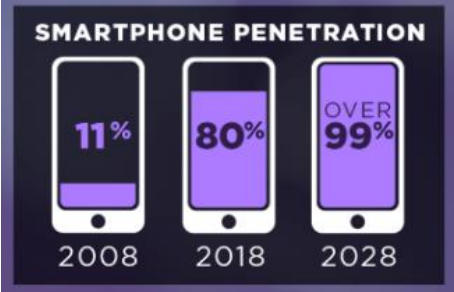
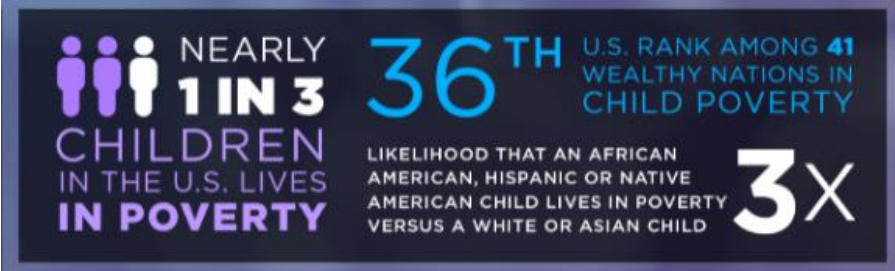
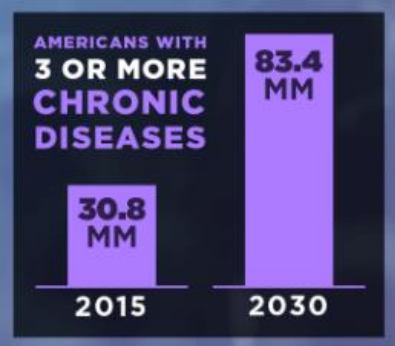




Future of the Health Care Workforce: Where are we going?"

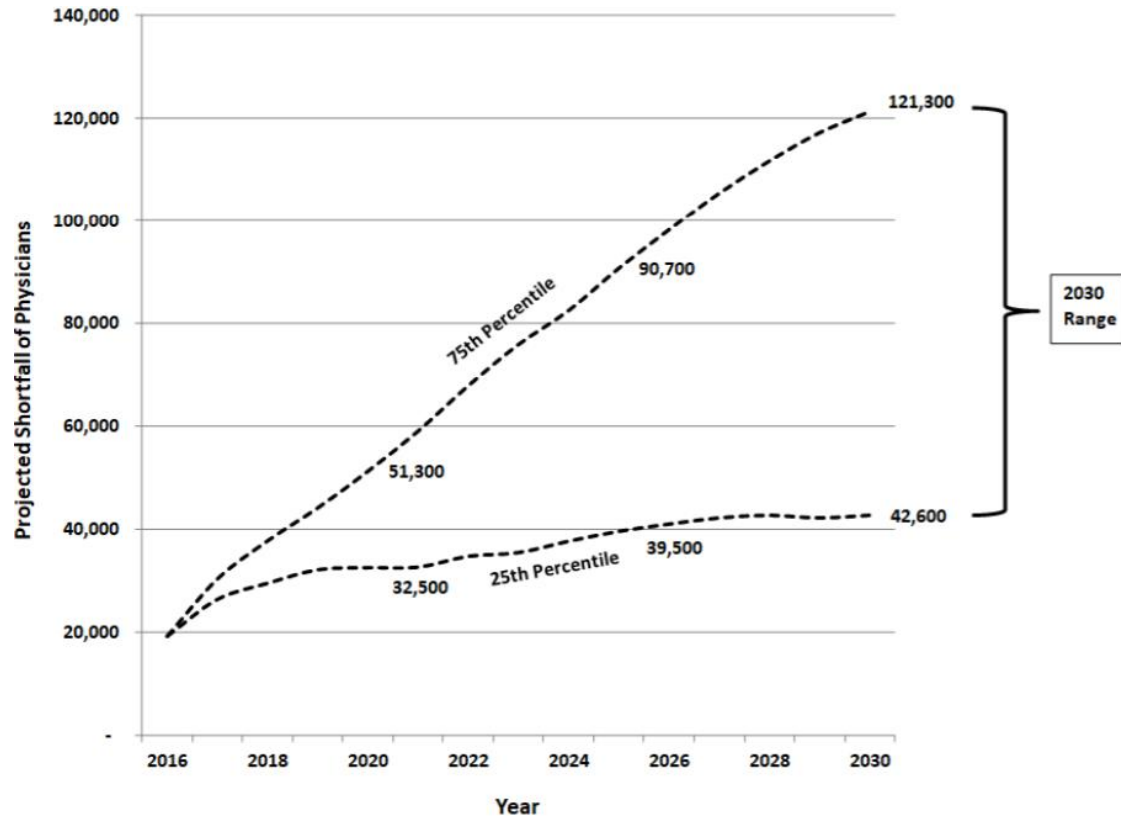
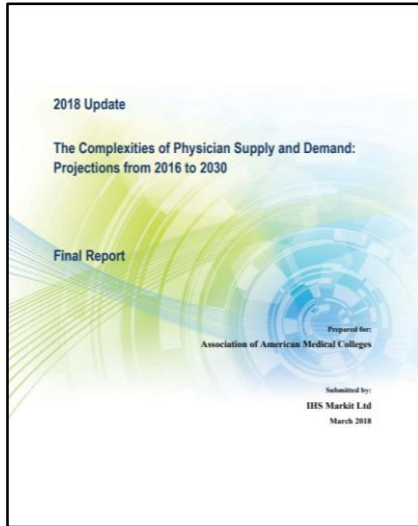
May 23, 2018

Setting the Context



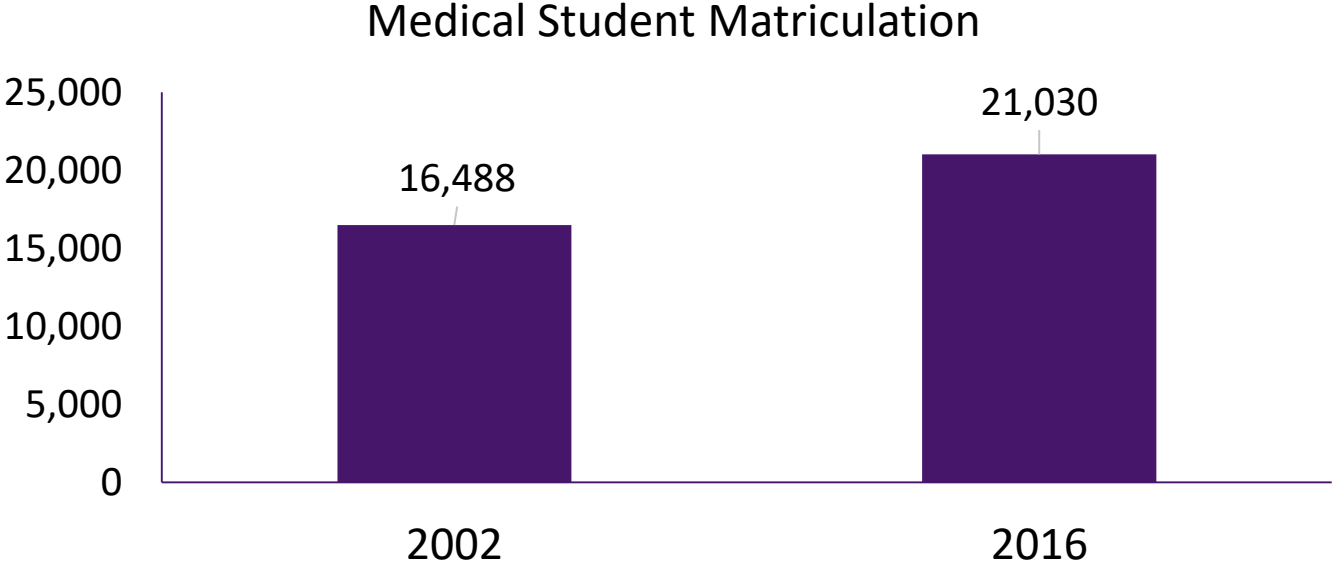
Source: Various, AMA

Projected physician shortfall of between 42,600 and 121,300



Source: 2018 Update - The Complexities of Physician Supply and Demand: Projections from 2016 to 2030 - Final Report, Association of American Medical Colleges

Increasing Medical Student Matriculation

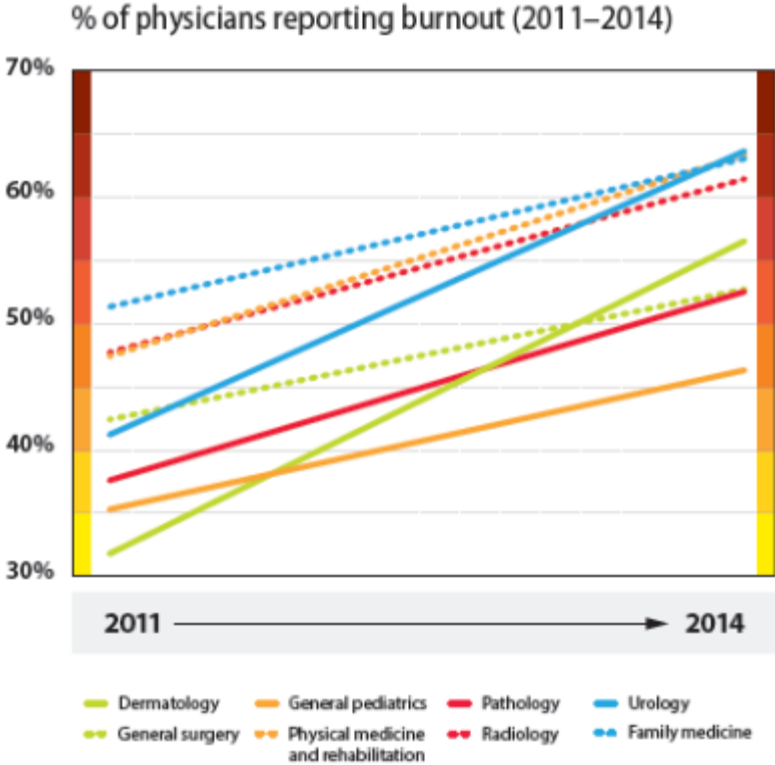


Caps on federal Medicare funding for residency training limits the ability to expand graduate medical education

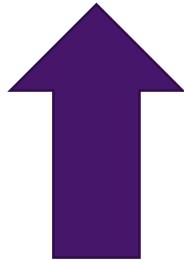
Source: Kirch DG, Petelle K. Addressing the Physician Shortage The Peril of Ignoring Demography. *JAMA*. 2017;317(19):1947–1948. doi:10.1001/jama.2017.2714



Increasing Signs of Burnout



2014: 54%

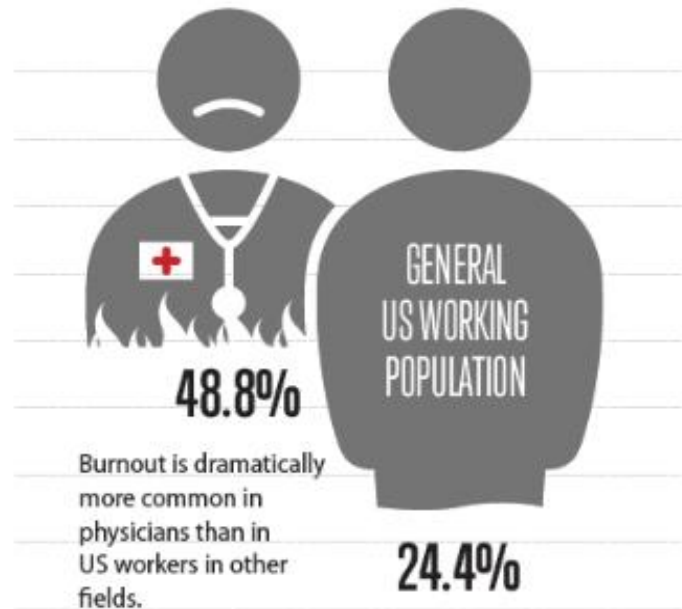


2011: 46%

Source: Shanafelt TD, Hasan O, Dyrbye LN, et al. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. Mayo Clin Proc. 2015;90:1600-13.



How Do Physicians Compare?



Source: Shanafelt TD, Hasan O, Dyrbye LN, et al. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clin Proc.* 2015;90:1600-13.

What Causes Dissatisfaction?

“Physicians who used EHRs and CPOE were less satisfied with the amount of time spent on clerical tasks and were at higher risk for professional burnout.”

Shanafelt TD, Dyrbye LN, Sinsky C, et al. Relationship between clerical burden and characteristics of the electronic environment with physician burnout and professional satisfaction. *Mayo Clin Proc.* 2016.

“More after-hours time spent on the EHR was associated with burnout and less work-life satisfaction.”

Robertson SL, Robinson MD, Reid A. Electronic Health Record Effects on Work-Life Balance and Burnout Within the I3 Population Collaborative. *J Grad Med Educ.* 2017 Aug;9(4):479-484.

“Physicians who reported higher % of time spent on administrative duties had lower levels of career satisfaction, higher levels of burnout, and were more likely to be considering seeing fewer patients...PA, clinical documentation, and medication reconciliation were rated the most burdensome tasks.”

Rao SK, Kimball AB, Lehrhoff SR, et al. The Impact of Administrative Burden on Academic Physicians: Results of a Hospital-Wide Physician Survey. *Acad Med.* 2017 Feb;92(2):237-243.



What Causes Dissatisfaction?

“Burnout was associated with high stress, low work control, and low values alignment with leaders ”

Linzer M, Poplau S, Babbott S, et al. Worklife and wellness in academic general internal Medicine: Results from a national survey. J Gen Intern Med. 2016.

“The leadership qualities of physician supervisors appear to impact the well-being and satisfaction of individual physicians.”

Shanafelt TD, Gorringer G, Menaker R, et al. Impact of organizational leadership on physician burnout and satisfaction. Mayo Clin Proc. 2015;90:432-40.

“The number of hours a physician works is not related to happiness, but the perceived ability to manage workload was significantly related to happiness.”

Eckleberry-Hunt J, Kirkpatrick H, Taku K, et al. Relation Between Physicians' Work Lives and Happiness. South Med J. 2016 Apr;109(4):207-12.



Allocation of Physician Time: Part 1

Annals of Internal Medicine

ORIGINAL RESEARCH

Allocation of Physician Time in Ambulatory Practice: A Time and Motion Study in 4 Specialties

Christine Sinsky, MD; Lacey Colligan, MD; Ling Li, PhD; Mirela Prgomet, PhD; Sam Reynolds, MBA; Lindsey Goeders, MBA; Johanna Westbrook, PhD; Michael Tutty, PhD; and George Blike, MD

Background: Little is known about how physician time is allocated in ambulatory care.

Objective: To describe how physician time is spent in ambulatory practice.

Design: Quantitative direct observational time and motion study (during office hours) and self-reported diary (after hours).

Setting: U.S. ambulatory care in 4 specialties in 4 states (Illinois, New Hampshire, Virginia, and Washington).

Participants: 57 U.S. physicians in family medicine, internal medicine, cardiology, and orthopedics who were observed for 430 hours, 21 of whom also completed after-hours diaries.

Measurements: Proportions of time spent on 4 activities (direct clinical face time, electronic health record [EHR] and desk work, administrative tasks, and other tasks) and self-reported after-hours work.

Results: During the office day, physicians spent 27.0% of their total time on direct clinical face time with patients and 49.2% of

their time on EHR and desk work. While in the examination room with patients, physicians spent 52.9% of the time on direct clinical face time and 37.0% on EHR and desk work. The 21 physicians who completed after-hours diaries reported 1 to 2 hours of after-hours work each night, devoted mostly to EHR tasks.

Limitations: Data were gathered in self-selected, high-performing practices and may not be generalizable to other settings. The descriptive study design did not support formal statistical comparisons by physician and practice characteristics.

Conclusion: For every hour physicians provide direct clinical face time to patients, nearly 2 additional hours is spent on EHR and desk work within the clinic day. Outside office hours, physicians spend another 1 to 2 hours of personal time each night doing additional computer and other clerical work.

Primary Funding Source: American Medical Association.

Ann Intern Med. 2016;165:753-760. doi:10.7326/M16-0961 www.annals.org
For author affiliations, see end of text.
This article was published at www.annals.org on 6 September 2016.

- For every hour physicians provide direct clinical face time to patients, nearly 2 additional hours are spent on EHR/desk work.
- Outside office hours, physicians spend another 1 to 2 hours each night doing EHR/desk work.

Allocation of Physician Time: Part 2

Tethered to the EHR: Primary Care Physician Workload Assessment Using EHR Event Log Data and Time-Motion Observations

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Jonathan L. Temte, MD, PhD¹

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³American Medical Association, Chicago, Illinois

ABSTRACT

PURPOSE Primary care physicians spend nearly 2 hours on electronic health record (EHR) tasks per hour of direct patient care. Demand for non-face-to-face care, such as communication through a patient portal and administrative tasks, is increasing and contributing to burnout. The goal of this study was to assess time allocated by primary care physicians within the EHR as indicated by EHR user-event log data, both during clinic hours (defined as 8:00 AM to 6:00 PM Monday through Friday) and outside clinic hours.

METHODS We conducted a retrospective cohort study of 142 family medicine physicians in a single system in southern Wisconsin. All Epic (Epic Systems Corporation) EHR interactions were captured from "event logging" records over a 3-year period for both direct patient care and non-face-to-face activities, and were validated by direct observation. EHR events were assigned to 1 of 15 EHR task categories and allocated to either during or after clinic hours.

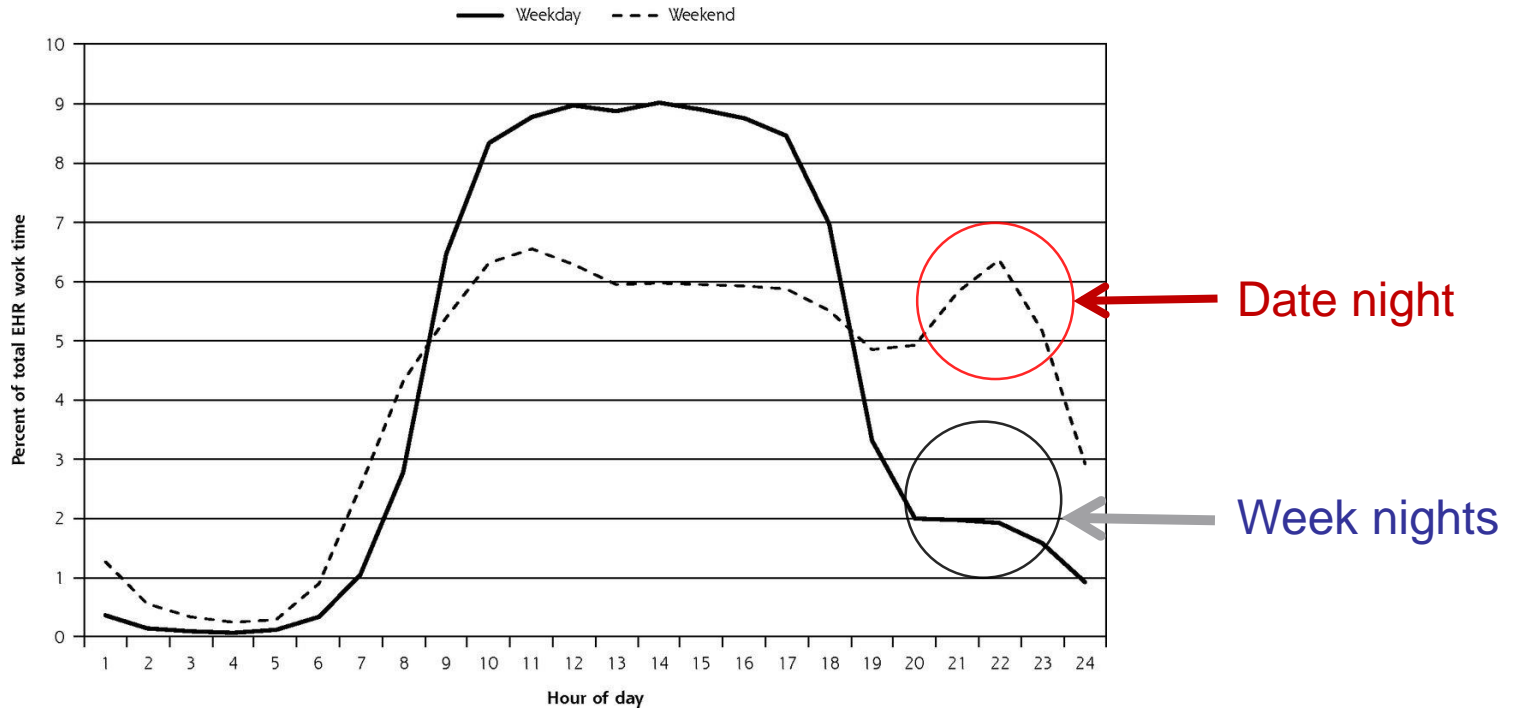
RESULTS Clinicians spent 355 minutes (5.9 hours) of an 11.4-hour workday in the EHR per weekday per 1.0 clinical full-time equivalent: 269 minutes (4.5 hours) during clinic hours and 86 minutes (1.4 hours) after clinic hours. Clerical and administrative tasks including documentation, order entry, billing and coding, and system security accounted for nearly one-half of the total EHR time (157 minutes, 44.2%). Inbox management accounted for another 85 minutes (23.7%).

- Physicians spent an average of 5.9 hours out of an 11.4-hour workday working in the EHR.
- Clerical and administrative tasks accounted for 44 percent of the total EHR usage time
- Inbox management took up 24 percent of family physicians' time.

Brian G. Arndt, John W. Beasley, Michelle D. Watkinson, Jonathan L. Temte, Wen-Jan Tuan, Christine A. Sinsky, and Valerie J. Gilchrist, *Tethered to the EHR: Primary Care Physician Workload Assessment Using EHR Event Log Data and Time-Motion Observations*, Ann Fam Med September/October 2017 15:419-426

“Pajama Time”: Saturday nights belong to EHRs

142 FM
3 yr



Brian G. Arndt, John W. Beasley, Michelle D. Watkinson, Jonathan L. Temte, Wen-Jan Tuan, Christine A. Sinsky, and Valerie J. Gilchrist, *Tethered to the EHR: Primary Care Physician Workload Assessment Using EHR Event Log Data and Time-Motion Observations*, *Ann Fam Med* September/October 2017 15:419-426

Why Does it Matter?

“We found support for the notion that the depersonalization dimension of physician burnout was associated with patient outcomes of lower satisfaction and longer post discharge recovery time (after controlling for severity of illness and other demographic factors).”

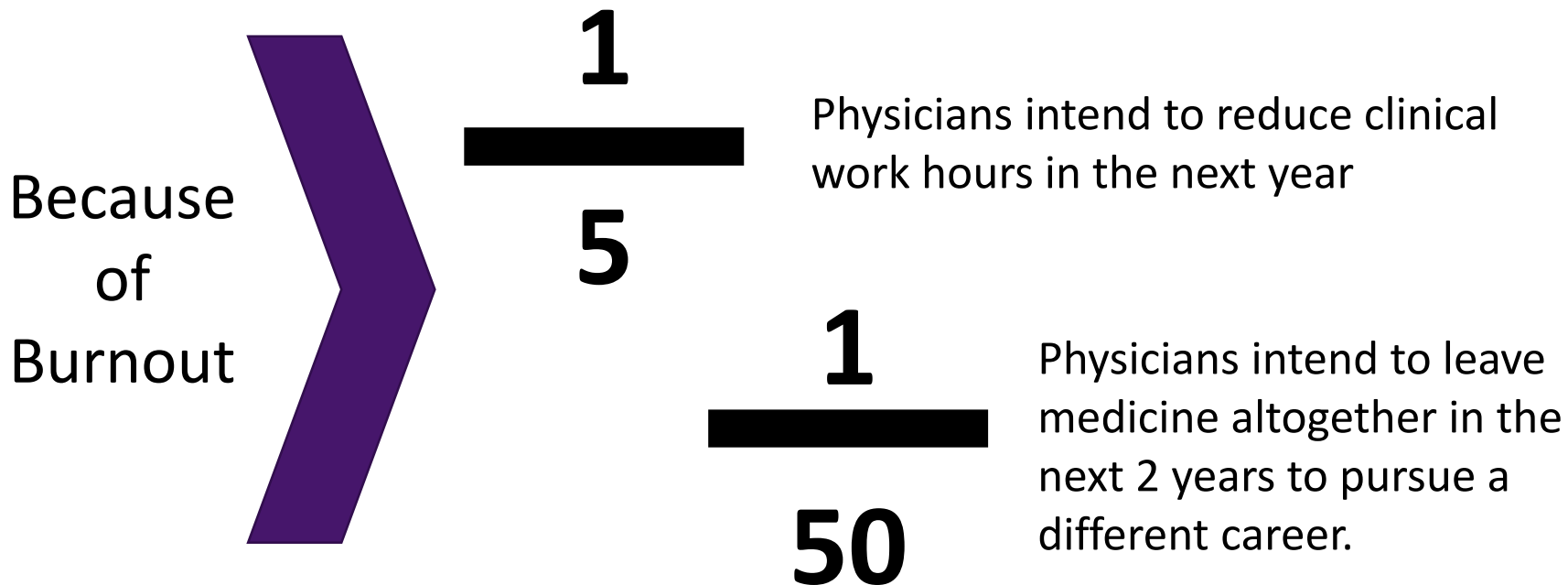
Halbesleben JR, Rathert C. Linking physician burnout and patient outcomes: Exploring the dyadic relationship between physicians and patients. *Health Care Manage R.* 2008;33:29-39

“Burnout is associated with lower patient satisfaction, reduced health outcomes, and it may increase costs. Burnout thus imperils the Triple Aim”

Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. *Ann Fam Med.* 2014; 12:573-6.



Physicians Leaving Practice and Profession Due to Burnout



Source: Sinsky, Christine A. et al., Professional Satisfaction and the Career Plans of US Physicians, Mayo Clinic Proceedings, Volume 92, Issue 11, 1625 - 1635