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A Rios Partners report

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About Rios Partners

Founded in 2016, Rios Partners is a strategy consulting firm committed to delivering high-impact, high-value, and transformative results for our clients. We address our clients' most pressing and complex issues by developing a deep understanding of their needs, customers, employees, and partners to build timely and relevant solutions. As a team, we know what it takes to move organizations forward with measurable, sustainable results.

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Executive Summary

While many people are having conversations about the state of the American health ecosystem, its challenges, and potential solutions, most of these conversations only focus on a single ecosystem component. Further, assessments of health and healthcare often fail to examine the critical role of mental health in overall well-being. Rios Partners' Health of Health report aims to provide a holistic assessment of the US health ecosystem. The 2023 edition takes advantage of trusted data sources to assess the state of US physical and mental health through four pillars:

- **Patients** – Representing the demand side of healthcare, this pillar includes metrics measuring the treatment individuals receive (or do not receive) and their associated health outcomes.
- **Providers** – Representing the supply side of healthcare, this pillar includes metrics measuring healthcare's human resources and physical infrastructure.
- **Payers** – 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 healthcare, this pillar includes metrics measuring investment in new technologies and actions taken to improve healthcare delivery.

In addition to analyzing each pillar individually, the Health of Health report also assesses the interconnectedness of all pillars and draws Cross-Cutting Insights highlighting specific intersections, shortcomings, and opportunities in the American health ecosystem. This year's report highlights three insights:

Insight 1, Rising Expenditures, Declining Results: Access to care remains an issue for millions of uninsured or underinsured Americans. Additionally, many insured Americans struggle with the rising cost of healthcare. Combined, these issues often contribute to patients either delaying or forgoing treatment and result in patients experiencing more severe health conditions.[1] Even for Americans with sufficient healthcare coverage, ubiquitous disparities within the healthcare system result in worse outcomes for specific groups.[2] Further, the United States struggles to translate its strength in R&D into improved patient outcomes as innovations are not readily available to all. While healthcare access is a complex issue, improving it is essential to establishing a more effective and equitable health ecosystem in the United States.

Insight 2, Meeting Mental Health Demand: Mental health is a significant and growing challenge in the United States as self-reported rates of mental illness and suicide rates reached record highs in 2022.[3] While there was a similar uptick in the number of patients seeking mental health treatment, obtaining care remains a challenge.[4] Patients are often dissuaded from seeking help due to difficulties with identifying providers, the high cost of care, and/or stigma around mental illness and asking for help.[5] Increasing access to mental healthcare is critical for capturing the significant and wide-ranging benefits this care provides to individuals and the country.

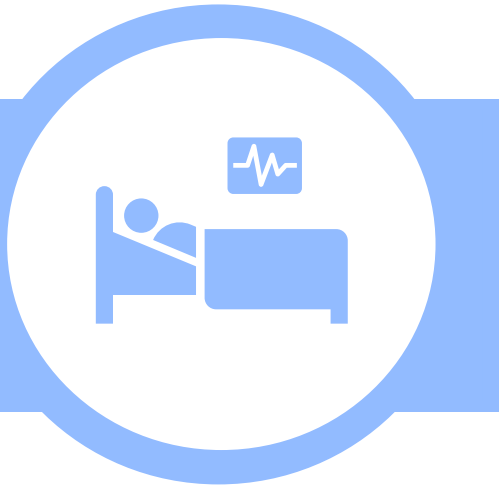
Insight 3, Looming Provider Shortages: Increasing demand from an aging American population is outpacing growth in the supply of doctors and nurses. American medical schools are not on target to replace today's aging healthcare workforce, and significant shortages are forecasted.[6] The impact of provider shortages is observable in many rural areas, where patient outcomes trail those of urban centers where shortages are less pronounced.[7] A multifaceted solution that goes beyond just attracting and retaining more medical professionals is required to mitigate this issue and stop its spread. Approaches that transform care delivery from traditional models, utilize technology to reduce administrative burdens on providers, and leverage telemedicine to connect patients with specialists

have shown promise in recent years. Scaling them alongside further innovation is critical to solving projected provider shortages.

While the Health of Health report is not intended to detail or explain all the complexities within the American health ecosystem, its metrics, analysis, and insights aim to spur conversations that lead to change. The goal is for these changes to positively impact the state of health in the United States.

Patient

Life expectancy shows limited recovery post-COVID, but improvements do not offset concerning long-term trends that predate the pandemic.



The Patient pillar represents the demand side of health. It includes the entire US population (i.e., all potential patients) and analyzes overall patient health, outcomes, and the actions patients take to promote and maintain their health. While COVID-19 negatively impacted several Patient metrics, most show worsening or stagnant long-term trends with limited to no recovery post-pandemic.

American life expectancy exemplifies this finding. While stagnant since 2010, life expectancy fell by 2.4 years between 2019 and 2021. Therefore, while this metric showed a modest improvement in 2022 for the first time since the pandemic's start, its overall recovery is still incomplete. During the pandemic, long-term improvements in infant mortality stalled while maternal mortality rose steadily. Further, significant racial disparities persist across the metrics for life expectancy, infant mortality, and maternal mortality.[8]

The prevalence of mental illness is a growing challenge for many patients. Self-reported rates of mental illness have been on the rise since 2018. Similarly, suicide rates have increased steadily since 2005. Despite an initial decline during the pandemic, they reached an all-time peak at 14.3 suicide deaths per 100,000 people in 2022.[9] More encouragingly, mental healthcare utilization is rapidly growing, resulting in the gap between patients reporting mental illness and those receiving treatment narrowing significantly.[10]

Metrics

Note: Mental health metrics are a focus area of the 2023 Health of Health report and are highlighted in blue in the table below.

	Trending	Metric	Description
Patient		**Patient 1. Life expectancy at birth**	US life expectancy rebounded in 2022 after declining in 2020 and 2021 due to the COVID-19 pandemic. However, life expectancy remains below pre-pandemic levels.[11]
		**Patient 2. Maternal mortality**	Since 2018, maternal mortality rates have nearly doubled, up to 32.9 maternal deaths per 100,000 live births in 2021 from 17.4 in 2018.[12]
		**Patient 3. Infant mortality**	Long-term improvements in infant mortality plateaued over the last 5 years, with a slight uptick in deaths between 2021 and 2022 (from 5.42 to 5.60 deaths per 1,000 live births).[13]
		**Patient 4. Annual doctor visits**	In 2022, 83.4% of adults visited a doctor in the last 12 months. This percentage has remained constant since 2015, even through the COVID-19 pandemic.[14]
		**Patient 5. Suicide deaths**	Deaths from suicide reached a new peak in 2022 at 14.3 deaths per 100,000 people, slightly above pre-pandemic levels.[15]
		**Patient 6. Rates of substance/drug misuse**	Use of illicit drugs other than marijuana remains relatively flat at around 9%, with a 0.5 percentage point increase since 2018. Opioid usage is slowly decreasing, from 3.8% in 2018 to 3.3% in 2022.[16]
		**Patient 7. Rates of mental illness**	Reported rates of mental illness were on the rise even before the pandemic, from 19.1% in 2018 to 23.1% in 2022.[17]
		**Patient 8. Mental health service utilization**	Rates of mental health care utilization rose starting in 2018. In 2022, 21.8% of adults reported receiving mental health care in the past year, up from 16.1% in 2018.[18]

Table 1: Patient Metrics

Icon legend

 Metric remains at an encouraging level or is trending sharply in a positive direction

 Metric is sub-optimal but stable or is concerning but slowly trending in a positive direction

 Metric remains at a concerning level or is trending sharply in the wrong direction

Provider

Despite increases in the number of providers, the United States is projected to face shortages over the next decade.

The Provider pillar represents the supply side of healthcare. It includes the size of both the healthcare workforce and physical healthcare infrastructure. Overall, there is a decrease in traditional infrastructure as the healthcare ecosystem shifts to new methods of healthcare delivery. At the same time, provider shortages remain a key risk due to increased patient demand.

While physical healthcare infrastructure trends are mixed, there is a continued slow decline in the number of available staffed hospital beds. This reflects a long-term shift from inpatient care at a hospital to outpatient care, where patients receive most of their treatment in a doctor's office or at home.[19] This trend will likely continue as technology and approaches to care evolve.

Even though the per capita numbers of doctors and nurses are rising, demand for healthcare (due to an aging population) is growing faster. As a result, staffing shortages remain a risk post COVID-19 pandemic. These shortages are exacerbated by insufficient capacity to train new staff, an aging healthcare provider workforce, and high rates of burnout.[20]

Similarly, shortages in the number of mental health providers are projected over the next decade.[21] Recent increases in the per capita number of mental health providers have been insufficient to offset increased patient utilization.

Metrics

Note: Mental health metrics are a focus area of the 2023 Health of Health report and are highlighted in blue in the table below.

	Trending	Metric	Description
Provider		**Provider 1. Beds per capita**	The number of hospital beds per 100,000 people decreased steadily over the last two decades,[22] reflecting a shift from inpatient to outpatient care.
		**Provider 2. Number of physicians and surgeons per capita**	The number of doctors rose from 318 per 100,000 people in 2018 to 339 in 2022.[23]
		**Provider 3. Number of registered nurses per capita**	The number of registered nurses (RNs) increased from 1,239 per 100,000 people in 2018 to 1,351 per 100,000 people in 2022.[24]
		**Provider 4. Number of mental health providers per capita**	The number of mental health professionals increased to 283 per 100,000 people in 2022, up from 262 per 100,000 in 2018.[25]

Table 2: Provider Metrics

Payer

Access to care continues to be a challenge for some Americans due to high medical costs.

The Payer pillar represents how the US health ecosystem funds healthcare and the cost of care. It includes metrics measuring healthcare costs and the mechanisms patients use to pay for their care, including health insurance. Compared to other OECD countries, US healthcare costs are high, and a small but sizeable minority of Americans struggle to access care due to cost.[26]

American healthcare costs are high and continue to increase. With total expenditures exceeding $4.8 trillion ($14,254 per person) in 2022, US per capita healthcare costs are 66% greater than the next OECD country (Switzerland, $8,565 per person).[27] In concert, private insurance premiums and out-of-pocket expenses rose over the same period.[28] High healthcare costs often lead to uninsured or underinsured individuals forgoing and/or rationing medical care. In 2022, of American adults, 6.3% reported forgoing care, 7.0% delaying care, and 6.8% not taking medication as prescribed due to cost.[29]

Paying for mental healthcare is also a challenge for some patients. In 2022, 5% of American adults reported that they had forgone mental healthcare due to cost.[30] While this is lower compared to other rates of skipped care, significantly fewer Americans utilize mental health versus traditional physical health services. This suggests that cost is more frequently a factor when patients decide whether to seek mental health treatment.

Metrics

Note: Mental health metrics are a focus area of the 2023 Health of Health report and are highlighted in blue in the table below.

Payer	Trending	Metric	Description
		**Payer 1. Total annual US health expenditures**	Total national health expenditures jumped in 2020 with the onset of the COVID-19 pandemic. Spending declined slightly in 2022 but remains high at $14,254 per person.[31]
		**Payer 2. Annual OOP expenses**	Americans paid an average of $1,515 in constant-dollar out-of-pocket healthcare expenses in 2022, a 6% increase from $1,427 in 2018.[32]
		**Payer 3. Health insurance premiums**	Premiums for individual and family insurance plans increased slowly over the past decade, reaching a peak in 2021. Premiums returned to pre-pandemic levels in 2022 and 2023.[33]
		**Payer 4. % of US insured**	Health insurance coverage rates held steady over the last 5 years at around 92%.[34] Coverage growth stagnated after increases from the passage of the 2010 Affordable Care Act and subsequent expansions of Medicaid eligibility.
		**Payer 5. Forgone or delayed medical care due to cost**	Fewer Americans are rationing care because of cost. Amongst American adults in 2022, 6.3% reported not getting medical care (versus 8.3 % in 2019), 7.0% delaying medical care (versus 9.6% in 2019), and 6.8% not taking medication as prescribed due to cost (versus 9.6 % in 2019).[35]
		**Payer 6. Patients foregoing mental health care due to cost**	In contrast with the above metric, the number of Americans forgoing mental health care due to cost has slightly increased to 5.0% in 2022 versus 4.4% in 2019.[36]

Table 3: Payer Metrics

Research & Development

The US realized significant medical breakthroughs over the last decade alongside an increase in R&D investment.

The Research and Development (R&D) pillar represents innovations in healthcare. It includes metrics measuring investment in new technologies and actions to improve healthcare delivery. Overall, R&D is an area of strength for the United States as high levels of investment drive numerous breakthroughs.

The United States is a world leader in R&D spending.[37] PhRMA, a trade group of major pharmaceutical companies, reported member spending of $80.1 billion on R&D in 2022, a 52.6% increase in private R&D spending from 2013.[38] However, in concert with the end of the COVID-19 pandemic, private R&D investments decreased between 2021 and 2022. While private R&D is a significant component of the US health ecosystem R&D investments, public investments account for over 33% of overall US healthcare R&D investments. Considering the public sector, the National Institutes of Health (NIH) is the single largest state investor in health R&D globally.[39] NIH funding grew over the last decade in real terms to $45.7 billion in 2022[40] while its top research categories remained largely stable (see Table 5 for additional detail).[41] For its investment, the United States is effective in generating medical breakthroughs. There is an upward trend in the number of novel drugs approved by the US Food & Drug Administration (FDA) over the last decade.[42]

Mental health R&D investment is difficult to assess. Private-sector R&D investment estimates are not readily available. However, government funding for mental health has increased in recent years. The budget for the National Institute of Mental Health (NIMH), the leading federal agency for research on mental health disorders, rose nearly $500 million between 2013 and 2023.[43]

Metrics

Note: Mental health metrics are a focus area of the 2023 Health of Health report and are highlighted in blue in the table below.

	Trending	Metric	Description
Research & Development		**R&D 1. Pharmaceutical industry R&D investment**	PhRMA companies have shown an upward trend in domestic R&D funding over the past two decades, with an uptick during the COVID-19 pandemic.[44]
		**R&D 2. NIH R&D investment**	The NIH's R&D investment budget increased by approximately $3 billion between 2018 and 2022, rising from $43 billion to $46 billion.[45]
		**R&D 3. NIH spending by topic: top 10 in 2023, over time**	The top categories of research spending remained largely static over the past decade. The top five categories in 2013, 2018, and 2022 were Clinical Research, Genetics, Neurosciences, Prevention, and Biotechnology.[46]
		**R&D 4. Number of novel FDA drug approvals**	While the number of novel drugs approved each year fluctuates there is a general upward trend, with an average of 45.7 drugs approved per year over the past decade.[47]
		**R&D 5. NIMH funding level**	The National Institute for Mental Health (NIMH) budget increased by ~$220 million (~10%) over the last five years.[48]

Table 4: Research and Development Metrics

Top 10 NIH spending categories, by year		
2013	**2018**	**2022**
Clinical Research	Clinical Research	Clinical Research
Genetics	Genetics	Genetics
Prevention	Prevention	Neurosciences
Biotechnology	Neurosciences	Prevention
Neurosciences	Biotechnology	Biotechnology
Cancer	Cancer	Brain Disorders
Infectious Diseases	Infectious Diseases	Infectious Diseases
Women's Health	Brain Disorders	Behavioral and Social Science
Brain Disorders	Rare Diseases	Cancer
Behavioral and Social Science	Clinical Trials and Supportive Activities	Clinical Trials and Supportive Activities

Table 5: Top 10 NIH R&D Categories by Year

Cross-Cutting Insights

In addition to analyzing each pillar individually, the Health of Health report also considers the inextricable links between all pillars. It draws Cross-Cutting Insights highlighting specific intersections, shortcomings, and opportunities in the US health ecosystem. This year's report highlights three insights:

- **Insight 1, Rising Expenditures, Declining Results:** The United States spends significant amounts on healthcare for relatively poor results due to structural challenges
- **Insight 2, Meeting Mental Health Demand:** Mental health is a growing challenge in the United States, and many patients face significant barriers when seeking help
- **Insight 3, Looming Provider Shortages:** Provider shortages represent a significant risk to patient health, and more medical professionals are needed to mitigate them

Insight 1, Rising Expenditures, Declining Results: The United States spends significant amounts on healthcare for relatively poor results due to structural challenges

The United States spent over $4.8 trillion on healthcare in 2023, more than any other nation and nearly double the next highest OECD nation on a per capita basis.[49] Despite high expenditure levels, key health outcomes such as life expectancy, maternal mortality, and infant mortality lagged behind other developed countries.[50] This gap is attributable to systemic factors related to access, disparities in quality of care, and struggles translating innovation into improved health. The United States must address these challenges to bring outcomes in line with spending.

The United States does not have a universal public healthcare option that covers all citizens, which imposes access challenges that harm patients. Despite improvements after the passage of the Affordable Care Act in 2010, 26.4 million Americans remain without insurance coverage.[51] Millions of other Americans are "underinsured" and lack health insurance that covers the cost of medical care sufficiently.[52] Both uninsurance and underinsurance result in patients delaying or not receiving care, which often leads to worse outcomes and more resource-intensive treatments in the long term.[53] Conversely, laws that increase access showed noticeable improvements. For example, states that accepted ACA Medicaid expansion saw infant mortality decrease between 2014 and 2016, while states that rejected expansion saw an uptick in infant mortality.[54] Expanding access to healthcare on a large scale is challenging, but enabling patients to receive care when needed is crucial to ensuring a healthy population.

Americans face significant health disparities along racial and ethnic lines, which contributes to relatively poor overall health outcomes in the United States. Health disparities are prevalent across many metrics, but maternal mortality is one area in which they are particularly striking. The United States ranks in the bottom quartile for overall maternal mortality amongst OECD nations.[55] Maternal mortality for Black non-Hispanic American women is even worse, with 69.6 deaths per 100,000 births—more than twice the overall US total of 32.9 deaths per 100,000 births.[56] Racial differences in health outcomes persist even after controlling for other factors such as income and education.[57] Research attributes these disparities to several causes, including lower rates of insurance, reduced access to primary care physicians and specialists, less access to doctors of the same race/ethnicity (which is associated with better outcomes), and longer wait times to receive a diagnosis, plus location-based factors such as food deserts and pollution.[58] Devoting additional resources to addressing these inequities so that all patients receive the same quality of care is critical for the United States to improve its overall health performance.

While the United States is the world leader in healthcare R&D investment and innovation,[59] this has not translated into improved population health. Despite increases in the number of drugs approved by the FDA, key metrics, such as life expectancy, are plateauing. While stagnant life expectancy is attributable to many factors, this result suggests that recent breakthroughs may not address the health needs of, be accessible to, and/or be trusted by all patients. For example, developing COVID-19 vaccines utilizing mRNA technology represented a significant innovation during the pandemic. However, initial adoption and deployment were disparate as Asian and white non-Hispanic Americans were vaccinated at higher rates and had lower age-adjusted death rates from COVID-19 than other racial/ethnic groups.[60] Vaccination efforts are multi-faceted, but the unequal uptake of COVID-19 vaccines was detrimental to the health of different populations. More promisingly, health disparities are receiving additional

attention, as seen by the NIH allocating $5.2 billion, $4.7 billion, and $4.3 billion towards research on Health Disparities, Minority Health, and Social Determinants of Health, respectively, in 2022.[61] Although improvement in these areas also requires personnel, infrastructure, and policy to affect change, ensuring the accessibility of medical innovations is an essential step towards a more equitable system.

Population health is a challenging issue dependent upon many variables within and outside the healthcare ecosystem. It is impossible to address all these factors. Still, the United States has opportunities to improve health outcomes by expanding access, promoting health equity, and prioritizing R&D solutions that meet the needs of all Americans. Doing so will foster a healthier population while bringing outcomes in line with peer nations.

In reviewing this insight, stakeholders should consider the following:

- What is the role of insurers and other payers in closing healthcare access gaps?
- How can existing healthcare providers implement solutions to address the challenges faced by underserved populations?
- How can R&D funders promote research that is both impactful and readily accessible?

Insight 2, Meeting Mental Health Demand: Mental health is a growing challenge in the United States, and many patients face significant barriers when seeking help

Promoting good mental health has several benefits. It improves patient quality of life, reduces many adverse physical health conditions such as diabetes, and boosts worker productivity.[62] The COVID-19 pandemic disrupted the lives of most people. Lockdowns and social distancing that were necessary to protect physical health also had a profound effect on mental health. Many people reported higher levels of anxiety and depression,[63] continuing trends from before the pandemic. At the same time, the pandemic increased conversations around mental illness.[64] While the increased awareness around the importance of mental health is encouraging, significant challenges remain for those seeking help. Addressing barriers due to availability, cost, and stigma is critical to making further progress.

Mental health is of growing importance to many Americans. Increased numbers of adults are reporting that they are experiencing mental illnesses and seeking treatment.[65] Several contributing factors include increased stress among youth due to the pressures of modern life, social media use, and social isolation (even pre-2020).[66] The pandemic exacerbated all of these factors. Further, the attention paid to mental health during the pandemic likely had a compounding effect. Some people likely became more aware of the challenges that they were facing, so they were more likely to seek treatment and be diagnosed with a mental illness. While there are many causes, the increased utilization of mental reflects shifts in societal attitudes towards mental healthcare.

Despite more Americans receiving treatment, seeking and obtaining mental healthcare remains a challenge. Federal law requires insurers to treat mental and physical healthcare equally. However, insurers' reimbursement rates for mental health providers are often too low for providers to participate in insurance networks.[67] As a result, patients are significantly more likely to have to go to out-of-network providers (paying more out of pocket) for mental health appointments. In 2022, 5 % of American adults reported that they forewent mental healthcare due to cost.[68] Finding a provider is also difficult. Relative to physical healthcare, patients must call more mental health providers to schedule an appointment.[69] This can be particularly challenging in rural areas where the supply of providers is often limited.[70] Lastly, while attitudes are improving, significant stigma still exists around mental illness. Along with everyday challenges in accessing care, this can dissuade patients from pursuing the help they want and need.

Investments in mental healthcare will improve patients' quality of life and overall health outcomes. What are sometimes referred to as "deaths of despair," deaths resulting from suicide, alcohol misuse, and drug overdoses, are a growing challenge. These deaths are complex but stem from treatable conditions, which can be addressed in part through the increased availability of mental health services. Treating these mental health conditions, as well as the others affecting millions of Americans, requires that patients feel comfortable seeking mental health care and can find and afford the help they need. While the pandemic influenced more Americans to prioritize their mental health, there is still room for significant growth in access.

In reviewing this insight, stakeholders should consider the following:

- How can policymakers promote the growth of the supply of mental health professionals, especially those serving communities that are currently underrepresented?
- How might stakeholders throughout the health ecosystem use language, outreach, and other methods to reduce stigma around mental health conditions and treatments?

- What policy changes can be made to ensure that mental health care is affordable and accessible?

Insight 3, Looming Provider Shortages: Provider shortages represent a significant risk to patient health, and more medical professionals are needed to mitigate them

Provider shortages result in longer patient wait times, reduced care access, and worse outcomes.[71] Such shortages are a significant threat to the American healthcare system over the next decade. Patient-side demand for medical services is growing faster than the supply of providers, while many rural areas are already facing shortages with dire consequences for patient health.[72] Addressing this challenge and preventing its spread will require multi-faceted solutions that retain current medical professionals and attract new ones.

Demand for health services is rising rapidly in the United States. Changing demographics are a significant driver of this shift. The United States population is increasingly elderly, with 16.8% of Americans (55.8 million people) recorded as aged 65 or older in the 2020 Census.[73] This proportion will continue to grow as more of the baby boomer generation reaches retirement age. One effect of this demographic shift is an increased demand for healthcare because older individuals require more care on average.[74] Aside from demographic shifts, expanding health insurance coverage could also increase demand. Currently, 8% of Americans do not have health insurance and are more likely to forgo or delay medical care due to cost.[75] While expanded coverage improves health outcomes,[76] it would also increase the demand for providers, especially in nonemergency settings, as these patients can afford necessary medical services.

On the supply side, the number of physicians and registered nurses per capita is increasing, but not at a sufficient rate to keep pace with demand. The Health Resources and Services Administration (HRSA) projects a shortage of 68,020 primary care physicians by 2036.[77] Similarly, nursing shortages due to high rates of burnout, an aging workforce, and a lack of educators to train new nurses are a challenge, with some studies projecting shortages between 200,000 and 450,000 trained nurses by 2025.[78] Shortages mean that patients receive less attentive care, while providers who remain in the profession face pressure from increased workloads. Attracting and retaining additional medical professionals must be a priority for the American healthcare system.

The impact of provider shortages can be seen in many rural areas, where they contribute to a widening life expectancy gap relative to metro areas.[79] Rural residents are older on average and thus are more likely to need care.[80] Despite this, rural areas have fewer healthcare providers, resulting in lengthy travel times to access standard and specialized services.[81] Rural infrastructure is also challenging, as many rural care centers struggle to remain solvent. Relative to urban hospitals, rural hospitals receive lower rates of reimbursement from private insurers and Medicare Advantage plans.[82] As a result of financial challenges, almost 200 rural hospitals closed or stopped providing inpatient services between 2005 and 2023.[83] These closures further strain emergency departments in nearby hospitals due to increased costs.[84] Rural healthcare is affected by provider shortages today, but many of these same issues will impact patients elsewhere in the future if anticipated provider shortages are not mitigated.

Supply-side shortages in healthcare are a critical issue for the United States to address coming out of the COVID-19 pandemic. More medical professionals are required to meet an older population's needs and provide quality care outside of urban centers. In addition, transforming care delivery can augment the current supply of providers, maximizing efficiency and improving health outcomes. Promising examples include expansions in telemedicine that connect patients to specialists remotely, artificial intelligence to help diagnose patients and support providers with administrative tasks, and updates to traditional provider models that utilize nurse practitioners instead of medical doctors while providing the same

quality of care and requiring less investment in training.[85] A combination of investment, policy, and innovation is necessary before shortages increase and patient care further deteriorates.

In reviewing this insight, stakeholders should consider the following:

- How can payers and other stakeholders incentivize people to join the healthcare workforce in roles that can address current and upcoming provider shortages?
- How can stakeholders incentivize expanded healthcare access in underserved areas, with a particular focus on primary care?
- What regulations need to be reexamined to address new styles of care delivery and the use of new technologies such as telehealth?

Conclusions & Questions for Stakeholders

In this annual examination of the health of the US health ecosystem, Rios Partners found that patient outcome metrics are flat (e.g., life expectancy, infant mortality) or moving in the wrong direction (e.g., maternal mortality, suicide rates). Additionally, provider shortages are predicted to increase rapidly in the years ahead, further threatening health outcomes. At the same time, the cost of care remains high, limiting access to medical care for millions of Americans. R&D is producing numerous breakthroughs without yielding dramatic changes in patient metrics, suggesting a need to better translate innovation into outcomes.

The 2023 report also spotlighted mental health. Patients' awareness of mental healthcare's importance has risen, but matching investments in the supply of mental health providers are necessary to match demand. In addition, payers must treat mental healthcare equally to physical healthcare, in accordance with its importance to overall health and federal requirements.

This report looks across the entire US health ecosystem to provide insights that can start conversations and hopefully move the needle for future health analyses. To spark discussions and perhaps even policy changes, Rios asks readers to consider the questions raised by each of the three cross-cutting insights:

1. **The United States spends significant amounts on healthcare for relatively poor results due to structural challenges**
    - What is the role of insurers and other payers in closing healthcare access gaps?
    - How can existing healthcare providers implement solutions to address the challenges faced by underserved populations?
    - How can R&D funders promote research that is both impactful and readily accessible?
2. **Mental health is a growing challenge in the United States, and many patients face significant barriers when seeking help**
    - How can policymakers promote the growth of the supply of mental health professionals, especially those serving communities that are currently underrepresented?
    - How might stakeholders throughout the health ecosystem use language, outreach, and other methods to reduce stigma around mental health conditions and treatments?
    - What policy changes can be made to ensure that mental health care is affordable and accessible?
3. **Provider shortages represent a significant risk to patient health, and more medical professionals are needed to mitigate them**
    - How can payers and other stakeholders incentivize people to join the healthcare workforce in roles that can address current and upcoming provider shortages?
    - How can stakeholders incentivize expanded healthcare access in underserved areas, with a particular focus on primary care?
    - What regulations need to be reexamined to address new styles of care delivery and the use of new technologies such as telehealth?

Endnotes

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