

2024 ACR-RBMA Practice Leadership Forum

Keynote Address: Challenges Facing the Radiology Workforce: Physician Wellness, Engagement, and Empowerment

Alexander Ding, MD, MS, MBA
Friday, January 19 | Phoenix



American College
of Radiology™
Radiology Leadership Institute



Radiology Business
Management Association

Faculty



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Disclosures

- Nothing to disclose

Objectives

- Define the challenges facing the radiology workforce
- Describe strategies for workforce wellness, engagement, and empowerment

The State of the Radiology Workforce

- Rising volumes
- Increasing workloads
- Workforce shortage
- Rate cuts
- Aging workforce
- Increasing burnout

What are the biggest challenges you've faced so far this year?

Management

- 1) Overall staffing levels
- 2) Increased workload due to organizational changes
- 3) Patient volumes increased
- 4) Struggles dealing with staff
- 5) Struggles with internal management
- 6) Patient volumes down

Physicians

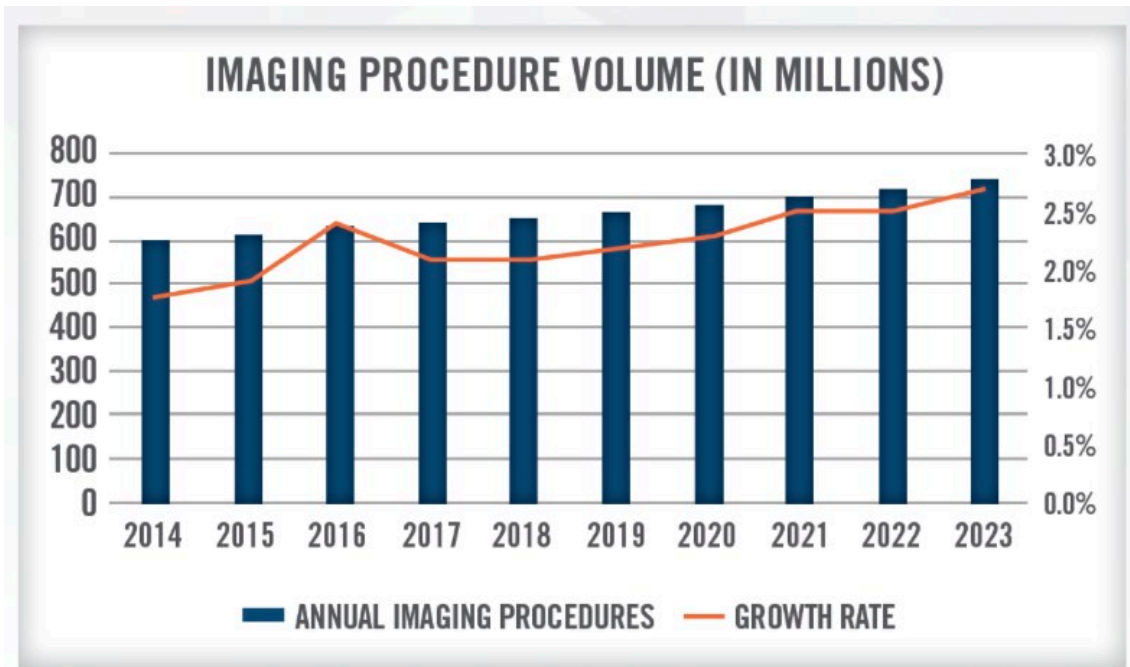
- 1) Patient volumes increased
- 2) Increased workload due to organizational changes
- 3) Overall staffing levels
- 4) Struggles with internal management
- 5) New role or position internally
- 6) Patient severity/mix

Technologists

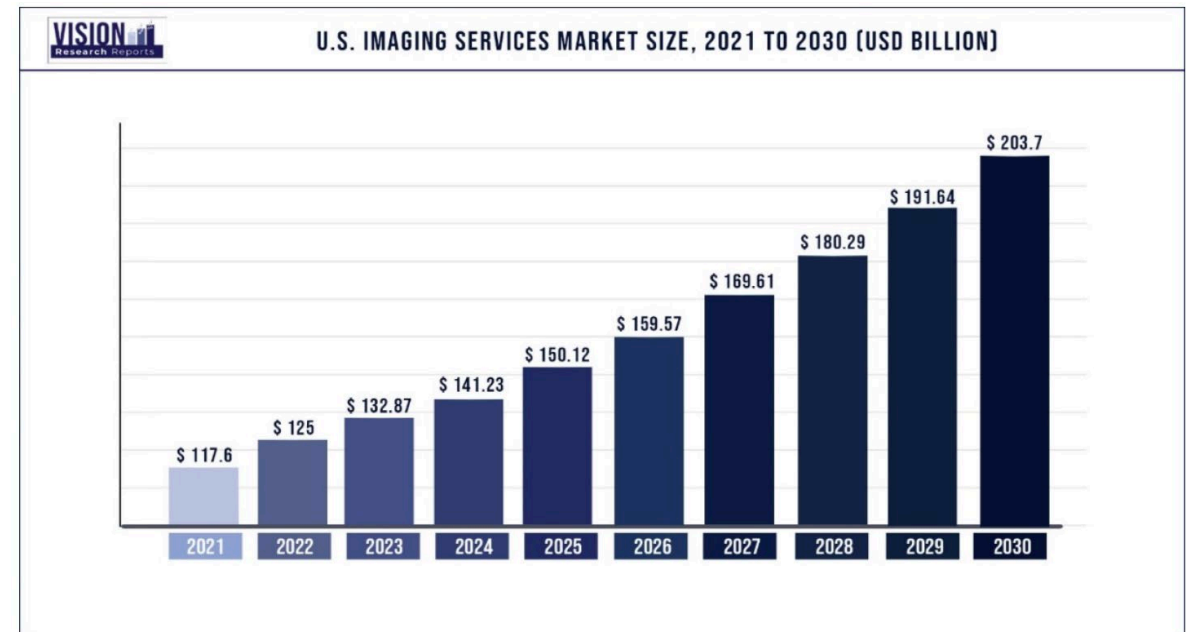
- 1) Patient volumes increased
- 2) Increased workload due to organizational changes
- 3) Struggles with internal management
- 4) Overall staffing levels
- 5) Struggles dealing with staff
- 6) Danger or risk of treating COVID patients

Source: [2023 Radiology Business Salary and Job Satisfaction Report](#)

Volumes have and will continue to rise



Source: [2020 Outlook HealthCare Appraisers](#)



Source: [Vision Research Reports, US Imaging Services Market Size](#)

But workforce numbers are stagnant to slow growing

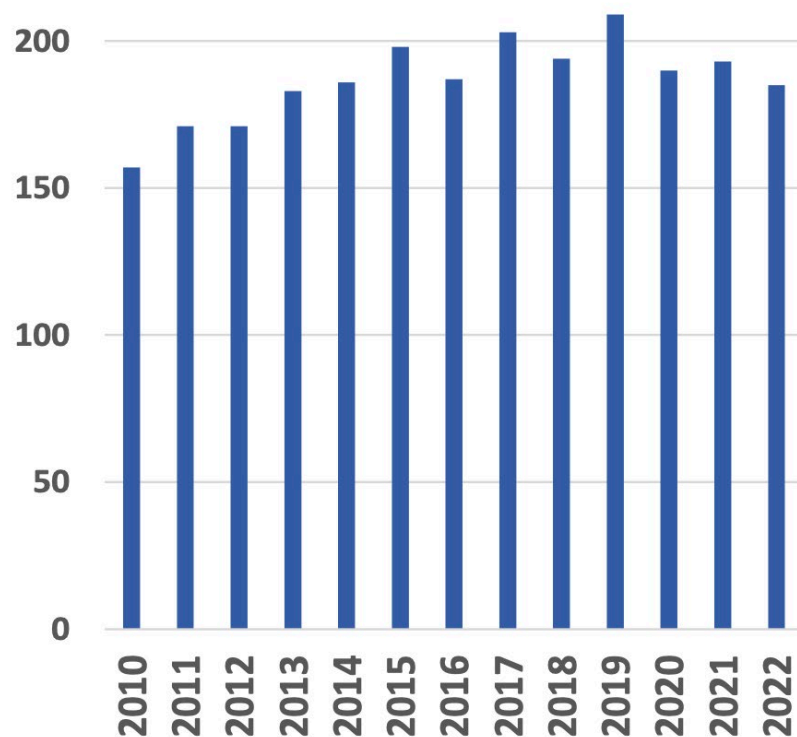


Figure 1: Radiation oncology total residency slot quotas 2010 - 2022

Source: [ASTRO](#)

- Growth is restricted by residency spots, and is slower than rise in work volumes
- Workforce itself is aging
- Workforce is leaving for other careers
- Younger generations have different views on work

Great Resignation: Healthcare not immune

Civilian labor force participation rate, seasonally adjusted

Click and drag within the chart to zoom in on time periods



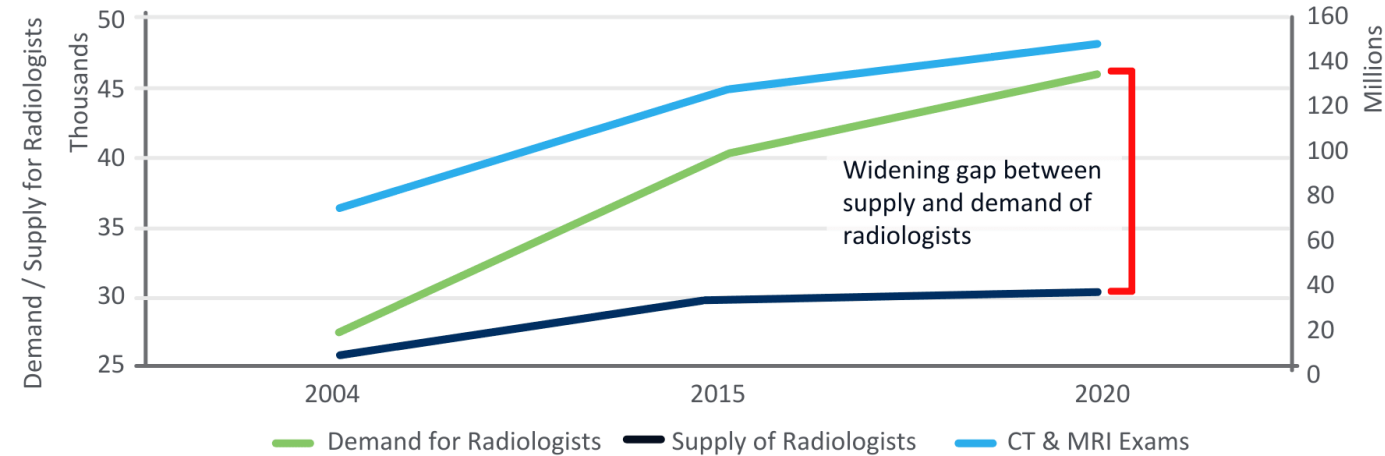
Source: US Bureau of Labor Statistics

- U.S. Bureau of Labor Statistics (BLS) stated 4.5 million workers quit or changed jobs in November 2021
- Health care industry was second among industries hit by the "Great Resignation."

Resulting in supply/demand mismatch & rising workloads

Demand and Supply of Radiologists Versus CT & MRI Exams, US

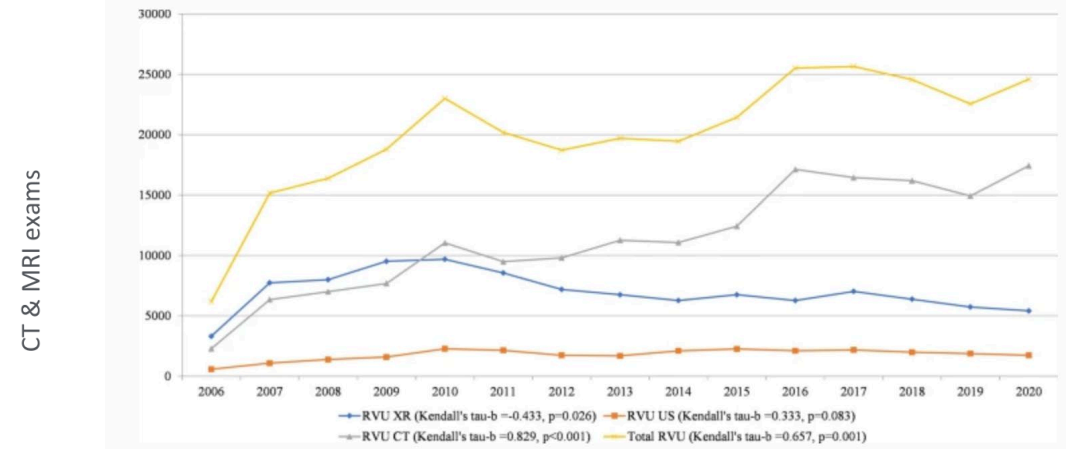
2004 - 2020



Source: Frost & Sullivan, 2019

Source: [2021 vRad Staffing Report Trends](#)

Fig. 1



Relative value units of on-call studies per modality. Temporal trend of the relative value units of on-call studies per modality (XR, US, and CT) and of all modalities together, for the entire month of January of the years 2006 through 2020

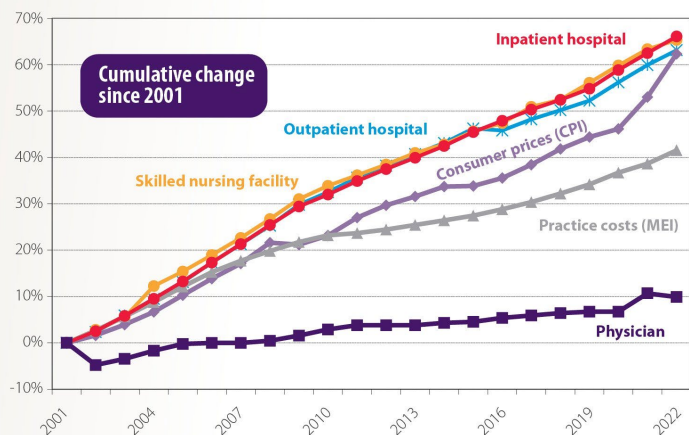
Source: Bruls and Kwee. <https://doi.org/10.1186/s13244-020-00925-z>

All while payment goes down, disproportionately to rads

Medicare physician payment is **not** keeping up with inflation. Why are physician services taking a backseat?

Medicare updates compared to inflation (2001–2022)

Adjusted for inflation in practice costs, Medicare physician payment declined 22% from 2001 to 2022.



Sources: Federal Register, Medicare Trustees' Reports and U.S. Bureau of Labor Statistics, American Medical Association, Economic and Health Policy Research, September 2022.

CMS estimates an overall impact of the MPFS proposed changes to radiology to be a 3 percent decrease, while interventional radiology would see an aggregate decrease of 4 percent, nuclear medicine a 3 percent decrease and radiation oncology and radiation therapy centers a 2 percent decrease if the provisions within the proposed rule are finalized. Part of the decrease is due to changes in relative value units (RVUs) and the third year of the transition to clinical labor pricing updates.

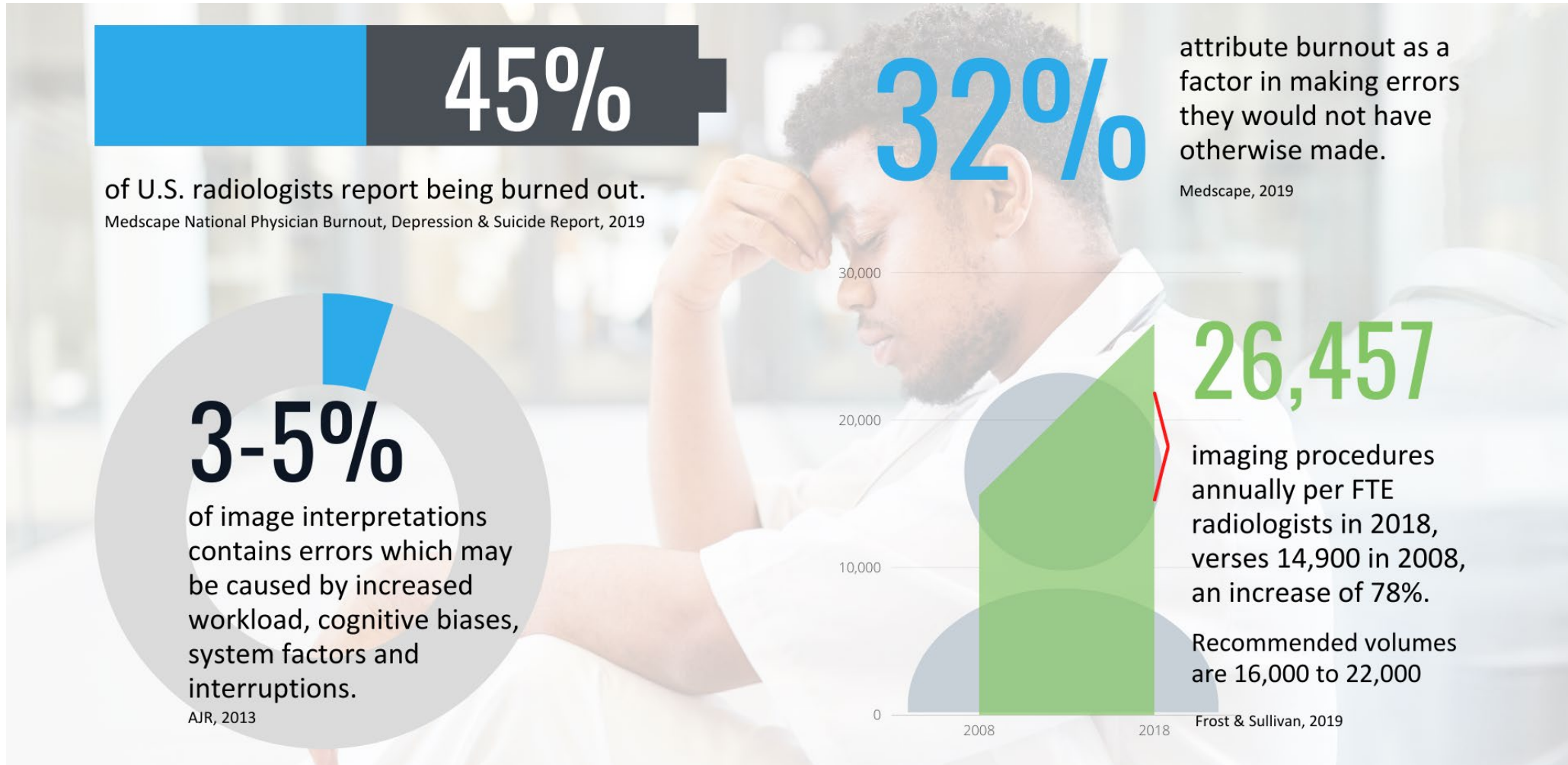
Table 1. Mean adjusted reimbursement trends from 2007 to 2019

Imaging Modality	Mean CAGR	Mean Annual Change	Mean Unadjusted Total Percentage Change	Mean Total Percentage Change
Bone densitometry	-9.7%	-\$8.24	-63.6%	-70.5%
CT	-4.9%	-\$17.66	-32.2%	-45.1%
CTA	-6.0%	-\$38.12	-41.4%	-52.5%
Mammography	-0.6%	-\$0.98	14.7%	-7.1%
MRA	-6.2%	-\$39.83	-42.8%	-53.7%
MRI	-8.2%	-\$52.08	-55.7%	-64.1%
Nuclear medicine	-0.4%	-\$0.32	18.2%	-4.3%
Radiography	-1.3%	-\$0.71	5.5%	-14.6%
Ultrasound	-2.1%	-\$4.13	-4.8%	-22.9%

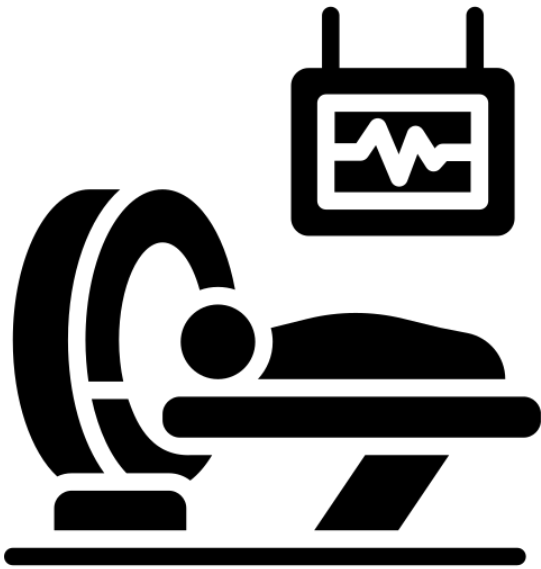
Note: All values are adjusted for inflation. CAGR = compound annual growth rate; CTA = CT angiography; MRA = MR angiography.

Source: JACR <https://doi.org/10.1016/j.jacr.2020.07.003>

This results in moral injury and a demoralized field



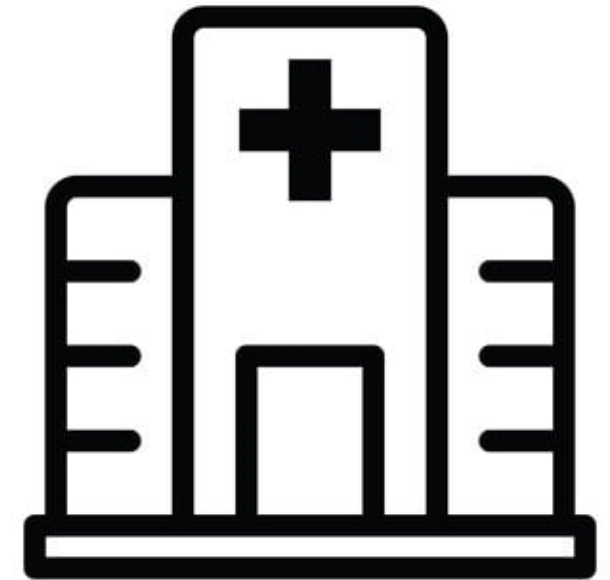
...with different implications by practice type



Private Practice



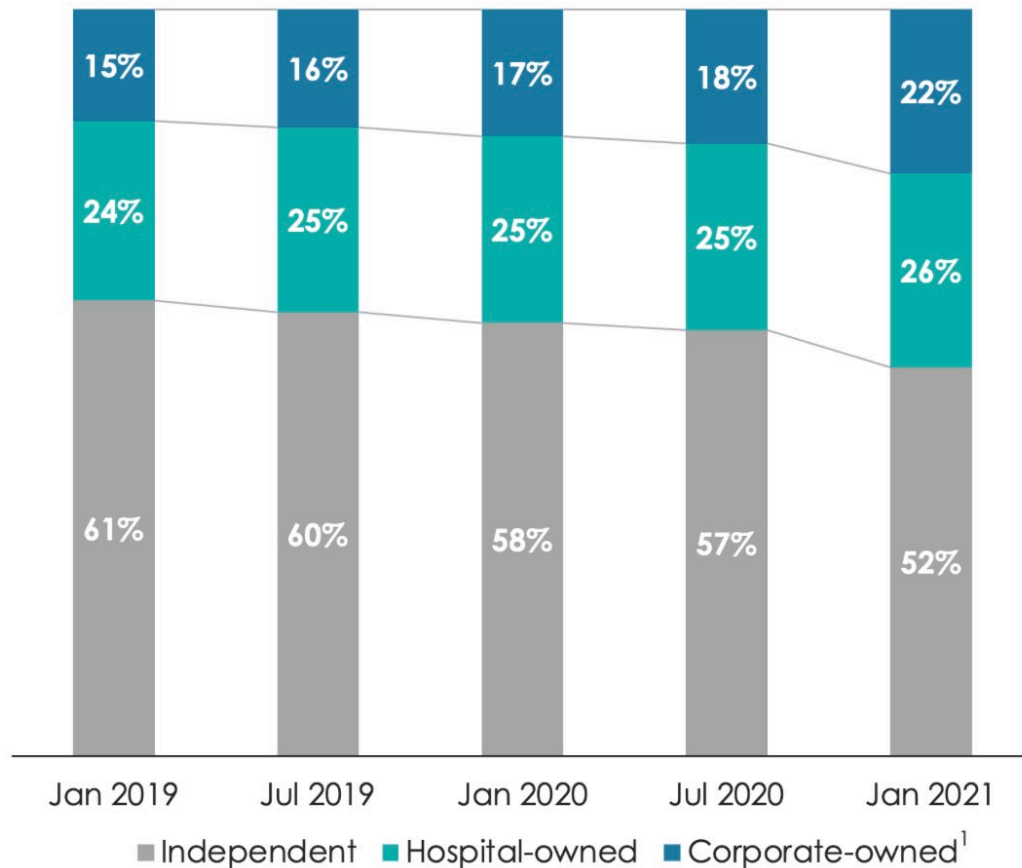
Corporate Practice



Academic Practice

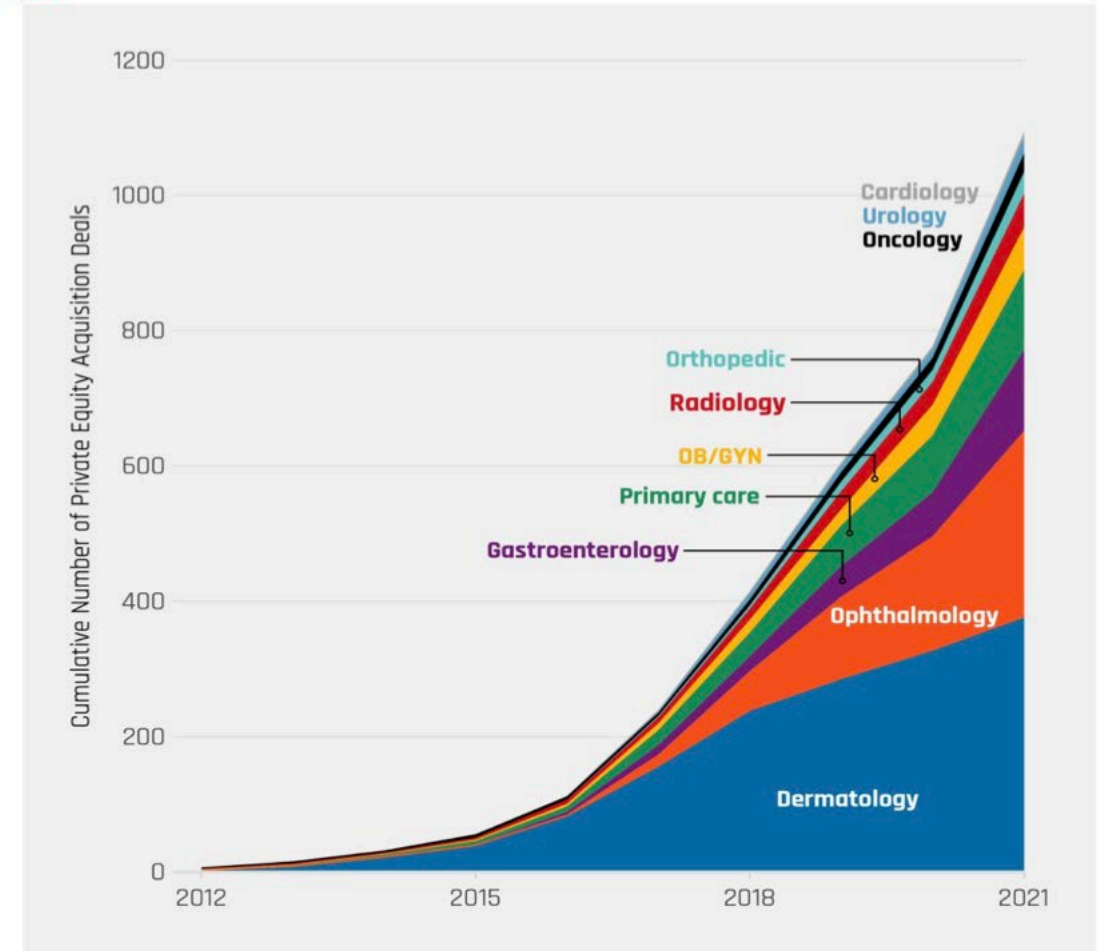
Rise of physician employment impacts workforce

Percentage of Physician Practices by Ownership Type



Source: [Gist Healthcare](#)

Figure 2: Cumulative Number of Private Equity Acquisition Deals of Physician Practices by Specialty, 2012-2021



Source: Authors' analysis of PitchBook Data, Inc., as of June 15, 2022. PitchBook data has not been reviewed by PitchBook analysts.

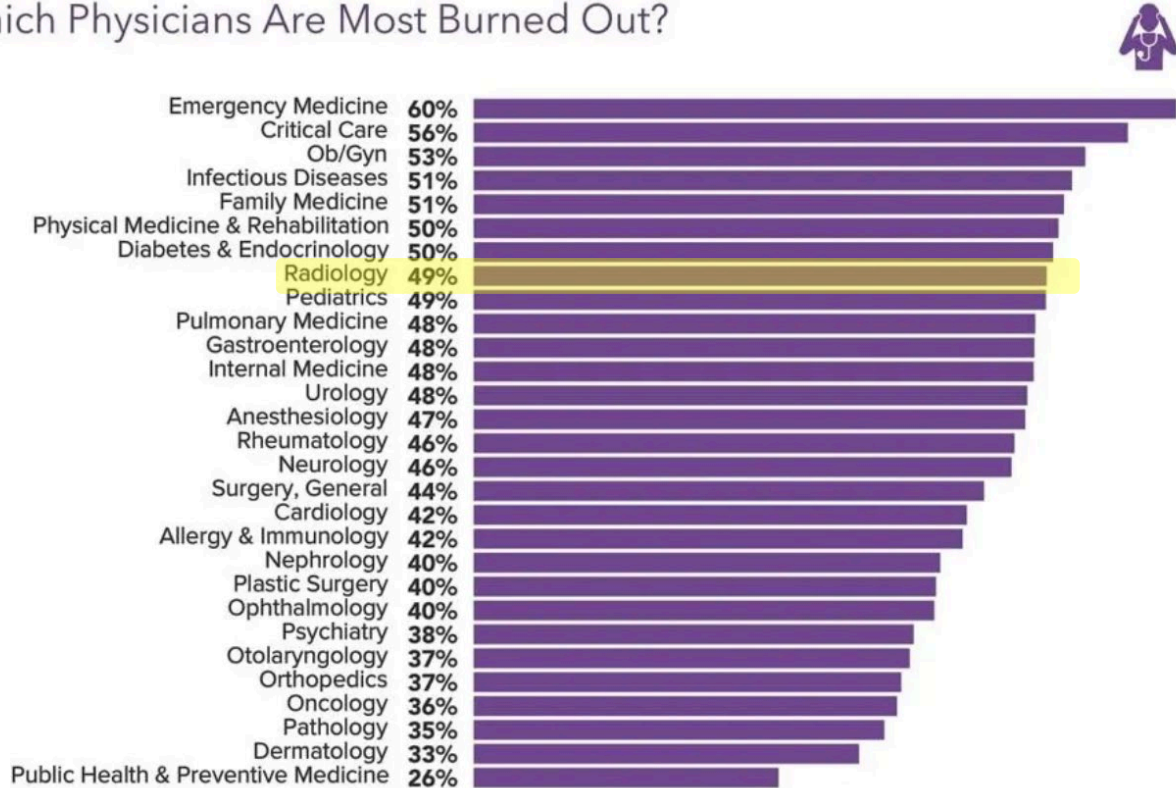
Source: [American Antitrust Institute](#)

Other industry trends contributing to workforce issues

- Admin burdens, increased documentation
- Increased complexity of cases
- Increased number of images per study, i.e. more sequences, thinner slices, more series
- Clunky IT systems
- Rising expectations for TAT

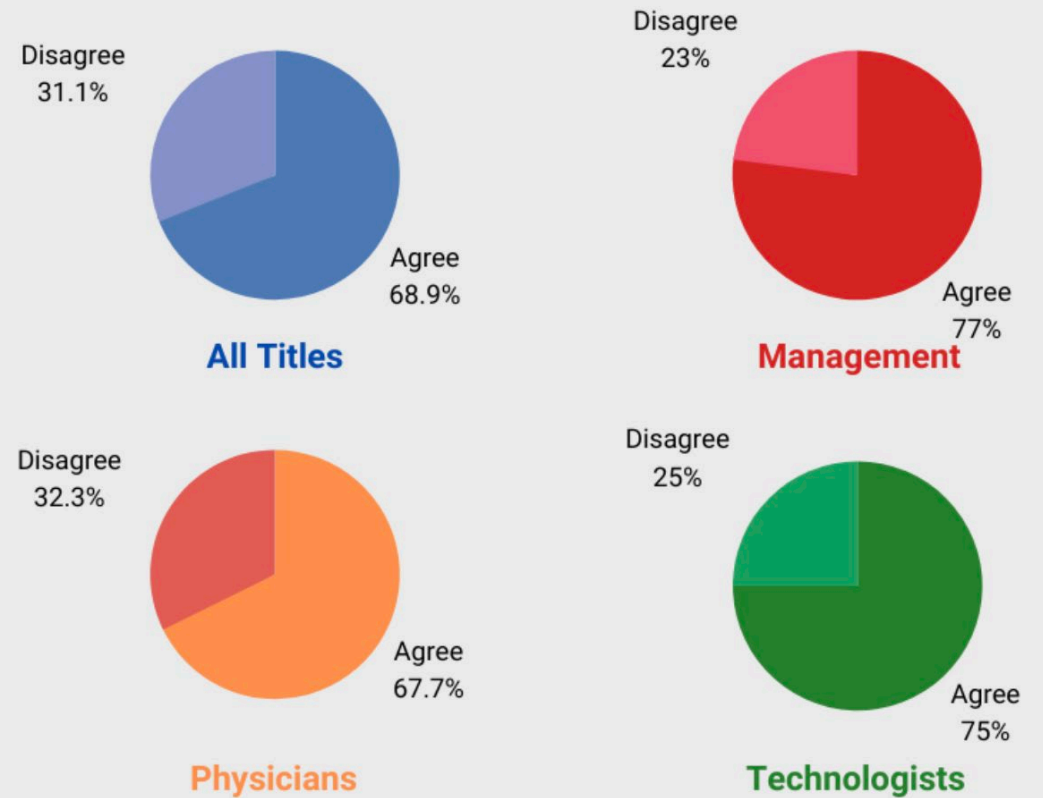
The workforce is burning/burned out

Which Physicians Are Most Burned Out?



Source: [Medscape Physician Burnout Report 2022](#)

Over the last 12 months, have you felt overworked or burned out on the job?



Source: [2023 Radiology Business Job Satisfaction Report](#)

Key Research Findings on Physician Burnout

Almost

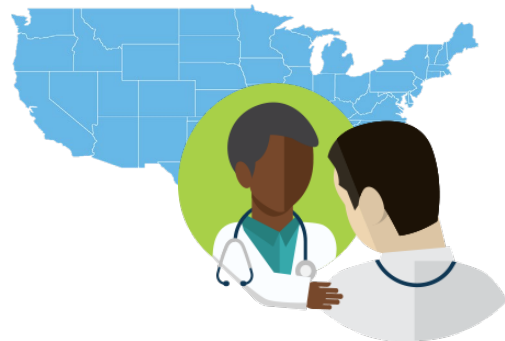
2/3rds

of U.S. physicians experience burnout (AMA data)

Each 1 point increase equates to a

43% greater

likelihood of clinical reduction within 24 months



Burnout is shown to increase the risk of medical errors by

200%

It is estimated that

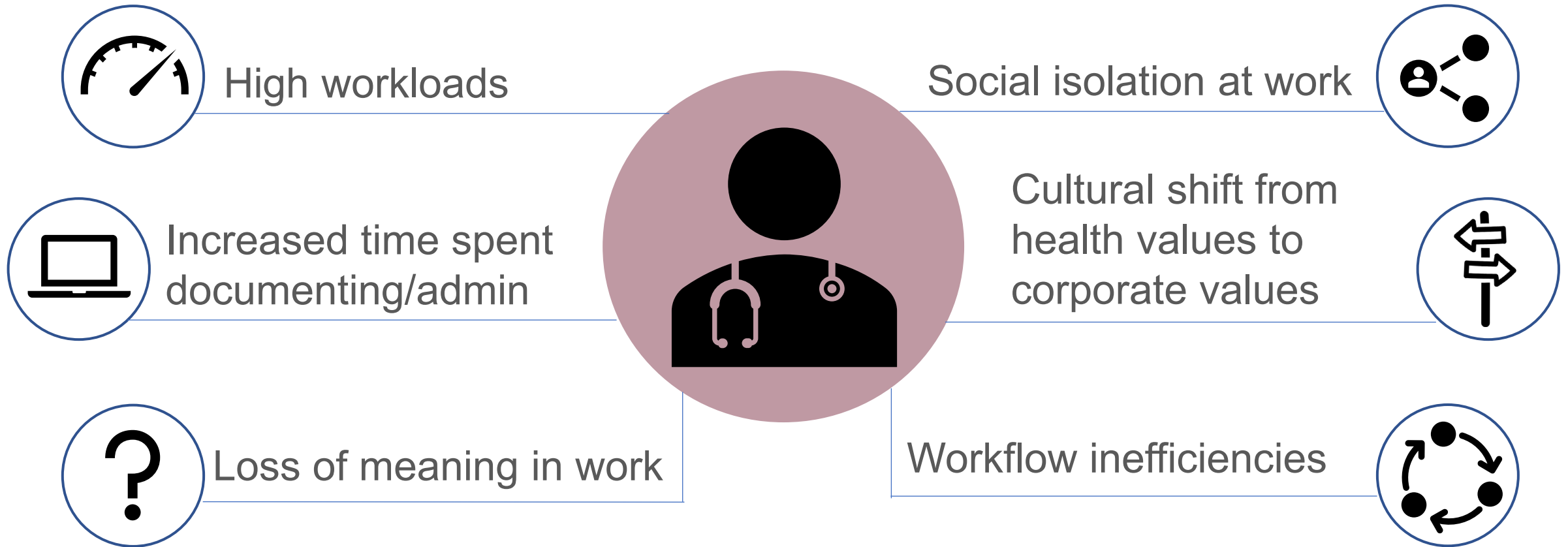
80%

of burnout is related to organizational factors



Source: AMA

Primary Drivers of Physician Burnout



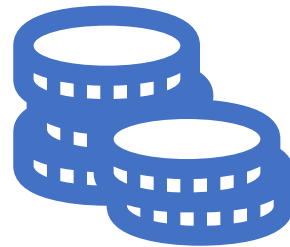
Source: AMA

Estimated Costs of Burnout

Each year, approximately

\$4.6 billion

in costs related to physician turnover and reduced clinical hours can be attributed to physician burnout in the United States.



It costs approximately

\$500K

to \$2M and

12-14 mos.

to replace a physician

Every 1 pt. increase in burnout and 1 pt. decrease in professional satisfaction, is associated with a

30-50%

increased likelihood that physicians will decrease their professional work effort.



Annual economic costs associated with burnout related to turnover and reduced clinical hours is approximately

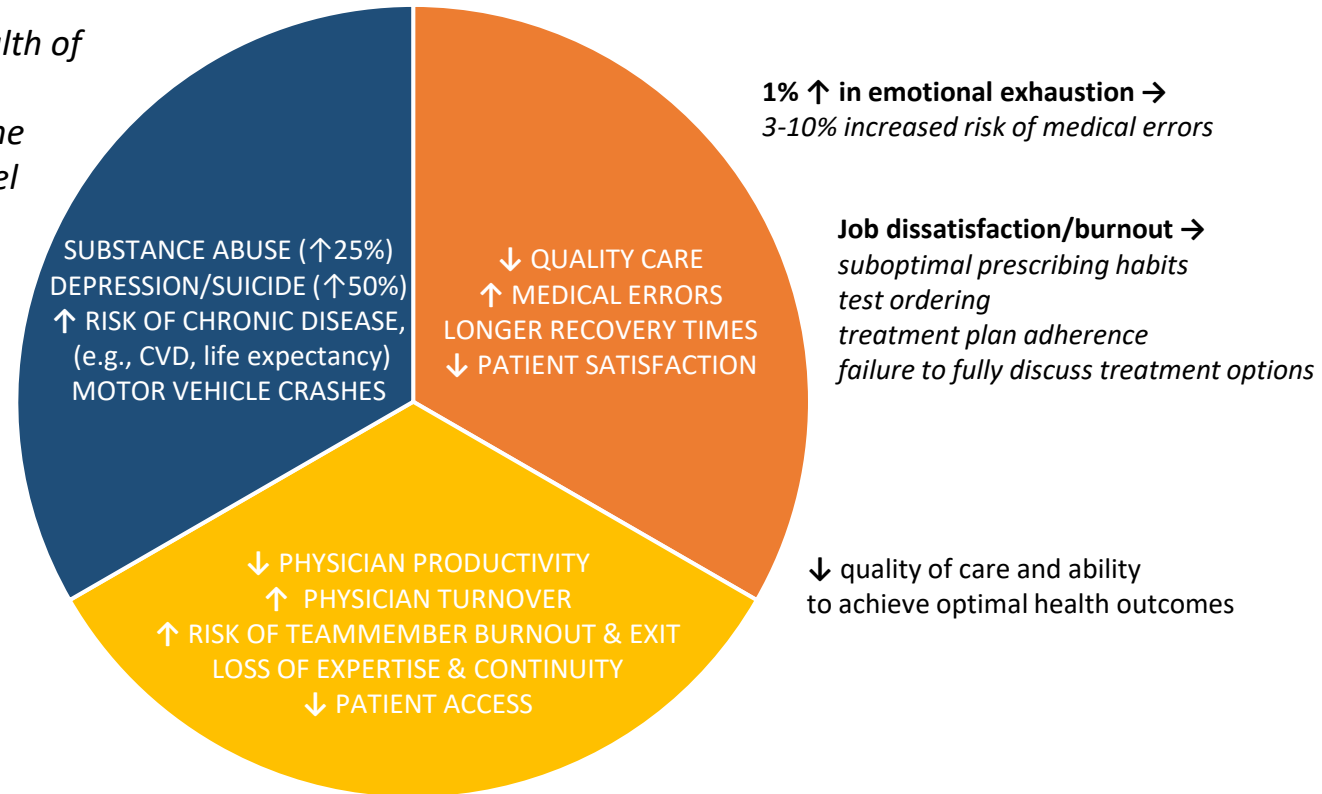
\$7,600

per employed physician per year.

Source: AMA

Consequences of Physician Burnout

Deleterious effects on the health of physicians & patients, and adverse financial impact at the practice and organization level



Sources:

West, CP et al. Physician burnout: contributors, consequences and solutions. *Journal of Internal Medicine* 2018, 283; 516–529
 Shanafelt et al. “the Business Case for Investing in Physician Well-being”. *JAMA Internal Medicine* online 9/25/2017

How the AMA thinks about burnout



Source: [Stanford Model of Professional Fulfillment](#)

Resources/services

- [Organizational biopsy](#)TM
- [Steps Forward](#)
- [Joy in Medicine](#)TM

AMA **STEPSforward**

De-implementation checklist

In an effort to **reduce unintended burdens** for clinicians, health system leaders can consider **de-implementing** processes or requirements that add little or no value to patients and their care teams. Physicians themselves are often in the best position to recognize these unnecessary burdens in their day-to-day practice. The following list includes potential de-implementation actions to consider. Learn more on how to reduce the unnecessary daily burdens for physicians and clinicians at stepsforward.org.

EHR

- Minimize alerts**
 - Retain only those alerts with evidence of a favorable cost-benefit ratio
- Simplify login**
 - Simplify and streamline login process, leveraging options like single sign-on, RFID proximity identification, bioidentification (fingerprint, facial recognition, etc.)
- Extend time before auto-logout**
 - Consider extending time for workstation auto-logout
 - Consider customizing workstation location and the security level to use patterns of the specific user
- Decrease password-related burdens**
 - Consider extending the intervals for password reset requirements
 - Help users create passwords that are both strong and easy to remember (i.e., by allowing special characters and spaces, and by allowing longer passwords that can be passphrases)
 - Consider use of password keeper programs
- Reduce clicks and hard-steps in ordering**
 - Reduce requirements for input of excessive clinical data prior to ordering a test
 - Eliminate requirements to fill fields attesting to possible pregnancy in males or women over 60 years old
- Eliminate requirements for password revalidation**
 - Identify ways to reduce unnecessary requirements for users to **re-enter username/password** when already signed in to EHR, to send prescriptions (Note: Organizations may choose to keep this requirement in place for opioid prescriptions.)
- Reduce note-bloat**
 - Reduce links imbedded in visit note documentation templates that automatically pull in data from other parts of EHR contributing to "note bloat," but adding little if any true clinical value

How the ACR thinks about burnout

- Similar focus on root causes from the system

Also has great resources:

- [ACR Well-Being 360 report](#)
- [Well-being support guides](#)
- [ACGME-aligned curriculum](#)
- [Well-being case studies](#)

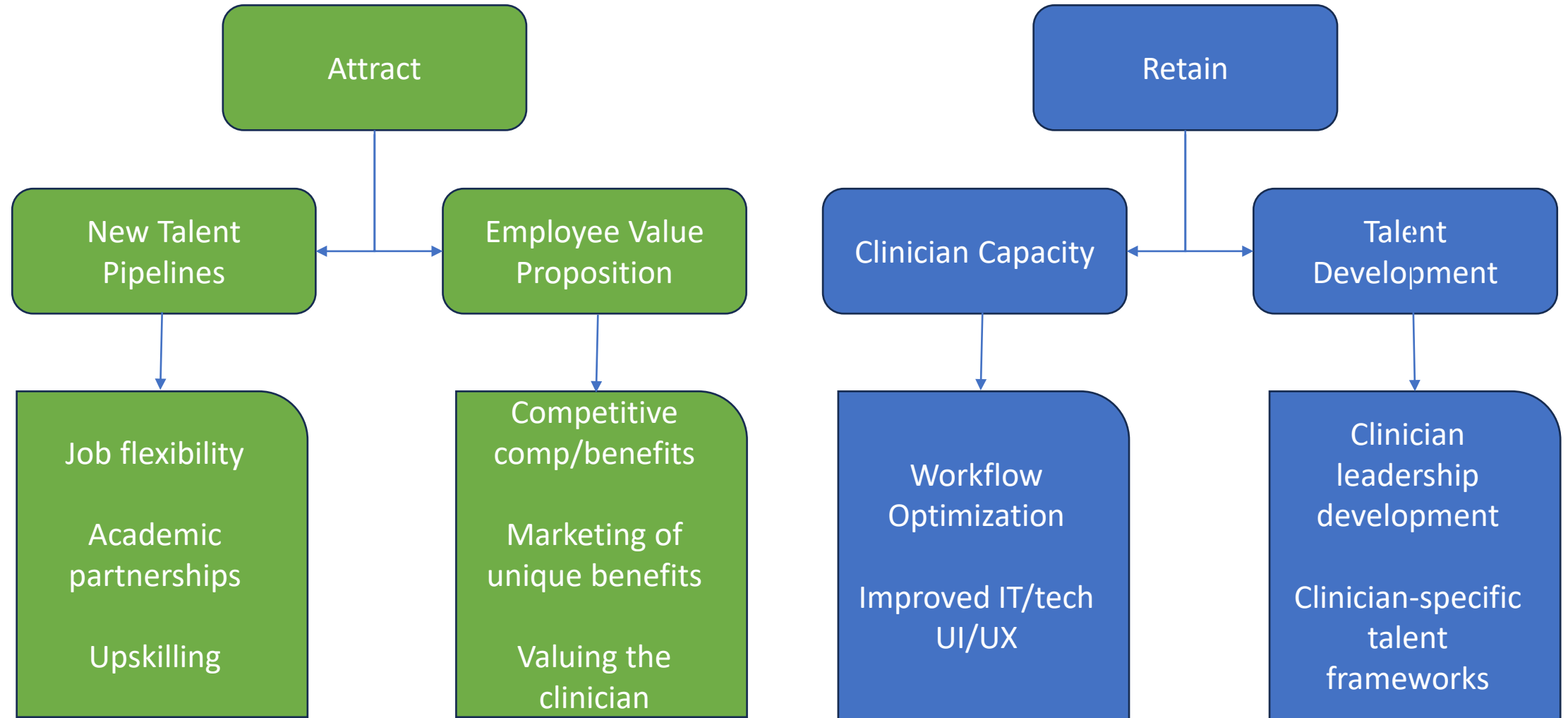


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Long term industry levers

- Supply
 - Augment w/ AI
 - Augment w/ extenders
 - Increase # with residency
 - Shorten residency pipeline
 - More interest
- Demand
 - Rads owns UM
 - AUC

Short/medium term focus on recruitment and retention



Clinical culture of health, wellness, and clinician voice and empowerment

The rising role of the Chief Wellness Officer

Direct Responsibilities

Evaluating the current scope of the problem, benchmarking, and monitoring the impact of interventions

Reporting the results throughout the organization (partnering with the communications department on this effort is helpful)

Designing an organization-wide strategy

Implementing appropriate components of the strategy and monitoring progress of areas responsible for other elements

Overseeing broad, system-level efforts to drive improvement in the dimensions most relevant to the local organization

Indirect Responsibilities

Communicating the vision, including why addressing the well-being of health care professionals is important to the organization's success

Assisting in advancing fundamental qualities of the organization, such as equity, participatory leadership, collegiality, mutual respect, and professionalism

Ensuring that the organization considers physician well-being in all consequential organizational decisions

Helping other leaders see the link between their work and the well-being of health care professionals



My Tracker

AMA Ed Hub > AMA STEPS Forward > By Topic

PROFESSIONAL WELL-BEING

Establishing a Chief Wellness Officer Position

Create the Organizational Groundwork for Professional Well-Being

[Recommended CME](#)

The Humana and Centerwell experience

- Vertically integrated system
- ~1000 physicians
 - 1/3 administrative
 - 2/3 practicing primary care
- ~18,000 clinicians
- Think more broadly than just wellness
 - Workforce management
 - What does it take to be an employer of choice?



You can't manage what you don't measure

Metric	Description
Voluntary turnover	Individuals who actually leave the org. Calculated as a rate.
Turnover risk	"I rarely think about looking for a new job with another org." Predictive of leaving in the next 90-days.
Engagement	Composite score of the below + I recommend this org as a great place to work, I intend to stay at this org for at least the next 12 months, and I am proud to work for this org. Predictors of job satisfaction, productivity, and tenure.
Speaking Up	"Top leaders listen to and act upon my ideas and suggestions. I feel like I can be open and honest with leadership about challenges and problems."
Belonging	"I feel like I really belong at this org."
Wellbeing	My leader really cares about my well-being. This org is committed to creating a work environment that contribute to the health and wellbeing of employees. The stress I experience on the job is manageable. I have the flexibility I need to manage my work and personal needs. Burnout – MiniZ, Maslach,
Career Cultivation	Opportunity for growth and development. Opportunities for advancement. I can achieve my career goals at this or
Effective collaboration	There is effective collaboration between departments/teams. My leader gives us freedom to collaborate and work with other depts/teams. We are open to debate decisions and ideas.
Empowerment	Decisions are made without unnecessary levels of approval. I have the freedom to serve our referring physicians and our patients. I am involved in decisions that affect my work.

Making the business case resonates with administrators

Organizational Cost of Physician Burnout

Projected cost of physician burnout in terms of turnover. (Other costs of burnout, in terms of medical errors, malpractice liability, patient satisfaction, productivity and organizational reputation, are not included.)

500

Number of physicians at your center

54 %

Rate of burnout of physicians at your center

Rate of burnout national mean: 54%

7 %

Current turnover rate per year

Current turnover rate national mean: 7%

\$ 500000

Cost of turnover per physician

Cost of turnover per physician national mean: \$500,000

12.5

Number of physicians turning over due to burnout per year

Annual Cost of Burnout

\$6,136,364

Projected cost of physician turnover per year due to burnout

Developing an infrastructure to capture feedback & needs



Humana Physician Collaborative

Executive Council

Advisory Council



Community Building
and Engagement
Committee



Growth, Development,
and Advancement
Committee



Health and
Well-being
Committee



Inter-Professional
Collaboration
Committee



Our Goal



Develop and retain diverse, engaged and healthy physician teammates that will help drive best-in-class health outcomes for Humana members and CenterWell patients

Data Snapshot

950+ physicians at Humana

67% practicing
33% administrative

40+ specialties represented

Focus Area

Community Building and Engagement

Growth, Development, and Advancement

Health and Wellbeing

Interprofessional Collaboration

Objective

Increase engagement and build connections for physicians across all markets and disciplines.

Develop pathways and opportunities for professional development and career evolution.

Promote mental and physical health and inspire each other to prioritize self-care.

Increase physician impact through collaboration and communication with other clinical and business departments across the enterprise.

Measuring Success

Continued improvement to the AES and Continuous Listening (CL) engagement measure:

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Continued improvement to the AES and Continuous Listening (CL) engagement measure:

Belonging: "I feel like I really belong at Humana."

Career Cultivation: "Humana provides me with an opportunity for Growth and Development."

Wellbeing: "Humana is committed to creating a work environment that contributes to the health and well-being of associates."

Effective Collaboration: "In my organization, there is effective collaboration between departments/teams."

Vision Sentiment

I feel valued at work and belong to a clinical team critical to the health of those we serve.

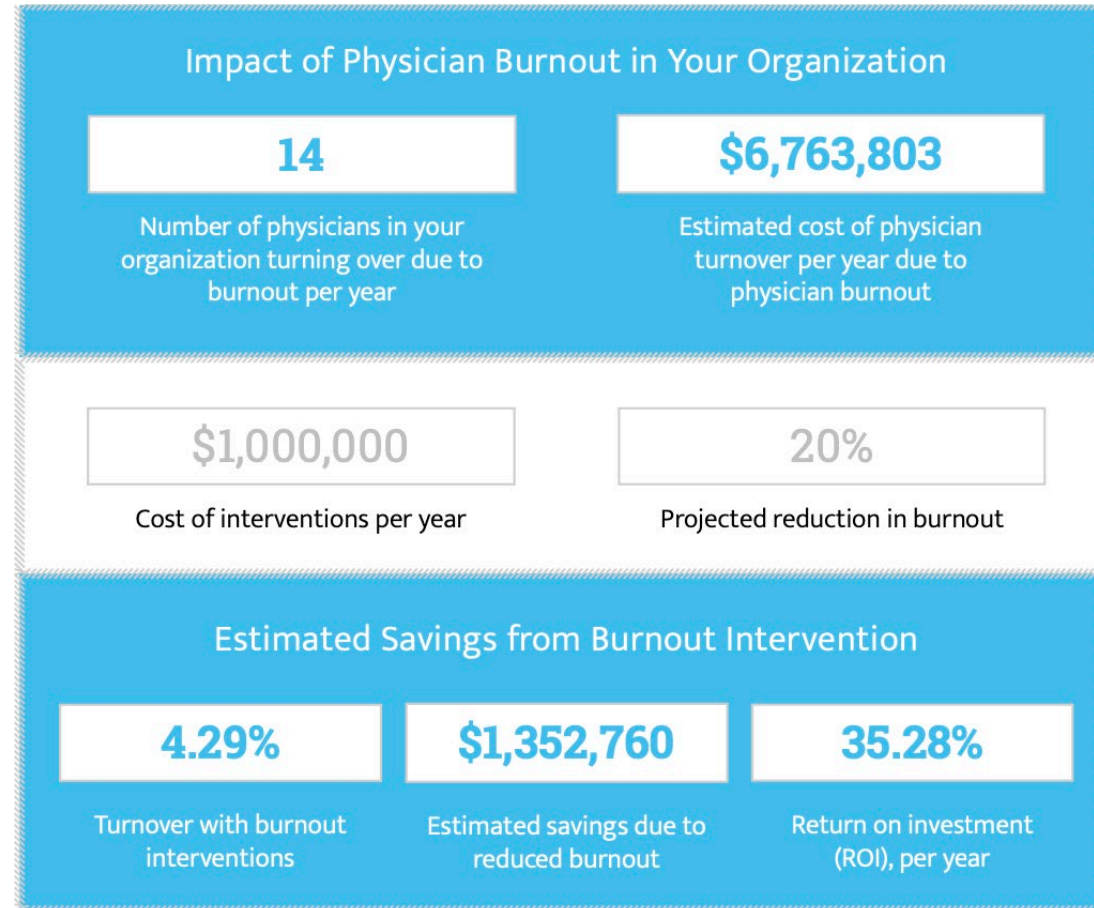
I trust that Humana cares about my career journey and is actively working to empower my growth and advancement.

I feel empowered to holistically care for myself to strengthen my purpose in caring for others.

I am more effective in my job through improved communication, interaction, and collaboration with other clinicians and business units.

Health First: Healthy Physician Teammates support a Healthy Customer and Company, to back our values: Caring, Curious, and Committed

Buy-in needs investment with capital and staffing



Thank you!

Questions?

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