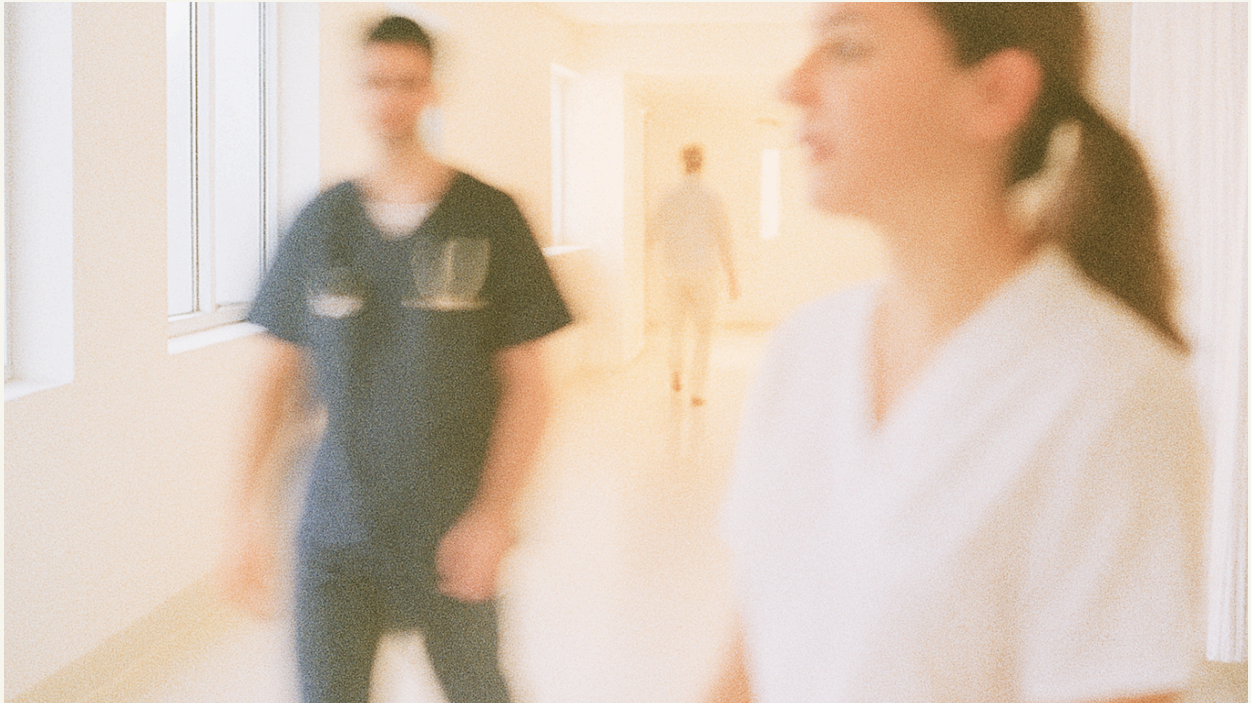


SULLY^{AI} ✨



Industry Report 2025

The state of healthcare: The *labor cost* crisis

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Key crisis *indicators*:

Turnover cost:

\$500k–\$1m

per departing physician

Burnout rate:

48%

of physicians report
burnout symptoms

Labor cost share:

56%

of hospital budgets
(highest in healthcare history)

Physician shortage:

187,130

projected shortage by 2037

Nurse shortage:

78,610

annual RN openings
through 2032

Premium labor:

\$51.1b

spent on contract labor in 2023
(+257.9% since 2019)

The U.S. healthcare system faces an unprecedented labor cost crisis that threatens the sustainability of care delivery. Labor costs now consume 56% of total hospital operating budgets, with year-over-year increases exceeding 20% during peak pandemic years and stabilizing around 4-5% currently.

This crisis stems from converging forces: severe workforce shortages, accelerating burnout and turnover, an aging provider population approaching retirement, and explosive growth in premium labor costs.

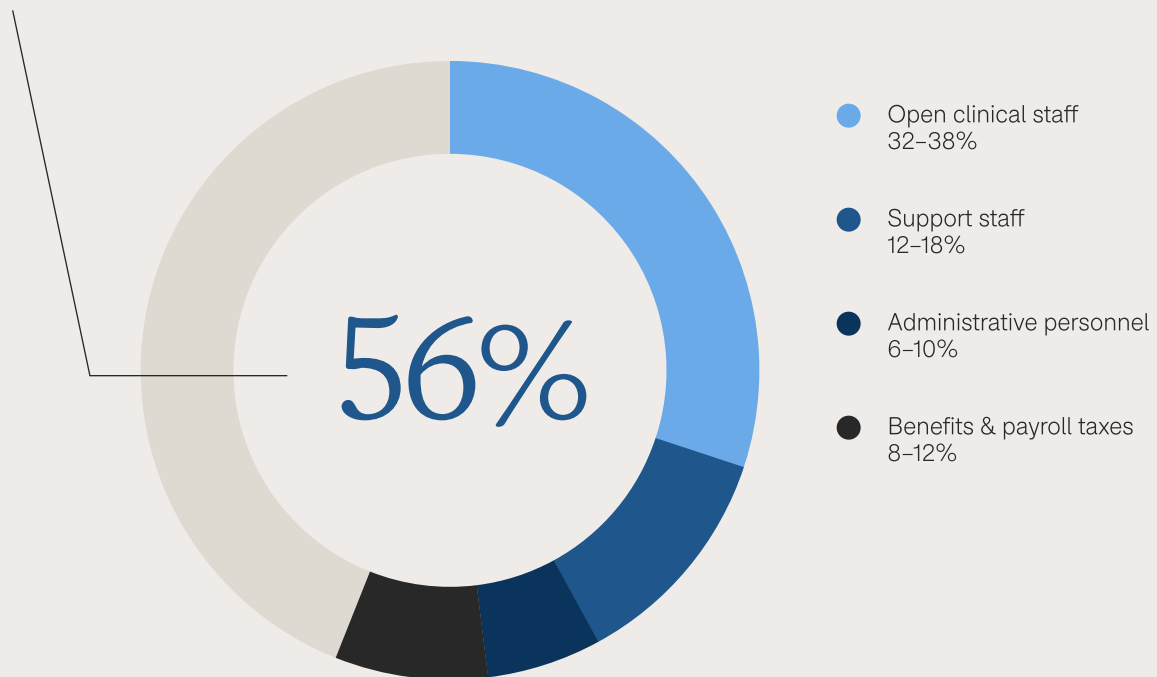
Labor cost *composition*:

- | | | | |
|---|--|---|---------------------------------|
| 1 | Clinical staff (RNs, physicians): 32–38% | 3 | Administrative personnel: 6–10% |
| 2 | Support staff (techs, aides): 12–18% | 4 | Benefits & payroll taxes: 8–12% |

Source: Healthcare Financial Management Association

Labor costs represent the single largest expense category in healthcare delivery, now reaching historic highs that threaten organizational sustainability.

Over 56% of total hospital operating budgets consumed by labor costs



Source: American Hospital Association

This represents the highest labor cost percentage in modern healthcare history and significantly exceeds other industries (retail: 10-20%, manufacturing: 12-35%). Hospital labor expenditures reached \$839 billion in 2023, up from \$775 billion in 2020.

Annual *labor cost* growth rates:

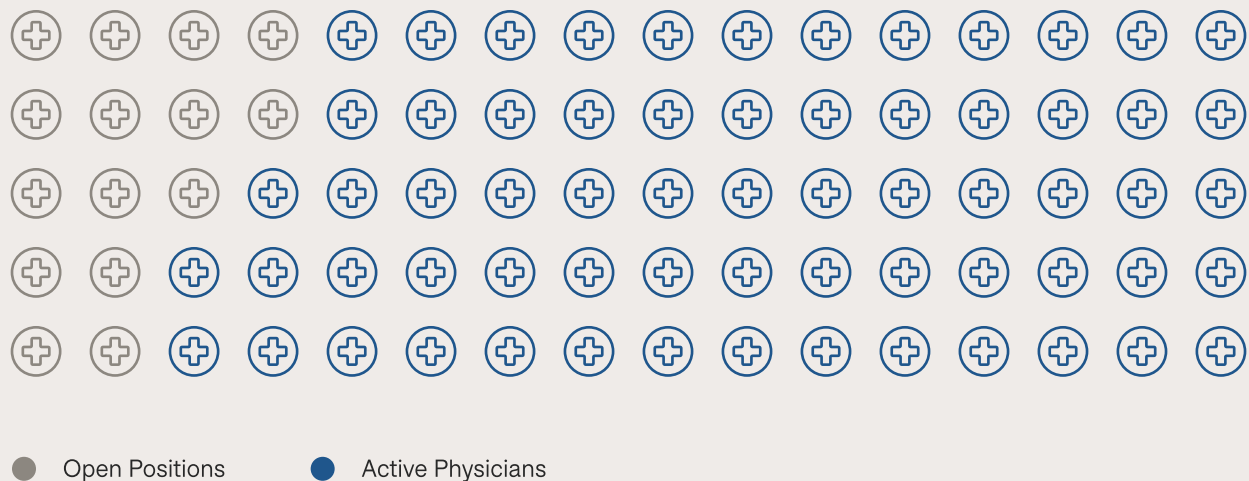
Period	Growth Rate	Drivers
2019	5%	Normal wage inflation, modest hiring
2020	6–8%	Early pandemic staffing challenges
2021	20–25%	Severe shortages, premium labor surge
2022	15–18%	Continued competition, retention bonuses
2023	4–5%	Stabilization with elevated baseline
2024	5.1%	Moderating costs, persistent labor pressures
2025 (proj.)	4–6%	Stabilization efforts, AI adoption begins

Sources: AHA Costs of Caring, NASHP National Trends Report

Labor cost growth has undergone dramatic acceleration, with pandemic-era spikes creating a new baseline that continues to pressure margins.

The 2021-2022 surge created a permanent step-change in labor costs. While growth rates have moderated, they remain above historical norms and compound from an elevated base. Organizations that experienced 20%+ increases in 2021 face ongoing margin pressure even with current 4-5% growth rates.

187,130 physician shortage projected by 2037



Source: AAMC Physician Workforce Study

Projected *shortage* by category (2037):

- 1 Primary care: 48,000 - 86,000
- 2 Surgical specialties: 28,700 - 53,200
- 3 Medical specialties: 22,300 - 58,500
- 4 Other specialties: 10,130 - 16,100

The United States faces an acute and worsening physician shortage that affects both primary care and specialty medicine, with geographic and specialty-specific variations creating access deserts.

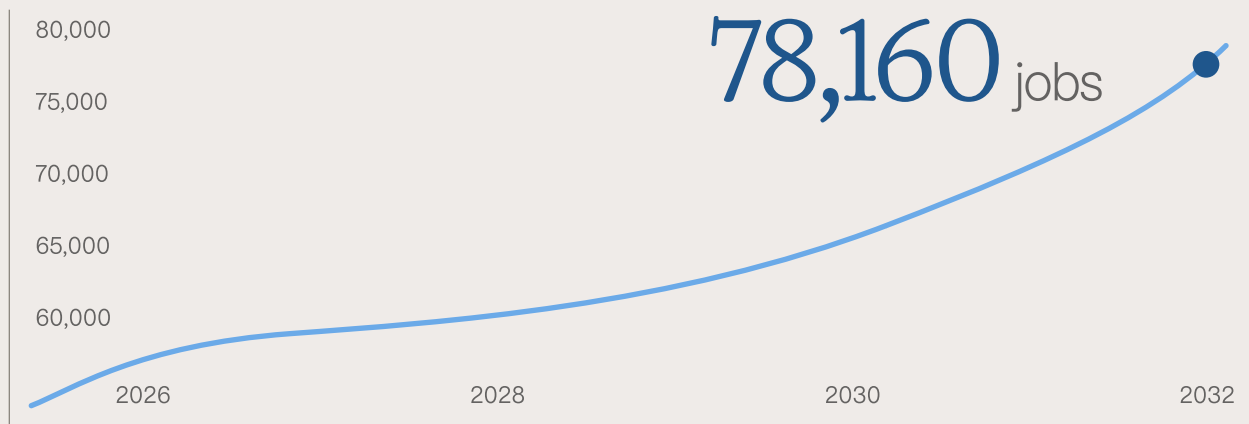
Source: AAMC

Primary care faces the most severe shortage, with rural and underserved areas experiencing critical access gaps. The shortage is driven by insufficient medical school capacity, lengthy training pipelines (11-15 years from undergraduate to practice), and specialty preference shifts among medical students. Current physician turnover rates of 6-7% annually exacerbate these supply constraints.

The nursing workforce *crisis*

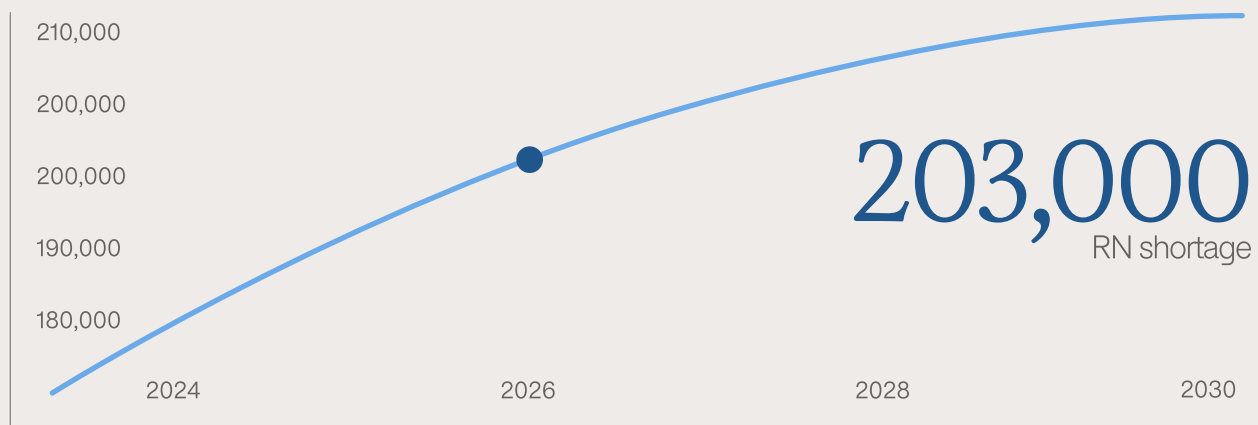


The United States faces an acute and worsening physician shortage that affects both primary care and specialty medicine, with geographic and specialty-specific variations creating access deserts.



78,610 annual registered nurse job openings projected through 2032

Source: Bureau of Labor Statistics



203,000 registered nurse shortage anticipated by 2026

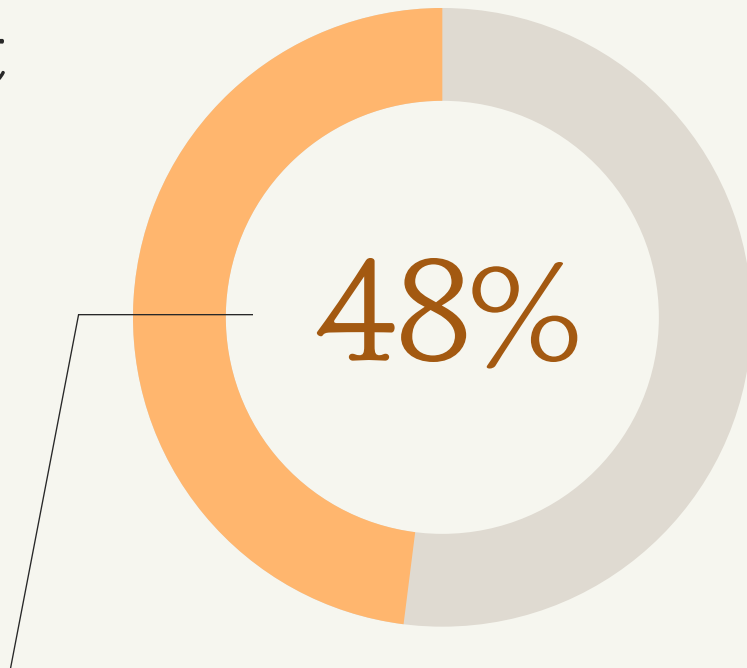
Source: AAMC Physician Workforce Study



Key shortage drivers include aging workforce (average RN age 52 years), inadequate nursing school capacity (80,000+ qualified applicants turned away annually due to faculty and clinical site limitations), high turnover rates (18-25% annually), and accelerated retirements during the pandemic. The shortage is most severe in intensive care, emergency, and operating room settings.

The burnout *epidemic*

Healthcare worker burnout reached crisis levels during the pandemic and remains persistently elevated, driving turnover, quality issues, and workforce exits.



48% of physicians report burnout symptoms

Source: Mayo Clinic Burnout Study



\$4.6 billion annual cost of physician burnout to healthcare system

Source: NAM Physician Burnout Analysis

Burnout rates by role:

Role	Burnout Rate	Drivers
Emergency physicians	60%	High acuity, long hours, violence
Primary care physicians	48%	Administrative burden, volume pressure
Intensive care nurses	55%	Moral distress, staffing ratios, deaths
Medical-surgical nurses	45%	Understaffing, excessive workload
Front office staff	42%	Call volume, system complexity, abuse

Source: Multiple industry studies

Healthcare worker burnout reached crisis levels during the pandemic and remains persistently elevated, driving turnover, quality issues, and workforce exits.

Burnout leads directly to increased medical errors, reduced patient satisfaction, higher turnover, and increased likelihood of leaving healthcare entirely. Physicians experiencing burnout are twice as likely to make medical errors and three times more likely to consider early retirement. Administrative burden—particularly EHR documentation and prior authorization processes—accounts for the majority of burnout drivers.

Annual *turnover* by position:

Position type	Turnover rate
Registered Nurses	18–25%
Physicians	6–7%
Medical Assistants	30–35%
Front Office Staff	40%
Nursing Assistants	40–50%
Healthcare Executives	14–22%

Source: NSI, MGMA, Industry Reports

Healthcare experiences higher turnover rates than most industries, creating continuous recruitment costs, training burdens, and care continuity disruptions.

Front office and support staff experience the highest turnover, creating constant disruption to patient access and administrative functions. Nurse turnover correlates directly with patient safety outcomes—a one standard deviation increase in nurse turnover associates with 35 additional deaths per 100,000 hospital admissions. Primary turnover drivers include workload, compensation, career advancement opportunities, and workplace culture.

Turnover *cost* by role:

Position	Cost per departure	Cost components
Physician	\$500k–\$1m	Recruiting, lost revenue, onboarding, ramp-up
Registered nurse	\$40k–\$65k	Recruiting, training, temporary coverage
Medical assistant	\$20k–\$35k	Recruiting, training, productivity loss
Front office staff	\$10k–\$25k	Recruiting, training, error rates

Source: Work Institute, NSI, MGMA

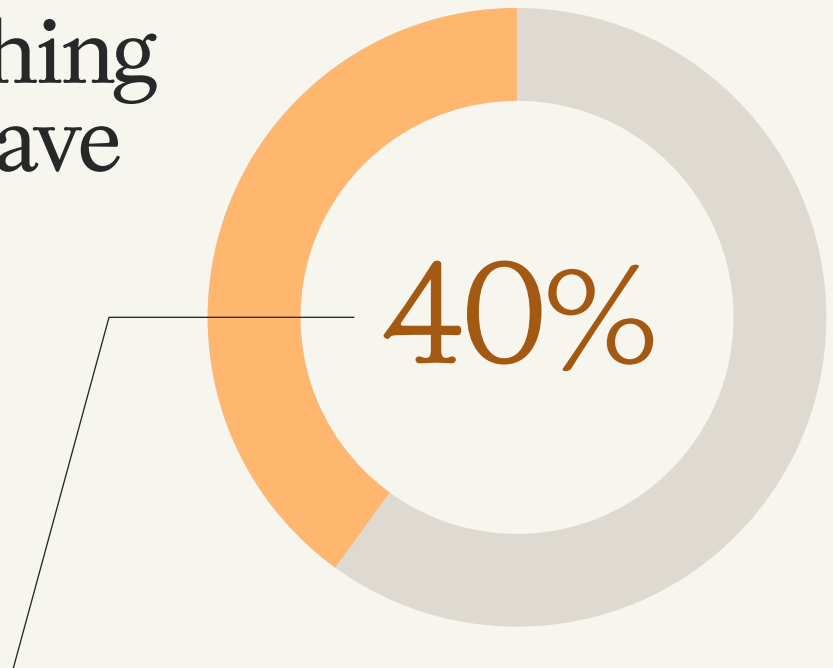
Healthcare turnover imposes massive direct and indirect costs that compound the labor crisis.

System wide impact:

For a typical 400-bed hospital experiencing average turnover rates, annual turnover costs can exceed \$8-12 million. At a national level, RN turnover alone costs the U.S. healthcare system approximately \$5.2-9.0 billion annually. These figures exclude the substantial indirect costs of quality degradation, patient dissatisfaction, and staff morale impacts.

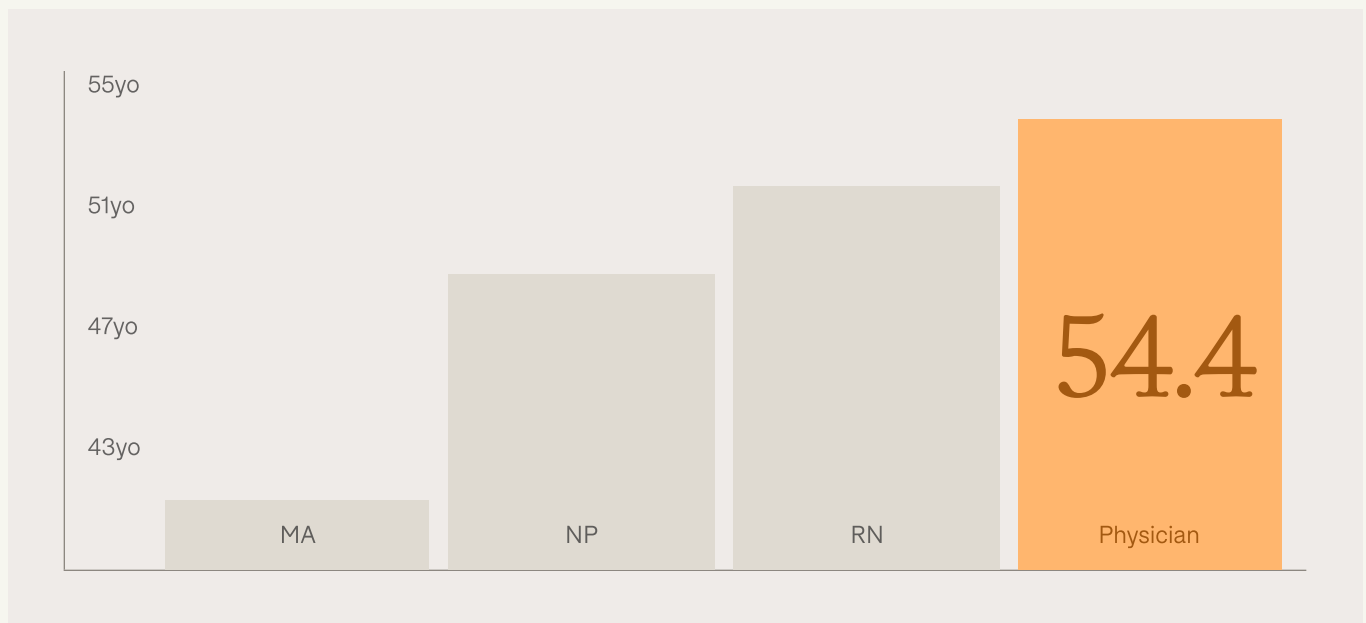
Hidden turnover costs include increased error rates during transition periods, knowledge loss, team disruption, reduced patient continuity, and negative effects on remaining staff morale. Each departing experienced nurse takes with them institutional knowledge, patient relationships, and team chemistry that may take 6-12 months to rebuild.

The approaching *retirement* wave



40% of practicing physicians are aged 55 or older

Source: AAMC Physician Workforce Data



54.4 years: Average physician age (vs. 41.8 for general workforce)

Source: AMA Physician Practice Benchmark Survey

Healthcare *workforce* age demographics:

Position	Average Age	% Age 55+
Physicians	54.4	40%
Registered nurses	52	33%
Nurse practitioners	49	28%
Medical assistants	42	15%

Source: AMA, BLS, Industry Analysis

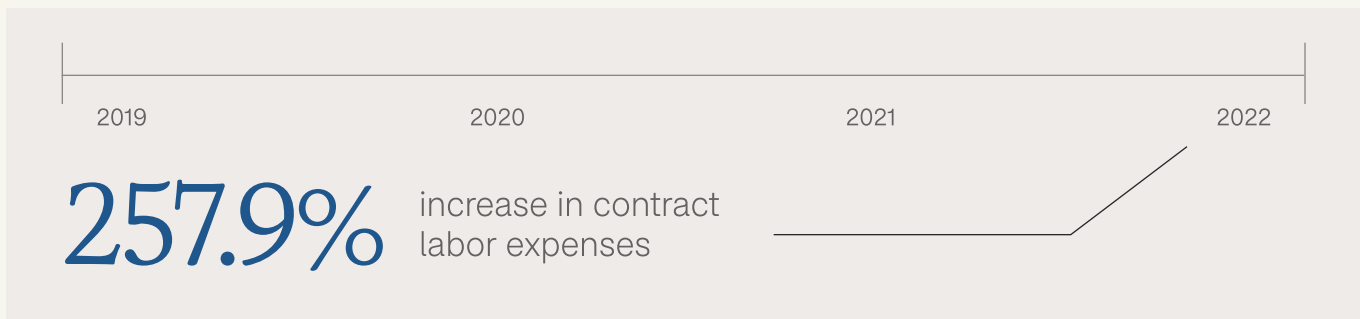
Retirement decisions are influenced by financial readiness (physicians target \$4 million in retirement savings), burnout levels, and practice enjoyment. The pandemic accelerated retirement planning for many clinicians—survey data shows 31% of physicians considering earlier-than-planned retirement due to COVID-19 impacts. Primary care and rural physicians face particular vulnerability to retirements, as these practitioners skew older demographically.

The retirement wave compounds the shortage crisis because training pipelines cannot produce replacements fast enough. Each retiring physician requires 11-15 years to replace (from undergraduate education through residency). This creates a structural supply deficit that will persist for decades without intervention.

The *premium labor* cost explosion



Source: Kaufman Hall National Hospital Flash Report



Source: Kaufman Hall

Unable to fill positions through traditional hiring, healthcare organizations have turned to premium labor solutions at unprecedented scale and cost.

The surge in premium labor represents one of the most dramatic cost escalations in healthcare history. Travel nurse rates peaked at \$150/hour in early 2022 during the Omicron surge, compared to pre-pandemic rates of \$35-45/hour. While rates have moderated to approximately \$67/hour currently, they remain 50-70% above historical norms.

Premium labor categories

Category	2024 rate	vs. staff rate
Travel nurses	\$67/hour avg.	+70–90%
Locum physicians	\$200–300/hour	+100–150%
Per diem RNs	\$55–80/hour	+40–60%
Contract therapists	\$85–120/hour	+80–100%

Source: Industry analysis, staffing agencies

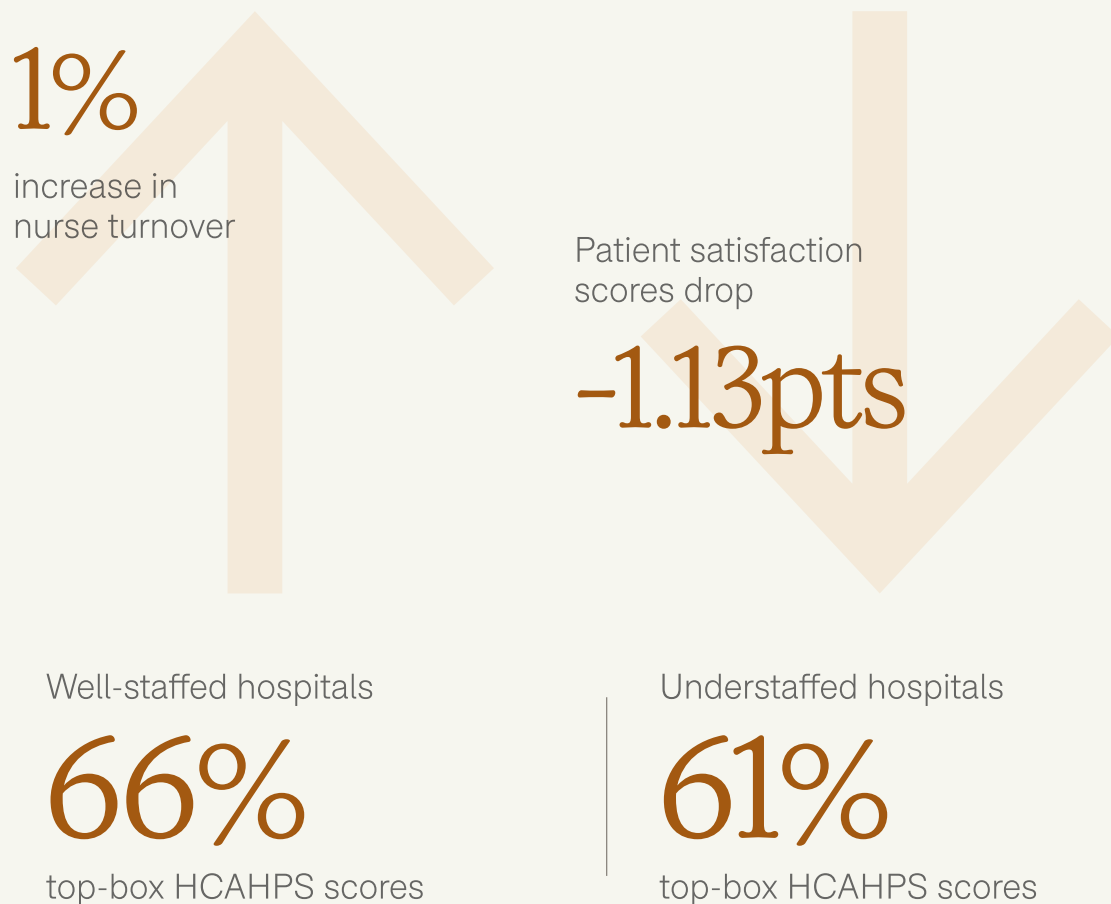


Premium labor creates multiple negative effects beyond direct costs. It disrupts team cohesion, reduces care continuity, lowers staff morale (permanent staff see travelers earning 2-3x their wages), and can actually increase turnover as staff leave to join travel agencies. Organizations caught in premium labor dependency face a vicious cycle where high turnover necessitates premium labor, which drives more turnover.

Projected shortage by category (2037):

- 1 For every 1% increase in nurses leaving the hospital, patient satisfaction scores drop by about 1.13 points. Source: <https://pmc.ncbi.nlm.nih.gov/articles/PMC9545246/>
- 2 Well-staffed hospitals achieve 66% top-box HCAHPS scores vs. 61% in understaffed facilities Source: <https://pmc.ncbi.nlm.nih.gov/articles/PMC4548286/>

Hidden cost of workforce *instability*



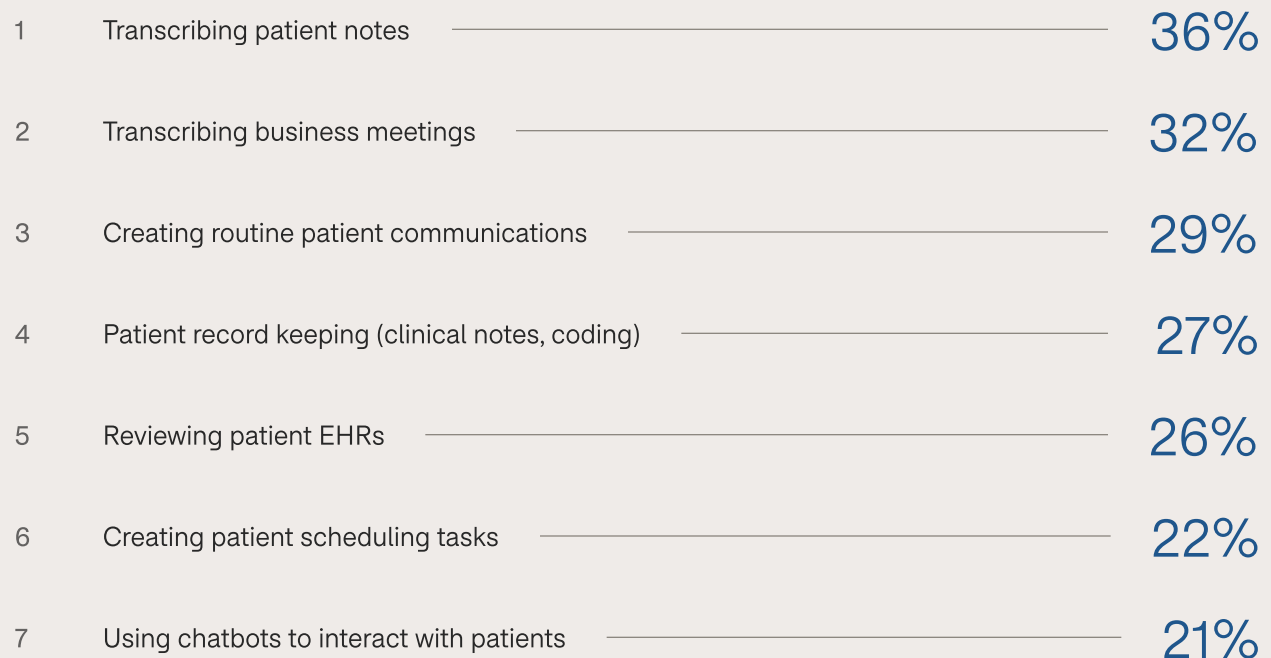
Healthcare workforce challenges don't just affect operations and finances—they directly harm patient satisfaction, safety, and outcomes. The connection between staffing stability and patient experience is clear, measurable, and financially consequential.

Current AI adoption snapshot:

Artificial intelligence represents the only solution that can scale fast enough to address the healthcare labor crisis. Traditional interventions cannot produce results quickly enough or at sufficient scale.

Healthcare organizations are already deploying AI, with highest adoption in administrative tasks that drive burnout.

Top AI *applications* in healthcare:

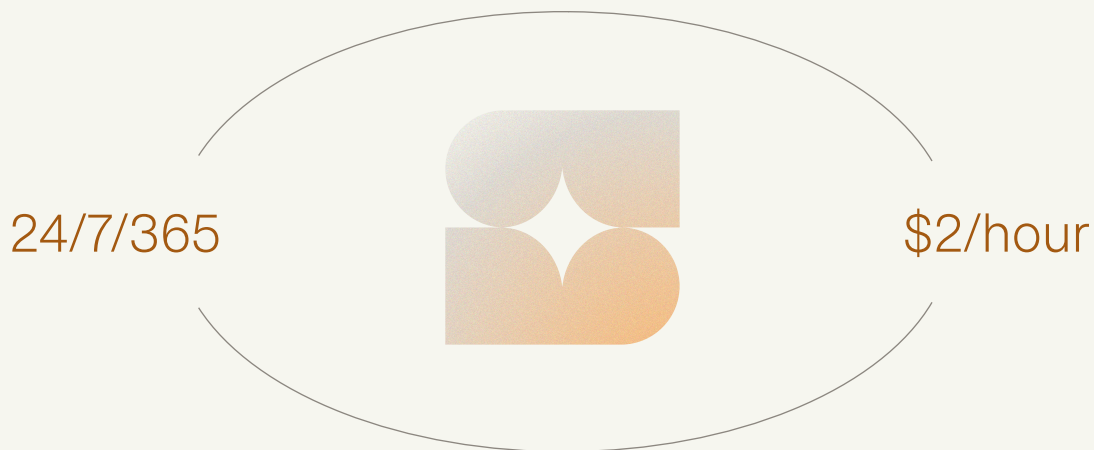


Source: Healthcare AI Adoption Survey

Organizations deploying AI at 30%+ adoption rates in administrative tasks are experiencing measurable workforce relief and 20-30% cost reductions. AI adoption is not a future consideration but an immediate strategic imperative. The technology has matured to the point of reliability and regulatory acceptance, with proven implementations across hundreds of healthcare systems.

The era of AI medical *employees*:

By 2035, successful healthcare organizations will deploy multiple AI Medical Employees for every human administrative employee. This isn't replacement—it's augmentation. While humans focus on complex care and relationships, AI employees handle high-volume operational tasks 24/7/365 at \$2/hour.



Sully.ai is building the autonomous operating system for healthcare—deploying AI Medical Employees that work alongside human staff, handling administrative tasks that fuel burnout and drive unsustainable costs.

Your AI medical team:

- 1 AI Triage Nurse: Prioritizes and routes patient care needs
- 2 AI Receptionist: Manages appointments and intake
- 3 AI Scribe: Generates clinical notes (saves physicians 10+ hours weekly)
- 4 AI Medical Consultant: Provides in-visit clinical intelligence
- 5 AI Medical Coder: Automates billing and coding
- 6 AI Researcher: Delivers evidence-based research instantly
- 7 AI Nurse: Coordinates post-visit care and follow-ups

The **SULLY**^{AI} advantage

Unlike point solutions, Sully.ai provides a fully configurable AI team that integrates with your EHR. These AI employees communicate with each other and continuously optimize performance—creating a self-improving workforce.

Proven impact

Cost per AI employee:



Administrative efficiency:

Admin time saved

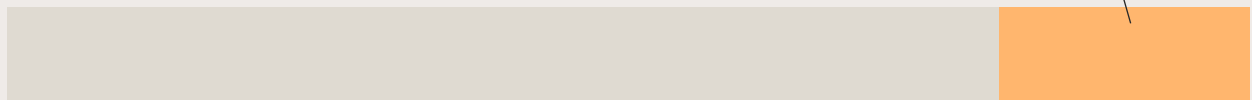
10 hours
weekly per physician

Admin cost reduction

24%
by year 3

Patient capacity:

+25% additional
appointments



Why act *now*?

The labor crisis will intensify over the coming decade.

Organizations deploying AI Medical Employees now gain immediate cost relief, improved staff satisfaction, enhanced patient experience, and workforce scalability impossible with human-only models.



Implementation:

Implemented in

30-90 days

ROI in

3-6 months

Contact Sully.ai today to meet your future AI Medical Employees.

Learn more at

Sully.AI