Cornell University

Health Disparities; and Medical Malpractice

PUBPOL 2350

November 14, 2023

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THURSDAY, NOVEMBER 30
6 - 7:30 PM
LOCATION: MVR 1153

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Today's Topics

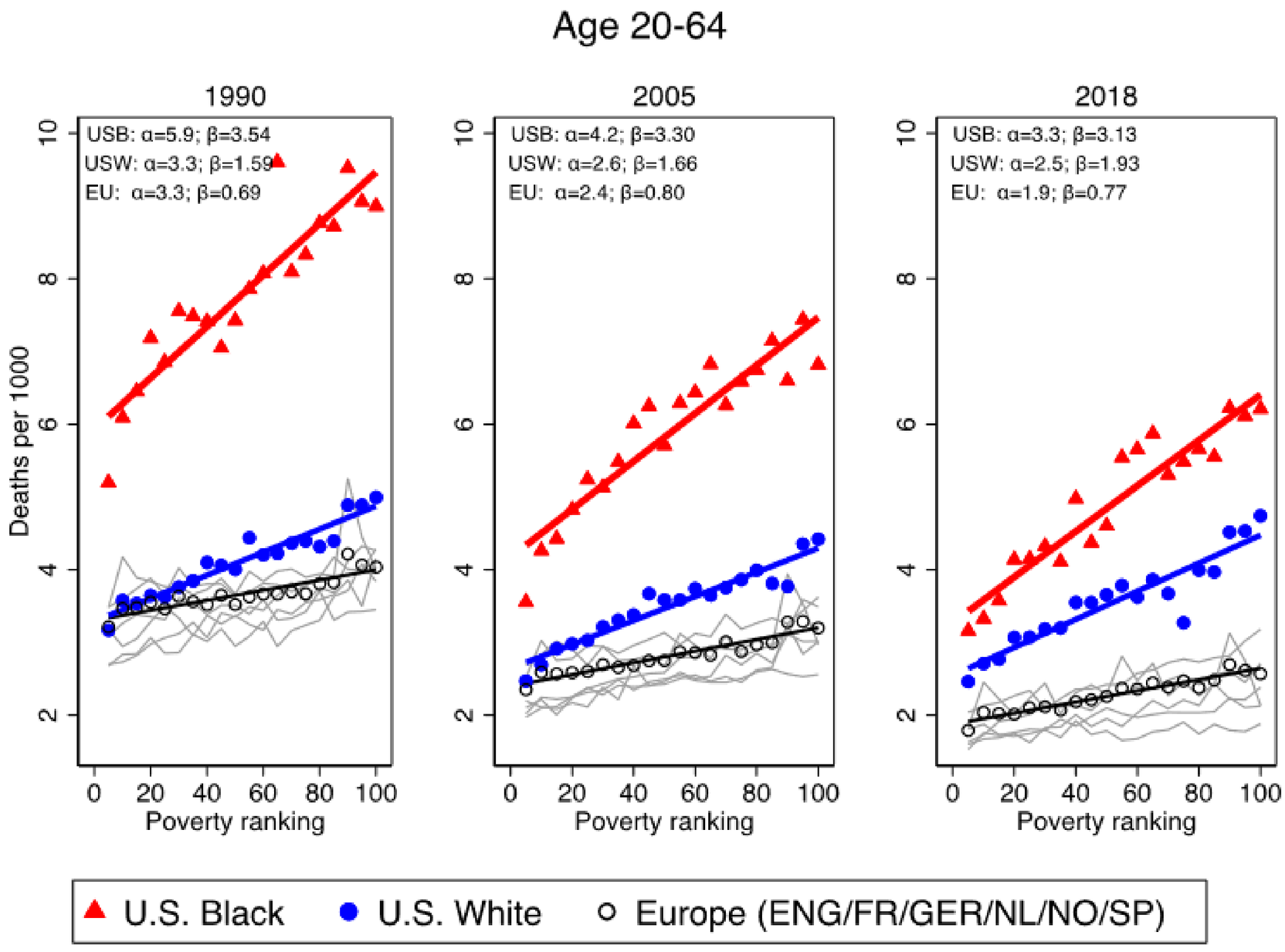
1. **Health Disparities:** continue discussing why there are such large health differences across racial and ethic groups in the U.S., and possible policy solutions.

Medical Malpractice

2. **Crisis?** Discuss whether we are experiencing a medical malpractice crisis
3. **Objectives:** Describe the objectives of the malpractice system
4. **Performance:** Discuss how well the system is meeting those objectives

Responding to a question from Thursday: the authors do NOT have European data broken out by race/ethnicity

Figure 3. One-year mortality for Black Americans, White Americans, and six European countries, age 20-64.



Source: Schwandt et al., 2021, PNAS.

Summary of Thursday's Racial Disparities Material

- Substantial differences in the health of Black people and White people in the U.S., and in their access to medical services.

- Much of these differences can be explained by differences in income, health insurance, and "exposure" to the social determinants of health.

- Where one lives matters: health differences by geography/ location highlight the importance of the social determinants of health (which differ substantially across geographic areas).

But, Differences in Income, Insurance, and Location Do Not Fully Explain Health Disparities Between Black and White Patients

- Authors examined the records of 177,000 women who were diagnosed with Stage I (early) – Stage III (relatively late) breast cancer between 2010 and 2016.

- Relative to non-Hispanic white patients, Black and Hispanic patients were 46% and 35% more likely to be diagnosed with Stage III cancer.

- **After controlling for income, education, insurance status, and other SES variables**, Black and Hispanic patients were still 29% and 17% more likely to be diagnosed with Stage III cancer vs. white patients.

- That is, other factors explain about one-half of the disparities in stage of cancer at diagnosis, and thus probability of survival.

Source: Ko et al., JAMA Oncology, January 2020.

Some Studies: the SAME Health Facility Treats Patients of Different Racial Groups Differently -- Evidence Consistent With (but not "proving") Racial Bias By Health Care Professionals

- Authors compared the use of opioid drugs for White and Black patients at 310 health systems in the U.S. in 2016 and 2017.
- White and Black patients being treated in the same health system were equally likely to receive an opioid prescription for pain relief.
- BUT, the average dose was 36% lower among Black patients than White patients.
- "These opioid-receipt patterns probably reflect both overtreatment of White patients and undertreatment of Black patients."

Source: Morden et al., NEJM, July 22, 2021.

Does Racial Discrimination Play a Role?

"Discrimination, as the (IOM) committee uses the term, refers to differences in care that result from biases, prejudices, stereotyping, and uncertainty in clinical communication and decision-making."

Source: Institute of Medicine, Unequal Treatment, 2002.

Health Care Professionals Display Implicit Bias at the Same Levels as the Entire Population

- Authors identified 37 studies that test whether health care professionals display implicit bias.
- Most common measurement -- Implicit Association Test (IAT): "in race IAT, participants pair photos of Black and White faces with good or bad words like pleasure or agony."
- In 31 of the 37 studies, the authors found evidence of pro-white bias among health care professionals.
- Mixed evidence on whether implicit bias translated into worse medical care or health outcomes for patients of color.
- Most common finding was that providers with stronger implicit bias demonstrated worse patient-provider communication.

Recommended optional test: https://implicit.harvard.edu/implicit/takeatest.html

Source: Maina et al., Social Science & Medicine, 2018.

More Evidence of Implicit (or explicit?) Bias Among Clinicians From Two 2022 Studies

- Authors used electronic medical records of 19,000 patients treated at one urban hospital in 2019 and 2020.
- Physicians and nurses were 2.5 times more likely to use a negative patient descriptor (e.g., “resistant” or “non-compliant”) with Black versus White patients (which could worsen a patient’s trust of the provider/medical system, and how they are treated).
- Second study: overall, 2.5% of the hospital admissions notes for 30,000 patients contained “stigmatizing language” such as “argumentative” or “junkie” or “nonadherence.”
- Non-Hispanic Black patients were 0.7 percentage points more likely to have such stigmatizing language in their notes relative to non-Hispanic White patients (about 30% higher).

Source: Sun et al., Health Affairs, February 2022; Himmelstein, JAMA Network, January 2022.

Importance of Effective Communication Between Patients and Physicians

- Black men in Oakland, CA were randomized to see black or non-black male physicians.
- Black men treated by a Black physician were more likely to agree to receive 5 preventive services (e.g., flu vaccine, cardiovascular screening), particularly for invasive services.
- The effect was strongest for men who mistrust the medical system.
- **"The results are most consistent with better patient-doctor communication during the encounter rather than differential quality of doctors or discrimination."**
- A separate study found that the Black-White gap in infant mortality was reduced by 50% when a Black physician (vs. a White physician) cared for a Black newborn baby.

Source: Alsan et al., 2019; Russell, *Washington Post*, January 13, 2021.

Importance of Communication and Trust Confirmed by Recent Study of the Military Health System

- Authors compare medical treatment and health outcomes of Black and non-Black patients in the Military Health System who switch military bases.

- Military bases differ in the % of physicians who are Black.

- Black patients who transfer to a base with a relatively high % of Black physicians (so they are more likely to be randomly assigned to a Black physician):
  - Receive better (evidence-based medicine) preventive care for diabetes
  - Experience a 15% decline in mortality relative to Black patients assigned to a non-Black physician

Source: Frakes and Gruber, 2022.

5 Possible Policies to Address Health Disparities

1) **Divest from racial health inequities**: treat all patients the same even if they (or their insurer) pay different amounts (e.g., Medicaid pays MDs/hospitals less than private insurance).

2) **Diversify the health care workforce.**

3) **Make "mastering the health effects of structural racism" a professional medical competency.**

4) **Mandate and measure equitable outcomes.**

5) **Protect and serve.**

Source: Hardeman et al, NEJM, July 2020.

Disparities Conclusions

- Substantial differences between Black people and White people in health status and use of medical services.

- Much of this can be explained by differences in socioeconomic factors (SES), income, education, access to health insurance, and access to providers of care.

- But, differences persist when controlling for these factors.

- The medical profession is perplexed by the possibility of overt or subconscious discrimination, lack of trust, and/or communication deficiencies.

- Disparities appear to be narrowing over time, but slowly.

Video

A Patient's Perspective on Medical Malpractice

Cornell University

To Prevail in a Malpractice Lawsuit, a Patient/Plaintiff Must…

1) Prove that the defendant (e.g., MD, hospital) owed a duty of care to the plaintiff

2) Prove that the defendant breached this duty by failing to adhere to the standard of care (i.e., negligence occurred)

3) Prove that this breach of duty injured the plaintiff

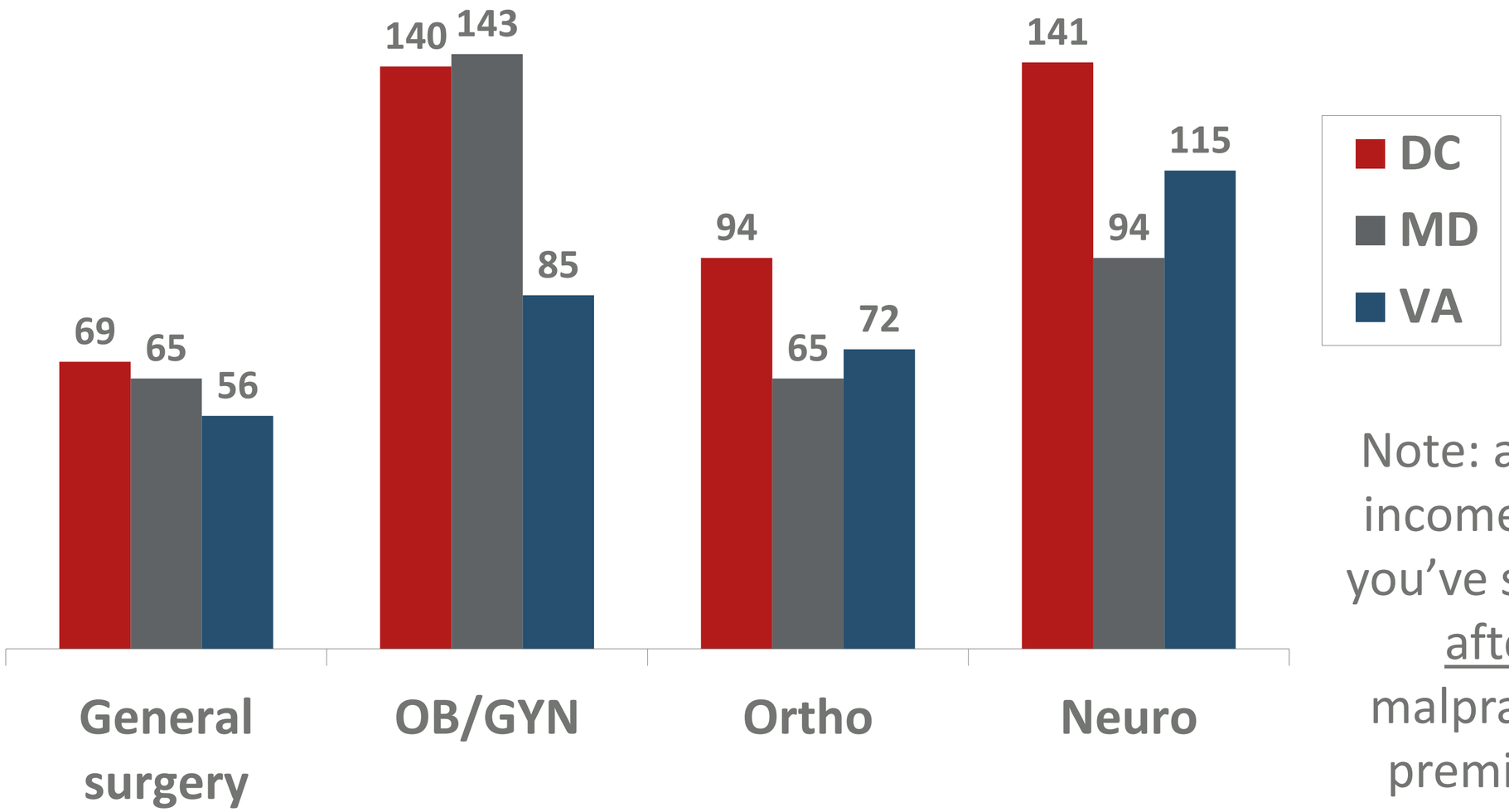
Breach of duty is negligent if the defendant did not deliver the quality of care that would be expected of a reasonable practitioner in similar circumstances (based on local or national norms)

Source: Studdert et al., 2004, *New England Journal of Medicine*.

Physicians' Typical Perspective

"Are Soaring (Malpractice Premium) Rates Sending DC Doctors to the Suburbs?"

Average Annual Malpractice Premium ($000), 2005



Note: all MD income data you've seen is <u>after</u> malpractice premiums

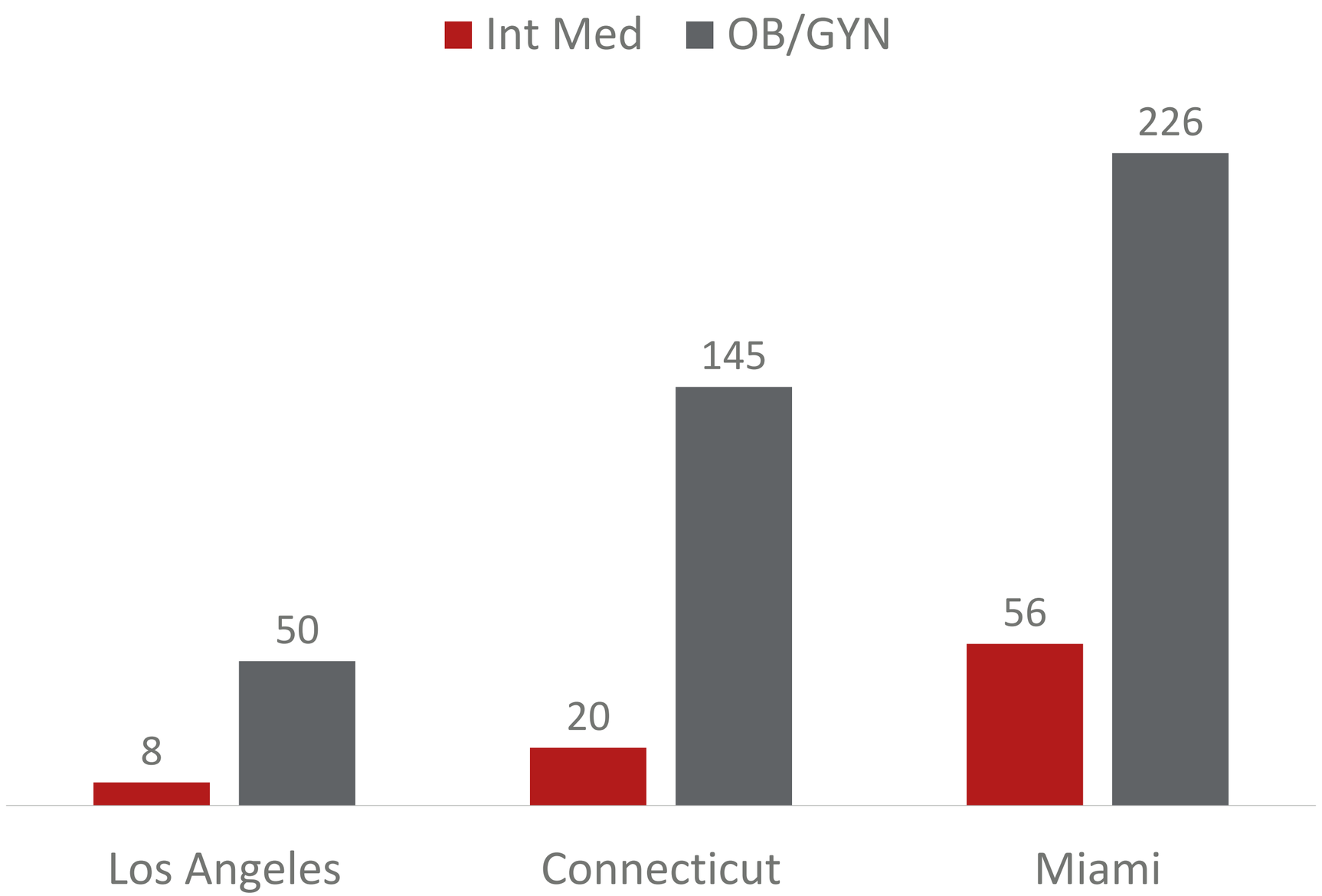
Source: Fleury, *Washingtonian*, 2005.

It's Important to Keep Perspective

- High malpractice premiums are concentrated in certain specialties and certain locations (see next slide).
- Malpractice premiums tend to cycle (see slide 20), but the media often "tune in" only when premiums are rising.
- Most physicians (96% on slide 20 for Massachusetts) paid lower malpractice premiums in 2005 than in 1985 once one accounts for inflation.
- Premiums have remained steady or fallen since the most recent upward spike (see slide 21).
- Physicians' fees tend to adjust over time to account for rising malpractice premiums (i.e., patients or taxpayers ultimately pay malpractice premiums, not physicians, through higher health insurance premiums).

Source: Rodwin et al. 2008, *Health Affairs*; *Medical Economics*.

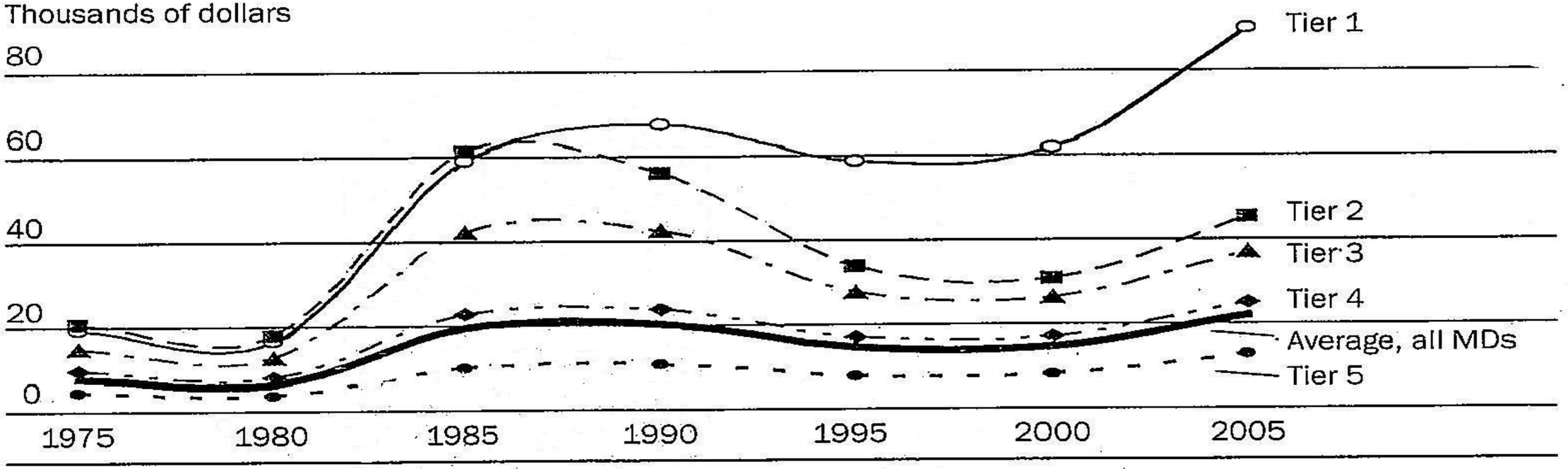
Malpractice Premiums ($000) Differ Greatly by Specialty and Geographic Area (2022)



Source: American Medical Association.

Although Premiums Tend to Cycle, They Fell in Massachusetts Between 1985 and 2000 for Most Physicians

EXHIBIT 1
Mean Manual Premium Rates For $1/$3 Million Occurrence Policies, For All Physicians And Physicians Divided Into Five Tiers, Adjusted By The Number Of Rate Groups In Each Tier, Selected Years 1975–2005

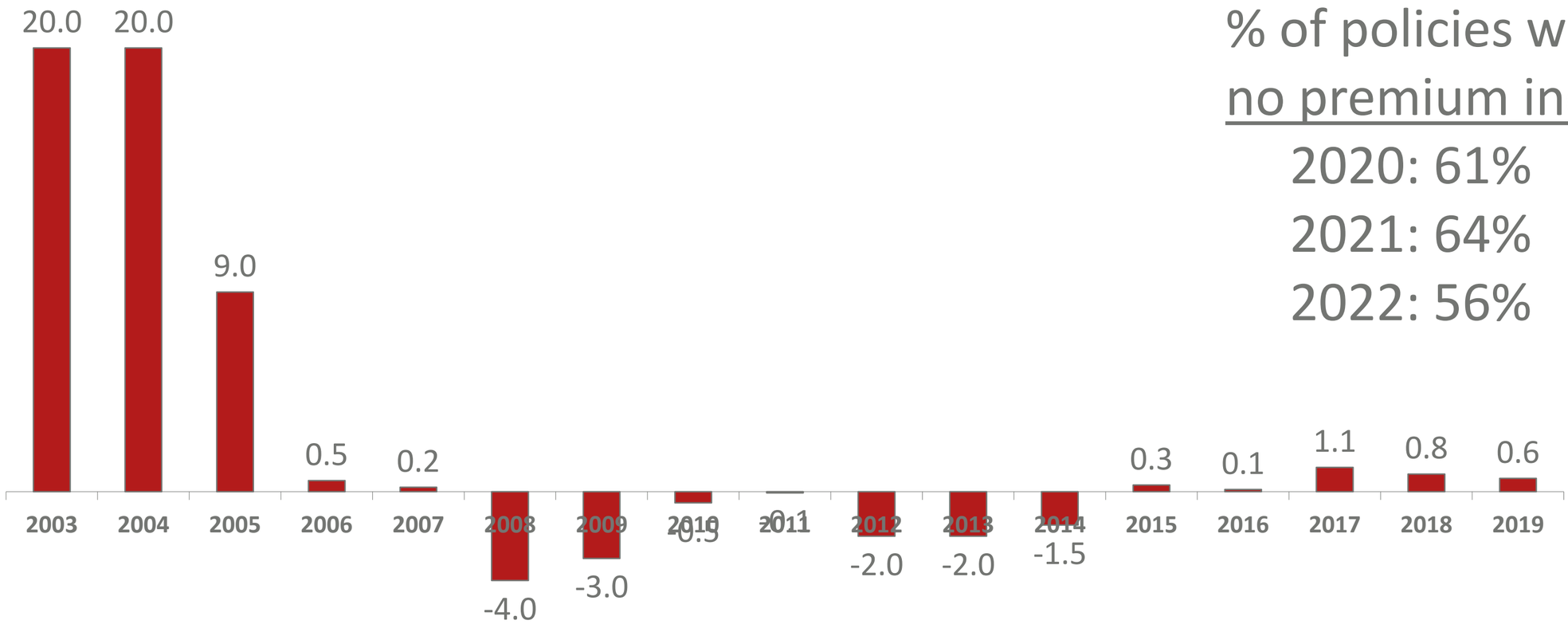


SOURCE: Medical Professional Insurance Company.
NOTES: All data adjusted by Consumer Price Index (CPI) and expressed in constant 2005 dollars. Practice specialties divided into tiers charged similar rates. Tier 1: obstetrics/gynecology, neurological surgery, and orthopedists performing spinal surgery. Tier 2: major vascular, cardiovascular, head and neck, traumatic, and orthopedic (except spinal) surgery. Tier 3: major general, abdominal, thoracic, plastic, cardiac, and gynecological or hand surgery and emergency medicine without major surgery. Tier 4: anesthesiology, and major surgery for emergency medicine, ronco-esophagology, colon and rectal, endocrinology, gastroenterology, geriatrics, neoplastic, nephrology, laryngology, otology, otorhinolaryngology, rhinology, and urology. Tier 5: all other physicians (a total of sixty-five practice specialties).

Source: Rodwin et al. 2008, *Health Affairs*.

Where is the Media When Malpractice Lawsuits and Malpractice Premiums are Declining?

Average Percentage Change in Malpractice Premiums Nationally



% of policies with no premium increase:

2020: 61%

2021: 64%

2022: 56%

No growth in premiums for 13 years is not a crisis

Source: Medical Liability Monitor (through 2019); American Medical Association (2020 -).

Small % of Total Medical Spending

Total direct spending on malpractice (premiums + legal defense costs) accounts for less than 1.0% of total medical spending in the U.S. (we'll discuss indirect effects later)

Source: Kessler, 2012, *Journal of Economic Perspectives*.

Two Key Objectives of the Medical Malpractice System

1) Compensate patients who are injured due to negligent behavior.

2) Deter future negligence by creating incentives for MDs, hospitals, and other medical providers to consider their actions/behavior carefully; and to spend time/money to improve skills/processes.

How well does our system meet these objectives?

Source: Keeton et al., 1984.

How Close Does the Actual Malpractice System Come to a "Perfect" System?

Perfect

1) All patients harmed due to negligence would sue.

1) They would all win.
2) No patients not harmed, or harmed but not due to negligence, would sue/win.
3) MDs/hospitals who are sued more often pay higher malpractice insurance premiums.

Actual

1) Only 6% of NY hospital patients harmed due to negligence filed a claim.
2) 73% of the people above who sued, did receive money.
3) 38% of claims are from these patients, but 72% receive $0, and payments are small.
4) MDs' malpractice premiums are not experience rated; hospitals' premiums are.

Source: Studdert et al., *New England Journal of Medicine*, 2006.

Why do so few of the patients harmed due to negligence sue?

Why Do So Few Patients Sue?

- Some patients may not know they were harmed by negligent behavior.
- Plaintiff's lawyer's usually receives 35% of any payout from the malpractice insurance company, or $0 if the suit is unsuccessful.
- Prospective lawyers will only pursue cases where the expected payout (weighted by the likelihood of winning) exceeds their expected time costs.
- 2011 study in MA: 58% of malpractice claims were eventually dropped. Primary reason: plaintiff acquired info and learned that the claim was weaker than expected.

Source: Studdert et al., 2004, *New England Journal of Medicine;* Golann*, Health Affairs,* 2011.

7.4% of Physicians Face a Malpractice Claim in a Year, on Average (between 1991 and 2005)

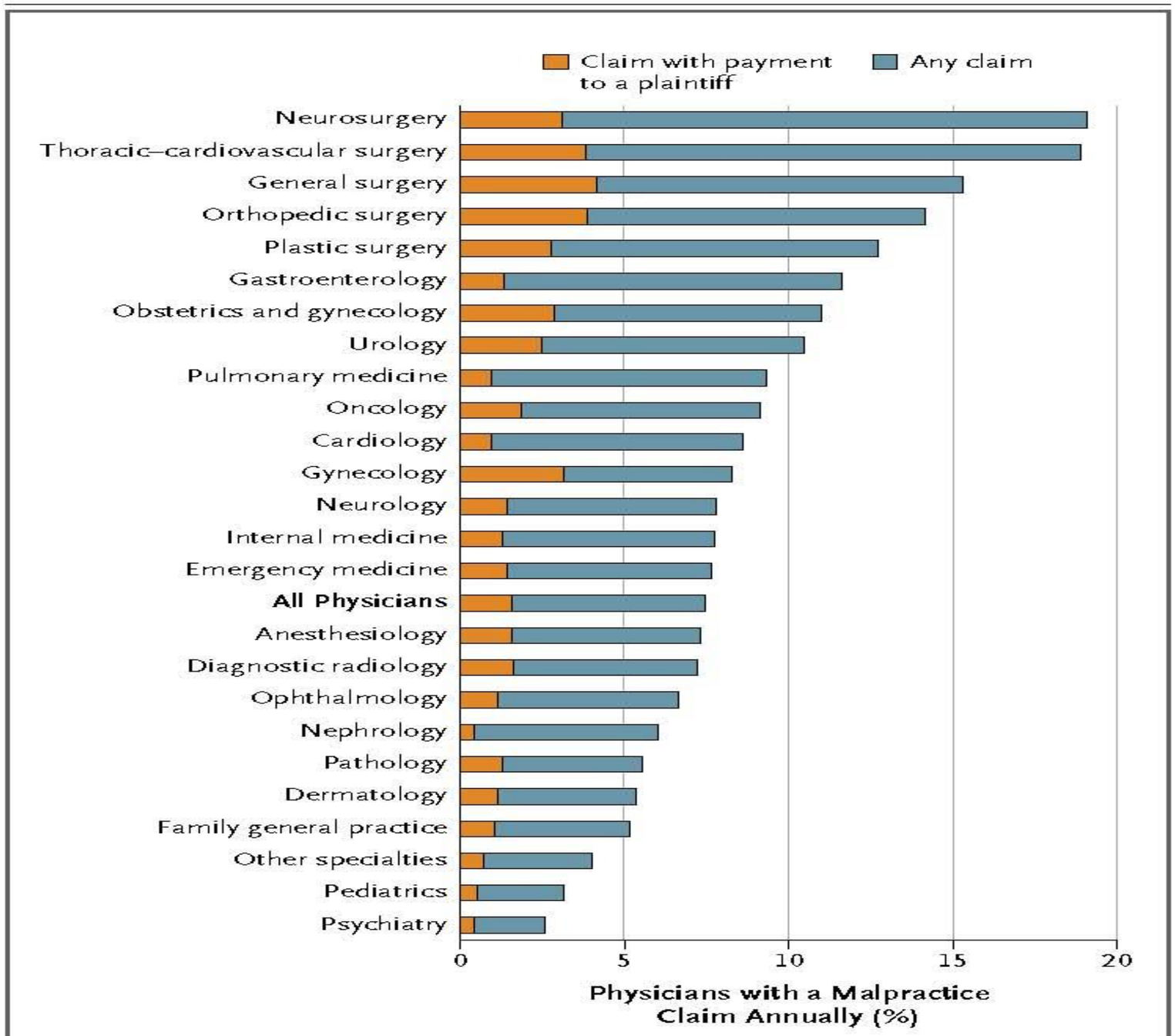


Figure 1. Proportion of Physicians Facing a Malpractice Claim Annually, According to Specialty.

- Ranges from 19% in neurosurgery to 2.6% in psychiatry.

- Lifetime probability of facing a claim:
  - 75% for low-risk specialties
  - 99% for high-risk specialties

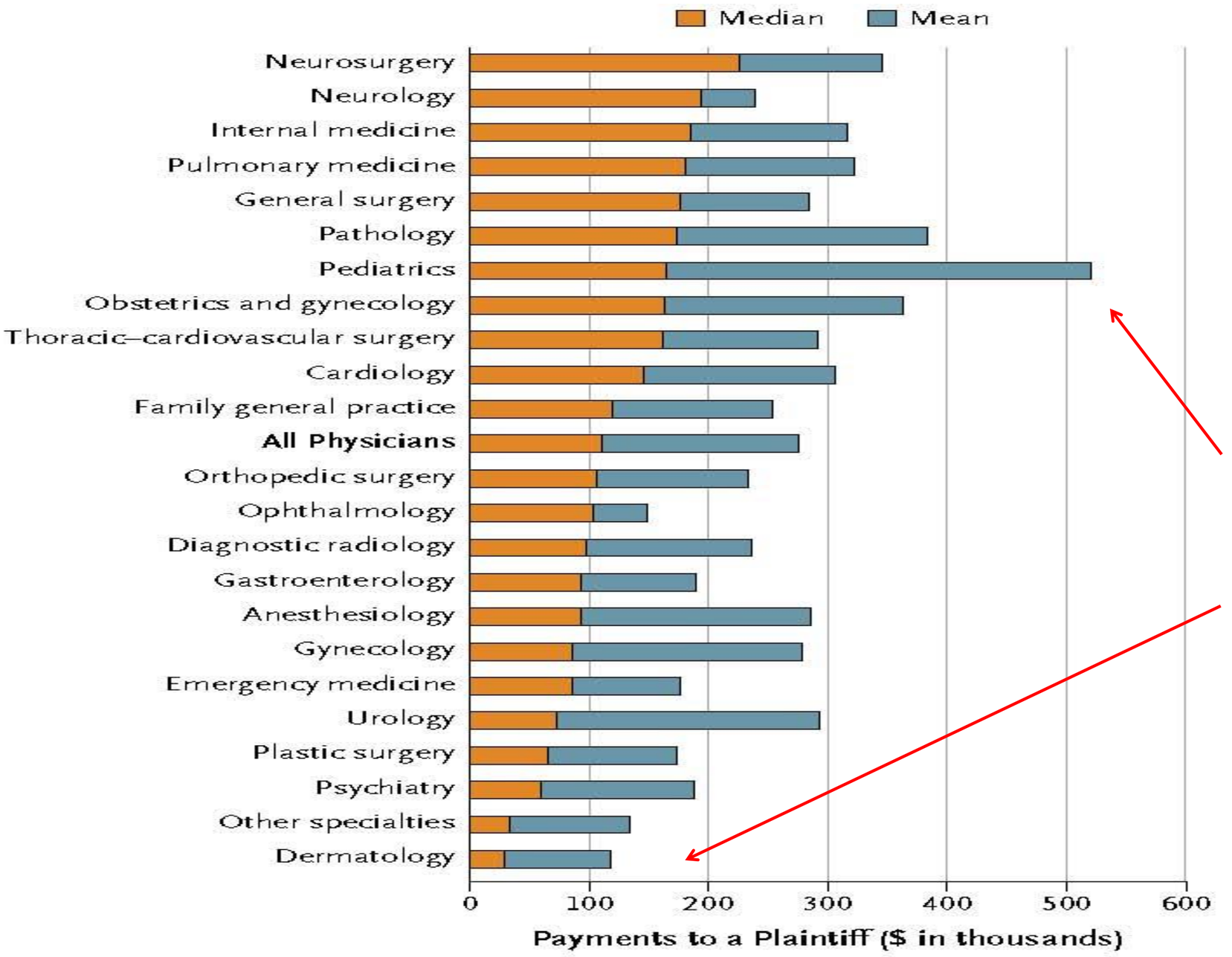
Source: Jena et al., 2011, *NEJM*.

How is Malpractice Money Paid Out?

- About 1% of all physicians account for 32% of paid claims.
- 71% of claims do not result in any payment to plaintiff (i.e., case is dropped, or judge/jury rules for the defendants).
- 97% of the money patients (and their lawyers) receive come from settlement payments before a case comes to trial, or before the judge/jury decides the case.
- Only 3% of the total payouts are from trial judgments, but these awards tend to be larger, on average, than settlement payouts.

Source: Carroll et al., "The Graying of America," Spring 2012;
Studdert et al., *New England Journal of Medicine,* 2016.

Mean Claim Payment ($275,000) Much Greater Than Median ($112,000): Settlements and Trial Payouts

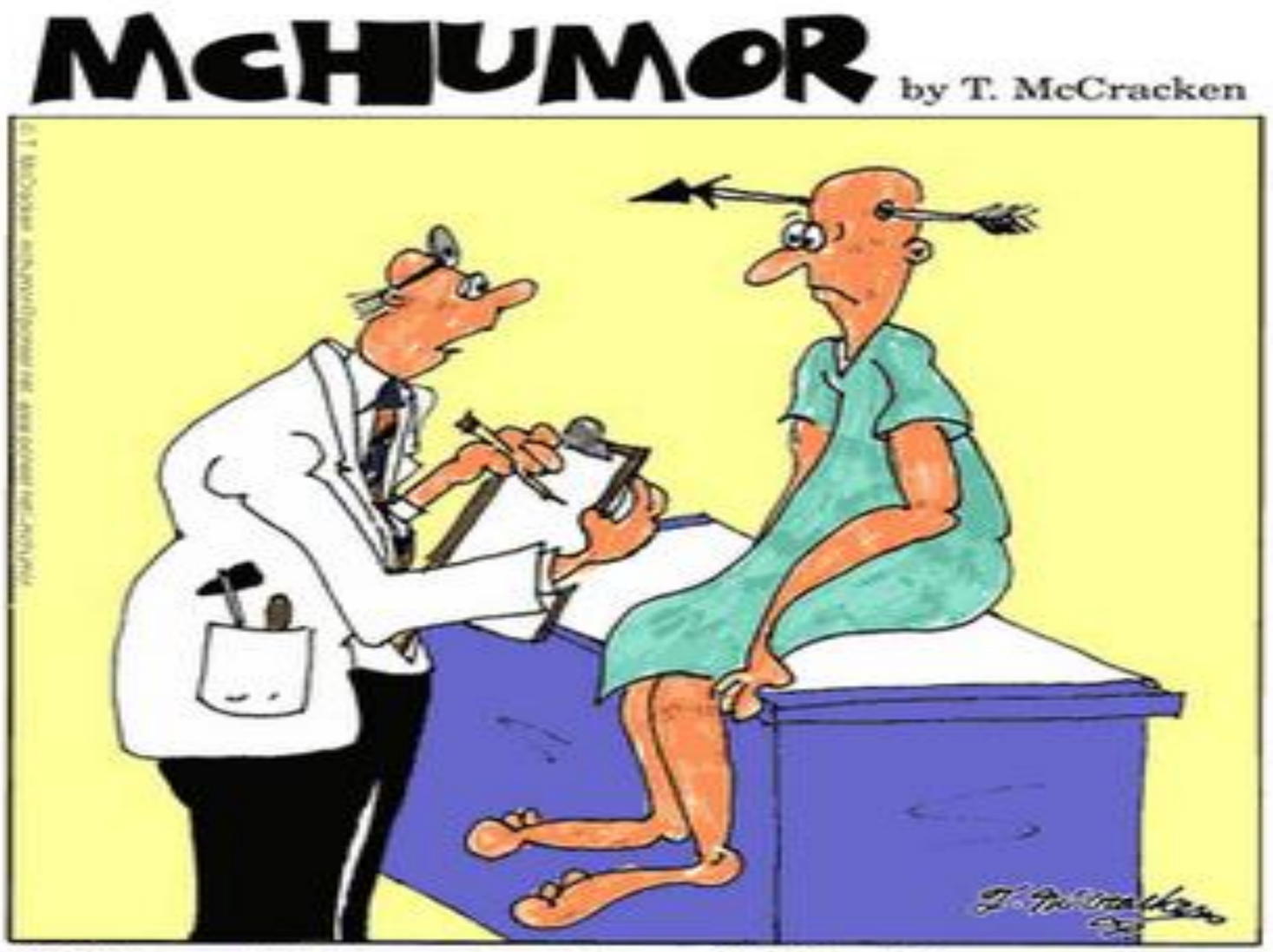


Mean payment ranged from $521,000 in pediatrics to about $120,000 in dermatology

Figure 3. Amount of Malpractice Payments, According to Specialty.
Payments are shown in 2008 dollars. Specialties that had fewer than 30 payments (i.e., oncology and nephrology) are not listed.

Source: Jena et al., *NEJM, 2011*.

Is Defensive Medicine A Big Deal? If so, the Real Costs of a Flawed Malpractice System Could Be Much Greater Than 1.0% of Medical Spending



"Off hand, I'd say you're suffering from an arrow through your head, but just to play it safe, I'm ordering a bunch of tests."

Defensive medicine: medical care provided to reduce the probability of a malpractice lawsuit, rather than improving a patient's health

Many Physicians Believe They Provide Unnecessary Medical Care in Order to Avoid Lawsuits

- 42% of surveyed primary care physicians in the U.S. believe their patients are receiving too much medical care, versus 6% who indicate too little.

- Reasons MDs believe patients receive too much care:
  - malpractice concerns: 76%
  - clinical performance measures: 52%
  - inadequate time to spend with patients: 40%

- Providing more services to a patient in a hospital does, on average, reduce the chance that a physician will be sued for malpractice (see next 2 slides for examples).

Source: Sirovich et al., *Archives of Internal Medicine*, 2011; Jena et al., *The BMJ*, 2015.

Example: OB/GYNs Respond to a Malpractice Lawsuit by Performing More C-Sections

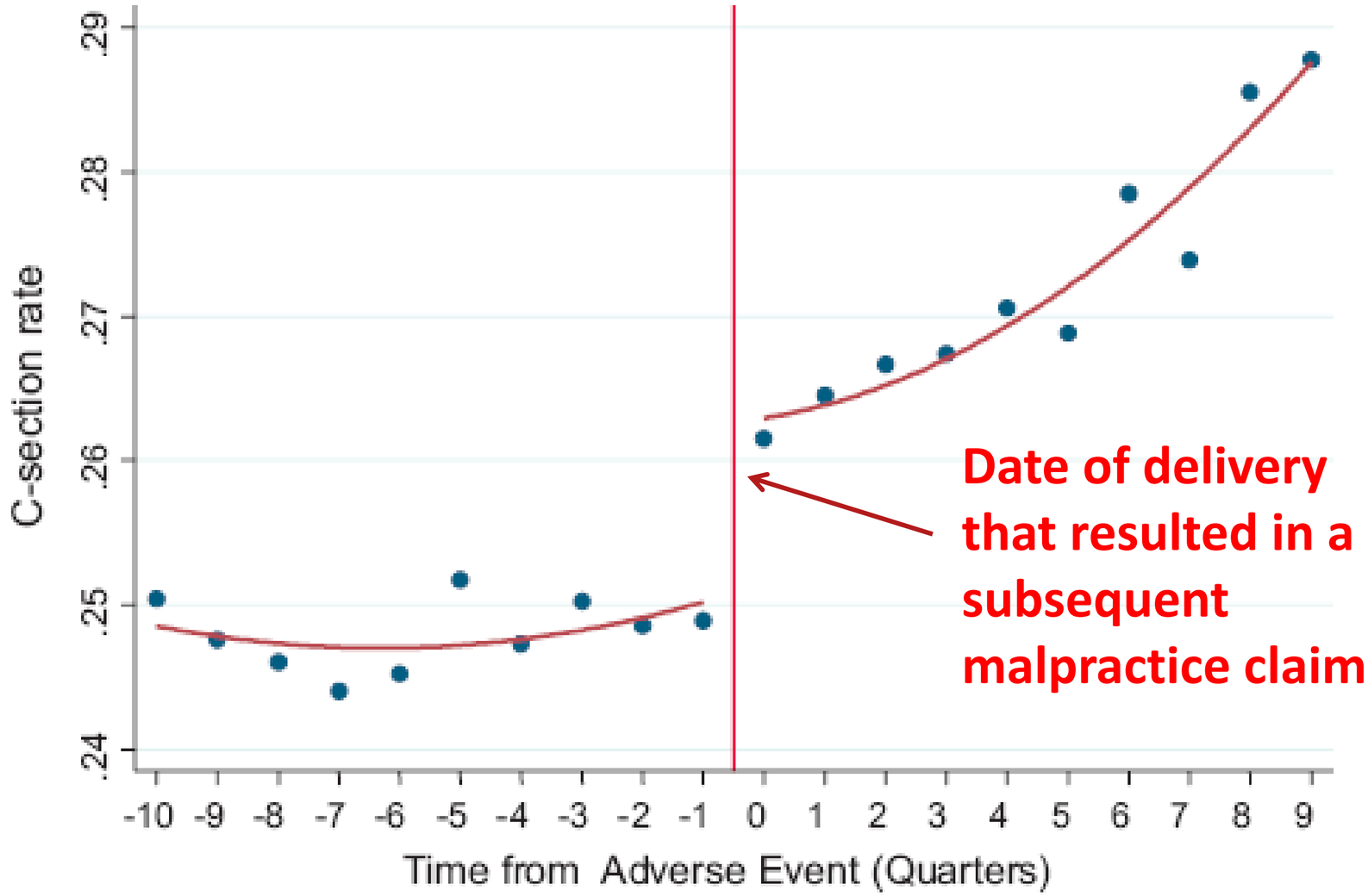
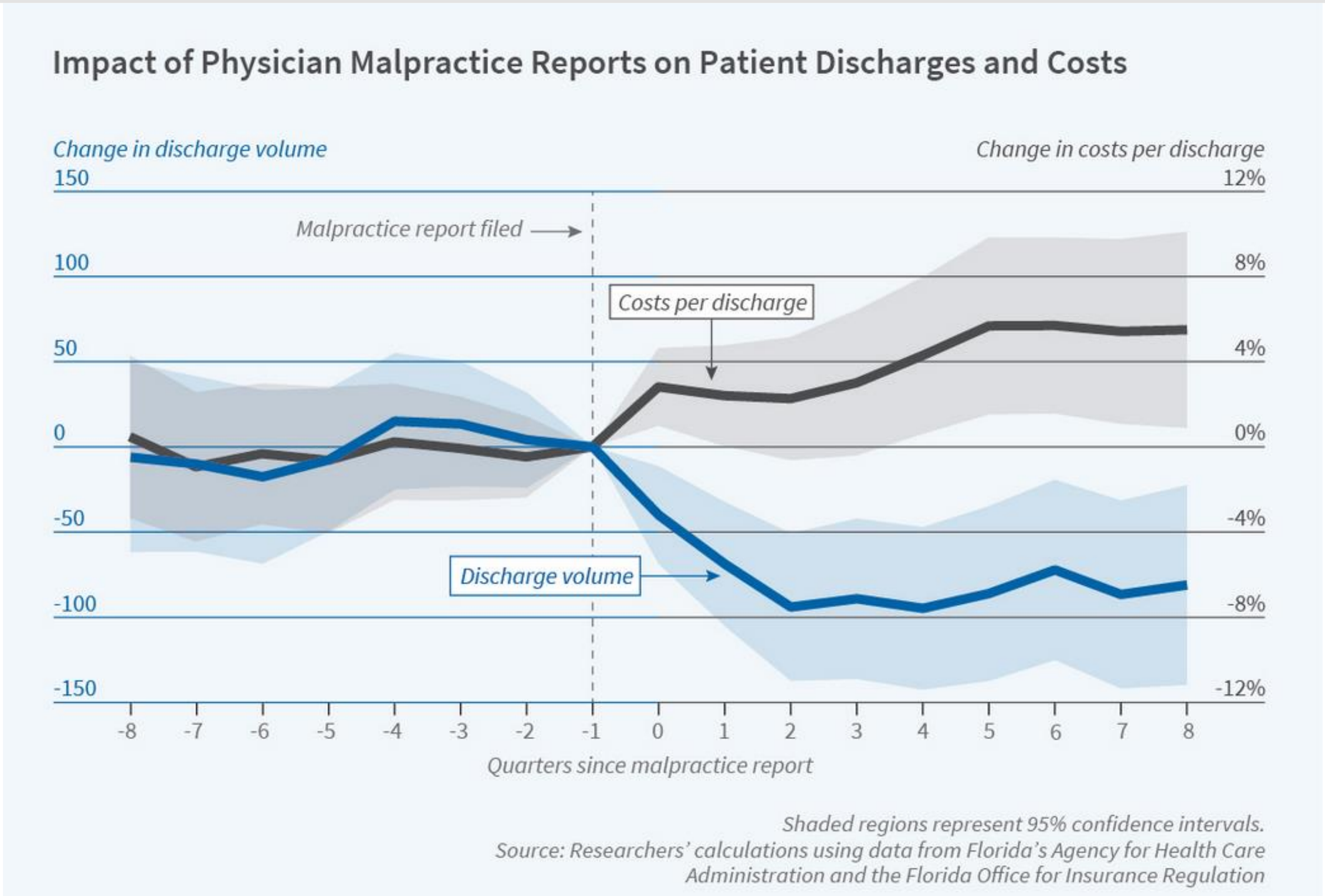


Fig. 5. Short-run effect of an adverse event. *Note*: The figure plots per-period C-section rates in the adverse event panel. The vertical line denotes the time of the adverse event.

Source: Shurtz, *Journal of Health Economics*, 2012.

Florida Emergency Room Physicians Take Longer to Treat Patients and Provide More (Expensive) Services After Being Sued for Malpractice



Source: Carroll, Cutler, and Jena, 2021. NBER working paper 28330

Economists' Conclusion: Defensive Medicine is a Relatively Small Deal: An Issue, But Not That Important

- Conclusion: defensive medicine drives up costs by 5% to 10%. Based on…
- …Comparing costs of treating patients in states that instituted malpractice reforms (e.g., caps on pain and suffering awards) vs. those that have not.
- …and comparing costs between Military Health System (historically not subject to malpractice) and civilian settings.
- No evidence that defensive medicine affects the long run growth rate of spending.

Source: Kessler and McClellan, 1996, *Quarterly Journal of Economics*; Sloan and Shadle, 2009; Frakes and Gruber, 2018.