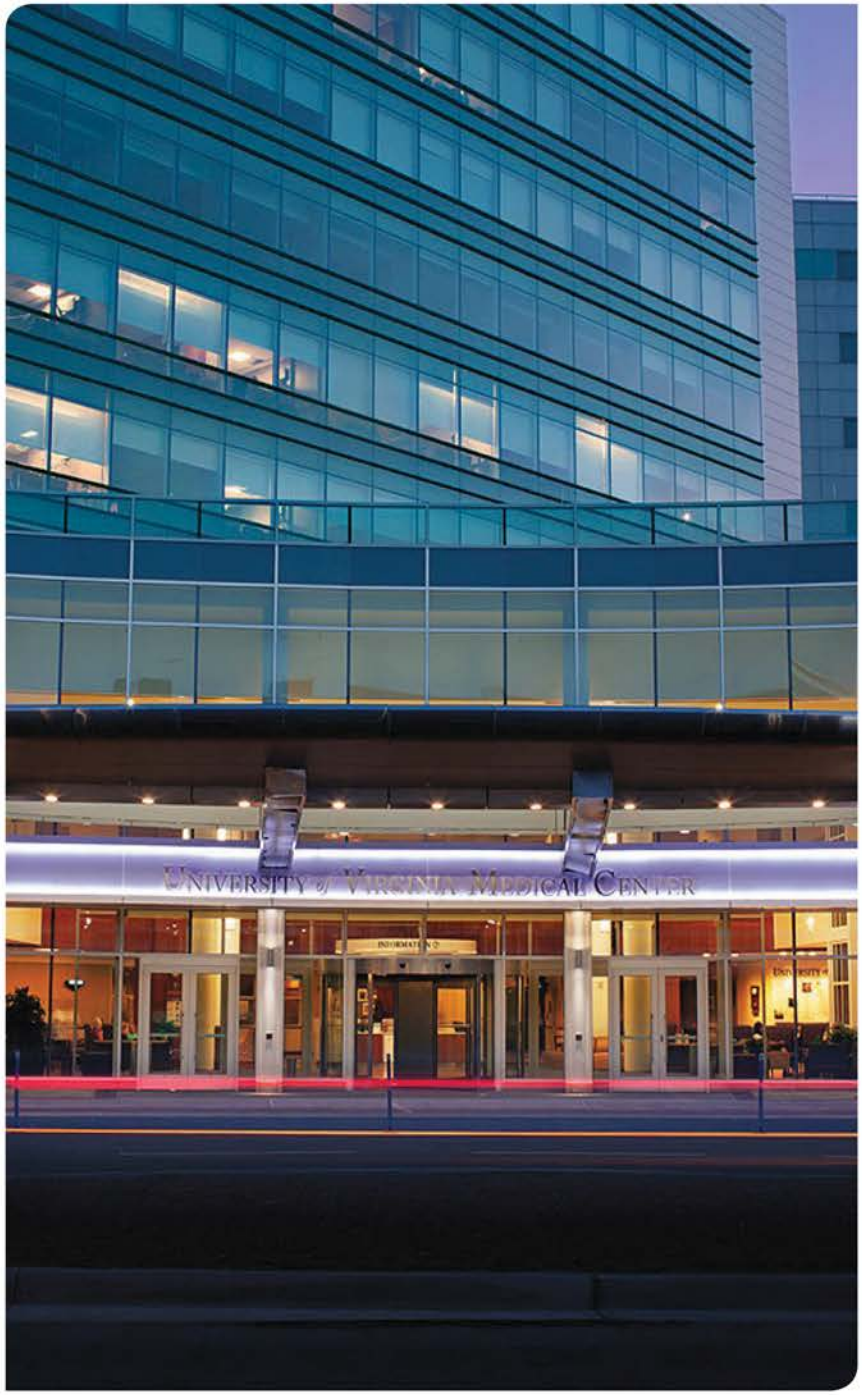

How GME is Changing…and What Do We Need to Do to be Ready?

Susan E. Kirk, MD
AIAMC
March26, 2022

University of Virginia Health System

Nothing to Disclose

Learning objectives

- Learn how to locate a crystal ball
- Develop skills in reading tea leaves
- Understand the significance of eclipses, walking under ladders and the sudden appearance of vultures

Learning objectives

- Define the ideal state of GME for residents and fellows
- Understand the barriers to the ideal state
- Utilize what we have learned during the pandemic to help us prepare for the future

First, a story…

Previous attempts to predict the future

ACGME's *Sponsoring Institution 2025* (published in 2017)

1. **Faculty who remain in GME are those whose employers directly support…the GME role. While physicians remain dedicated to teaching, few…are able to engage in teaching due to clinical demands.**

Previous attempts to predict the future

ACGME's *Sponsoring Institution 2025*

2. Learners entering GME have been educated in learning environments that are primarily electronic, highly engaged in self-directed learning, highly adapted to individual learning and just-in-time learning.

Previous attempts to predict the future

ACGME's *Sponsoring Institution 2025*

3. The GME environment is aligned for optimal learning experience.

Previous attempts to predict the future

ACGME's *Sponsoring Institution 2025*

4. GME is structured around continuity of care, longitudinal patient care experience, and population health management.

Previous attempts to predict the future

ACGME's *Sponsoring Institution 2025*

5. The duration of residency and fellowship remains primarily determined by time requirements for completion. However, there is substantial experimentation in competency- and outcomes-based training that is not based on time requirements for completion.

Previous attempts to predict the future

ACGME's *Sponsoring Institution 2025*

6. Most Sponsoring Institutions are transparent in how they support their GME faculty.

Previous attempts to predict the future

ACGME's *Sponsoring Institution 2025*

7. Other health care professionals who teach residents are recognized for their role by the ACGME.

Previous attempts to predict the future

ACGME's *Sponsoring Institution 2025*

8. GME program faculty include a mix of local faculty as well as regional, national and international faculty who participate remotely.

Previous attempts to predict the future

ACGME's *Sponsoring Institution 2025*

9. Health systems and health care organizations increasingly engage in the development of their own physician workforces, including contributions to fund GME. The federal government contributes some level of funding for GME.

The Ideal Resident/Fellow

- Compassionate, Curious, Competent and Socially Conscious
- Unburdened by debt
- In the specialty of their choice
- Sufficiently rested, physically and mentally well
- In adequate numbers to maintain, expand, and/or redistribute the physician workforce
- With healthy personal and professional relationships

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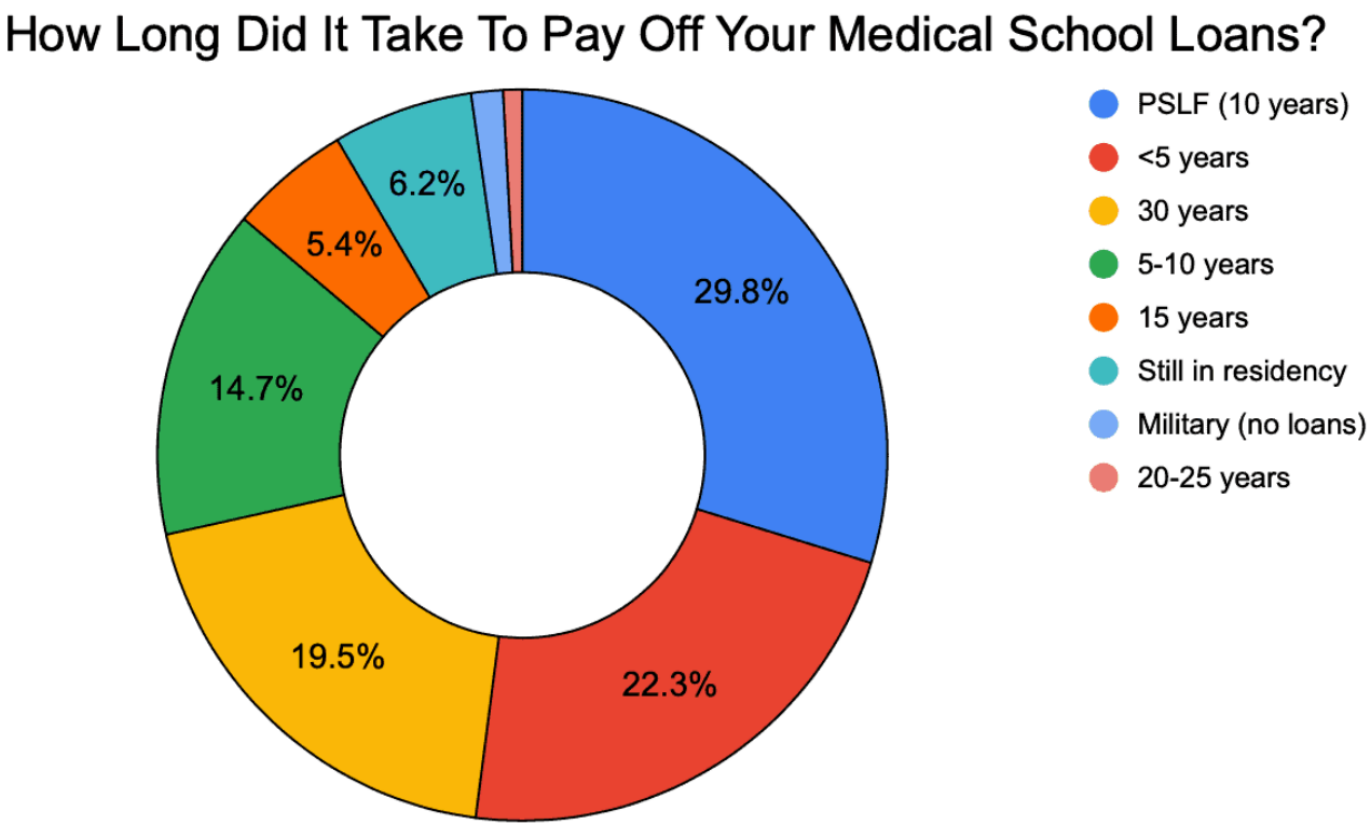
Average Medical School Debt

Graduation Year	Medical School Debt Only	Cumulative Debt At Graduation
1999-2000	$115,300	$127,500
2003-2004	$144,100	$158,300
2007-2008	$150,300	$158,800
2011-2012	$181,400	$199,100
2015-2016	$232,300	$251,600
2019-2020	$215,900	$241,600

https://www.credible.com/blog/statistics/average-medical-school-debt/#average-medical-school-debt

- Average cost of medical school in the 1960's was $40K in 2021 dollars; now ~$300K
- Consider *price* vs. *cost*
  D. Asch, et al; N Engl J Med 2020; 383:6-9
- Average debt for law school graduates in 2021 was $161K
  https://educationdata.org/average-law-school-debt
- Average debt for business school graduates in 2021 $66.3K
  https://www.nerdwallet.com/article/loans/student-loans/mba-student-debt

Duration of Medical Education Debt



https://averagedoctor.com/how-long-does-it-take-to-pay-off-medical-school-loans/

Unequal Impact of GME Trainee Debt

- The average physician ultimately pays $365-440K for educational loans plus interest
- $2,480 is the minimum monthly payment that the average graduate must make to pay off all loans in 10 years
- 60.2% of indebted medical school graduates are male
- 33.4% of indebted medical school graduates are married
- 27% of medical school students graduate without any educational debt; this is directly related to parents' income

Choice of Specialty

- Personality fit – 99%
- Specialty content – 98%
- Role model influence – 81%
- Work/life balance – 77%
- Fellowship training options – 61%
- Future family plans – 61%
- Income expectations – 48%
- Length of residency – 43%
- Competitiveness of specialty – 39%
- Expectations of family – 29%
- Education debt- 22% (increasing)

AMA data 2020

Barriers to Rest and Wellness:
Bill Goes to Therapy

https://www.youtube.com/watch?v=J8LvcdEYJ50

Barriers to the Well-being of Residents

Nomenclature

Resilience: *The capacity to recovery quickly from difficulties, toughness*

Grit: *sustained commitment toward completing a specific endeavor despite episodes of failure, setbacks, and adversity*

Burnout: *a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed; symptoms of burnout tend to resolve with an improvement in the work environment*

Barriers to the Well-being of Residents

1. Lack of money
2. Lack of time
3. Lack of money, again
4. Stigma regarding asking for help
5. Culture of being stoic
6. Limitations on size and duration of training
7. Or do we actually really have lots of money, we're just not willing to spend it on Graduate Medical Education?

Case Scenario #1

Jennifer is a PGY-2 Urology Resident who has returned from 8 weeks of paid parental leave two months ago and is now on a busy endoscopic surgery service. Her partner's job requires frequent travel and he is often out of town during the work week. Their families both reside out-of-state. Fortunately, Jennifer's medical center sponsors on-site daycare for residents that opens at 5:30am. Jennifer's generous stipend allows her to pay for a part-time nanny who can pick up her child from daycare when Jennifer is in a case that runs past the close of the daycare center. In addition, the medical center's lactation rooms are conveniently located so that she can pump for breast milk between cases.

Case Scenario #1

On Sunday night, Jennifer receives an email notifying her that her child's daycare room will be closed due to a recent positive COVID test in another infant. Her partner has already left for a distant city for the week. Jennifer notifies her Program Director by text that she will likely miss the next day while she arranges back-up daycare, funded by her benefits. The PD texts back to assure her this is no problem and notifies the contingency resident and the contingency APP that they will be covering Jennifer's patients until she returns.

Case Scenario #2

Jennifer is a PGY-2 Urology Resident who has returned from 6 weeks of paid parental leave two months ago and is now on a busy endoscopic surgery service. Her partner's job requires frequent travel and he is often out of town during the work week. Their families both reside out-of-state. Jennifer's daycare option is off-site and opens at 6am, making her frequently rushed during rounds or in preparing patients for the OR.

On Sunday night, Jennifer receives an email notifying her that her child's daycare room will be closed due to a recent positive COVID test in another infant. Her partner has already left for a distant city for the week. Jennifer….

https://scitechdaily.com/distinctive-primal-acoustics-of-the-human-scream/

Case Scenario #1

Jennifer is a PGY-2 Urology Resident who has returned from **8 weeks of paid parental leave** two months ago and is now on a busy endoscopic surgery service. Her partner's job requires frequent travel and he is often out of town during the work week. Their families both reside out-of-state. Fortunately, Jennifer's medical center sponsors **on-site daycare for residents** that **opens at 5:30**. Jennifer's **generous stipend** allows her to pay for a **part-time nanny** who can pick up the baby from daycare when Jennifer is in a case that runs past the close of the daycare center. In addition, the medical center's **lactation rooms are conveniently located** so that she can **pump for breast milk between cases**.

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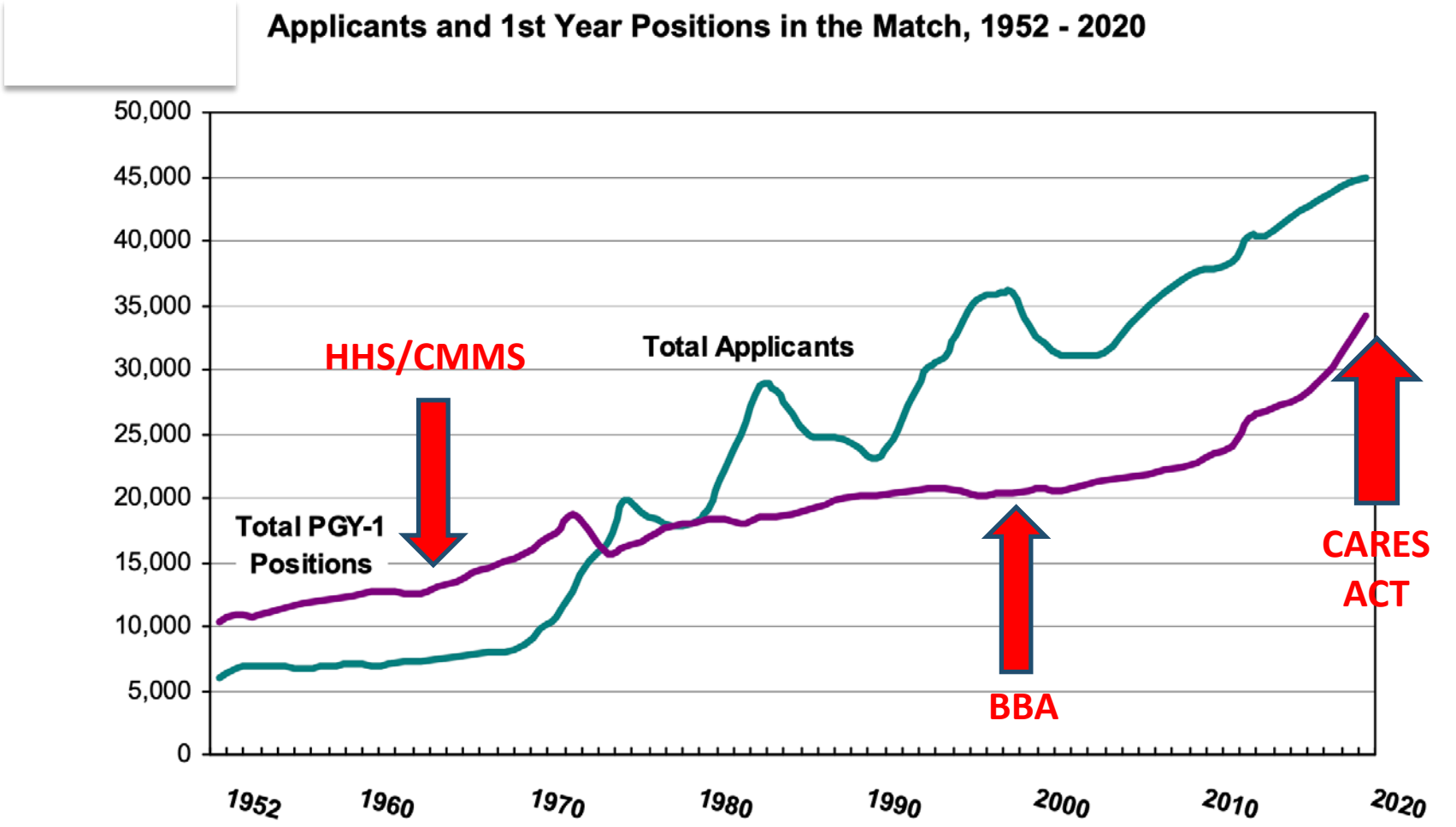
Funding of GME – facts

- DME and IME reimbursement started with the initiation of Medicare as a way to ensure the physician workforce
- Programs (and slots) grew unchecked until 1997 when the Balanced Budget Act went into effect
- However GME slots *have* continued to increase
  1. Funded by other than CMS, including SI margin
  2. As part of new Sponsoring Institutions who can establish their own cap

Expansion of GME



https://www.nrmp.org/wp-content/uploads/2021/12/MM_Results_and-Data_2020-rev.pdf

Funding of GME: Are trainees cost-effective?

- Single on-call neurosurgeon at a southern sponsoring institution keep a call log of all consults, admissions and procedures for two years
- Indirect procedures generated 7052 wRVUs and direct supervised activities using CPT modifier 80 generated 1120 wRVUs.
- Using MCGA median reimbursement rates for neurosurgery billing, an annual reimbursement of $344,757 per individual or $1.67M per program was calculated
- Annual cost of 1 GME FTE/year ~$134K
- Annual salary and benefits of APP ~$150K

J Neurosurg; Gordon et al; July 2021

Barriers to healthy professional relationships

Female nurses and female residents

- Wear and McNulty surveyed 51 participants (28 nurses and 23 residents) at a Mid-western teaching hospital in 2004
- Female nurses found female residents to be "*less intimidating, easier to get along with, and more likely to provide a "team" atmosphere. They felt female residents were more likely to do things for themselves, were less demanding, and were more likely to help clean up after a procedure*".
- Consistent with all specialties except OB/GYN

Acad Med. 2004;79:291–301

Barriers to healthy professional relationships

Female nurses and female residents

- Female residents felt *they were more likely to be labeled as "difficult" if they were overly demanding or have their "tone" analyzed when they made requests and therefore often opted to simply "do it themselves"; that male requests were carried out faster than theirs and that they would sometimes be asked to perform tasks that their male colleagues would never be expected to do*
- Conclusion: *With the number of female residents increasing each year in hospitals, this relationship should be further examined so that dysfunctional communication patterns between the two groups can be challenged*

Healthy Professional Relationships

Leadership Development

- Many training programs include leadership development as part of their curriculum, however, it is generally specific to the specialty and often focused on an individual's career development

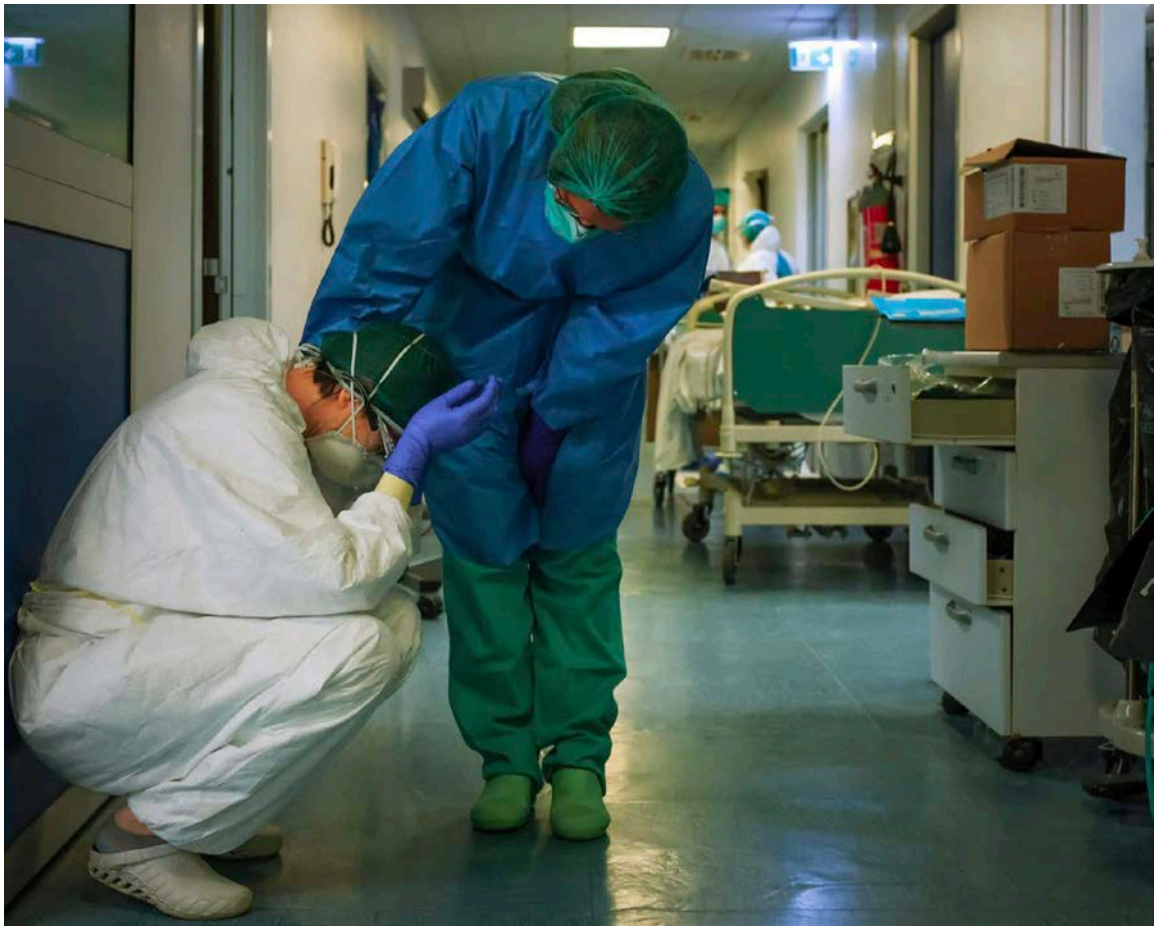
  Torres-Landa, et al; Am J Surgery, 2021

- Recently, the relationship between leadership skills and professional wellbeing has started to emerge
- For every 1% increase in leadership score, there was a 9% increase in satisfaction and 3.3% decrease in burnout

  Shanafelt and Noseworthy; Mayo Clin Proc. 2017;92(1):129-146

WHAT WE LEARNED DURING THE PANDEMIC

BEING A HEALTHCARE WORKER IS HARD



Paolo Miranda/AFP/Getty Images

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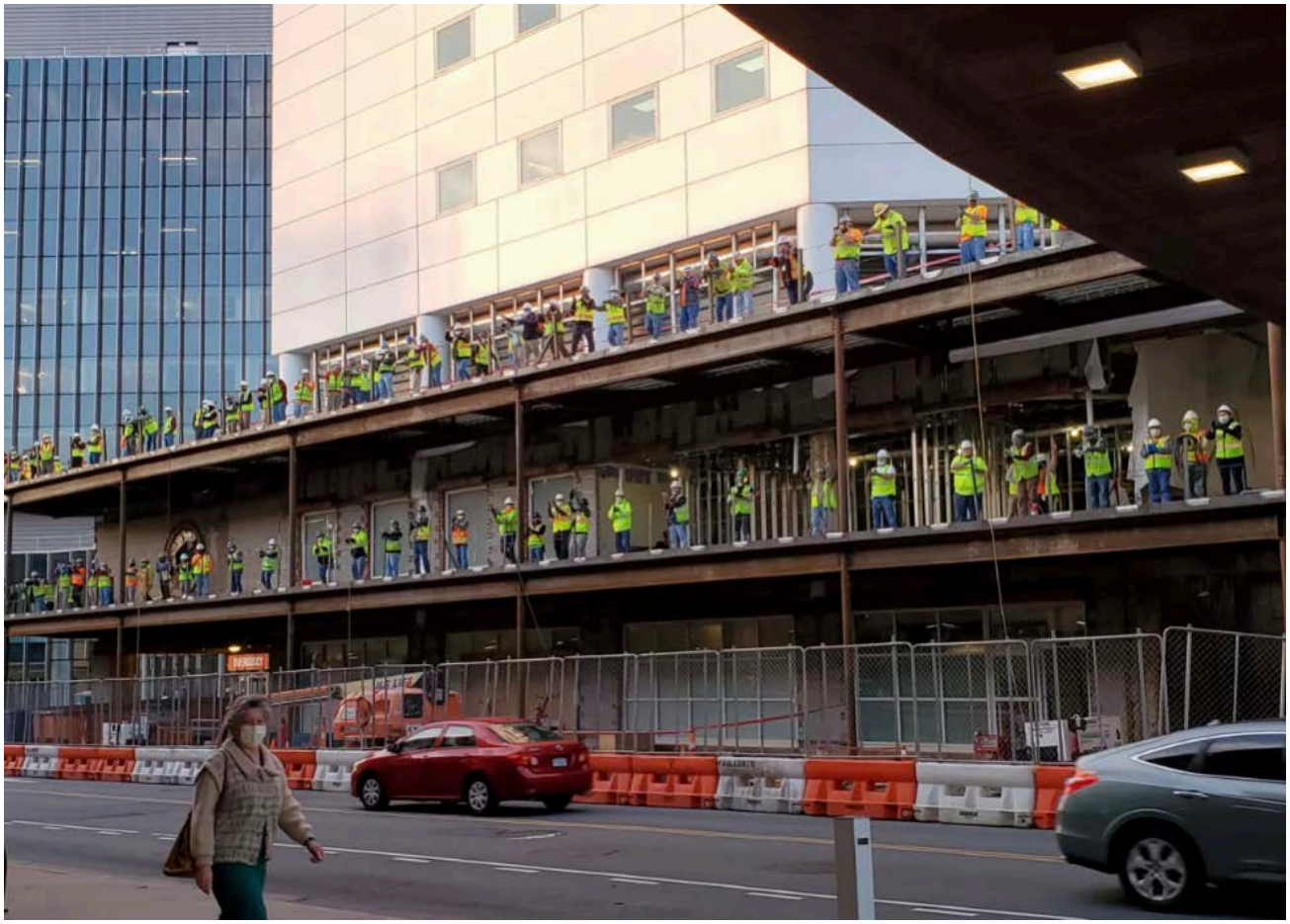
WHAT WE LEARNED DURING THE PANDEMIC



TWO YEARS IS A LONG TIME TO SUSTAIN EFFORT

WHAT WE LEARNED DURING THE PANDEMIC

Alyson McClaran/Reuters

BEING A HEALTHCARE WORKER IN A POLITICALLY DIVIDED NATION IS REALLY HARD

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WHAT WE LEARNED DURING THE PANDEMIC

Jacob King/Pool/Getty Images

BIOMEDICAL SCIENCE CAN ADVANCE RAPIDLY WHEN WE WORK TOGETHER

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Lowering the *price* of medical school

- Hybrid or virtual learning can be less costly
  - Pre-clinical curricula can be standardized
  - Online classes do not need facilities, maintenance or security
  - Regional, national or international faculty can fill gaps in specialty knowledge
- Savings should be passed on to students
- Virtual interviews
- Create solutions to loan repayment programs

Physically and Mentally Healthy Residents

- Moonlighting/Hazard pay was provided by many healthcare organizations to cover gaps
- Telemedicine afforded benefits for both patients and residents/fellows
- Healthcare systems MUST lower workplace stressors instead of emphasizing resilience

Expansion of GME

- Recognition by congress that a physician shortage is looming with willingness to increase funding for training (CARES act)
- Healthcare systems should examine their costs to divert the necessary funds to expand training positions and provide the resources they need

Better Professional Relationships

- Healthcare systems MUST lower workplace stressors
- Build leadership education into residency and fellowship curricula
- Intentionally address areas of dysfunction

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Building Professional Relationships

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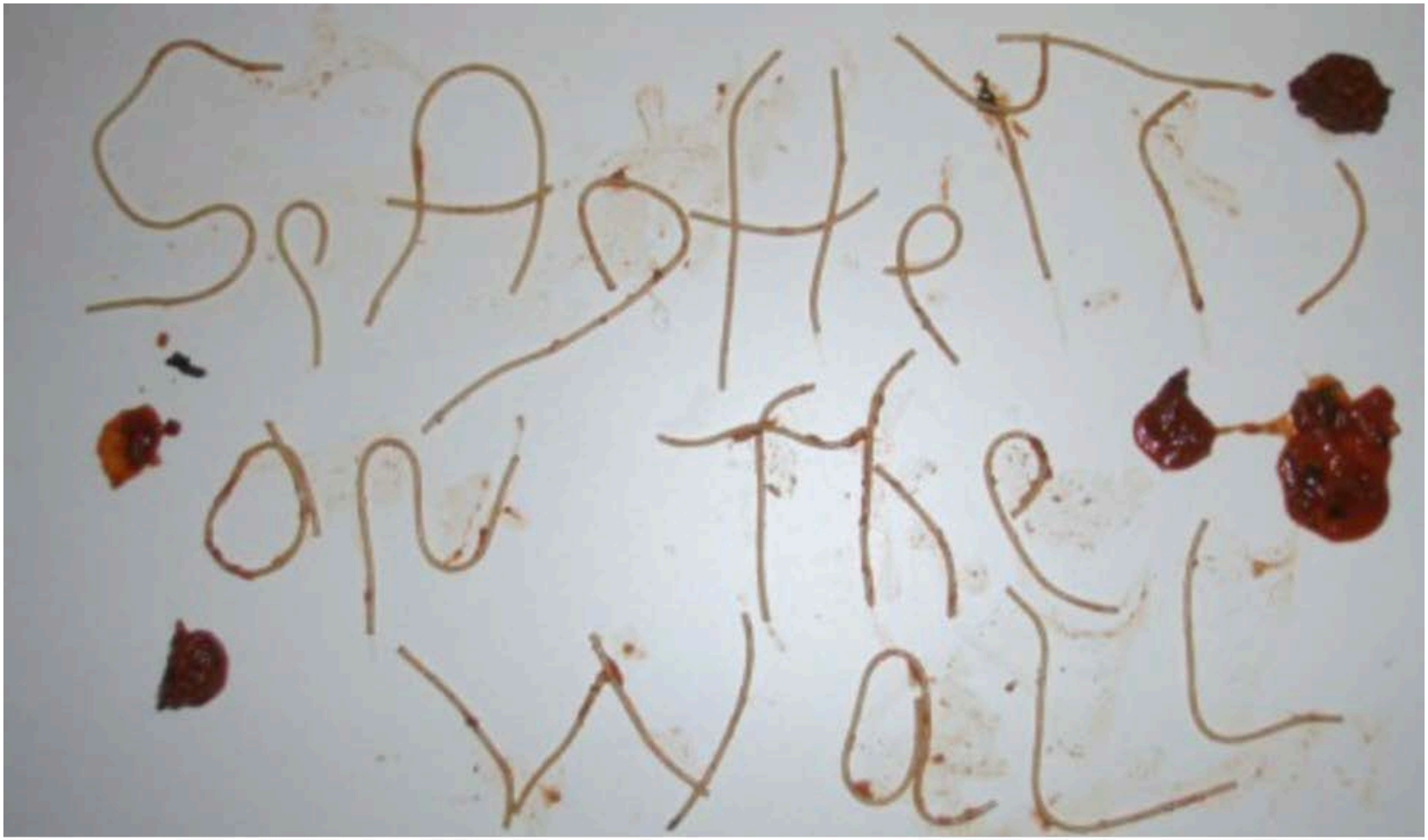

https://www.invistaperforms.org/get-the-spaghetti-off-the-wall/

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Thank you for your interest!