CREATING A SUSTAINABLE U.S. HEALTHCARE SYSTEM

Addressing workforce, productivity and financial wellness





Foreword

As the U.S. population ages, hospitals and health systems face an increasingly critical question: how can they train, hire, retain, and support enough employees to meet the rising demand for care, while still maintaining cost-efficiency and long-term financial health?

Several fundamental trends are intersecting to push this question to the forefront. There are more older Americans today than ever before, with more than 55 million people 65+, leading to greater prevalence of chronic disease and rising health expenditure: over 17% of GDP in 2024.^{1,2} Hospitals and health systems are struggling to keep pace with this demand, leading to high operating costs, pressure on margins, and, in some cases, the closure of health facilities in communities that rely on them.

Compounding this challenge, healthcare productivity remains stagnant over the past two decades, despite breakthroughs in technology and the life sciences. Since 2000, digital technologies have transformed every aspect of life—yet health sector productivity has slightly declined.³

Emerging technologies like AI show immense promise, but they have yet to significantly impact healthcare productivity. Absent such a transformation, health systems need more and more workers to meet care needs, but they cannot sustain rapid increases to operating costs indefinitely.

What is the path forward?

In late 2024 and early 2025, the TIAA Institute explored this question with leaders and experts from across healthcare, including clinicians, researchers, and health system executives. Our goal was to understand the trends and challenges impacting health systems, identify promising responses, and find lessons that could be applied from other sectors and fields.

One throughline emerged: expanding the equation. This means looking to new strategies, collaborations, and perspectives, which reach beyond zero-sum competition

for a finite pool of talent. Instead, successful efforts will expand the pipeline by cultivating new sources of talent and embrace a wider set of elements in the employee value proposition. And rather than accepting constrained productivity, new innovations like Alenabled tools have the potential to streamline workflows and increase efficiency.

In addition, the TIAA Institute, the research and educational arm of the broader TIAA organization that focuses on research and education for our partners' most pressing issues, sees instructive parallels between health care and higher education. In many ways, the two are mirror images. As higher ed faces a relative decline in the traditional "college-age" student population, healthcare faces an increase in the traditional "retirement-age" patient population. We believe these similarities offer important lessons as both look to adapt for an aging U.S.

In this paper, Towards creating a sustainable U.S. healthcare system: Navigating workforce, productivity, and financial wellness challenges, we curate takeaways from leaders and experts, provide the research and cross-sector expertise of TIAA, and present a framework—three strategic imperatives, with three cross-cutting lenses that raise questions and opportunities to consider for each.

We hope this will start new conversations as health systems evolve and advance. We look forward to engaging with healthcare clients, health system leaders, and other stakeholders as the sector continues to adapt for the future.



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U.S. health systems: addressing four key paradoxes

For health systems, the strategic imperative is to adapt, innovate, and transform to meet the growing need for care in an aging nation, while maintaining sufficient staffing and stable finances.

The U.S. population is growing older than ever before. In the last century, the population 65 and over grew nearly 5x faster than the total population, reaching 56 million older adults and $\sim\!17\%$ of the U.S. in 2020.4 Looking ahead, this group will grow nearly 50% through 2050, reaching 23% of the population.5

We are moving from a "population pyramid" to a "population pillar," a demographic structure that has a top-heavy distribution. This structure means greater prevalence of chronic disease, comorbid conditions, and acute care emergencies, but a lower ratio of younger people to provide that care.

These pressures are evident in skills shortages, clinician burnout, and rising costs across the health sector. A closer look at the workforce gap shows four challenges, or "paradoxes"—exacerbated during the COVID-19 pandemic but consistent with long-term trends.

Health sector employment has been rising—but the skills gap and disparities remain.

After a drop during the COVID-19 pandemic, health sector employment rebounded to add 2.6 million jobs by March 2024—passing the pre-pandemic level by more than 1 million jobs. The employment growth rate in the sector for 2022–2024 was more than twice that of all other industries combined.⁶

And yet the workforce gap stubbornly remains, especially in certain states and non-metro areas. While the health sector's job opening rate has fallen since a peak at nearly 10% in 2022, it remains higher than the rest of the economy. In 2024, almost half of hospitals reported a RN vacancy rate above 10%.



56M IN 2020

The 65+ population has grown nearly 5x faster than the total U.S. population, and is projected to grow another 50% by 2050.

2.6M

Health sector added 2.6 million jobs, surpassing pre-pandemic level by 1 million, yet many hospitals report RN vacancy rates above 10%.

Health sector wages are increasing—but satisfaction with wages is low.

As health systems struggle to fill openings, wages have been rising, with average weekly earnings up approximately 20% from February 2020 to January 2024. Increases were especially pronounced during the pandemic, given competition for contract workers such as travel nurses. One analysis found a ~140% increase in contract employees and a nearly 60% increase in wage rates, leading to a steep drop in health system operating margins. In

Yet employee satisfaction with wages is low. A Qualtrics study found that just 52% of healthcare employees believe they're paid fairly, the lowest level for any industry.¹²

Technology and the life sciences are advancing—but health sector productivity remains flat.

Despite progress in digital technologies and life sciences in recent decades, health sector productivity has not increased. Much as one professor can only teach so many students in a conventional college classroom, one clinician can still only care for so many patients.

According to a 2024 BLS report, the labor productivity of private community hospitals has slightly declined since 2000.¹³ As the demand for inpatient and outpatient services continues to increase, the number of hours worked is increasing in lock step.

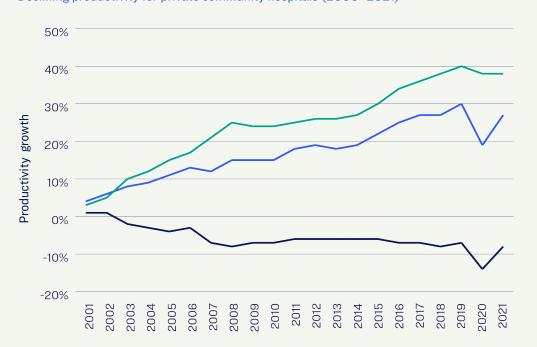
■ Labor productivity

Hours worked

Output

FIGURE. PRODUCTIVITY GROWTH FOR PRIVATE COMMUNITY HOSPITALS.¹⁴

Declining productivity for private community hospitals (2000–2021)



has remained stagnant for two decades, with labor productivity in private community hospitals even slightly declining since 2000.

Health sector productivity

20%

Healthcare wages increased by 20% from February 2020 to January 2024.

52%

Yet only **52% of healthcare**employees feel they are paid fairly—
the lowest among all industries.





Workload, staffing shortages, and burnout are major challenges—and they only reinforce each other.

According to the TIAA Institute Healthcare Workforce Survey, 40% of surveyed healthcare employees say that staffing shortages and a lack of resources are a big problem, and 30% say stress and burnout are a big problem. These concerns are especially high among those at elevated risk for turnover, rising to 63% and 56%, respectively.¹⁵

The result can be a vicious cycle, where clinician turnover and staffing shortages put increased pressure on employees, leading to further risk of stress, burnout, and turnover.

Result: Growing pressure on health system capacity, workforces, and finances.

Where does this leave the health workforce and health systems? The tight labor market puts financial pressure on hospitals and health systems, as labor costs outstrip revenue increases. From 2021 to 2022, health system revenues grew by 12.5%, but costs surged by 17.2%, straining margins. In fact, Fitch Ratings declared 2022 "the worst year ever" for the financial health of non-profit hospitals. While hospital margins increased in 2023, they remain below pre-pandemic levels. 17

At the same time, gaps are widespread across health occupations and, for many roles, expected to

persist for the next 10 years. Further, rural areas and certain states face far more severe gaps than others. According to the Health Resources & Services Administration, 26 states had less than 90% adequacy of RNs in 2024, 11 of those had less than 80% adequacy, and four of those (Idaho, New Mexico, Oklahoma, and Virginia), had less than 70%. 18

Moreover, these gaps are not just numbers; they represent real-world issues that impact patient care, access, and outcomes. Certain states, or regions within a state, particularly those with lower funding or less infrastructure, face more significant gaps in healthcare workers.

These disparities can lead to uneven healthcare quality across the country, where some states or areas may struggle to provide even basic services, while others have relatively well-resourced healthcare systems. For example, Alabama has just 57% adequacy of Emergency Medicine Physicians, while Massachusetts has 152%. While there is a projected 114% adequacy of Physician Assistants in metro areas by 2037, the projection is just 72% for non-metro areas.¹⁹

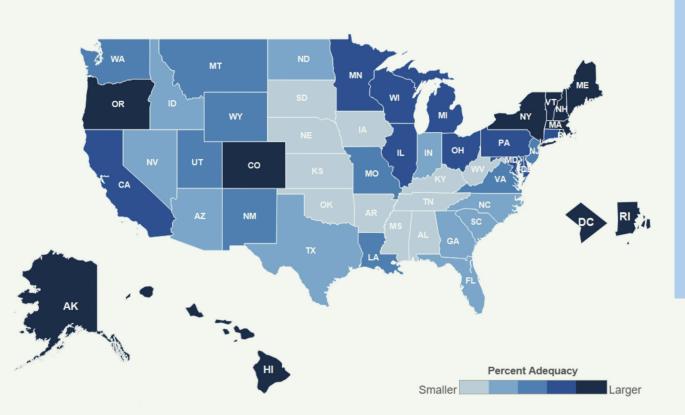


FIGURE. ADEQUACY OF EMERGENCY MEDICINE PHYSICIANS BY STATE IN 2024.²⁰

RN ADEQUACY

26 states below 90%

Idaho, New Mexico, Oklahoma, and Virginia below **70**%.

EMERGENCY MEDICINE PHYSICIAN ADEQUACY

57% Alabama vs. **152%** Massachusetts



What informs health system strategies?

Expanding the equation through three lenses.

As health systems face this challenging environment, experts agree that the most promising path forward is to expand the equation. Health systems can look to introduce new sources of talent (increasing training and recruitment), new drivers of the employee value proposition (increasing retention), and new innovations for workflows (increasing productivity), supported by new partners and technologies.

Three "lenses" suggest ways to reconsider these areas, ask new questions, and work towards fresh responses:



Cross-Sector Collaboration Lens

Learning from and working with partners outside the healthcare sector.



Work and Workforce Lens

Creating the right mix of roles, skills, and teams, while enhancing the workplace and the work experience itself.



Longevity and Aging Lens

Positioning for the growth of the intergenerational workforce and people changing careers.

When we apply the lenses to key health system goals, we have a set of questions to consider and potential opportunities to pursue:

	Cultivate the talent pipeline	Elevate the employee value proposition	Innovate to increase productivity
Cross-Sector Collaboration Lens	How can we get more value from our academic affiliations, or start new ones?	How can we partner with benefits providers or other organizations to engage and support employees beyond salary?	How can we collaborate with tech innovators to reduce administrative or clinical burden?
Work and Workforce Lens	How can we connect overlooked local talent pools with clinical or allied health roles?	How can we design roles, benefits, and workplaces to maximize meaningful work, while mitigating stress and burnout?	How can we best adapt jobs and the workforce to harness the advantages of AI, robotics, telehealth, and other technologies?
Longevity and Aging Lens	How can we attract older students and workers who want to change careers?	How can we best shape our EVP for an intergenerational workforce with varied life stages and preferences?	How can we help intergenerational teams to drive productivity and retention?

Spotlighting the parallels

Insights from healthcare and higher education

TIAA has a long history of serving the higher education and healthcare sectors. We see important parallels between the two, providing an opportunity for shared lessons and models.

Both are heavily impacted by aging, as they navigate the demographic transition that requires adapting to balance supply and demand, while ensuring financial health. Our hope is that each can inform and inspire solutions for the other.



Healthcare

Higher Education

Shared dynamics

Demand concentrated in certain age range

Flat productivity

Steadily increasing costs, outstripping revenues and pressuring margins

Purpose-driven, revenue-reliant

Large, fragmented market

Heavily influenced by policy decisions

Central difference: Impact of aging

Losing "college-age" students
Imperative: Grow and support new pools of students

Gaining "retirement-age" patients
Imperative: Grow and support new pools
of talent

Shared enablers to adapt

Identifying, reaching, and engaging overlooked pools of human capital

Innovative collaborations with med-ed, tech leaders, start-ups

Harnessing the power of new technologies to improve and scale

Knowing the local market, community, ecosystem

Creating an age-inclusive environment

A strong Advanced Practice Provider program can provide NPs and PAs right into the health system, yet many health systems are not connected with schools of nursing or advanced practice.

David Kirshner,

Executive Advisor, Ernst & Young Global Consulting Services; Managing Director of LogicSource's healthcare division; former CFO. University of Rochester Medical Center

Innovative partnerships between hospitals and community colleges are training a pipeline of allied health professionals who are technicians or assistants, and who know they have a great job waiting. That frees clinicians' time higher up the value chain.

Katherine Baicker,

Provost, University of Chicago; Emmett Dedmon Professor, Harris School of Public Policy



Cultivate new sources of talent

The most promising opportunities to expand the talent pipeline lie with the growth of advanced practice provider programs, overlooked local talent pools, and a likely surge in workers who are changing careers. Experts say tapping these areas requires a proactive approach to train, recruit, and onboard for the right roles, rather than waiting for the labor market to produce needed skills.

Silver lining in the data

HRSA projects the number of Nurse Practitioners (NPs) will increase by 107% from 2022 to 2037, reaching more than 700,000 NPs and staying ahead of increases in demand.²¹ In fact, there is the potential for an additional 50,000 NPs in the system under the "more graduates" scenario.



The number of Nurse Practitioners (NPs) is projected to increase by 107% from 2022 to 2037.

Questions to consider

How can we get more value from our academic affiliations, or start new ones?

Experts note that projected growth in the number of NPs, PAs, and LPNs is one of the most encouraging trends in the health workforce. To align with this growth, health systems can explore how to form new or stronger partnerships with schools of nursing, advanced practice, or other academic institutions. Even if these are already in place, more can often be done to expand the number of seats available and streamline job pathways.

How can we connect overlooked local talent pools with clinical or allied health roles?

Recruitment for roles that require less training can help expand staffing and save clinicians' time, especially when tailored to the local talent ecosystem. Programs might include collaborating with vocational schools, community colleges, or community health worker programs, to train care navigators, community health workers, hospital technicians, or other roles across the health workforce.

How can we attract older students and workers who want to change careers?

Over the next decade, longer careers and the workforce disruptions of AI could result in a large cohort of people from age 25 to 75 who are looking to upskill, reskill, and change careers. Health systems can provide desirable jobs that often can't be automated, but they will need to ensure that both training programs and workplaces are age-inclusive for this cohort of students. (See our report, *The future of higher education in the era of longevity*, for more.²²)



Innovate to increase productivity

Al, robotics, telehealth, and other advanced technologies promise to increase productivity by reducing administrative burden, streamlining workflows, and aiding diagnosis or decision-making. Alongside shifts to workflows and care delivery, these innovations can enhance efficiency and capacity, but the best approach to implementation is still emerging.

Silver lining in the data

A recent study estimates that tech enablement and delegation could save as much as 15% of nurses' time, freeing them to focus on high-value activities like direct patient care or mentoring, rather than looking for supplies or other support tasks.²⁶

15%

As much as 15% of nurses time could be saved by tech enablement.

Questions to consider

How can we collaborate with tech innovators to reduce administrative or clinical burden?

Academic experts, EHR companies, and AI or heath tech start-ups all offer potential collaborations for health systems to deploy technologies that increase productivity. For instance, a health system might collaborate with a university to explore AI for a certain task or specialty like interpreting images, explore AI tools built into their EHR system, or work with one of the growing number of AI-based health startups, which have attracted more than \$30 billion in investment in recent years.27

How can we best adapt jobs and the workforce to harness the advantages of AI, robotics, telehealth, and other technologies?

These advanced technologies now emerging can deliver the greatest benefits for the health workforce and care capacity when they enable shifts in workflows, roles, and time savings. For example, a nurse might direct at-home care across a network of home health aides and remote monitoring devices, or an AI "medical assistant" might assist or automate patient onboarding, freeing up clinicians for other tasks.

How can we help intergenerational teams to drive productivity and retention?

The intergenerational workforce can drive job satisfaction and team cohesion, especially with concerted efforts to foster mentorship, team-building, and support across levels of tenure. In one study, experienced nurses say they felt "like a leader," "hopeful," and "helpful" after working with early-tenure nurses, while early-tenure nurses say they felt "supported" and "grateful." 28

Conclusion: Next steps to define health system strategies

The U.S. healthcare system is at a crossroads, grappling with the challenges of an aging population, rising costs, and a persistent workforce gap. While there is no one-size-fits-all solution for such a large and varied sector, hospitals and health systems face a common set of underlying trends that suggest new approaches, collaborations, and experimentation is needed.



If we consider what a successful health system might look like in five years from now, it would likely be one that adapts and innovates across recruitment and training, EVP and retention, to workflows and productivity. To do so, it would look to areas of new opportunity and advancement, such as collaborations with academic institutions, innovators, and local partners, the rise of older workers and intergenerational teams, shifts in workflows and the workplace to free-up clinicians' time, and the emergence of AI tools and other technologies for greater efficiency.



Checklist for health system responses

While the exact path forward will look different for each health system, a core set of next steps can help to determine the best course:

Expand employee listening.

Deeper understanding of employee segments, their priorities and challenges, and what parts of the EVP matter most to them, through surveys, interviews, or other employee listening efforts.

Invite the outside in.

Seek out new perspectives, ideas, strategies, and tools by engaging across sectors and disciplines, with peers at other health systems, or through working groups, conferences, and other forums.

Know the community.

Identify local pools of students and job seekers, how to make healthcare careers attractive to them, and what training programs can best connect this talent with health system needs at every level.

Collaborate to shape policy.

Work with policymakers to assess local or state-level policy adjustments that can support a more robust healthcare workforce and ecosystem.

Advance age inclusivity.

Assess and enhance the age inclusivity of training programs, benefits, workplaces, and organizational culture for an intergenerational workforce.

As demographic, financial, and staffing pressures come together, now is the time to begin exploring and scaling these near-term next steps and long-term strategies. The TIAA Institute is committed to engaging with health systems, experts, and TIAA teams to continue exploring these questions and surfacing new insights and models.

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