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# Reframing Investments in the U.S. Healthcare Workforce

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This report highlights discussions from the **UNC Center for the Business of Health's** 2025 Research Symposium.

It summarizes key themes and ideas shared by expert panelists and contributors. The symposium was held under Chatham House Rule.

# Introduction

Despite being foundational to a functioning society, investment in the U.S. healthcare workforce is reactive, fragmented, and short-sighted.<sup>1,2</sup> This paper draws on insights from a multi-sector healthcare workforce conference hosted by the UNC Center for the Business of Health (CBOH), and highlights questions that are often overlooked in current discourse, policymaking, and investment decisions.

Grounded in stakeholder experience, these guiding questions challenge prevailing assumptions and reframe what it means to build a healthcare workforce capable of meeting both current and future needs. They serve not as theoretical exercises, but as invitations to reimagine how investment, policy, and leadership can align to support a more just, resilient, and effective healthcare workforce.

This paper is organized around five themes, each representing a core tension or opportunity in healthcare workforce investment. Within each theme, we pose guiding questions designed to provoke critical reflection and shift strategic conversations toward new solutions. These act as entry points for rethinking how we value, support, and build the healthcare workforce that the population demands.

While workforce challenges are global, this discussion focuses specifically on the U.S. context, where fragmented systems, market dynamics, persistent inequities, and uneven policy responses create unique challenges and opportunities for workforce development.



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**We can invest in  
everything else, but  
without investing in  
people first, none of  
it matters.**

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## >> Theme 1: Healthcare Workforce as a Shared Necessity

The U.S. approach to healthcare workforce development has oscillated between fragmented market solutions and reactive public investments.<sup>3</sup> Yet, the essential nature of healthcare demands a model of shared accountability that moves beyond these silos. This theme explores what it means to reframe healthcare workforce investment as a public good—one critical to societal function, not merely an operational expense or a transactional labor input in care delivery.

**Treating workforce development as essential infrastructure and a shared societal responsibility requires a shift in perspective.**



————— ” ———

**Healthcare is a must-have, and in the U.S., we generally treat it like a nice-to-have.**

—— “ —————

## Guiding Question 1

How would treating healthcare workforce investment as a shared societal priority, rather than relying on fragmented market forces or intermittent public interventions, change the U.S. healthcare system?

Despite the essential role healthcare workers play in maintaining population health, well-being, and system resilience, chronic underinvestment remains a global and national problem.<sup>4</sup> In the U.S., workforce development is reactive. Financial margins, inconsistent access to educational pathways and funding across states, and episodic federal grants shape it, rather than long-term, coordinated planning. As a result, the system consists of a patchwork of initiatives, misaligned incentives, and missed opportunities. Treating workforce development as a public good requires shifting from short-term, institution-specific fixes to collective investment strategies grounded in long-term national, state, and community health needs. Reframing investment in this way calls for durable funding models, data-driven forecasting, and mechanisms for shared accountability across sectors.

### ***Let's Compare: National Approaches to Healthcare Workforce Investment***

In the U.S., federal workforce development programs, primarily funded through the Health Resources and Services Administration's (HRSA) Title VII and VIII, receive less than 0.05% of total healthcare spending—under \$2 billion annually out of more than \$4.5 trillion.<sup>5,6</sup> This limited and often short-term funding underscores how marginal the healthcare workforce is in national investment priorities. Embedding workforce investment within the national health strategy is both feasible and already underway in other countries. Australia's 10-year National Medical Workforce Strategy and Canada's Health Workforce Canada offer public models that align education pipelines, labor market forecasting, and equity goals with broader system planning.<sup>7,8</sup> These examples show that treating the healthcare workforce as essential infrastructure and a public good is both achievable and necessary.



## Guiding Question 2

Whose responsibility is it to ensure the availability, sustainability, and well-being of healthcare workers, given that society cannot function without them?

Responsibility for the healthcare workforce is too often viewed in silos. Educators train, health systems hire and retain professionals, governments fund, and individuals often manage their own stress and development. Yet ensuring a sustainable workforce requires coordination among these groups. Effective stewardship relies on interlinked functions that operate across individual, organizational, institutional, and system levels, with each level enabling the one above and depending on the one below.<sup>9</sup>

No single entity can guarantee workforce resilience on its own,<sup>10</sup> and success will require intentional interdependence and shared capacity. A widely accepted premise among healthcare workforce experts is that the workforce should respond to the enduring health needs of society, rather than the interests of healthcare organizations, insurers, or professional groups.<sup>10</sup> However, the current U.S. health system often prioritizes institutional interests over collective responsibility. Health systems, insurers, educational institutions, government agencies, professional associations, and community organizations all shape workforce outcomes through their influence on training access, licensure, reimbursement, workplace culture, and policy. Simultaneously, policy makers regulate and craft policy for each of these stakeholders independent of the others.

**Responsibility should be shared across these actors and levels. A shared-responsibility framework calls for alignment across sectors, guided by long-term public health goals rather than narrow institutional interests.**

Calls to strengthen the healthcare workforce often receive fragmented solutions, which focus on short-term fixes rather than structural transformation. Instead, a unified framework is needed to guide investments toward long-term value. Beck et al. provide one such framework in Figure 1, organizing workforce policy into four foundational pillars: production, distribution, maximization, and resiliency. This model shifts the focus from merely increasing headcount to building a workforce aligned with population needs, equitable distribution, effective deployment, and sustainable support. As workforce demands evolve, this structured approach provides a path toward smarter investment and more accountable planning.



FIGURE 1. HEALTH WORKFORCE POLICIES FRAMEWORK.  
BECK ET AL., 2021

## »» Theme 2: Ecosystem Dysfunction

Despite increasing recognition of the common causes behind healthcare workforce challenges, such as burnout, staffing shortages, and training mismatches, efforts to address these issues remain uncoordinated. Many stakeholders engage in finding solutions, but they often operate in parallel rather than together. Educators, employers, funders, and regulators participate but often lack shared frameworks and aligned incentives.

A deeper structural issue drives this fragmentation. Those with the most comprehensive, real-time view of care delivery patterns and workforce demand, such as payors and large health systems, are not responsible for workforce planning or training. Conversely, institutions that educate and credential the workforce often lack access to timely, practice-based data. This disconnect hampers efforts to anticipate shortages, align training with practice environments, and coordinate investments at scale.



————— ” ———

**We need institutions or leaders who can act as ecosystem orchestrators—moving the healthcare workforce with purpose rather than leaving it spinning like a top.**

——— “ —————



## Guiding Question 3

How can the U.S. build healthcare workforce 'orchestrators'—individual roles or institutions that align workforce planning across silos to meet health delivery needs?

The U.S. lacks a central authority to align workforce supply with demand, resulting in fragmented responsibility for training, financing, and deployment. In many single-payer systems, national governments play an active role in workforce planning as part of their broader duty to ensure access to care, directly connecting population health needs to training capacity and service delivery. By contrast, in the U.S.'s mixed payer system, federal and state agencies influence workforce development through funding and reimbursement but lack mechanisms for comprehensive alignment across all relevant stakeholders involved in training, financing, and deploying the workforce.

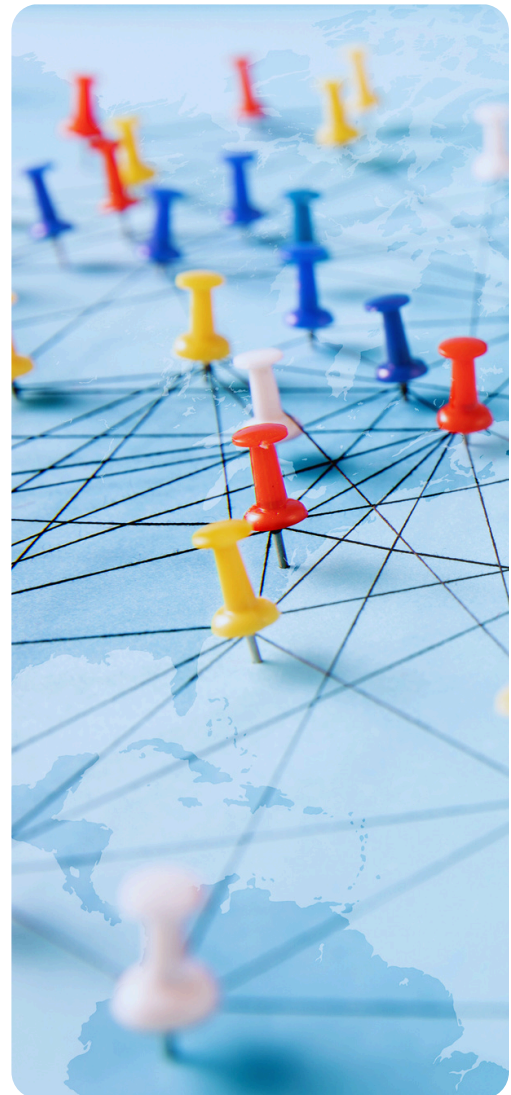
To build effective orchestrators, the U.S. must pursue both institutional redesign and cultural change. First, stakeholders need incentives and infrastructure for cross-sector coordination, whether by empowering teams within existing institutions or establishing new coordinating bodies. Second, the system must distribute responsibility more evenly across sectors, especially to those best positioned to observe and respond to system-wide needs.

**Without designated orchestrators, efforts to resolve shortages or misalignments will remain reactive and incomplete. Coordination is not just a managerial challenge but a strategic necessity for system transformation.**

## >> Theme 3: Aligning Workforce with Community Contexts and Needs

Workforce investment strategies often fail to fully account for the complex tradeoffs involved in delivering healthcare across diverse geographies. Efforts to train and retain clinical workers for specific communities can overshadow the basic care preferences and unique needs of those communities. Rather than addressing these questions sequentially—first understanding the health problems, then applying the appropriate care team solution—these elements are often merged, making it difficult to navigate the tradeoffs that both patients and care providers face. Additionally, patient preferences, namely who and how care is provided, is often left out of the equation altogether.

This theme explores how healthcare workforce strategies can better align with patient needs and preferences, and how training and deploying clinical teams can more effectively reflect community contexts and distinct health challenges.



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**We cannot procedure our way out of how we invest and serve in communities. We have to start with understanding what health issues we are trying to address, patient preferences, and what workforce we need to address these issues.**

—— “ —————

## Guiding Question 4

What strategies can ensure that investments in the healthcare workforce improve access, affordability, and quality of care, while also reflecting the real-world needs and preferences of patients and clinicians who are directly affected by these decisions?

Although many actors influence healthcare, including governments, health systems, and insurers, patients and the clinicians who serve them are most directly affected by decisions about care delivery. Yet these two groups are rarely included in the policy, business, or regulatory decisions that ultimately shape what care is available and how it is delivered. This exclusion has serious consequences. **Decisions about reimbursement models, service consolidation, and workforce investments are often made without accounting for the care preferences of communities or the realities facing providers.**

This creates particular problems in rural communities. As a result, rural hospitals, already challenged by low patient volumes, geographic isolation, and financial instability, struggle to attract and retain the appropriate workforce for essential services. According to the American Hospital Association and the UNC Cecil G. Sheps Center for Health Services Research, 136 rural hospitals closed between 2010 and 2021, and many of those that remain lack critical services.<sup>11</sup> Workforce shortages make these gaps worse, especially as rural areas contend with older populations who have more complex and chronic health needs.<sup>12</sup> While state and federal agencies may use health data to inform funding, they rarely adopt policies that align financial incentives, provider training, and staffing strategies with the realities of rural care.<sup>13</sup> Ensuring access, affordability, and quality in these communities will require more than funding; it will require decision-making structures that reflect the perspectives of those who deliver and receive care.



**CASE  
EXAMPLE**

One powerful example of misalignment between workforce strategies and community needs is the growing prevalence of maternity care deserts in the United States. These are counties that lack access to obstetric services—often because of chronic underinvestment in maternal health professionals, hospital closures, or unsustainable staffing models. Maternity care deserts demonstrate how workforce planning that downplays geography, community preferences, and demographic shifts can result in stark service gaps with serious consequences for population health.

## Over **35%** of US counties are **maternity care deserts**

### Maternity care access designation by county, US

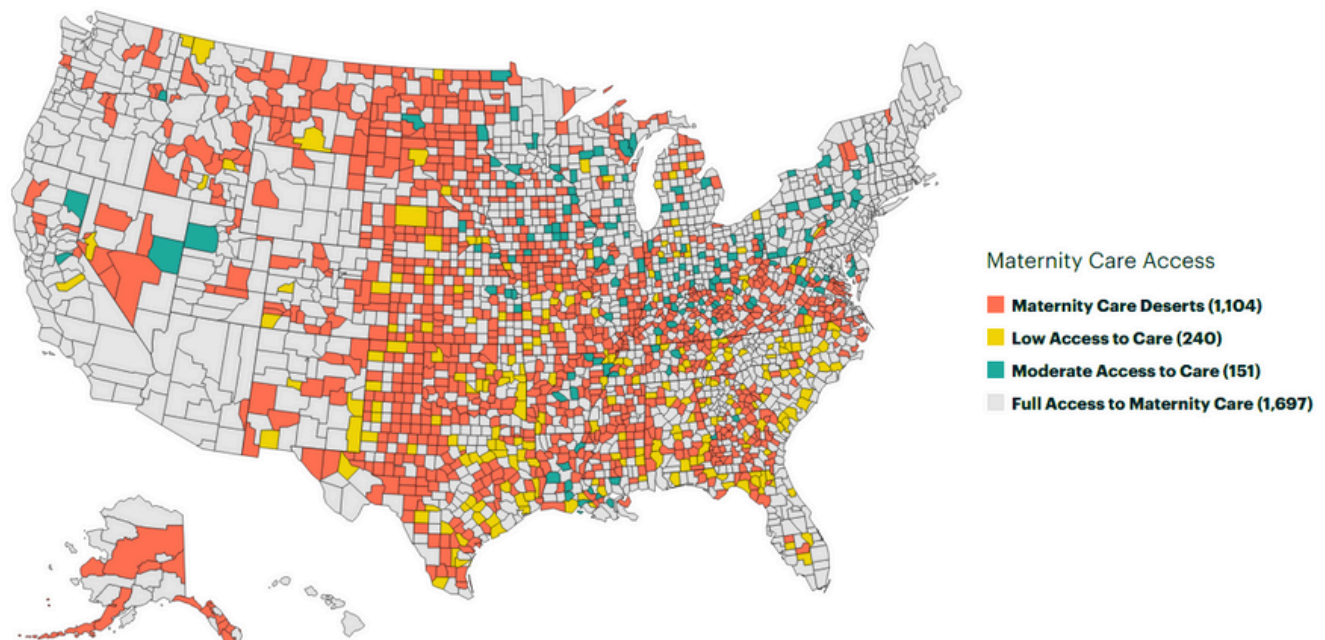


FIGURE 2. MATERNITY DESERT MAP. STONEBURNER ET AL., 2024

# Maternity Care in Rural Areas



## Definition & Scope

- Over 2.2 million women of childbearing age live in maternity care deserts.<sup>14</sup>
- Defined as counties with no hospital offering obstetric care and no OB providers.
- Nearly 1 in 10 births in the U.S. occur in areas with limited or no maternity care access.



## Workforce Link

- Driven by shortages of OB-GYNs, Certified Nurse Midwives, and labor & delivery nurses.
- Rural areas face higher barriers to recruitment and retention, especially for OB services.
- Hospitals often close labor and delivery units due to low volume and high liability insurance costs, not only lack of staff.



## Community Impact

- Increased rates of maternal and infant mortality, especially among Black and Indigenous populations.
- Longer travel time to deliver care—sometimes over 50 miles—contributes to worse outcomes.
- Women in these areas report delays in prenatal care, lower continuity of care, and reduced birth plan autonomy.



## Strategic Workforce Insight

- Most workforce policies focus on general clinician supply, not discipline-specific or region-specific needs.
- Midwifery expansion, telehealth models, and rural training tracks are examples of solutions underutilized at scale.
- Maternity care deserts reveal how misaligned incentives, lack of integrated planning, and narrow definitions of workforce investment compound access challenges.

Without aligning workforce development with the specific needs and preferences of a population, even well-funded systems fail to deliver essential and affordable care. In this example, women seeking maternity care in rural communities consider more than just the tradeoff between convenience and comprehensive services. Strategic alignment between decision makers and those most impacted—patients and healthcare workers—must focus on understanding and prioritizing local preferences, investing in flexible care and team-based models, and measuring success by outcomes that matter to the community. By doing so, it becomes possible to create maternity care options that are both accessible and high-quality, rather than forcing women to choose between the two.

## Over half (51.3%) of all US counties do not have a hospital or birth center that provides obstetric care

### Distribution of hospitals and birth centers providing obstetric care by county, US

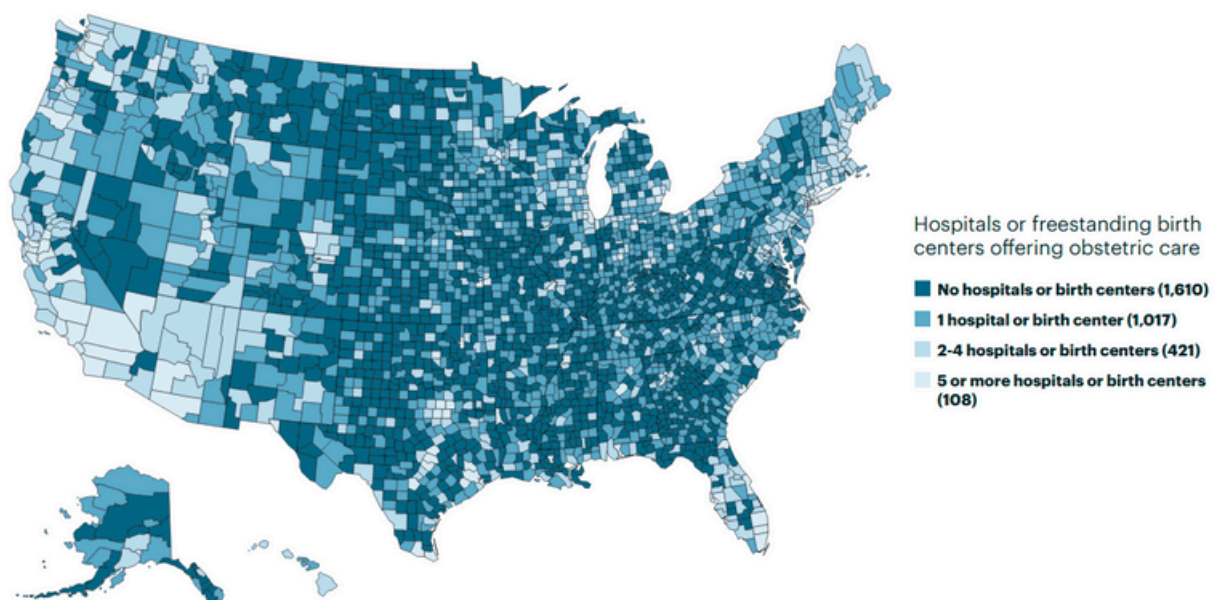



FIGURE 2. MATERNITY DESERT MAP. STONEBURNER ET AL., 2024

## »» Theme 4: Technology, Trust, and Perceived Usefulness to the Healthcare Workforce




While technologies, especially Artificial Intelligence (AI), are often positioned as workforce solutions, their true value lies not in novelty but in their trusted and effective integration into clinical practice.<sup>15</sup> Technology use must reflect the needs of both providers and patients. Too often, organizations introduce technology without sufficient alignment to clinical workflows, frontline needs, or workforce realities. When systems prioritize innovation over clarity, transparency, and usability, technology can add burdens rather than relieve them. Studies document how health information technology, particularly electronic health record (EHR) systems, contributes to clinician burnout by increasing clerical burdens, documentation requirements, and time pressures.<sup>16,17</sup> However, the technology that clinicians perceive as burdensome usually serves important business functions for healthcare organizations. For example, EHR documentation support billing optimization and compliance, clinical decision support systems reduce liability exposure, and quality reporting modules enable value-based care contracts. The reality that care delivery is both a service and a business underscores the importance of integrating clinical leaders into decision making and clearly communicating the intentions and goals behind technology adoption.





**I have found that  
doctors and nurses  
tend to readily adopt  
technology when we  
take the position of  
using it to do the  
ordinary things  
extraordinarily well.**



## Guiding Question 5

How can healthcare organizations ensure that technology solutions are trusted by clinicians and patients?

### **Earning clinician trust through understanding of people and their work**

Healthcare environments are complex systems shaped by human behavior, technology, culture, and organizational constraints. Successful adoption of new technology depends on more than the tool itself; new platforms must align with clinical workflows, professional roles, and real-world care delivery. Even well-designed technology fails if it disrupts workflows or burdens clinical teams. Organizations cannot simply impose technology; it must fit within a sociotechnical system where trust, roles, risks, and practical limits interact. Clinicians facing information overload and limited capacity tend to reject tools that add complexity without clear benefit. Meaningful adoption requires co-design with frontline users and context-specific rollout strategies. When technology complicates rather than supports work, clinicians disengage. Successful rollouts treat clinicians as partners, not just users, in integration.

Trust is an essential ingredient for successful technology adoption in healthcare. Too often, organizations introduce platforms without explaining their purpose, value, or impact on clinical workflows. Clinicians are more likely to support new tools when they see how these tools address real problems they encounter. Effective rollout relies on engaging clinical partners well before adoption or implementation. When clinicians can ask questions, review evidence, and support the evaluation of how a solution improves care, trust and adoption will follow.

### **Earning Patient Trust**

Patients play an equally important role in shaping how healthcare systems use technology. As AI and similar tools become more common in clinical settings, patients are becoming increasingly aware of these technologies and their influence on care. Just as clinicians base adoption on trust and perceived value, patients accept technology only if they trust how these tools handle their data and support their health. Organizations must ensure transparency about data use, privacy protections, and clear communication to earn and maintain patient trust. Without this, technology adoption falters not only among providers but also among the patients they serve.

## Guiding Question 6

What organizational processes can healthcare leaders adopt to ensure that technology decisions meaningfully integrate clinical workflows and patient care quality alongside business imperatives?

In many healthcare organizations today, technology adoption is shaped by frameworks focused on financial performance, regulatory compliance, and digital transformation. While these priorities are legitimate, they often dominate decision-making at the expense of clinical workflow integration and patient-centered care. Clinicians are too rarely engaged early in the design, selection, or implementation of tools intended to support their practice. **This disconnect results in technologies that are layered onto workflows rather than integrated into them, leading to inefficiencies, duplicative tasks, and workaround behaviors.**

To address this, healthcare leaders should establish formal governance structures such as cross-functional review committees, clinical workflow impact assessments, and structured feedback loops that embed frontline clinical perspectives into technology decisions. These mechanisms can ensure that digital innovation serves both operational and care delivery goals. Without them, the potential of technology to reduce burden, improve care, and retain talent will remain unrealized.

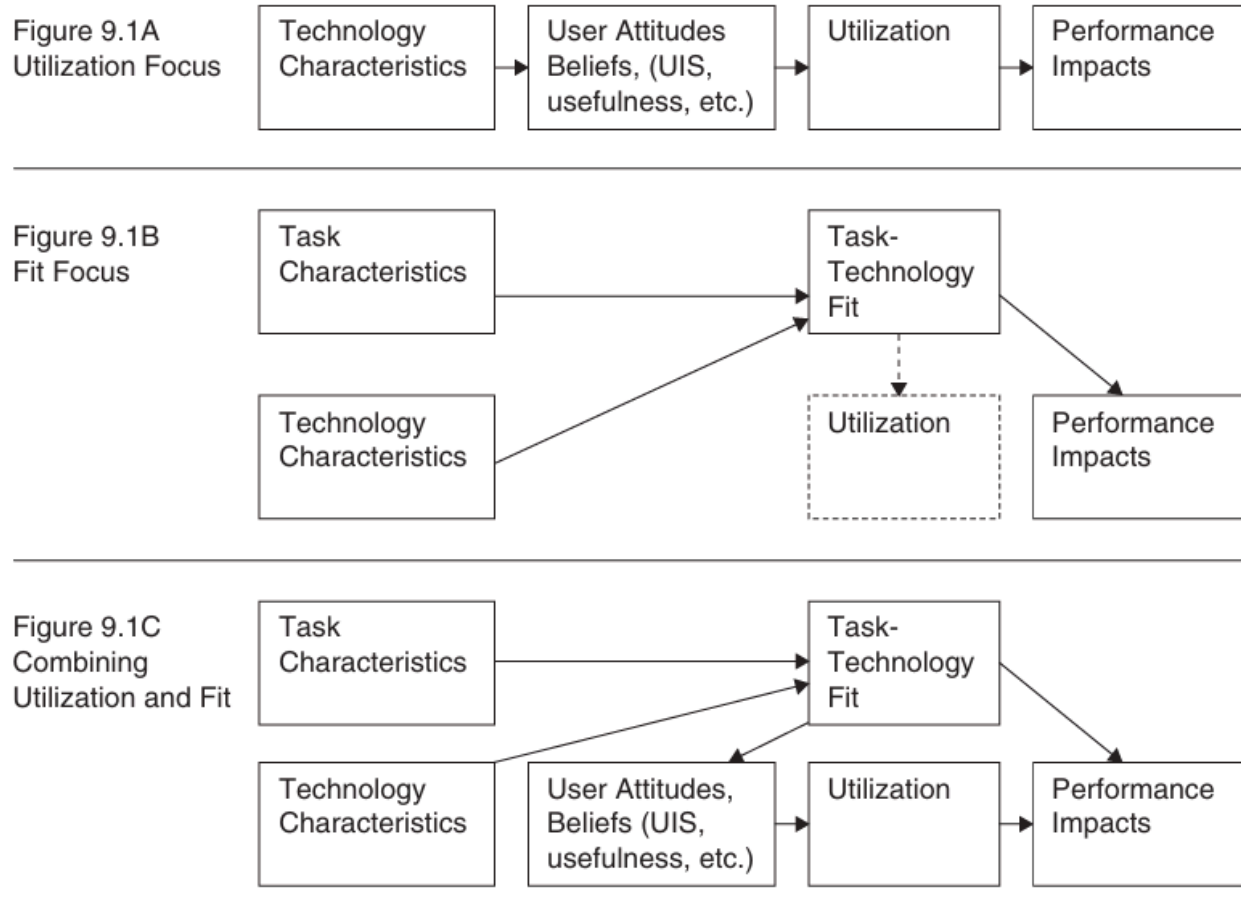
When leaders choose technologies mainly for business reasons like efficiency, billing, or data capture without assessing real-world usability, they cause clinician frustration and disrupt workflows. This erodes trust in leadership and harms workforce retention and care quality.

# Making Technology Work: The Role of Fit

Task-technology fit is the degree to which a technology assists an individual in performing their tasks, with better fit leading to higher performance and technology utilization.

186 GOODHUE

Figure 9.1 **Three Models of the Link From Technology to Performance**



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Figure 3. Task-Technology Fit Models Linking Technology to Performance. Goodhue & Thompson, 1995

## »» Theme 5: Pipelines, Politics, and Wishful Thinking

Job market data highlights both the scale of healthcare's growth and the increasing strain on the workforce needed to sustain it. Employment growth in healthcare outpaces every other industry in the U.S., with more than 30% of all net new jobs in 2024 originating from the healthcare sector. According to the Bureau of Labor Statistics, demand for clinical healthcare roles will exceed that of all other occupations through at least 2033—and this projection includes only traditional clinical positions.<sup>20,21,22</sup> While many frame these figures as signs of economic strength, in context they reveal a deeper challenge: a rapidly aging population paired with a shrinking labor pool capable of meeting its care needs.

When asked what gives them hope in the face of mounting workforce pressures, many healthcare leaders highlight the next generation of professionals. But this optimism rarely leads to investments in education, training, or incentives that meaningfully support young people entering the field. Without corresponding support, this faith in future workers becomes little more than wishful thinking.

**Building a sustainable healthcare workforce requires a sober reckoning with the gaps between rhetoric and resources.** Investments in talent pipelines must account for how policy and funding decisions shape—or erode—the development of the next generation of caregivers in a changing society.

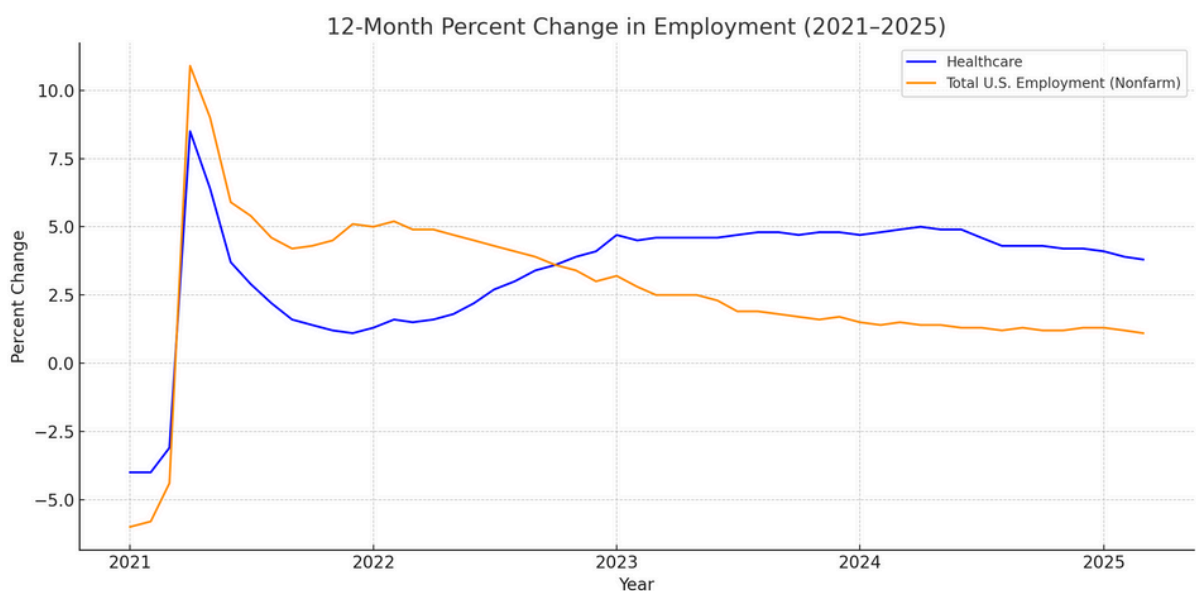


Figure 4. U.S. BLS Healthcare Employment Trends (2015–2025)

————— ” ———

**Every nation, but especially the United States, is already running into a wall at 100 mph because we don't have the people, the workforce that we need.**

—— “ —————







## Guiding Question 7



What are the current policies, programs, or resources that impact building a strong healthcare workforce for the future?

Understanding the future of the healthcare workforce requires expanding the lens beyond traditional levers such as clinical education pathways, licensure standards, and workforce funding mechanisms. While these well-established drivers remain foundational, broader economic, demographic, and political forces that originate outside the healthcare system increasingly influence them. For instances, immigration policy has become a critical determinant, with foreign-born professionals now comprising nearly one in five U.S. healthcare workers.<sup>23,24</sup> Similarly, changes in technology, public health infrastructure, and housing affordability directly affect workforce supply, distribution, and sustainability. Accounting for this wider set of interlocking factors provides a more realistic grasp of what shapes the healthcare workforce, and can ultimately help determine who enters the field, where they work, and under what conditions they thrive.

## Examples of System-Level Policy Constraints Affecting Workforce Growth

	<b><u>Category</u></b>	<b><u>Description</u></b>
	Immigration Policy	Limitations and reduced visa pathways for international medical graduates and foreign-born clinicians reduce the ability to supplement the domestic healthcare workforce, which includes about 20% immigrant staff. These constraints affect workforce growth and composition. <sup>23,24,25</sup>
	Federal Research Funding	Reduced funding from agencies such as NIH and HRSA for health workforce research and development can limit innovation and the creation of new training models, workforce planning, and strategies to address workforce shortages and improving care delivery. <sup>26</sup>
	Medicaid Funding	Changes in Medicaid funding may impact the financing of Graduate Medical Education (GME) and support for clinical training sites. These shifts may affect the capacity to train new clinicians, particularly in underserved areas, compounding workforce shortages. <sup>27</sup>
	Graduate and Professional Student Loan Funding	The introduction of new annual and total borrowing limits for graduate and professional students, including those in medical programs, may not fully cover the cost of education. As a result, students could face increased financial barriers, which may decrease the number of future clinicians entering the workforce.

# Examples Promoting Workforce Sustainability

	<b><u>Category</u></b>	<b><u>Description</u></b>
	Local Pipeline Programs	Community-based pipeline initiatives, also known as “home-grown” programs recruit students and workers—especially those from rural or underserved backgrounds—into health professions for training and upskilling. Research shows that students with rural origins or rural training are significantly more likely to practice in rural settings. <sup>28</sup>
	Health Workforce Training Centers	Federally supported programs that embed clinical rotations and continuing education in underserved regions, such as Area Health Education Centers (AHEC), help increase provider retention where they are most needed. <sup>29</sup>
	Team-Based Care Models	Team-based care models bring together healthcare professionals from various disciplines to collaboratively manage patient care. By sharing responsibilities and leveraging diverse expertise, these models can improve patient outcomes and help prevent provider burnout, supporting a more sustainable healthcare workforce.

# Conclusion

The insights included here reflect the knowledge of healthcare leaders with vast and varied experiences across the healthcare ecosystem. Healthcare workforce challenges often appear at the organizational, community, or individual level, causing shortages, limiting access and quality for patients, and forcing difficult professional decisions for clinicians and healthcare workers. However, the root causes of these challenges often reflect broader social practices and decisions. Connecting the on-to-ground experiences of patients and providers to the ways business and policy decisions impact practice is critical. Building and investing in a sustainable healthcare workforce equipped to serve everyone, everywhere is a broader endeavor shared by all.

Meeting the healthcare needs of a growing and aging population requires more than local innovations or incremental changes; it demands coordinated, long-term investments and a fundamental shift in how the workforce is valued, funded, and governed. The necessary talent already exists, and the need is clear. Building and sustaining an effective healthcare workforce depends on collective will to align policy, investment, and leadership for the benefit of both the U.S. health system and everyone it serves.

# References

1. [www.who.int/publications/i/item/everybody-s-business----strengthening-health-systems-to-improve-health-outcomes](https://www.who.int/publications/i/item/everybody-s-business----strengthening-health-systems-to-improve-health-outcomes)
2. [pmc.ncbi.nlm.nih.gov/articles/PMC9062457/](https://pmc.ncbi.nlm.nih.gov/articles/PMC9062457/)
3. [pmc.ncbi.nlm.nih.gov/articles/PMC9062457/?utm\\_source=chatgpt.com](https://pmc.ncbi.nlm.nih.gov/articles/PMC9062457/?utm_source=chatgpt.com)
4. [www.who.int/health-topics/health-workforce#tab=tab\\_1](https://www.who.int/health-topics/health-workforce#tab=tab_1)
5. [www.hpniec.org/media/3471/download?attachment](https://www.hpniec.org/media/3471/download?attachment)
6. [www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/nhe-fact-sheet?utm\\_source=chatgpt.com](https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/nhe-fact-sheet?utm_source=chatgpt.com)
7. [www.health.gov.au/our-work/national-medical-workforce-strategy-2021-2031](https://www.health.gov.au/our-work/national-medical-workforce-strategy-2021-2031)
8. [www.canada.ca/en/health-canada/news/2023/12/health-workforce-canada-established-to-improve-health-workforce-data-and-planning.html](https://www.canada.ca/en/health-canada/news/2023/12/health-workforce-canada-established-to-improve-health-workforce-data-and-planning.html)
9. Cometto G, Buchan J, Dussault G. Developing the health workforce for universal health coverage. *Bull World Health Organ.* 2020 Feb 1;98(2):109-116. doi: 10.2471/BLT.19.234138. Epub 2019 Dec 4. PMID: 32015581; PMCID: PMC6986219.
10. Beck et al., 2021. "Investing In A 21st Century Health Workforce: A Call For Accountability", Health Affairs Blog, September 15, 2021. DOI: 10.1377/hblog20210913.133585
11. American Hospital Association. Rural Hospital Closures Threaten Access: Solutions to Preserve Care in Local Communities. September 2022. Accessed July 7, 2025. [www.aha.org/system/files/media/file/2022/09/rural-hospital-closures-threaten-access-report.pdf](https://www.aha.org/system/files/media/file/2022/09/rural-hospital-closures-threaten-access-report.pdf)
12. Rural Health Information Hub. Healthcare Access in Rural Communities. Accessed July 7, 2025. [www.ruralhealthinfo.org/topics/healthcare-access](https://www.ruralhealthinfo.org/topics/healthcare-access)
13. Kaiser Family Foundation. 10 Things to Know About Rural Hospitals. Published February 20, 2024. Accessed July 7, 2025. [www.kff.org/health-costs/issue-brief/10-things-to-know-about-rural-hospitals/](https://www.kff.org/health-costs/issue-brief/10-things-to-know-about-rural-hospitals/)
14. Stoneburner A, Lucas R, Fontenot J, Brigance C, Jones E, DeMaria AL. Nowhere to Go: Maternity Care Deserts Across the US. (Report No 4). March of Dimes. 2024.
15. [arxiv.org/abs/2504.19179](https://arxiv.org/abs/2504.19179)
16. [journals.sagepub.com/doi/10.1177/21501319231166921](https://journals.sagepub.com/doi/10.1177/21501319231166921)
17. [pubmed.ncbi.nlm.nih.gov/33550392/](https://pubmed.ncbi.nlm.nih.gov/33550392/)
18. [www.tandfonline.com/doi/abs/10.1080/00207547808930044](https://www.tandfonline.com/doi/abs/10.1080/00207547808930044)
19. [www.jstor.org/stable/249689](https://www.jstor.org/stable/249689)
20. [bhw.hrsa.gov/sites/default/files/bureau-health-workforce/state-of-the-health-workforce-report-2024.pdf](https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/state-of-the-health-workforce-report-2024.pdf)
21. [www.healthsystemtracker.org/chart-collection/what-are-the-recent-trends-health-sector-employment/](https://www.healthsystemtracker.org/chart-collection/what-are-the-recent-trends-health-sector-employment/)
22. [www.spglobal.com/market-intelligence/en/news-insights/articles/2025/1/surge-in-healthcare-employment-may-mask-weakness-in-wider-us-jobs-market-87077332](https://www.spglobal.com/market-intelligence/en/news-insights/articles/2025/1/surge-in-healthcare-employment-may-mask-weakness-in-wider-us-jobs-market-87077332)
23. [www.bakerinstitute.org/research/understanding-role-immigrants-us-health-sector-employment-trends-2007-21](https://www.bakerinstitute.org/research/understanding-role-immigrants-us-health-sector-employment-trends-2007-21)
24. [www.forbes.com/sites/emmahwhitford/2025/06/13/trumps-visa-ban-is-barring-new-foreign-doctors-from-entering-us/](https://www.forbes.com/sites/emmahwhitford/2025/06/13/trumps-visa-ban-is-barring-new-foreign-doctors-from-entering-us/)
25. [www.axios.com/2025/07/10/employers-health-care-visa-support?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=newsletter\\_axiosvitals&stream=top](https://www.axios.com/2025/07/10/employers-health-care-visa-support?utm_source=newsletter&utm_medium=email&utm_campaign=newsletter_axiosvitals&stream=top)
26. [www.ajmc.com/view/white-house-proposes-deep-cuts-to-hhs-in-fy2026-budget-reducing-nih-to-8-centers](https://www.ajmc.com/view/white-house-proposes-deep-cuts-to-hhs-in-fy2026-budget-reducing-nih-to-8-centers)
27. [www.ama-assn.org/education/improve-gme/ama-advocacy-graduate-medical-education-and-student-loans](https://www.ama-assn.org/education/improve-gme/ama-advocacy-graduate-medical-education-and-student-loans)
28. [www.businessinsider.com/trump-spending-bill-student-loans-cap-graduate-school-doctor-lawyer-2025-7](https://www.businessinsider.com/trump-spending-bill-student-loans-cap-graduate-school-doctor-lawyer-2025-7)
29. [pubmed.ncbi.nlm.nih.gov/32696519/](https://pubmed.ncbi.nlm.nih.gov/32696519/)
30. [www.ncahec.net/graduate-medical-support/what-we-do/](https://www.ncahec.net/graduate-medical-support/what-we-do/)



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