforce Metrics

Number of Hospital Beds

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.[79]

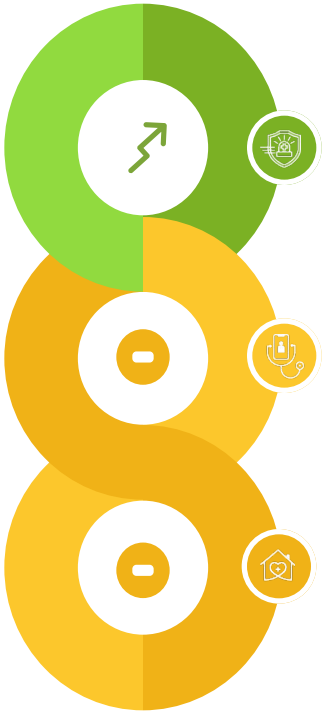
Hospital Closures by Rurality

Since 2015, only 2 hospital closures in the US occurred in urban areas versus 105 closures in rural areas.[80] The rate of closure is slowing, with only 5 closures in 2024 compared to 8 in 2023 and 17 in 2019, but the concentration of closures in small rural communities has persisted.

Average Wait Times

According to a recent report, only 6% of US metro areas had a wait time less than or equal to 14 days, with an average wait of 38 days.[81] Another recent survey found 2022 wait times increased by 8% from 2017 and 24% from 2004.[82] Americans spend a median of 163 minutes at the emergency department before leaving, a 26-minute increase since 2019.[83]

Healthcare Utilization Metrics



Utilization of Urgent Care Clinics

Utilization of urgent care clinics rebounded to above pre-pandemic levels in 2023 after decreasing in 2020 and 2021 due to the COVID-19 pandemic. Utilization of urgent care clinics slightly decreased from 32.5% of the population in 2022 to 31.6% in 2023.[90]

Medicare Telemedicine Utilization

Telehealth use among the general U.S. population increased from 190.4 million users in 2022 to 236.4 million in 2023, a growth of 24%. However, total usage has remained relatively flat since the start of the pandemic, with 2023 figures only 1.5% lower than 2020 levels.[91]

Home Health Care Services Utilization

According to a 2023 report, 79% of Americans did not use home health care services in the previous years but those who did were overwhelmingly satisfied with the level of care they received.[92] About a third of home health care recipients were younger adults, with only 9% of age 55 and over taking advantage. This indicates room to grow in home health services.

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.

Healthcare Spending

Compared to all other Organization for Economic Cooperation and Development (OECD) member countries, US healthcare costs were over $3,700 higher per capita, and a small but increasing proportion of Americans struggle to access care due to costs.[93]

American healthcare expenditures continue to rise. In 2023, from the most recent National Health Expenditure (NHE) data, total healthcare expenditures reached $4.87 trillion, exceeding 2020 COVID-19 pandemic levels.[98,99] Spending on public health insurance grew, even after controlling for inflation. Medicare spending grew 4.6% from 2022 to 2023, with large growth in dental services (56.2%), durable medical equipment (14%), and other non-durable medical equipment (26.3%). Medicaid spending grew 4.5% from 2022 to 2023, with large growth in prescription drugs (8%), other professional services (6.5%).

Read more about spending trends in the **Medicare and Medicaid Expenditures** topic deep dive.

Healthcare Spending Metrics

Total Annual US Health Expenditures[94]

Total national health expenditures eclipsed 2020 pandemic levels in 2023, reaching $4.87 trillion. 2023 expenditures per capita also increased by 3.1% compared to 2022.[95]

Total Annual Medicare Expenditures

Total Medicare health expenditures grew by 7.2% from 2019 to 2023 and 4.6% since 2022.[96] This growth was driven by prescription drug, durable medical equipment and dental services spending.

Total Annual Medicaid Expenditures

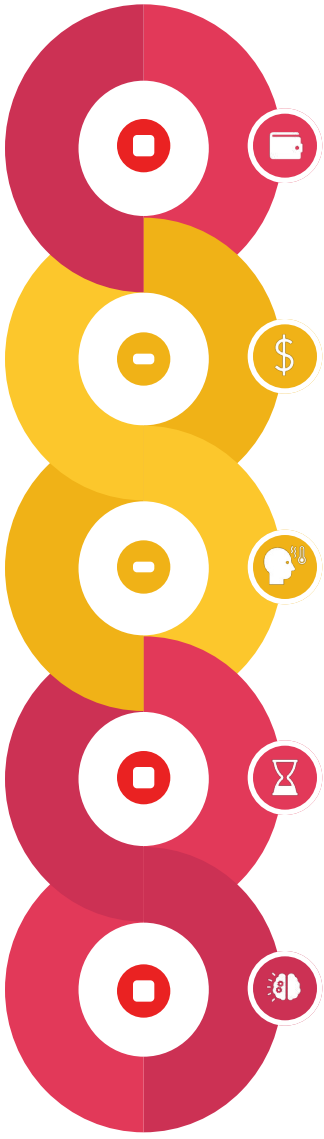
Total Medicaid health expenditures grew by 18.7% from 2019 to 2023 and 4.5% since 2022.[97] This growth was driven by prescription drug, net cost of health insurance, and other health and professional services spending.

Healthcare Cost

Per capita out-of-pocket (OOP) health care costs reached $1,514 in 2023, a 2.8% increase to compared to 2022 after controlling for inflation.[100] Americans are putting more of their income toward health care costs even though healthcare premiums are not outpacing inflation, indicating higher prices and/or reductions in health benefits.[101] Only South Korea spends more OOP per capita on healthcare than the US, demonstrating the increased cost of staying healthy in America versus the rest of the world.[108]

Higher OOP costs mean rationing or foregoing care for some Americans. In 2023, 6.3% forewent medical care, 7.2% delayed care, 7.8% rationed prescribed medication, and 5.5% forewent mental health care due to cost concerns.[109] All of these measures stayed the same or increased since 2022, indicating worsening affordability of health care. Skipping care due to cost is more common in the US than in comparable countries, where an international survey of older adults found that 8% of Americans reported avoided visiting a doctor due to cost despite having a medical problem (other country responses ranged from 1-7%).[110]

Health Cost Metrics



Annual OOP expenses [102]

Americans spent $1,514 per capita on out-of-pocket healthcare expenses in 2023, a 2.8% increase from $1,472 in 2022.[103]

Health insurance premiums

Premiums for employer-sponsored health insurance increased by over 6.6% from 2022 to 2023 for both single and family plans, on par with 2022 inflation (6.5%).[104]

Foregone/delayed medical care due to cost

While still below pre-COVID levels, more American adults are rationing medical care in 2023 than in 2022. Foregoing medical care due to cost remained at 6.3% in 2023 (8.3% in 2019; 6.3% in 2022). Delaying medical care due to cost increased by 0.2 percentage points to 7.2% in 2023 (9.6% in 2019; 7.0% in 2022).[105]

Not taking medication as prescribed due to costs

While still below pre-COVID levels, more American adults are rationing medical care in 2023 than in 2022 Not taking medication as prescribed due to costs increased by 1 percentage point to 7.8% in 2023 (versus 9.6% in 2019; 6.8% in 2022).[106]

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 0.5 percentage points to 5.5% in 2023 (versus 5.0% in 2022; 4.4% in 2019).[107]

Healthcare Enrollment

Medicare enrollment rates have mildly and steadily increased by 0.7 percentage points from 2019 to 2023, 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.[111] In 2024, MA overtook FFS in enrollment by about 200,000 (~0.4%) enrollees. This rapid change shows that the government is increasingly relying on private providers to

manage Medicare insurance plans.

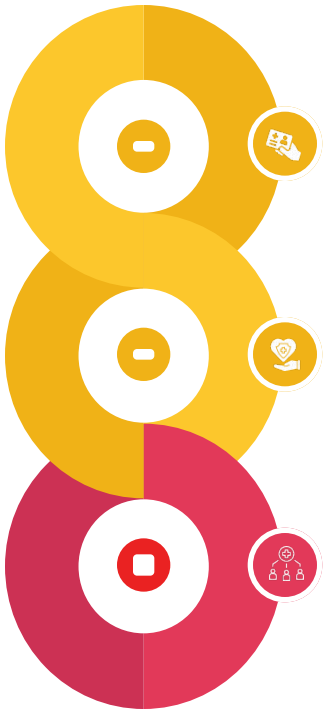
Medicaid enrollment from 2019 to 2023 grew by 1.5 percentage points, but more recent data shows a reverse in the trend. Since the end of the continuous enrollment requirement for COVID-era federal funding in April 2023, Medicaid enrollment has decreased by 17% from 94.6 million to a relative low of 78.5 million as of December 2024.[112] The change in continuous enrollment has impacted child enrollment rates, with many children losing coverage for procedural reasons rather than confirmed ineligibility.[113] 69% of all state unwinding disenrollment was for procedural reasons, indicating Medicaid-eligible Americans were removed from rolls due to changes in paperwork requirements.[114] More frequent eligibility checks are associated with more procedural disenrollment of beneficiaries who are otherwise eligible, as evidenced by policy changes in Texas.[115]

Healthcare Coverage & Market Competition

Insured individuals expect to have their healthcare covered, but that isn't always the case. With public attention and news coverage on denial of claims, especially their association with the murder of UnitedHealthcare CEO Brian Thompson, this year we have added some metrics to reflect coverage rates. About 1 in 5 (19%) of in-network claims were denied by health insurance exchange plans in 2023, which is a 3 percentage point increase from 2022.[121] 9 large providers (with over 5 million annual claims) exceeded the 19% overall in-network denial rate, led by BCBS of Alabama at 35% and UnitedHealth Group at 33%.[122]

Although Medicare and Medicaid do not publish their claim denial rates, 10% of Medicare and 12% of Medicaid beneficiaries

Healthcare Enrollment Metrics



% of US Insured by Any Insurance

Overall health insurance coverage rates have hovered at around 92% since 2019.[116] This stagnation represents enrollment saturation after sharp increases from the passage of the ACA almost 20 years ago.

% of US Covered by Medicare

Medicare coverage rates have steadily increased by 0.7 percentage points from 2019 to 2023, showing that enrollment share has increased with the growing eligible population. [117]

% of US Covered by Medicaid

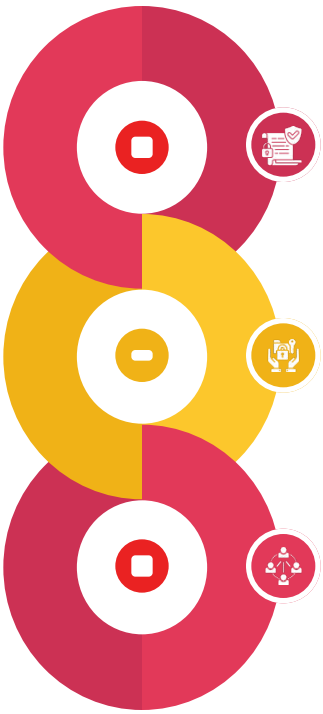
Medicaid coverage rates have also steadily increased from 2019 to 2023 by 1.5 percentage points. [118] However, more recent enrollment data from 2024 shows significant enrollment dips due to procedural disenrollment, particularly in children.[119, 120]

in a 2023 KFF survey had to pay care they thought was covered but was denied.[123] This is less than the 19% of marketplace plan beneficiaries who were denied a claim they thought was covered, suggesting coverage issues are more prevalent in private insurance plans.

Americans don't often have many choices for healthcare. A market concentration analysis found that 95% of US insurance markets were highly concentrated, defined by markets where a single insurer holds a 30% or higher market share of all health insurance plans.[124] 47% of the markets were heavily concentrated, where one insurer held at least a 50% share of plans. The 2023 numbers are up from the 74% concentration mark in 2019, indicating decreased competition in the market.

With decreased competition, increased claim denials and OOP costs are expected, decreasing the reliability and value of insurance plans for individuals.[129] Markets for Medicare Advantage plans are also highly concentrated, with 97% of markets meeting concentration criteria in 2023, demonstrating that government has not been effective at creating competition in their private insurance partners.

Healthcare Coverage & Market Competition Metrics



Exchange Plan Claim Coverage

Overall claim denial rates were 19% for health insurance exchange plans in 2023, a 3 percentage points increase compared to 2022.[125]

Medicare & Medicaid Plan Claim Coverage

Although Medicare and Medicaid do not publish claim coverage rates, a recent survey found 10% of Medicare beneficiaries and 12% of Medicaid beneficiaries had a claim denied they thought was covered.[126]

Market Concentration of Insurance Companies

95% of health insurance markets were highly concentrated in 2023, according to the Herfindahl-Hirshman Index (HHI).[127] The HHI calculates the share size of each industry competitor in each market, with higher resulting values in markets with high-share competitors. This is up from 74% of markets in 2019.[128]

> **95% of US insurance markets [are] highly concentrated,... where a single insurer holds a 30% or higher market share of all health insurance plans.**

R&D Pillar

The US continues to invest heavily in R&D as a growing proportion of innovations are funded by private companies and tested abroad.

The 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 is a world leader in healthcare R&D, with four of the five biggest biotech companies and four of the five biggest revenue pharmaceutical companies in the world headquartered in the US.[130,131] Among OECD member countries, only Israel spends more per capita on R&D than the US.[134]

US R&D investments have grown in the last two decades, but recently spending has fallen. PhRMA member company domestic R&D investment fell by over 5% in both 2022 and 2023, dropping below 2020 levels.[135] This follows the pattern of companies reviewing their R&D pipelines and refocusing on highly successful trials to bring spending back to pre-pandemic levels, like Moderna, who strategically cut 20% of their 2025-2028 R&D spending.[136,137]

The National Institutes of Health (NIH) is the largest public funder of biomedical research in the world with an annual budget of over $47 billion.[138] Over the last decade, R&D as a proportion of GDP has grown (2.67% in 2012 to 3.43% in 2022).[139] However, almost all of that growth was due to private sector-funded R&D, which increased by 0.89 percentage points as a share of GDP in the same timeframe. As of 2022, businesses now represent 75% of all US R&D spending (up from 63% in 2012). This trend is likely to accelerate as the new administration proposed budget cuts to NIH in April 2025, which would force research institutions to look elsewhere for funding.[140] Between February 28, 2025 and April 8, 2025, the US government canceled $1.8 billion in NIH grants, impacting 400 research projects.[141]

R&D Spending Metrics

Pharmaceutical industry R&D investment

PhRMA member companies have been spending more on R&D over the past two decades. However, domestic R&D has fallen by over 5% in both 2022 and 2023 to below 2020 levels.[132]

NIH R&D budget authority

The NIH's R&D investment budget increased by over $12 billion between 2018 and 2023, rising from $35.4 billion to $47.7 billion.[133]

Areas of Innovation

Medical discoveries continue to save lives and improve the living conditions of people managing chronic conditions. In the last decade, glucagon-like peptide-1 receptor agonist (GLP-1 RA) drugs have created a brand-new pathway for managing the epidemic of diabetes and obesity, with recent clinical trials demonstrating the potential of GLP-1 RAs to treat chronic kidney and liver diseases.[142] Without the dedicated investment in R&D, GLP-1 RAs wouldn't be the commercial medical miracle they are today. It took over 20 years from the identification of GLP-1 to the first available GLP-1 RA drug, liraglutide, in 2010.

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. 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.

Drug innovation continues to deliver new

Top 10 NIH Research Spending Categories by Year [143]

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

R&D Innovation Metrics

Number of novel FDA drug approvals

Over the last decade, the number of novel drug approvals as increased by ~1.7 drugs each year with an average of 44 drugs approved per year.[144]

US share of clinical trials

Since 2019, the US has maintained a 35% share of global clinical trials. During the same timeframe, China increased their clinical trial share from 19% to 30% while Europe's share declined from 26% to 21%.[145]

drugs to patients, with the FDA approving an average of 44 new drugs per year over the last decade.[146] Approvals have fluctuated but increased by ~1.7 drug approvals per year. A relative low of 37 approvals in 2022 wasn't due to a lack of innovation—FDA clamped down on its Accelerated Approval program after it came under fire for approving and subsequently pulling approvals for the Alzheimer's drug Aduhelm and two other accelerated drugs due to ineffective trials and safety concerns.[147] Aduhelm also came with a very high price tag, which caused Medicare and many private insurers to leave it off of their formularies.

The increasing role of private companies in health care innovation has shifted research away from the US. Despite the US's dominant position in health care R&D, China has been consistently growing its global presence. Since 2020, there have been over 300 licensing, merger, or acquisition deals with Chinese-based R&D companies.[148] Chinese contributions in clinical trials have also grown in the last five years: China's share of global clinical trials grew from 19% in 2019 to 30% in 2024 while the US share remained stagnant at 35%.[149] Changes in US trade policy are also revealing vulnerabilities in the international pharmaceutical supply chain that impact the ingredients developers use to create life-saving medications. Read more about challenges in US pharmaceutical supply chain in the **Securing the US Pharmaceutical Supply Chain** topic deep dive.

Endnotes

Pillars

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Deep Dive

Administrative Burden in U.S. Healthcare- A Focus on Rural Systems and Workforce Sustainability

Administrative burden refers to the documentation and reporting responsibilities placed on clinicians by both organizational policies and external regulatory requirements.[1] These non- patient care activities have become a structural vulnerability in the U.S. healthcare system - contributing to workforce burnout, increased costs, and reduced time for patient care.

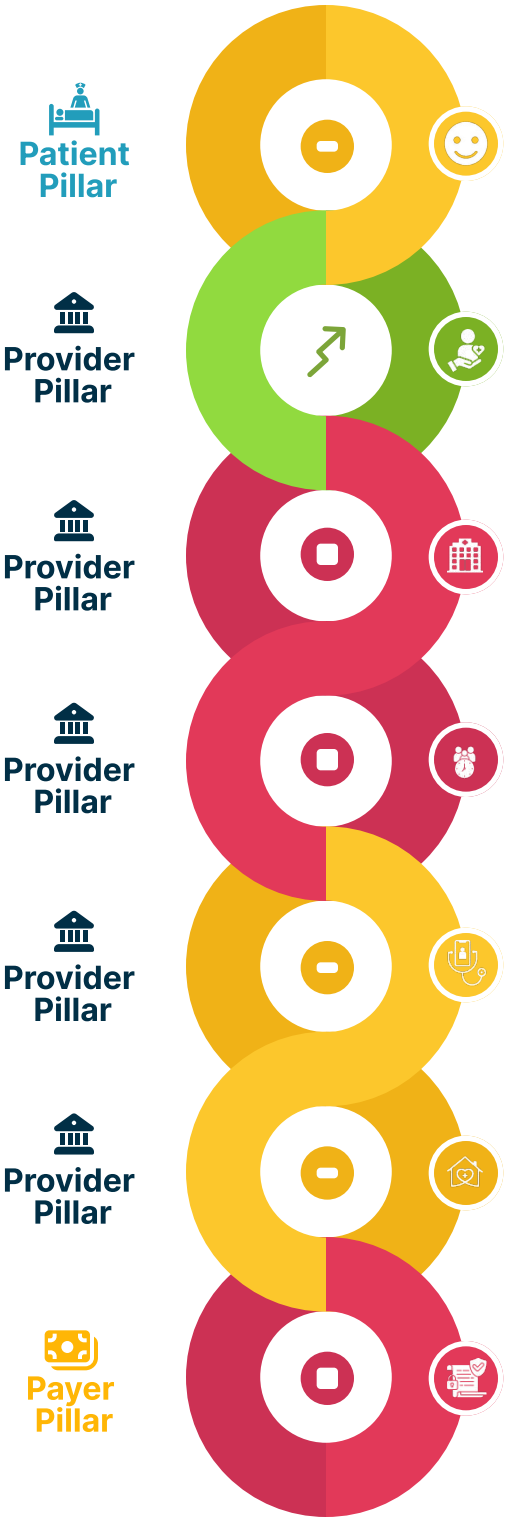
While some reporting duties are essential to the goals of value-based care, the volume and complexity of current requirements have grown to the point where they interfere with patient outcomes and may ultimately undermine the very systems they are meant to improve.[2] In rural settings, where staffing is lean, resources are limited, and digital infrastructure is uneven, this burden is even more destabilizing. What was once considered a backend operations issue now poses a direct threat to the resilience of rural healthcare and the broader system's ability to serve aging, medically complex populations. Reducing administrative burden, especially in rural systems, is critical to stabilizing the workforce, protecting patient access, and reducing system-wide costs. This brief outlines practical strategies for reform: public-private partnerships, standardized documentation requirements, shared infrastructure, and AI-powered automation.

One of the most pressing system-wide contributors to administrative burden is the duplication of data entry across fragmented platforms. Providers must often input the same information multiple times to meet the documentation requirements of Medicare, Medicaid, commercial insurers, and regulatory agencies, each of whom have different formatting and compliance standards. This fragmented system increases staff workload, drives reporting errors, and erodes time available for patient care. As innovation accelerates across states, health systems, and technology firms, addressing this challenge is essential - especially in rural communities where the stakes are highest and capacity is most constrained.

While Rios Partners' annual Health of Health Index provides a broad view of trends shaping U.S. healthcare, this brief focuses specifically on administrative burden as a key vulnerability particularly in rural settings. Though rural systems are the focal point, the challenges and solutions discussed here have far-reaching relevance: administrative burden has been identified by CMS, HHS, and the U.S. Surgeon General as a system-wide crisis.[3] Addressing it in rural contexts can surface scalable interventions that strengthen the healthcare system as a whole. This brief identifies three critical pressure points for targeted intervention within administrative burden:

How Administrative Burden Ties into Cross-Pillar Metrics

Administrative burden isn't just red tape: it's a systemwide disruptor. These metrics spotlight how paperwork, billing complexity, and compliance demands ripple through care delivery, straining providers, frustrating patients, and inflating costs. Each pillar below reveals a pressure point with cascading consequences.



Patient Satisfaction

Administrative burden trickles down to the patient care experience

Healthcare Workers Per Capita

Larger workloads lead to increased burden

Hospital Closures by Rurality

Fewer hospitals lead to larger patient populations

Average Wait Times

Administrative burden affects the timeliness of care

Telemedicine Utilization

Different methods of care delivery come with different billing and regulatory requirements

Home Health Care Services Utilization

Different methods of care delivery come with different billing and regulatory requirements

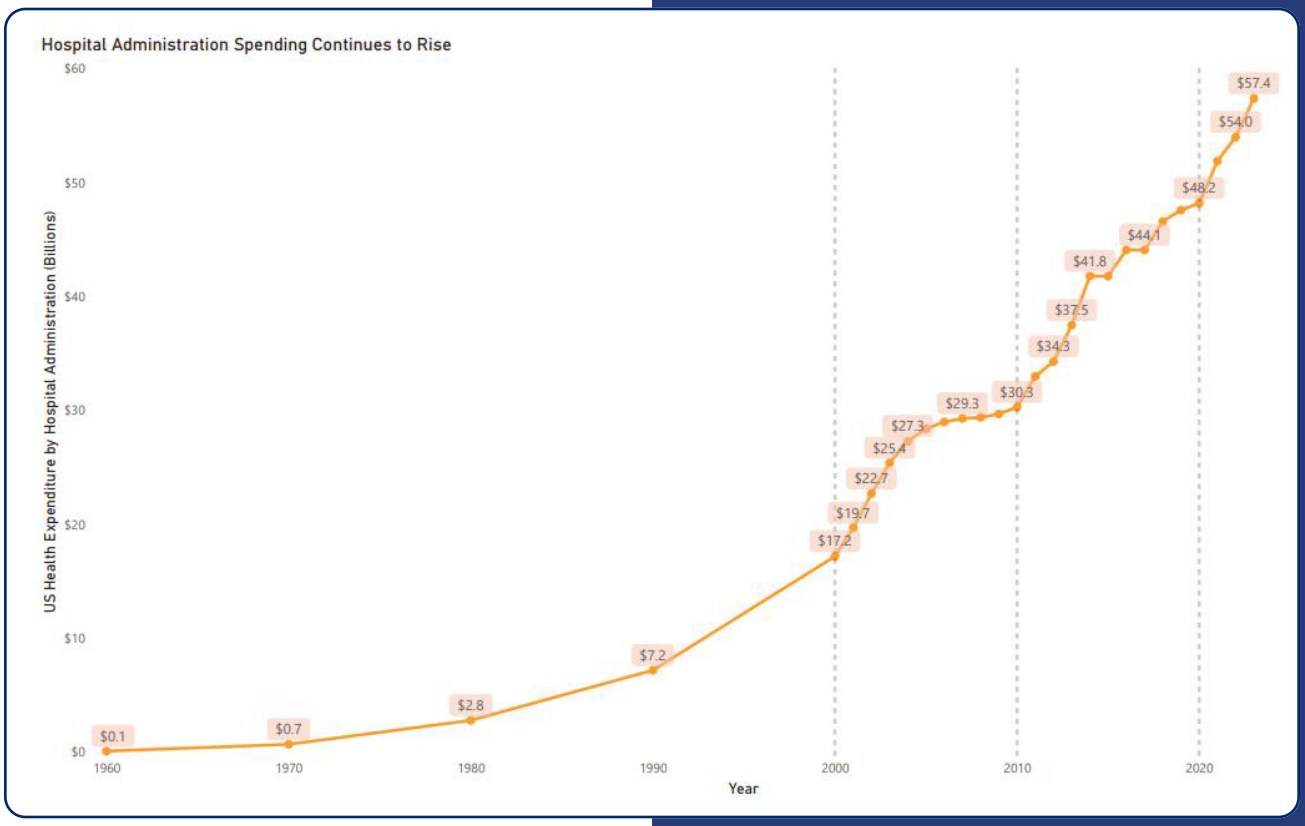
Claim Coverage

Benefit determinations and appeals require significant provider documentation

- Clinician burnout and cognitive overload: Administrative tasks are directly contributing to record-high burnout rates and threatening the sustainability of the healthcare workforce.
- Structural vulnerabilities in rural care delivery: Rural hospitals, already operating under constrained resources, face compounded risk due to fragmented digital systems and complex regulatory compliance.
- Data and technology gaps: A lack of standardized rural data and inequitable access to AI-powered tools is undermining both policy design and care outcomes.

U.S. Hospital Administration Expenditures

Healthcare administrative costs cover a wide range of activities, from billing and insurance to regulatory compliance, quality assurance, customer service, marketing, staff training, and technology management. Research estimates that administrative costs account for approximately 25% of total U.S. healthcare expenditures – far exceeding that of other high-income countries like Canada (12%), the Netherlands (19%) and England (15%).[4] In 2023, the U.S. spent $57.4 Billion on hospital administration – a 23% increase compared to 2018, and a 6.3% increase from just the previous year.[5] Between 2003 and 2023, U.S. hospital administration expenditures more than doubled—from $25.4 billion to $57.4 billion.[6] Administrative costs have also grown faster than clinical service expenditures over the past decade, driven largely by billing complexity, fragmented reporting requirements, and redundant documentation systems.[7] This imbalance risks diverting critical resources away from frontline care – such as staffing, equipment and direct care services- and instead funnels them into duplicative administrative processes. For under-resourced settings, especially rural and safety-net providers, this trade-off can be unsustainable: every dollar spent on billing complexity or compliance infrastructure is a dollar not spent on direct patient care. Over time this can not only undermine care delivery but also accelerate clinician burnout.



Despite these trends, administrative support systems and documentation platforms have not kept pace. Compared to international peers, U.S. healthcare professionals spend significantly more time on non-clinical tasks. Danish general practitioners, for example, spend almost less than half the time their U.S. counterparts do on electronic recordkeeping, due to centralized systems and national health data strategies.[8]

Burnout Crisis & the Cost of Administrative Overload

Since 2018, administrative overload has consistently ranked as the top contributor to physician burnout.[9] In 2023, 62% of physicians cited clerical and documentation demands as their primary source of dissatisfaction. This burden is not merely a time issue; it is a core threat to the sustainability of the clinical workforce. Burnout has become so pervasive that the U.S. Surgeon General issued a 2022 advisory naming clinician burnout as a public health crisis, warning that attrition and declining morale could endanger the entire healthcare delivery system if left unaddressed.[10] Despite near-universal adoption of electronic health records (96% of hospitals; 78% of office-based practices[11]), clinicians consistently report that EHRs increase after-hours work, reduce time with patients, and add to mental fatigue.[12] Much of this stems from EHRs being optimized for billing and compliance-not for clinical care delivery. As a result, even tech-forward clinicians spend hours "pajama charting" after hours or during weekends to catch up on documentation.[13]

n addition to reducing time at the bedside, administrative burden imposes a cognitive load that impairs decision-making. High administrative multitasking has been linked with diagnostic inaccuracies and reduced professional satisfaction.[14] In cognitive science, this phenomenon is known as "decision fatigue:" a state in which excessive small tasks reduce a person's ability to make high-stakes judgments, like determining a diagnosis or triaging a patient. The downstream effects are serious: clinicians facing burnout are more likely to report medical errors, lower patient satisfaction, and intentions to leave the profession altogether. In 2024, more than 1 in 4 physicians said they were considering an early exit from clinical practice due to chronic stress and lack of support.[15] The impact is not limited to physicians. Nurses, physician assistants, and behavioral health providers are also experiencing rising burnout rates.[16] Reducing administrative burden is not a secondary priority; it is a prerequisite for workforce stability, care quality, and patient safety.

Rural Healthcare: A Critical Inflection Point

Nearly 60 million people live in rural areas across the U.S.—about one in five Americans—where hospitals often serve as critical lifelines. Rural areas are typically defined as those located outside of metropolitan statistical areas (MSAs), including micropolitan regions with urban clusters of 10,000 to 49,999 people, as well as more remote, noncore communities. There are rural

> **Physicians are spending an average of 15.6 hours per week on administrative duties—nearly two full clinical days lost to non-clinical work.[17]**

hospitals across 48 states and constitute most hospitals in 17 of them.[18] In states like Montana and Nebraska, over 70% of hospitals are rural.[19] Rural hospitals are not only providers of care but also function as essential economic anchors and community hubs. In 2020, rural hospitals supported one in every 12 rural jobs in the U.S. as well as $220 billion in economic activity in rural communities.[20] Yet these providers often operate under severe constraints:

- Lower patient volume but higher per capita need: Rural hospitals serve smaller populations overall, but those patients tend to be older, sicker, and more likely to suffer from chronic conditions[21] – creating disproportionately high demand relative to available resources.
- Fewer than 25 beds in ~½ of rural hospitals: Nearly half of rural hospitals have 25 or fewer beds[22] - compared to the national average of 275[23] - which limits their capacity to manage patient surges, provide specialized care, or ensure continuity in emergencies.
- High reliance on Medicare and Medicaid reimbursements: Rural hospitals rely heavily on lower-paying public programs like Medicare & Medicaid which constrain their revenue and limits financial flexibility.
- Limited staff and IT infrastructure for meeting growing administrative mandates: Rural hospitals struggle to recruit and retain healthcare and IT staff, and limited budgets often prevent them from implementing essential cybersecurity measures, leaving them vulnerable to cyberattacks.[24]

In many rural systems, physicians wear multiple hats—as generalists, administrators, and care coordinators. When one clinician departs due to burnout or administrative fatigue, entire communities can lose access to obstetric care, behavioral health services, or even routine primary care. Administrative burden in this context doesn't just increase costs: it threatens the sustainability of essential health infrastructure. The close-knit nature of rural communities can also place added emotional strain on clinicians, who often have longstanding personal ties with their patients. This emotional proximity, while a strength of rural care, can heighten stress when administrative work interferes with patient time.[25]

Along with this, administrative complexity doesn't always scale with hospital size. Under CMS's Inpatient Quality Reporting (IQR) Program, many small rural hospitals paid under the Inpatient Prospective Payment System are required to meet the same quality data submission standards as large urban academic centers—despite significant differences in capacity and administrative resources.[26] This uniform reporting model places a disproportionate strain on smaller institutions, regardless of geography. The uneven distribution of technological resources further exacerbates the burden. Larger hospitals—typically with greater financial resources and dedicated technical staff—are more likely to adopt and evaluate AI models that streamline documentation and compliance.[27] A 2024 survey found that 87% of administrators in hospitals with fewer than 50 beds reported being unable to afford new or replacement technology due to financial constraints—highlighting how smaller hospitals, both rural and urban, often lack the infrastructure, funding, and workforce to adopt solutions that could ease administrative burden, thereby deepening the digital and operational divide.[28] This suggests that institutional scale, rather than location alone, plays a critical role in determining whether a facility can effectively manage administrative demands.

Regulatory fragmentation compounds these challenges, particularly for under-resourced providers. Rural hospitals, operating with l

eaner staff and tighter margins, are disproportionately affected by the duplication of data entry required across Medicare, Medicaid, and private insurer systems. What is merely inefficient for a large health system becomes a critical vulnerability in smaller settings, where each diverted staff hour directly impacts patient care delivery. EHR mandates under the 2009 HITECH Act formally began compliance enforcement in 2024, adding new reporting pressure on providers who already face staffing and funding challenges. At the same time, evolving Medicaid policy—particularly the potential for states to take on increased responsibility for eligibility determinations and work requirements—could create additional administrative layers, compounding the burden on providers least equipped to manage it.[29]

The fragmentation of digital systems and regulatory policies in the U.S. amplifies rural workload and undermines care access. While the U.S. healthcare market is uniquely complex, global examples highlight alternative approaches to reducing administrative strain. In Denmark and New Zealand, rural clinics are integrated into national platforms with unified billing and clinical documentation.[30] Physicians there spend less than half as much time on administrative tasks compared to U.S. counterparts,[31] thanks to centralized infrastructure and streamlined compliance expectations. While these models may not translate directly to the U.S. context, they highlight the potential impact of greater coordination, interoperability, and administrative simplicity. If administrative burden continues to rise without corresponding rural support, we risk not just inefficiency—but systemic collapse in the areas least equipped to absorb it.

Data Deficit: Seeing the Problem Clearly

Most existing research aggregates hospital experiences without accounting for critical factors like size and location, making it difficult to determine whether burdens arise more from geographic remoteness or institutional scale. MedPAC, for instance, has noted that smaller facilities—regardless of location—struggle to absorb compliance costs.[32] Despite the urgency of the issue, there is a notable lack of national data or standardized metrics capturing administrative burdens in rural settings. We lack visibility into core indicators such as:

- Time rural clinicians spend on documentation and compliance
- Cost burden of EHR adoption and maintenance at low-volume sites
- Administrative staffing ratios relative to patient load
- Burnout rates attributable to regulatory complexity in rural settings
- Disparities in AI or automation adoption

Without these metrics, policymakers and system leaders must rely on anecdotes or internal audits – leaving the rural administrative burden under-quantified and under-addressed.
While some academic and workforce research centers—such as the Center for Health Workforce Studies (CHWS) at SUNY Albany and NORC at the University of Chicago—have begun exploring administrative burdens in rural care, these efforts remain fragmented and underfunded. There is a growing opportunity for industry, academic institutions, and public agencies to align around a shared research agenda—one that prioritizes actionable data on staffing, documentation time, and compliance costs. As part of this effort, stakeholders could re-examine what reporting is actually required and what current reporting could be eliminated or streamlined. . In parallel, health systems can continue to explore automated

reporting solutions that can generate compliance and quality reports directly from EHRs and other digital tools – which can significantly reduce clinician workload, standardize data collection, and improve visibility across rural sites. Health Workforce Research Centers or Area Health Education Centers could serve as valuable conveners in this space, helping to build a common evidence base that informs scalable policy and sparks private-sector innovation.

The Case for AI and Automation

Artificial Intelligence tools offer one of the most promising avenues for reducing administrative burden system-wide. AI tool usage among physicians jumped from 38% to 68% between 2023 and 2024, with documentation support leading the list of use cases.[33] 57% of physicians surveyed said that AI's greatest potential lies in reducing administrative work—not clinical diagnostics or imaging.[34] Some top-ranked tools include:

- Abridge, Nabla, Augmedix – for real-time note generation
- Nuance – Dragon Ambient eXperience – for ambient scribing
- DocuSuite – for multi-system document consolidation

In January 2025, President Trump signed Executive Order 14179, titled "Removing Barriers to American Leadership in Artificial Intelligence." This order seeks to remove restrictive policies that hinder AI development, particularly in sectors like healthcare.[35] By focusing on enhancing America's leadership in AI free from ideological bias, the order is poised to streamline the adoption of AI solutions in fields burdened by excessive administrative tasks, including healthcare. The order directs federal agencies to revise policies to foster innovation, potentially making it easier for healthcare providers, particularly those in rural areas, to adopt AI technologies that reduce the time spent on documentation and other administrative duties.

With AI tools already showing promise in reducing non-clinical workload, such as through real-time note generation and ambient scribing, the executive order further supports the move toward more efficient healthcare operations.

Yet, the same cost and staffing limitations that challenge rural hospitals also make AI adoption difficult. While federal support—through shared services, grant funding, or technical assistance—can play a role, other creative pathways are emerging Health systems could extend AI infrastructure to rural affiliates; commercial payers could offer incentives tied to administrative efficiency; and philanthropic or impact investment capital could seed regional pilots.[36] This suggests that well-aligned public-private partnerships could deliver both operational savings and improved care access.

Call to Action: Reimagining Healthcare from the Admin Layer Out

Reducing administrative burden is no longer just a regulatory challenge - it is an operational imperative. With clinician burnout at crisis levels and rural care systems increasingly strained, it's clear that change is needed. While there is no single solution, both policymakers and industry leaders -including health systems, payers, and digital health innovators - have an opportunity to explore new models and collaborate on more sustainable approaches. The administrative layer should be reengineered to restore clinical capacity, reduce cognitive load, and protect access to care. Some initial concepts to inform discussion include:

- Integrate tools to automate reporting: Many EHR systems already capture the necessary data—tools should focus on real-time report generation, ambient dictation, and workflow-integrated compliance.
- Redesign contracts that reward simplicity: Value-based care models could be designed to also reduce paperwork.
- Extend enterprise infrastructure to rural and low-resource partners: Share access to AI documentation tools, EHR platforms, and billing systems.
- Build Rural Health IT Hubs or Consortiums: Establish regional shared-services platforms offering EHR, billing, and AI-driven documentation solutions to reduce costs and modernize rural healthcare infrastructure.
- Invest in tools built for real-world workflows—not compliance checkboxes: Prioritize user-centered design and seamless integration.
- Pilot "low-burden" care models: Let clinicians experience shifts with minimized documentation—through AI support, team-based workflows, or integrated data access—and build the case for transformation from those results. CMS's Data at the Point of Care pilot offers a precedent of reducing admin tasks through seamless claims data integration.[37]
- Standardize Federal Reporting Requirements: Align Medicare, Medicaid, and private insurer documentation standards to eliminate duplicative and conflicting requirements, reducing unnecessary administrative load on providers – especially those in small or rural systems.
- Establish a National Rural Administrative Burden Data Consortium: Build a coordinated initiative through CMS, HRSA, and academic partners to systematically collect, analyze, and publish standardized data on rural administrative burden, driving evidence-based policy reform.
- Streamline State-Specific Quality Reporting: Harmonize and simplify state quality reporting systems with federal frameworks to minimize extra documentation demands on already stretched rural systems.

From Burden to Breakthrough: Industry Prompts to Redesign Healthcare Administration

Successful transformation requires creativity and leadership from every level of the healthcare system. Real change will require joint leadership from both the public and private sectors to reimagine how documentation is designed, delivered and measured. Each contributes to the current burden—and each must be part of the solution. Public mandates and private platforms often intersect in ways that compound complexity; solving this will demand alignment, not silos. For example, commercial insurers alone account for up to 30% of documentation-related workload for some practices.[38] To spark that shift, we offer the following prompts—not as prescriptive solutions, but as provocations for leaders to reconsider the assumptions, systems, and incentives that shape documentation in U.S. healthcare.

To Health Systems and Payers:

- What would it take to design a "low-burden" clinical day—where documentation is ambient, automated, or entirely offloaded?
- How can care contracts be re-engineered to reward simplicity—by tying incentives to documentation reduction?
- Where can infrastructure—EHR access, billing platforms, compliance support—be shared with rural or community-based partners right now?

To Digital Health Innovators and Vendors:

- What would it look like to build tools designed first for the bottom 20% of the market— small clinics, rural providers, community health centers?
- How can tech companies partner with payers or systems to deploy tools through shared-savings or risk-sharing models?
- Where are companies still designing for regulatory compliance rather than real clinical workflows—and what needs to shift?

To Public Sector Partners:

- How might federal and state agencies recognize, track, or reward industry-led reductions in administrative burden?
- How might CMS or HRSA facilitate rural data collection by validating tools or co-funding collaborative pilots, rather than building systems from scratch?

Reducing administrative burden is not simply about saving time—it's about protecting clinicians' cognitive bandwidth, keeping rural health systems viable, and restoring the human connection in care delivery. For the 60 million Americans who rely on rural providers, the burden of bureaucracy could soon outweigh access to care.

> **"Imagine a rural clinic where a single nurse-practitioner spends 70% of their day with patients – not portals. That future is possible, but only if we design for it now.**

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Rios PARTNERS

Deep Dive

Securing the US Pharmaceutical Supply Chain

The US pharmaceutical supply chain is fragile, with recent shortages and reliance on foreign manufacturing posing risks to public health and national security.

The U.S. pharmaceutical supply chain faces mounting pressure from rising demand, escalating costs, and heavy reliance on foreign manufacturing. In 2023, prescription drug spending surged to $449.7 Billion,[1] an 11.4% increase from 2022 and a 73.3% increase over the last decade. Projections indicate that by 2030, prescription drug expenditures could exceed $650 Billion.[2] Drug prices have consistently outpaced inflation, increasing three times faster over the last two decades.[3]

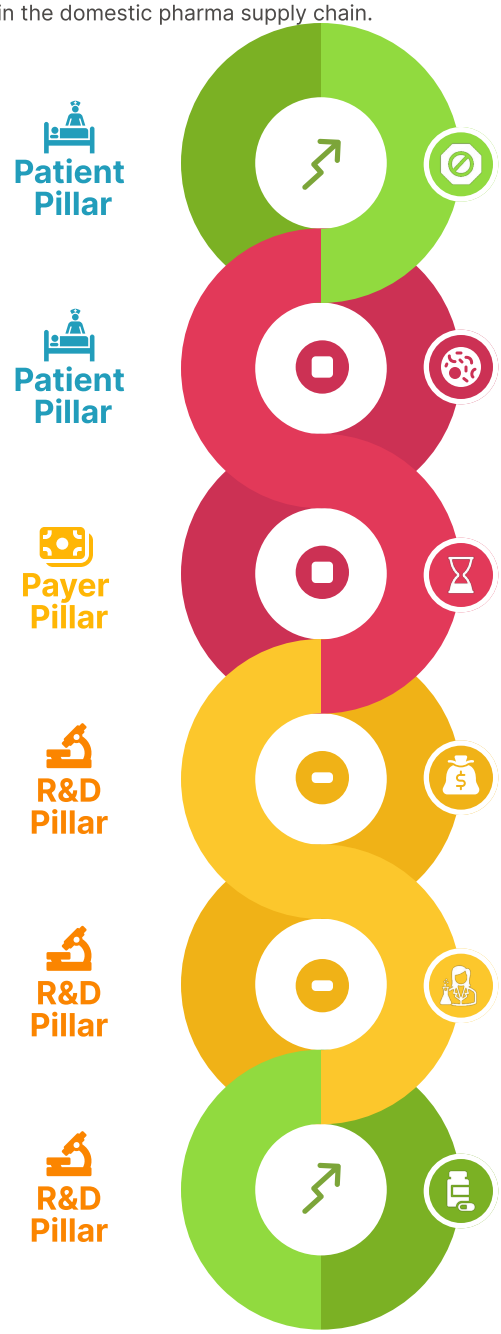
These widespread price hikes affect nearly all therapeutic categories including treatments for central nervous system disorders, cancer, respiratory conditions, infectious diseases. In 2023, 68.8% of U.S. adults used prescription drugs – up 5% from 2020.[4] Yet in 2023, 7.8% of adults reported not taking their prescribed medication due to cost – a 14% increase from the previous year.[5] As more Americans rely on prescriptions, more are also unable to afford them.

Critical to understanding the pharmaceutical market is the marked difference between the market for generic drugs and brand name drugs. While generics represent 90% of drugs sold in the US, they only make up 18% of drug costs.[6] In the last several decades, manufacturers have moved pharmaceutical manufacturing offshore in order to reduce costs. While offshoring has made generic drugs more affordable (a 2022 report found that the average co-pay for generics is $6.16, and 93% of the time the co-pay is under $20[7]), it has also created a serious security vulnerability for Americans.

The United States now depends heavily on foreign partners for these critical medications. The COVID-19 pandemic exposed how disruptions in global manufacturing and transportation can jeopardize access to essential drugs for millions of Americans. Since then, drug shortages in the United States have become increasingly frequent and severe, impacting patient outcomes and healthcare costs. In 2023 alone, the American Society of Health System Pharmacists tracked 130 new drug shortages in the U.S.[8] These shortages affect essential treatments like chemotherapy agents and antibiotics. Furthermore, our growing reliance on a single country—and geopolitical rival—China, for raw materials, active pharmaceutical ingredients (APIs), and finished drug products, threatens our ability to ensure a stable and resilient pharmaceutical supply.

How the Pharma Supply Chain Ties into Cross-Pillar Metrics

Disruptions to the pharmaceutical supply chain impact many facets of the health ecosystem across Health of Health pillars. Increased demand for drugs alongside shortages can result in rationing medication or ending up in the hospital. Innovation continues to produce new drugs but increasingly overseas, exposing vulnerabilities in the domestic pharma supply chain.



Preventable Hospitalizations

Inconsistent access to needed medication can result in hospitalizations

Chronic Disease Prevalence

Trends in chronic diseases drive demand for prescription drugs

Not Taking Medication as Prescribed Due to Cost

Patients will compensate for high prices by rationing or foregoing their medications

Domestic Pharmaceutical R&D Investment

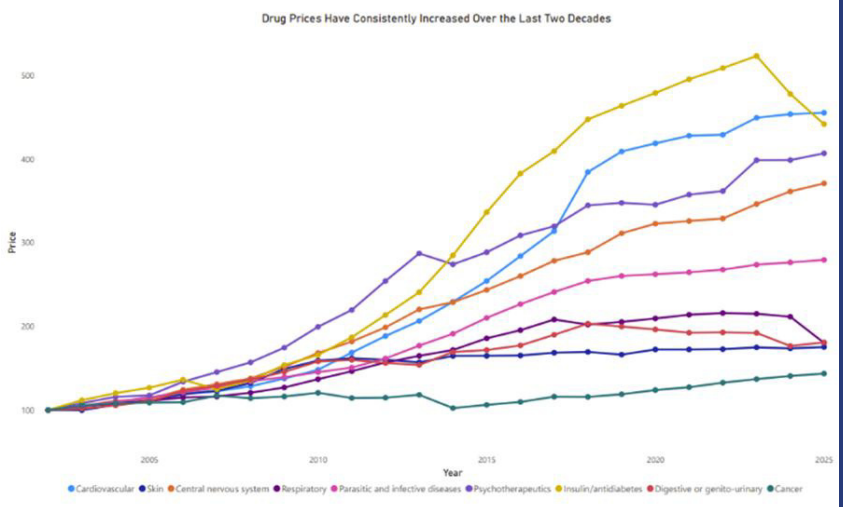
R&D pipeline location influences the manufacturing pipeline and materials supply stockpile

US Share of Clinical Trials

R&D pipeline location influences the manufacturing pipeline and materials supply stockpile

Novel FDA Drug Approvals

New drugs coming to market mean alternatives to existing drugs that might be in shortage



As the new U.S. administration considers its policies impacting the future of the US pharmaceutical supply chain, we aim to provide:

(1) Background on US drug shortages and the pharmaceutical manufacturing market

(2) Considerations for China's rise and influence in the current supply chain

(3) Prompts for industry and government to consider in its efforts to build more resilient pharmaceutical supply chains

Background

The COVID-19 pandemic, geopolitical tensions, and continued drug shortages have exposed the vulnerabilities of the pharmaceutical supply chain, which heavily depends on foreign production. There have been a number of preliminary attempts by the Trump and Biden administrations and Congress (such as Trump's Aug 2020 Executive Order on Ensuring Essential Medicines[9]; Biden's February 2021 Executive Order 14017 to secure America's Supply Chains[10]; Senate Dec 2024 introduction of S.5419 Protecting Our Essential Medicines Act in the 118th Congress[11], among others) to gain better visibility into the supply chain, bolster domestic manufacturing, and increase diversification of suppliers. Significant research and policy recommendations have been identified on this topic, including by the National Academy of Sciences in their publication "Building Resilience into the National Medical Product Supply Chains" published in 2022. Despite these efforts, the number of drugs in shortage per year and the duration of drug shortages continues to increase.[12,13]

The stories (see CNN report for one story) of individuals who were unable to be treated with chemotherapy agents, carboplatin and cisplatin, due to their shortage and lost critical time with their families is heartbreaking. A 2023 report by the American Society of Health System Pharmacists reported that 99% of surveyed pharmacists are facing drug shortages, with 32% saying that it is directly leading to rationing, delaying, or cancelling treatment.[14]

Critical to note, in addition to the patient impact, drug shortages are also driving up costs. The cost of Fludarabine - which is used in the treatment of Leukemia and is currently in shortage – increased by a staggering 2,387% between 2022 and 2023 alone, rising from a wholesale acquisition cost (WAC) of $110 to $2,736.[15]

Market dynamics in pharmaceutical manufacturing are critical to understanding the drug shortage trend. Drug shortages predominately affect generic drugs; ERG identified that ~66% of shortages affect generic drugs, while IQVIA estimates up to 84%.[16,17] While generics represent 90% of drugs sold in the US, they only make up 18% of drug costs.[18] Profit margins for generic drugs are very low, creating little incentive for manufacturers to enter the market, remain in it, or invest in improving manufacturing quality and capacity.[19] Although drug shortages can stem from various causes - such as spikes in demand or shortages of raw ingredients -

the underlying driver of persistent shortages is primarily economic-driven: limited market participation leading to fewer manufacturers and capacity and underinvestment in manufacturing quality leading to quality issues.[20] The GAO published this past month, April 2025, in its report, "HHS Should Implement a Mechanism to Coordinate its Activities," that the three root causes to drug shortages are:

- Lack of incentives to produce less profitable drugs
- Lack of recognition and reward for manufacturers with robust quality management (often manufacturers underinvest in quality oversight and control, leading to quality problems)
- Logistical complexities of the global supply chain and significant regulatory requirements[21]

The Global Pharmaceutical Supply Chain

Since the early 2000s, pharmaceutical manufacturers have increasingly offshored production of both Active Pharmaceutical Ingredients (APIs) and Finished Drug Products (FDPs) to countries like India and China, drawn by lower labor costs, looser environmental regulations, and a lack of strong incentives to build domestic capacity.

APIs form the backbone of pharmaceutical manufacturing, and their global supply has shifted dramatically over the past two decades. From 2000 to 2021, India's share of FDA Drug Master Files (documentation on API manufacturing) rose from 19% of to 62%, though it has since declined to about 50% as China's share has markedly increased.[22] While India continues to be the largest share of total active API DMFs, India is highly reliant on China for the raw materials and Key Starting Materials (KSMs) used to make the APIs; India also imports a significant amount of APIs from China.[23,24] Ramping up production of active pharmaceutical ingredients (APIs) and bulk intermediates and establishing themselves as essential links in global drug supply chains was a strategic move of the Chinese. Now, China is producing not only the critical APIs for generics, but has expanded API production for more complex APIs, supporting their broader investment in more advanced drug manufacturing.

China's Strategic Positioning

China's rise in pharmaceutical manufacturing is not incidental—it's the result of its deliberate industrial strategy, most notably through its "Made in China 2025" (MIC 2025) initiative. Launched in 2015, MIC 2025 aimed to transform China from a low-cost manufacturing hub into a global leader in high-tech industries, including biotechnology and pharmaceuticals.[25] The government has invested significant capital through government subsidies; developed industrial regional clusters; and organized intellectual property acquisition. Shanghai's Zhanjiang Science City has become a center for China's biopharmaceutical rise, serving as a home for hundreds of biomedicines and R&D companies.[26] These investments position China not only to dominate manufacturing of generic pharmaceuticals and the supply of drug substances, but also to emerge as a source of innovation and developer for new drugs.[27]

There are growing reports of China's significant advancements in manufacturing, particularly in its adoption of robotics, AI and other technologies. The so-called "dark factories"- highly automated facilities that require little to no human labor – demonstrate China's manufacturing evolution and global dominance and expertise.[28] While automation in pharmaceutical manufacturing is still in its infancy, there's broad consensus that advanced manufacturing technologies are critical for modernizing production and improving efficiency. Accordingly, the FDA has launched initiatives like the Emerging Technology Program to encourage development and adoption of advanced

manufacturing technologies like continuous manufacturing and 3D Printing.[29] Without a strong U.S. domestic base of advanced manufacturing capabilities, high labor costs and stringent regulatory requirements will continue to undermine efforts to reshore pharmaceutical production. Accordingly, building and deploying these new technologies at scale are critical for the U.S. and its allies to compete with China's cost and scale advantages.

Call to Action

After several years of widespread recognition of pharmaceutical supply chain vulnerabilities, the U.S. is now at a critical inflection point. As the U.S. reconsiders its reliance on foreign manufacturing, we call on both industry and government to coordinate a long-term strategy that combines smart industrial policy, innovation investment, and global partnerships. Only through decisive leadership and action can the U.S. protect its healthcare infrastructure and reassert control over this critical piece of its national security. Robust policy recommendations already exist across the healthcare ecosystem. We highlight several critical priorities requiring coordinated leadership:

- Collaborate with Trusted Allies: The U.S. should collaborate with trusted allies like EU, Mexico, Japan, and India to build a more resilient, diversified pharmaceutical supply chain. These countries offer lower cost or advanced manufacturing capabilities and can act as alternatives to China. The Biopharma coalition initiated in 2024 is a foundation to expand upon. As the U.S. explores policies to strengthen domestic production, it is important to consider trade measures that may also support these key alliances.

In order to appropriately incentivize new entrants and alternative suppliers, industry players must work together to consolidate demand. There is a critical opportunity for GPOs, drug wholesalers, and large health systems to coordinate purchasing strategies that shift the supply chain strategically and sustainably away from China.

- Reshore Critical API and Drug Production: To reduce dependency on foreign suppliers and strengthen supply chain resilience, the U.S. should reshore key elements of pharmaceutical manufacturing, including certain Active Pharmaceutical Ingredients (APIs) and generics. This requires investment in modern manufacturing capabilities and government support given the unfavorable market economics of generic and API production. Securing long-term purchase commitments from institutional buyers like the VA and DOD could de-risk investment by guaranteeing demand for domestically produced critical drugs.
- Invest in Smart, Innovative Manufacturing: The U.S. must actively invest in more automated manufacturing and quality control technologies to remain competitive. Amazon Web Services highlights a variety of innovative tools to use in pharmaceutical manufacturing that improve efficiency and quality: "predictive maintenance of equipment to prevent unexpected downtime, AI-enabled digital twins for real-time process monitoring and optimization, and AI agents to orchestrate simulations and manual tasks."[30]

Establishing advanced manufacturing capabilities will require strategic knowledge acquisition, partnerships, and technology development. As China strategically used joint ventures to bring IP to the country, the US must similarly be aggressive in innovation acquisition.[31] The Novartis-MIT Center for Continuous Manufacturing piloted the Integrated Continuous Manufacturing (ICM) platform and produced tablets in a 2-day lead time (usually requiring 200 days); this reflects one example model partnership.[32] Additionally, public-private partnerships (PPPs) offer an effective mechanism to accelerate innovation, combining government support with private sector execution. The new administration can model from their previous success of launching BioMADE, the PPP launched in 2020 with an initial $87M award from the DoD. BioMADE has continued to grow and is working to accelerate Bioindustrial manufacturing through investments in innovative projects and new facilities.

- Enhance Regulatory Agility: The FDA must be equipped with faster, more agile regulatory tools to assess new manufacturing technologies, rapidly evaluate product quality and safety, and accelerate the approval of domestic production facilities — without compromising patient safety. A modernized regulatory infrastructure is essential to match the speed of reshoring and innovation efforts.
- Improve Supply Chain Transparency: The U.S. must prioritize end-to-end transparency in the pharmaceutical supply chain by establishing real-time monitoring systems and requiring more detailed reporting of sourcing / manufacturing locations. Regulators and manufacturers should collaborate to create standardized, interoperable data-sharing frameworks that enable proactive risk management.

For Discussion

Strengthening America's pharmaceutical supply chain is not simply a government responsibility or a market inevitability — it requires leadership and coordination across the entire ecosystem. To further this critical conversation, please consider the following prompts:

- How should we define and protect "pharmaceutical sovereignty"?

- How might we aggregate demand to encourage domestic or ally manufacturers to enter the market to reduce collective dependence on China?

- What should we learn and emulate from China's playbook in industrial strategy and innovation development?

- How might we accelerate the development and deployment of smart manufacturing?

Endnotes

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Deep Dive

Medicare and Medicaid Expenditures

The Center for Medicare & Medicaid Services (CMS) is the single largest payer of health care services in the United States, with over 68 million enrollees in Medicare and over 78 million in Medicaid as of early 2025. Trends in health expenditures by these public payers indicate both culture- and market-driven shifts in how individuals manage their health. Growth in prescription drug and medical equipment spending headline recent spending trends.

The last half-decade has seen huge changes in the provision of healthcare to Americans. Recent developments in the public healthcare landscape from the COVID-19 pandemic, the implementation of new regulations, such as provisions from the Inflation Reduction Act, and societal shifts in the healthcare delivery model toward telehealth and in-home care have all influenced where and how we pay for healthcare.

While Rios Partners' annual Health of Health report provides a holistic evaluation of the state of US healthcare through the four pillars – Patient, Provider, Payer, and R&D – this brief highlights trends in Medicare and Medicaid spending that deliver cross-cutting insights into healthcare delivery and consumption.

Medicare and Medicaid health expenditures accounted for about 6.9% of the United States GDP in 2023. The sheer size of these programs translates to market power. According to the American Hospital Association, 96% of US hospitals rely on Medicare and Medicaid to pay for over 50% of their total inpatient days.[1] A financial analysis of the largest seven US health insurers found that three of them (Humana, Centene, and Molina) receive over 85% of their plan revenues from government programs.[2] With this reliance on government healthcare funding, the healthcare industry is incentivized to build their business models to support Medicare and Medicaid services.

> **96% of US hospitals rely on Medicare and Medicaid to pay for the majority of their inpatient days.**

Deep Dive
Medicare and Medicaid Expenditures

Table 1. **Medicare and Medicaid 2023 Health Expenditures of Select Types with Percent Change since 2022[3]**

Expenditure Type	Medicare (% change)	Medicaid (% change)
2023 Overall	$1.03 trillion (4.6%)	$871.7 billion (4.5%)
Hospital Care	$379 billion (2.6%)	$283.1 billion (4.1%)
Professional Services	$311.4 billion (7%)	$151.1 billion (6%)
Home Health Care	$51.8 billion (4%)	$51.2 billion (4.3%)
Prescription Drugs	$144.6 billion (8.5%)	$51 billion (8%)
Durable Medical Equipment	$15.9 billion (14%)	$51 billion (1.6%)
Other Non-Durable Medical Products	$4.7 billion (26.3%)	N/A

In 2023, Medicare eclipsed the $1 trillion mark in health spending with a year-to-year growth rate of 4.6% after adjusting for inflation. Medicaid spending also grew over 4% in 2023 to $871.7 billion. This growth was concentrated in few categories, two of which we highlight in this deep dive.

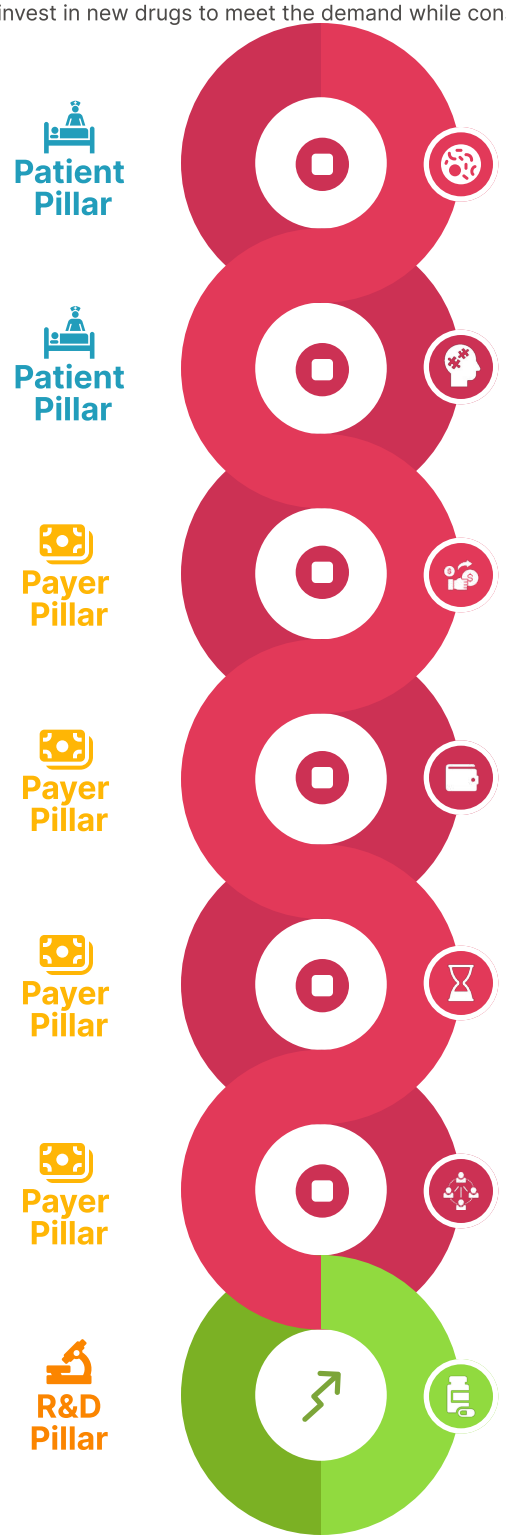
As the new U.S. government issues executive orders to control drug prices and spark digital innovation to connect patients to healthcare in their homes, this brief aims to identify Medicare and Medicaid spending trends, important policy context, and directional recommendations to respond to observed trends in the following areas:

Prescription drugs: Market incentives to raise drug prices and structural changes to Medicare and Medicaid have resulted in over 8% spending growth, twice the rate of overall expenditures.

Medical equipment: An aging US population is managing more chronic conditions that require home-based medical aids, driving up demand for medical equipment as Medicare has expanded coverage that has caused 16.6% combined growth in durable and non-durable medical product spending.

How Prescription Drug Spending Ties into Cross-Pillar Metrics

Pricing for prescription drugs includes a constellation of Health of Health pillar metrics. Individuals have a greater need for medication as chronic disease and mental illness rates continue to rise. Greater demand drives up prices, increasing spending and making it difficult for some to afford their treatment. Companies continue to invest in new drugs to meet the demand while consolidating operations to minimize costs.



Chronic Disease Prevalence

Chronic disease patients often take prescription drugs to help them manage conditions

Rates of Mental Illness

Mental illness management often includes a prescription drug component

Healthcare Expenditures

Insurance plans are spending more on prescription drug coverage

Out-of-Pocket Expenses

Patients are paying more for their healthcare, including for their drugs

Not Taking Medication as Prescribed Due to Costs

Patients will compensate for high prices by rationing or foregoing their medications

Market Concentration of Insurance Companies

Low competition means more ability to set prices of prescription drugs

Novel FDA Drug Approvals

New drugs on the market aren't subject to public payer price negotiations

Prescription Drug Prices in the US

Americans pay more for prescriptions drugs than any of their peers. In 2022, the US paid almost three times as much for prescription drugs as the Organization for Economic Co-operation and Development (OECD) comparison countries.[4] This gap is growing, with per unit prices on the top 50 drugs jumping from 5.7 times as much as OECD countries in 2017 to 9.1 times as much in 2022. Prescription drug costs are a top health concern for the American public. 92% of Americans believe it's important for the new administration to expand drug price negotiations, according to a recent KFF survey.[5] The Payer pillar highlighted a 2.8% increase in out-of-pocket expenses as well as a 14.7% increase in the number of US adults who are rationing medication due to costs.

Two recent Executive Orders on April 15, 2025 and May 12, 2025 asked Centers for Medicare & Medicaid Services (CMS) officials to evaluate drug pricing for Medicare and Medicaid beneficiaries and inefficiencies in the pharmaceutical supply chain with the goal of reducing drug costs for Americans.[6,7] Efforts to reign in drug pricing aren't new. Congress, in conjunction with CMS, has been trying to control government prescription drug spending for decades. The Medicaid Drug Rebate Program (MDRP), adopted in 1990, requires drug manufacturers to pay the government back part of the cost of outpatient drugs in exchange for their drugs' coverage under Medicaid.[8] Last year, Section 9816 of the American Rescue Plan Act removed the rebate cap on covered drugs to control what the government pays for brand name drugs whose rebates had already reached 100% of the average manufacturer price.[9] In addition to incremental changes to the MDRP, the Inflation Reduction Act (IRA) provided Medicare with the ability to directly negotiate drug prices. Also last year, CMS negotiated Maximum Fair Prices (MFPs) for 10 Medicare Part D drugs and estimated that 2023 Medicare spending on these drugs would have decreased by $6 billion had the MFPs been in effect.[10]

By the Numbers: Prescription Drugs

According to the latest National Health Expenditure (NHE) data from CMS, Medicare spent $144.6 billion on prescription drugs in 2023, representing

Table 2. **Prescription Drug Spending Changes by Source[11]**

Spending Source	Medicare	Medicaid	Private
2023 Overall	$1.03 trillion	$871.7 billion	$1.46 trillion
Change since 2022	4.6%	4.5%	7.9%
Change since 2019	7.2%	18.7%	6.4%
2023 Prescription Drugs	$144.6 billion	$51 billion	$175.5 billion
Change since 2022	8.5%	8%	10.1%
Change since 2019	**15.8%**	**34.8%**	6.5%

14% of total Medicare spending while Medicaid spent $51 billion on prescription drugs in 2023, about a 6% share of its total spending. Public payer spending on prescription drugs has grown rapidly over the last 5 years: Medicare and Medicaid expenditures on prescription drugs grew twice as fast as overall spending from 2019 to 2023. In contrast, during the same period, private insurance prescription drug expenditures grew at the same rate as overall spending. This indicates meaningful differences between private and public payer policies on prescription drugs.

Drug Price Drivers

Market structures have incentivized private drug manufacturers, wholesalers, and pharmacies to raise drug prices. A November 2024 HHS report to Congress highlighted increased manufacturer list drug prices for over 4,200 products in 2022, 46% of which outpaced inflation.[12] Over the last 40 years, the prices producers charge for pharmaceuticals have increased at three times the rate of inflation, with life-saving cardiovascular drugs in 2023 costing 450% of what they cost in 2002.[13]

The profits from these transactions are distributed across stakeholders. A 2025 study of provider-administered drugs found that 74% of the net spending retained from drug spending was captured by manufacturers, with providers capturing the majority of the remaining retention (22%).[14]

Health insurance plans often institute rebate agreements to claim some of the profits in the pharmaceutical supply chain in exchange for drug coverage on their formularies. This figure from a 2024 GAO report shows how funds flow to get plan members the drugs they are prescribed.[15]

Pharmacy benefit managers (PBMs) sit at the center of the market as price negotiators working on behalf of plan sponsors and collecting partial payments and rebates from manufacturers, pharmacies, and the health plan.

Figure 1. **Flow of Funds and Prescription Drugs through the Supply Chain to a Health Plan Member[16]**

Pharmacy Benefit Manager Incentives

PBMs have attracted a lot of recent attention for their role in the pricing of and access to drugs for Americans. A healthcare innovation of the 1960's, PBMs were established to regulate the expansion of prescription insurance coverage by designing drug formularies and negotiating prices of drugs with manufacturers, wholesalers, and pharmacies on behalf of insurance plan sponsors.[17] What was originally a cost savings role has warped into an oft-cited cause of drug price inflation. In their November 2024 report to Congress, HHS detailed market incentives for PBMs to drive prescription drug prices higher.[18] Two recent interim reports from the Federal Trade Commission (FTC) focused on the impact of vertical integration of PBMS in the prescription drug supply chain on drug prices.[19,20]

PBMs make money through their negotiations with drug manufacturers, health insurers, and pharmacies.[21] Many of these agreements result in rebate sharing, where an amount from drug sales are returned to PBMs in exchange for their services. These rebates are often structured as percentages of list prices, which means that the higher the list price, the higher the rebate. In fact, for every $1 increase in drug manufacturer rebates, drug list prices increase by $1.17.[22] Since PBMs determine the drug formulary structure for insurance plans, they have clear financial incentives to favor placement of higher priced drugs over cheaper alternatives. A GAO report in 2023 found PBMs received higher rebates for placing manufacturer drugs in lower formulary tiers with fewer competitors, demonstrating the mutual financial benefit of drug coverage negotiations for manufacturers and PBMs.[23]

Another driver of higher drug prices by PBMs comes from the practice of spread pricing, where prices charged to health plans are greater than the reimbursement sent to the pharmacy. The spread of these prices becomes profit for PBMs. An evaluation of Part D high-utilization generic drugs found 40% of average claim spending went to PBM gross profits.[24] CMS is aware of this practice and has required Medicaid and CHIP PBM subcontractors to report spread pricing so they can reduce rebate payments by an equivalent amount.[25] As of January 2025, 16 states have prohibited spread pricing, indicating increased awareness of the impacts on Medicaid spending.[26] Although no federal ban on spread pricing exists, the bi-partisan sponsored "Protecting Pharmacies in Medicaid Act" introduced in March 2025 by Senator Peter Welch includes a section prohibiting spread pricing to ensure drug payments are passed through to pharmacies.[27]

> **"For every $1 increase in drug manufacturer rebates, drug list prices increase by $1.17.**

Vertical Integration and Consolidation in the Pharmacy Supply Chain

Through various mergers and consolidations, three PBMs (Caremark Rx, Express Scripts, and Optum Rx) now manage about 80 percent of all prescriptions filled, granting them significant market power to manipulate prices to maximize profits.[28] These large PBMs are vertically integrated with insurance plans (Aetna with CVS Caremark, Cigna with Express Scripts, and United Healthcare with Optum Rx), which grants insurers more control over drug formularies while streamlining prescription drug benefit management.[29] Since Medicare and Medicaid subcontract out to PBMs and partner with private insurers to offer

coverage, they cannot take advantage of the administrative benefits of managing all aspects of prescription drug coverage under one roof. While fully integrated healthcare companies absorb the administrative costs since they would be "paying themselves," Medicare and Medicaid are changed administrative fees for each processed claim, further raising prices for public payers.

> **3 PBMs manage about 80% of all prescriptions filled.**

While vertical integration increases business efficiency, it also creates structures that limit drug patient options. Insurers and PBMs are owned by healthcare companies that operate specialty and retail pharmacies. As part of negotiations, PBMs often create preferred pharmacy networks that offer patients lower out-of-pocket costs and increased access to drugs when filling at in-network pharmacies. For specialty drugs, some formularies require patients to fill prescriptions at PBM-affiliated pharmacies and, in some cases, require providers administering medications in a clinical setting to order medications through their affiliated pharmacies. This lowers consumer prices of drugs and increases their access to their prescribed medications at preferred locations at the expense of flexibility. Independent or other out-of-network pharmacies are often left out of the loop, not carrying the right medication or offering it at a higher price point.[30] This market structure creates downward pressure on reimbursement rates for out-of-network pharmacies to a level that can become unsustainable for smaller, independent pharmacies, effectively eliminating rival pharmacies and patient choice with it.

This level of market coordination has drawn significant scrutiny from government regulators. On November 26, 2024, the FTC filed a suit against PBMs for engaging in harmful artificial price inflation of insulin.[31] A stay order due to FTC vacancies has halted administrative adjudication on this matter, but other offices have moved forward with independent suits. Most recently, the Michigan Department of Attorney General filed a suit against PBMs for engaging in anti-competitive practices that allegedly created pharmacy deserts across the state of Michigan.[32] These suits aim to limit the market power of integrated pharmaceutical distribution, which is critical for controlling spending by public plans who cannot integrate.

Pharmacy Supply Chain Disruptions

Increases in demand for certain drugs, such as diabetes and obesity treatments, along with changes to complex international pharmaceutical supply chains, have put upward pressure on drug prices. See the Health of Health 2024 **Securing the US Pharmaceutical Supply Chain topic deep dive** for more information.

Program Changes Contributing to Spending

While pharmacy market structures play a major role in increasing the prices of prescription drugs, structural changes to Medicare and Medicaid have influenced spending as well. Insulin spending caps for Medicare Part D beneficiaries and continuous Medicaid enrollment during the pandemic contributed to recent spending.

Absorbing Higher Prices Through Updated Medicare Benefits

While most prescription drug provisions in the IRA aren't reflected in expenditure data yet, insulin caps contributed to Medicare 2023 spending.

The IRA includes multiple provisions focused on lowering prescription drug costs for Medicare beneficiaries.[33] In 2023, the most recent year of NHE data, Medicare capped out-of-pocket spending for insulin at $35 per month. In 2024, 5% coinsurance was eliminated from Medicare catastrophic coverage. 2025 is the first year with a $2,000 annual out-of-pocket spending cap on covered prescription drugs for Medicare Part D beneficiaries. These changes are expected to drive prescription spending growth for Medicare as it foots the bill for beneficiaries with the highest level of medical needs.[34] Looking toward the future, Medicare's drug price negotiations coming into 2026 and beyond will likely result in decreased revenue from drug manufacturer rebates, although the savings from lowered list prices are expected to save Medicare billions of dollars.

Enrolling More Americans in Health Insurance

In response to the COVID-19 pandemic, the Families First Coronavirus Response Act (FFCRA) mandated that state Medicaid agencies had to maintain continuous Medicaid and CHIP enrollment from March 2020 to qualify for temporary Federal Medical Assistance Percentage (FMAP) increases.[35] This resulted in large increases in Medicaid enrollment through the delinking of FMAP from continuous enrollment in April 2023. However, even with increased enrollment, drug spending per Medicaid enrollee increased by 7.3% from 2019 to 2023, as shown in Table 2 below. This indicates that external market conditions were responsible for Medicaid spending growth.

> **Medicaid drug spending per enrollee grew 7.3% from 2019 to 2023.**

Table 2. **Medicaid Prescription Drug Spending per Enrollee[36,37,38]**

Year	Medicaid Total Enrollment	Prescription Drug Expenditures	Drug Expenditures per Enrollee
2019	74.6 million	$37.8 billion	$507
2023	93.8 million	$51 billion	$544
% Change	25.7%	34.8%	**7.3%**

The Path Forward

President Trump's April 15 Executive Order aimed at lowering drug prices and multiple active legal battles between the government and pharmacy benefit managers clearly indicate that now is the time to capitalize on momentum to address problems in the prescription drug industry. Many industry experts have written recommendations on how to rein in prescription drug costs. We list several priority recommendations:

Codify patient and pharmacy protections and price transparency: Bi-partisan Senate Bill 927 "Protecting Pharmacies in Medicaid Act" aims to level the negotiating playing field across all 50 states by eliminating spread pricing and requiring all participant pharmacies to submit National Average Drug Acquisition Cost surveys.

Improve the Drug Price Negotiations Program: Responding to Executive Order 14273, modifications to the current Medicare Drug Price Negotiation Program should not delay lower prices for life-saving medications. Reducing the biologics exemption grace period to 9 years will bring it in line with small molecule drugs and eliminate the "pill penalty." Furthermore, the negotiated Maximum Fair Prices from negotiations currently only apply to Medicare Part D. This means beneficiaries enrolled in Medicare Advantage (Part C) plans that include prescription drug coverage or in state Medicaid will not see the benefits of these drug negotiations. Expanding price negotiations to Medicare Part C and Medicaid can help the government to rein in prescription drug costs while maintaining robust prescription drug coverage through existing MDRP agreements.

Expand standards on formulary design to steer access to lower cost prescription drugs: The most recent proposed rule for CY 2026 included a formulary design requirement with "broad access" to generics and biosimilars for Part D coverage.[39] Expanding formulary design and tying rules to Part C and state Medicaid program funding will increase the number of Americans whose drug benefits will be improved by such rules.

Reform PBM rebate and pricing models: The strong linkage between manufacturer rebates and drug list prices creates market incentives to increase the price of prescription drugs. Renegotiating rebates with drug manufacturers as service fees that reflect the value of the services PBMs provide will sever the tie between rebates and the price of the drug the manufacturer produces. There is also a lack of transparency in PBM claim value calculations. Publishing PBM calculation methodology for prescription drug claim value to increase market price predictability and improve business transparency.

For Discussion

All stakeholders in the prescription drug market play a role in making life-saving medications accessible to and affordable for Americans who need them. The prompts below aim to motivate action:

To Federal Health Leaders:

- How might we…best ensure financial sustainability of Medicare and Medicaid while improving American access to affordable medications?
- How might we… transform pharmacy incentives and the "any willing pharmacy" network so that smaller independent pharmacies can remain competitive and grant additional access in prescription deserts?

To Industry Leaders:

- How might we…encourage the renegotiate of contracts with PBMs to maximize consumer utilization of life-saving drugs?
- How might we…encourage strategic PBM contracts with independent pharmacies and small manufacturers to provide plan sponsors with the most diverse options for medications possible?
- How might we…further innovate in prescription drug service delivery to reach patients in prescription deserts?

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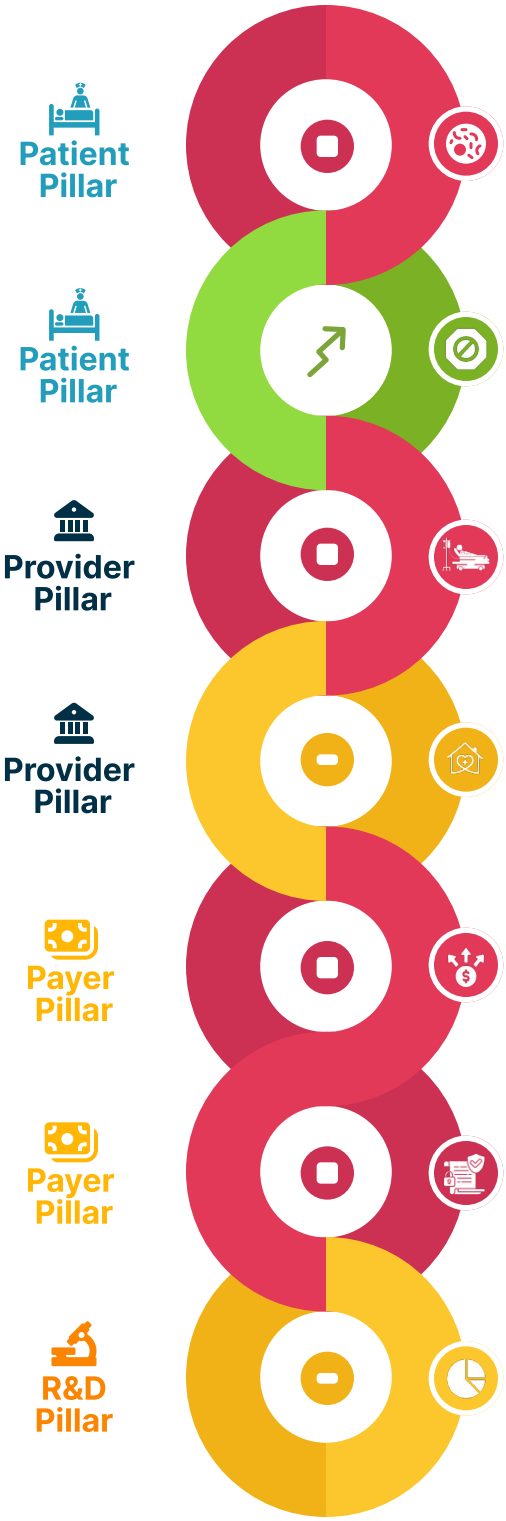
How Medical Equipment Spending Ties into Cross-Pillar Metrics

Changes in the medical equipment market involve all Health of Health pillars. More patients with chronic conditions are seeking ways to manage their health at home to prevent unnecessary trips to the hospital, driving both innovation and spending on durable medical equipment to meet patient needs.



Chronic Disease Prevalence

Durable medical equipment is often prescribed to help patients manage chronic conditions

Preventable Hospitalizations

Proper access and use of medical equipment outside of clinical settings helps manage conditions and prevent readmissions

Number of Hospital Beds

Durable medical equipment is for use in the home

Home Health Care Utilization

Durable medical equipment is for use in the home

Medicare Expenditures

Age 65 and over patients are more likely to manage chronic conditions that sometimes require medical equipment

Claim Coverage

Coverage of medical equipment plays a role in cost and use

NIH Spending by Topic

Digital innovation is growing the medical equipment industry

Innovations in Medical Equipment

Durable medical equipment (DME) goes well beyond wheelchairs and walkers. Medicare defines DME as equipment used in the beneficiary's home used to treat a medical illness or condition.[1] As medical technology has improved, devices that were only available in hospitals have become more and more common at home: intravenous medications can be delivered in the comfort of a patient's own bed and respiratory aids can be conveniently carried around by the patient as they go about their day, granting additional flexibility and freedom.

During the COVID-19 pandemic, many Medicare beneficiaries were prescribed ventilators to help them recover from the long-term respiratory issues associated with COVID-19. This resulted in a supply shortage that was covered by the news cycle throughout 2020.[2] Confronted with the reality of social distancing to prevent the spread of COVID-19, companies explored ways to help providers manage their patients' COPD symptoms while in isolation.[3] This remote pulse-oximetry monitoring equipment yielded promising results, pushing innovation in the industry to offer a broader range of convenient, wearable, and remotely monitorable devices in the coming years that report health data built for a digital age.[4]

By the Numbers: Medical Equipment

Medicare spending growth in medical equipment far outpaced Medicaid. From 2019 to 2023, Medicare spending on DME grew at five times the rate of Medicare overall spending. Spending on non-durable medical products, such as syringes, needles, wound dressings, and infusion/ transfusion sets, grew even faster at nine times the overall Medicare rate. Medicaid, on the other hand, saw growth rates in DME spending at one-third the rate of overall Medicaid growth.

This is not surprising—Medicare beneficiaries are age 65 and over, a demographic associated with chronic health conditions and mobility problems that require daily management. A report published by the CDC found that, in 2023, 93% of adults age 65 and over had at least one chronic condition and 78.8% had multiple chronic conditions, compared to 59.5% and 27.1% of adults age 18 to 34, respectively.[5] Muscle strength declines with age, which affects the performance of every day activities in older adults.[6] The intersection of decreased mobility and increased chronic conditions (some of which affects mobility) create an increased need for durable medical equipment to aid in daily living.

While Medicare normally doesn't cover common medical supplies like wound dressings, over-the-counter medical products for use at home while receiving home services, such as IV infusion, are covered.[7] This means non-durable medical products growth in Medicare points to a growing at-home health care market.

> **Medicare durable medical equipment spending grew at five times the rate of overall Medicare spending.**

Table 2. **Durable and Non-Durable Medical Equipment 2023 Spending Changes by Source[8]**

Expenditure Type	Medicare	Medicaid
Overall	$1.03 trillion	$871.7 billion
Change since 2022/2019	4.6% / 7.2%	4.5% / 18.7%
Durable Medical Equipment	$15.9 billion	$51 billion
Change since 2022/2019	**14% / 38.8%**	1.6% / 5%
Other Non-Durable Medical Products	$4.7 billion	N/A
Change since 2022/2019	**26.3% / 64.1%**	- / -
Home Health Care	$51.8 billion	$51.2 billion
Change since 2022/2019	4% / **0.2%**	4.3% / 15.6%

In-home services are broad in scope: the North American Industry Classification System (NAICS) code for Home Health Care Services (6216) includes medications and medical equipment/supplies in addition to the therapy, counseling, and nursing care associated with health professionals visiting patients at their homes to deliver care.[9] Why, then, did Medicare Home Health Care expenditures only grow by 0.2% from 2019 to 2023? The answer lies in the way NHE defines its categories. NHE Home Health Care data excludes all services and medical equipment purchases not billed through freestanding home health agencies, which means it misses all billing from hospitals and clinics for care delivered at patients' homes.[10] Since Medicare DME and non-durable medical product spending is directly tied to home health care, these categories tell a more representative story about home health care trends than the Home Health Care category itself.

The Growing Market for In-Home Medical Equipment

The durable medical equipment (DME) market is expected to expand, with 5-year compound annual growth rates estimated at over 5%.[11] This market growth is predicated on the rising geriatric population in the US, which has grown by 53.6% from 2010 (38.6 million) to 2023 (59.3 million).[12] Although the prevalence of chronic conditions in older Americans hasn't changed in the last decade, as the proportion of older Americans in the population increases, the need for DME will grow. For example, two of the chronic conditions Americans age 65 and over manage that require DME are arthritis (51.3% of population) and diabetes (23.5% of the population).[13] For arthritis, the kind of DME needed depends on the type and severity of the condition . Examples of DME for arthritis that are covered by Medicare

include canes and walkers, braces and splints, and orthopedic supports, all of which aim to increase mobility and reduce strain on joints. In the case of diabetes, continuous glucose monitors (CGMs) provide live readings to inform users of their blood sugar to effectively deliver insulin and manage their symptoms.

Advancements in Durable Medical Equipment Technology

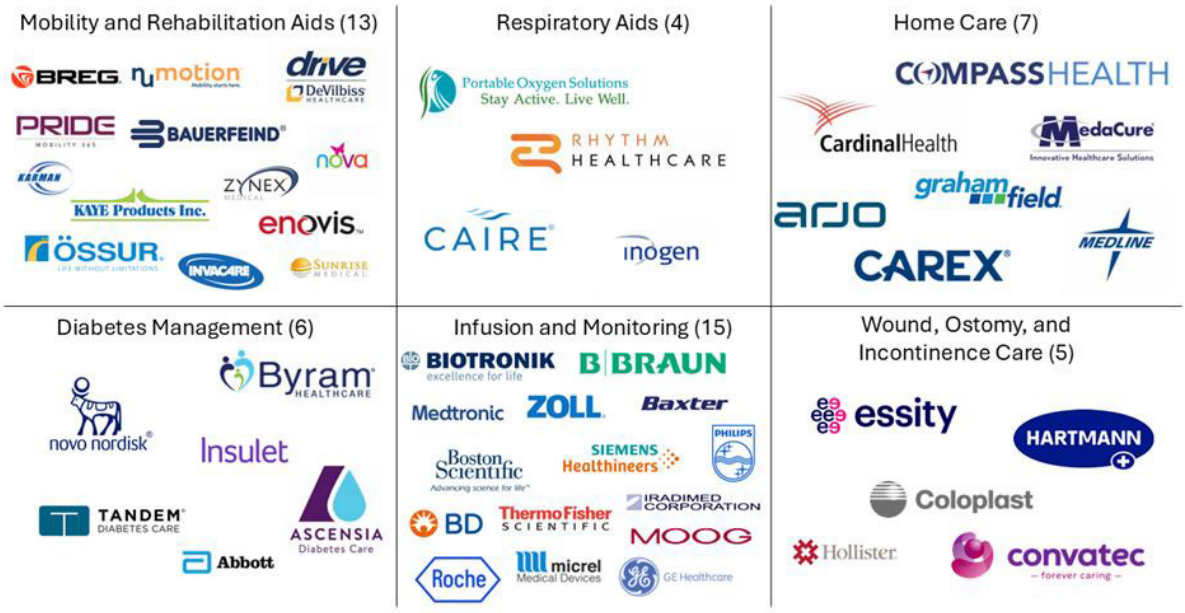
Not only are there more Americans who need DME solutions for daily living, there are new kinds of at-home medical devices created every year. While fitness tracking devices like the seminal Fitbit weren't designed primarily for the health system, they spurred innovations in wearable technology. Emergency response devices like the telephone-connected Life Alert button are now wristwatch-like devices like the Silvertree Reach, which connects wearers to family members and care providers via an app while tracking the wearer's location and detects their falls.

These devices can be tailored to enable remote monitoring of specific conditions. Biotech companies like Medtronic and Boston Scientific have created platforms that share patient health data with providers and send alerts when connected devices like glucose monitors and pacemakers detect signs of impending health events.[14]

The connected healthcare devices market is experiencing incredible growth right now, with an estimate 17.5% compound annual growth rate through 2032.[15] The figure below displays just a fraction of the innovators in the DME market.

Remote patient monitoring (RPM) offers Medicare a huge opportunity to extend preventative care and chronic condition management beyond the walls of healthcare centers and help beneficiaries stay healthier for longer. A literature review of wearable devices' role in patient monitoring found them effective at cardiac and neurological rehabilitation outcomes and improved

Figure 1. **Top 50 DME Companies in the US Market by Primary Equipment Type**



self-management of respiratory conditions like asthma and chronic obstructive pulmonary disease, among others.[16] Improved rehabilitation and self-management means fewer in-patient stays and emergency room visits, which hold large potential savings for Medicare, which covers 100% of in-patient costs for 60 days after the plan's deductible is met.[17]

While Medicare coverage of these new digital DME hasn't caught up to the innovation in the field, it has begun to expand. A CMS final rule in 2021 expanded the DME covered by Medicare to include CGMs, providing beneficiaries with diabetes more responsive options for managing their condition.[18] Expanding coverage to additional RPM devices will help support beneficiaries with other chronic conditions while helping Medicare realize acute care and inpatient hospital care savings.

Growing Home Health Care Solutions

Regular monitoring and therapy is necessary to help patients recover in post-acute care and manage chronic conditions. Patients are increasingly preferring to receive this care in their home, with a majority (56%) of Americans believing they would recover faster at home than in the hospital.[19] The desire for home healthcare is worth paying for according to Americans, who are willing to pay over 58 additional dollars per day to receive rehabilitative care at home instead of at nursing facilities.[20]

The market is responding to these changing preferences. From 2019 to 2024, home health care services employment grew by 14.5%.[21] In the same period, nursing and residential care facilities employment shrunk (-5.9%), demonstrating a shift in where Americans are receiving health care. COVID-19 influenced the trend toward at-home care options, with many providers expanding their telehealth and home health services infrastructure to interact with patients outside of hospital settings during lockdown. The pandemic also triggered a shift in Medicare-covered at-home treatment when they launched the Acute Hospital Care at Home (AHCAH) initiative. The AHCAH allowed some hospitals to safely deliver in-patient services at home through the end of 2024.

A CMS study of the AHCAH found that in-home acute care could be delivered at the same level of quality as in hospitals and at a lower cost, all while creating a more positive patient experience.[22] This study suggests brick-and-mortar acute care centers do not have to be the default for delivering in-patient services.

Home Health Care as a Solution for Older Rural Americans

Geriatric population growth isn't distributed equally throughout the US. The number of nonmetro counties considered "older age" (at least 20% of the population age 65 and over) grew by a whopping 194% from 2010 to 2023, with the working age (15- to 64-year-old) population in nonmetro counties decreased by about 2 million in the same period.[23] This means older Americans are living farther and farther away from hospitals and clinics, but still need access to equipment to help them manage their conditions.

For many people, the solution is home health care. Almost all rural eldercare growth since 2010 has been in home health care, which increased by 36% from 2010 to 2023.[24] This makes sense from a logistical standpoint—without the population density to run independent continuing care or retirement facilities in the patient's local community, rural health care organizations can instead connect with patients where they live to deliver services without the required health infrastructure of a skilled nursing facility. The advancements in remote patient monitoring and telehealth technology give health care providers more options to improve patient outcomes in healthcare deserts.

Without high-mileage visits to remote locations or the operational upkeep of hospital or nursing facilities, providers can still check in on patients to help them manage their conditions and stay healthier for longer.

The Path Forward

The rise in Medicare medical equipment purchases outside clinical settings shows that the health care system is increasingly setting up older Americans to manage their health at home. Embracing DME as tools that, paired with home health care services and/or RPM, provide alternatives to skill nursing facility care that both saves Medicare money with shorter in-patient stays and mirrors patient preferences for health care delivery.[25] We list several priority recommendations in the current policy environment:

Write AHCAH services into Medicare hospital funding: The AHCAH initiative expiring in December 2024 despite yielding promising results in reducing costs and improving patient experience.[25] Congress should modify Medicare hospital funding to include AHCAH services to incentivize innovation in health care delivery and drive down per patient acute care costs.

Reexamine cost-saving programs for Medicare DME: The last competitive bidding program for DME was issued in 2021 and has been on a gap period since the start of 2024.[26] With a rapidly changing and growing DME market, CMS should restructure its competitive bidding to more regularly receive contract proposals for new types of DME that enable remote patient monitoring and improve home health care. Proactive action will ensure that equipment remains at the lowest possible cost to both Medicare and its beneficiaries while responding to changing patient needs and preferences.

Integrate home health services into health care delivery systems where possible: Hospitals and clinics should incentivize professional development in home health and telehealth delivery and expand their teams to dedicate hours to those venues to meet patient needs. This will help more traditional care centers reach additional patients, generating more billable hours for health care centers while improving patient quality of care.

For Discussion

All stakeholders in the DME market play a role in improving access to home health care solutions for aging Americans. The prompts below aim to motivate action:

To Federal Health Leaders:

- How might we…allocate money to expand acute care solutions via home health care and remote patient monitoring solutions that save Medicare money and improve the patient experience?
- How might we…increase the availability of affordable DME under Medicare to respond to increasing demand?

To Industry Leaders:

- How might we…transform how and where we deliver care to expand our medical equipment patient base and respond to population needs?
- How might we…negotiate manufacturer contracts with private and public insurance companies to provide an expanded line of DME products to patients who need them?
- How might we…encourage technological partnerships with health care centers and DME manufacturers to supply the technical expertise to cutting edge digital home health solutions?

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Conclusion

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

Patient	While maternal mortality has improved, Americans are dealing with worsening chronic conditions and mental health outcomes.
Provider	While the number of healthcare professionals per capita increases, they haven't kept pace with healthcare demand. While more patients are turning to urgent care, growth in telehealth has plateaued, highlighting gaps in digital health infrastructure.
Payer	Both payers and patients are paying more for healthcare while plans cover less, making healthcare less affordable and less reliable.
R&D	Innovation outcomes in R&D remained strong as funding burden increasingly shifts toward private companies.

The 2024 report also conducted deep dives on three topics relevant to current health discourse:

Administrative burden: Rural healthcare centers are under-equipped to handle a higher need and more dispersed patient population. Equipping rural providers with automated solutions will reduce administrative burden but requires significant investment and policy transformation to be successfully implemented.

Pharmaceutical supply chain: COVID-19 exposed the vulnerabilities of US reliance on international markets for pharmaceutical inputs and manufacturing, resulting in drug shortages and increased costs. As China strategically positions itself as a major market player, the US should pursue strengthening global partnerships and building domestic supply chain resilience.

Medicare and Medicaid expenditures: Increases in recent prescription drug spending are driven by market incentives to raise drug prices and structural changes to Medicare and Medicaid drug benefits. Regulating pharmacy benefit managers (PBMs) and redesigning CMS formularies could help control drug spending. Recent medical equipment spending increases are driven by changing American demographics and needs as more patients receive home health care services. Integrating home health care into the traditional care model will increase durable medical equipment access while reinvigorating competitive bidding programs will help contain equipment costs.

This report looks across the overall US health ecosystem to provide context and insights that elicit conversations to inspire future action and analyses. We hope the questions from each deep dive topic kickstart discussions on today's most pressing health issues and policy solutions.