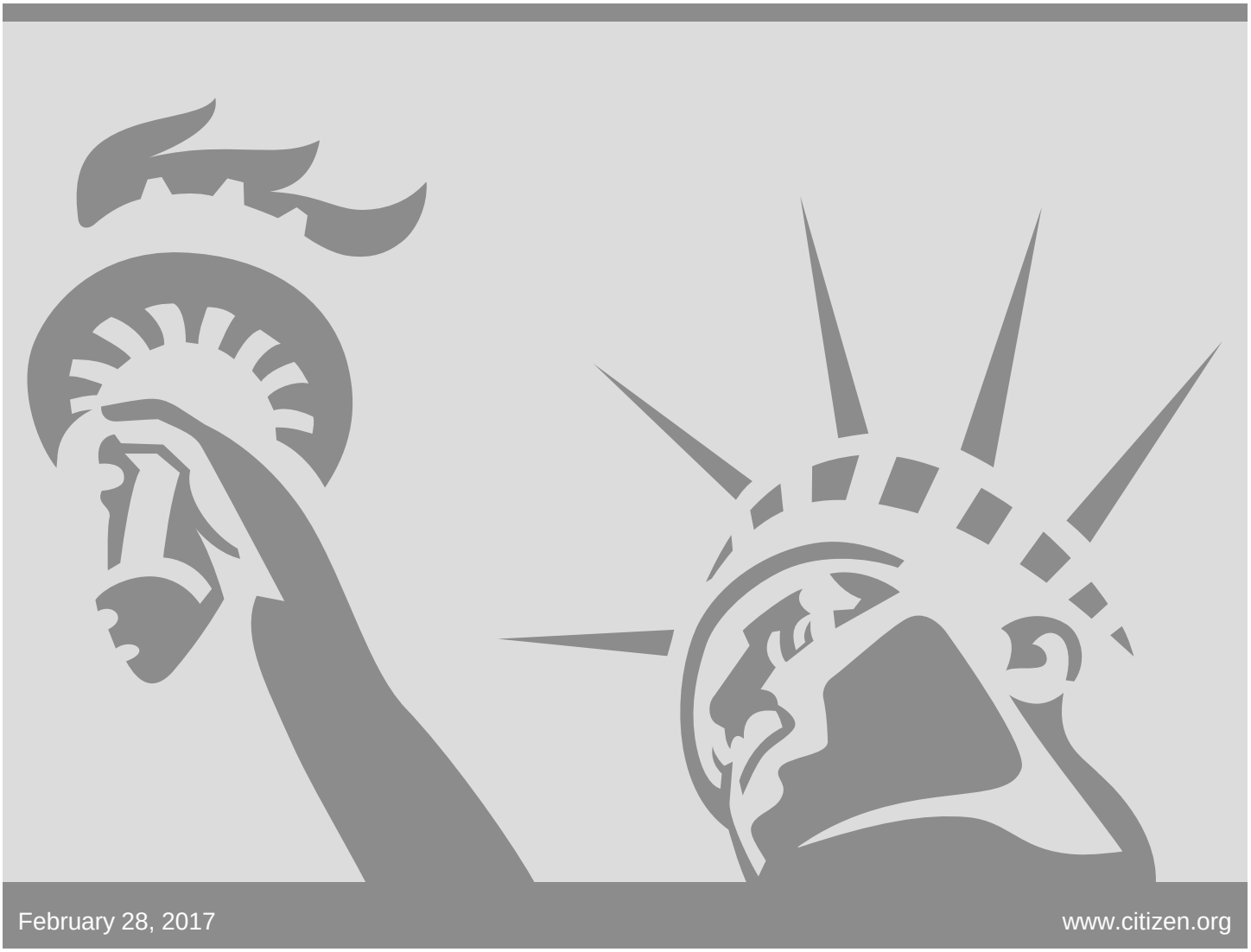
PUBLICCITIZEN



February 28, 2017

www.citizen.org

The Medical Malpractice Scapegoat

Claims That Litigation Is Responsible for Rising Healthcare Costs Crumble Under Scrutiny

Acknowledgments

This report was written by Taylor Lincoln, research director for Public Citizen's Congress Watch division.

About Public Citizen

Public Citizen is a national non-profit organization with more than 400,000 members and supporters. We represent consumer interests through lobbying, litigation, administrative advocacy, research, and public education on a broad range of issues including consumer rights in the marketplace, product safety, financial regulation, worker safety, safe and affordable healthcare, campaign finance reform and government ethics, fair trade, climate change, and corporate and government accountability.

Public Citizen's Congress Watch
215 Pennsylvania Ave. S.E
Washington, D.C. 20003
P: 202-546-4996
http://www.citizen.org

Contents

Executive Summary

Limiting medical malpractice liability is likely to be a component of proposals to replace the Affordable Care Act, the healthcare reform law also known as Obamacare. Those promoting replacement legislation will likely blame medical malpractice litigation for the nation's inexorably rising healthcare costs and will promise significant savings by reducing doctors' exposure to litigation.

This was the argument used by opponents of the Affordable Care Act, itself. Rep. John Boehner (R-Ohio), who was then the House Republican leader, claimed that the proposed healthcare bill did not do anything about "the biggest cost driver, which is medical malpractice and the defensive medicine that doctors practice."[1]

An abundance of evidence, however, indicates that the costs of the liability system are tiny in the scope of overall healthcare costs and have steadily declined over the past decade. Costs related to "defensive medicine," a term for extra healthcare that doctors allegedly administer to protect themselves against potential legal cases, cannot be precisely quantified. But the vast majority of academic studies that attempt to put a price tag on this phenomenon have found its cost to be small in the scope of overall healthcare costs. Therefore, limiting liability would not yield significant savings, if any at all.

Limiting liability also would amount to a misdiagnosis of the underlying problem, which is the well-documented epidemic of avoidable medical errors that cause severe injuries or death. Authors writing in the prestigious *BMJ* in 2016 concluded that medical errors are the third-leading cause of death in the United States. The number of patients suffering serious harms due to medical negligence dwarfs those who file medical malpractice legal cases.

Limiting liability also would reduce healthcare providers' incentives to prevent avoidable errors. Providers' concerns over litigation have spurred reforms that have reduced both adverse medical outcomes and litigation. The results of these safety initiatives support the conclusion that much room exists to improve healthcare safety. They should point the way forward for policymakers.

I. Medical Liability Costs Are at or Near the Lowest Levels on Record

The federal government maintains a database of medical malpractice payments made on behalf of doctors since mid-1990. In the life of that database, these payments have never accounted for more than a tiny percentage of healthcare costs, and that percentage is declining.

- In 2015, the most recent full year for which data are available, medical malpractice payments on behalf of doctors amounted to about 0.2 percent of costs for hospital and physician services and about 0.1 percent of all healthcare costs.
- The number of payments on behalf of doctors in 2015 was the lowest on record.

[1] Comments of Rep. John Boehner (R-Ohio) during televised summit on proposed healthcare legislation (Feb. 25, 2010), http://cnn.it/2jkufBa.

- The value of payments (in actual dollars) in 2015 was lower than at the end of the Clinton administration and lower than in any year during the administration of George W. Bush.

Some critics have said that the federal government's database of medical malpractice payments is not representative because it does not include payments made on behalf of hospitals. Industry reports on medical liability insurance premiums paid by both doctors and hospitals address this shortcoming. Liability insurance premiums also take into account litigation defense costs and insurance companies' overhead and profits, thereby providing a broad measure of medical liability costs.

These, too, have fallen.

- Medical liability insurance premiums paid in 2015 were at their lowest level since (and including) 2003, the earliest year for which such data are provided by information-services company A.M. Best.

- National medical liability premiums have fallen for nine consecutive years.

- Medical liability premiums equaled about 0.3 percent of national healthcare costs in 2015, and about 0.5 percent of the portion of healthcare costs consisting of hospital and physician services.

II. Most Studies Indicate That "Defensive Medicine" Costs Are Relatively Small

Those seeking to blame the legal system for rising healthcare costs invariably turn to the theory of "defensive medicine." This concept refers to tests and procedures that doctors allegedly provide to protect themselves against potential litigation. Defensive medicine cannot be definitively measured, but studies have used various approaches to gain an insight into its prevalence. Most have found it to be a legitimate phenomenon that is relatively insignificant in the scope of overall healthcare costs.

- In 2012, Public Citizen reviewed 12 prominent studies on defensive medicine over the previous quarter century. Of those that tried to determine how much the phenomenon adds to healthcare spending, most found its effect to be on the order of 2 percent or less of overall healthcare costs.

- An oft-cited 1996 study concluded that states with statutory limits on the size of medical malpractice awards experienced 5-to-9 percent slower growth in Medicare spending over five years in the treatment of two high-risk heart conditions. But that study's finding was likely skewed by the fact that Medicare had recently altered its payment formula in a manner that disproportionately suppressed payments in states with liability caps. A subsequent study using similar methodology by the Congressional Budget Office did not find a discrepancy in Medicare spending between states with and without liability caps.

- A few surveys of doctors have arrived at conclusions about defensive medicine that are far out of line with consensus findings. The surveys arriving at the most outlandish estimates

have relied on leading questions and other highly questionable methods to reach their conclusions.

III. Two Big-Picture Lenses Discredit Defensive Medicine Theory

Setting aside academic studies, the past decade-and-a-half has provided some excellent real-life cases that test the theories blaming defensive medicine (or medical liability, broadly) for rising healthcare costs. Two, in particular, concern the experiences of the state of Texas and the entire United States. In both universes, litigation costs have plummeted and healthcare costs have soared, contradicting the theory the litigation is a chief driver of healthcare costs.

- Texas in 2003 imposed some of the strictest medical liability limits in the country. Since then, medical malpractice payments in the state have declined by more than 70 percent (in actual dollars), but Medicare costs have risen faster than the national average.

- Across the United States, the value of medical malpractice payments declined by 22 percent from 2003 to 2015. Meanwhile, national healthcare costs rose by more than 80 percent.

IV. Proposals to Limit Liability Ignore Prevalence of Medical Errors

Criticisms of the medical liability system usually are founded on an assumption that a high percentage of cases are not merited or, more bluntly, are "frivolous." But these views are contradicted by well-established evidenced that only a fraction of serious harms caused by medical errors result in medical malpractice claims.

- In 1999, the prestigious Institute of Medicine (IOM) stunned the nation by reporting that between 44,000 and 98,000 patients were dying every year because of avoidable medical errors. Fewer than 15,000 patients (or survivors) received a medical malpractice payment on behalf of a doctor that year.

- Numerous studies since 1999 have reached even more shocking conclusions. For instance, the *Journal of Patient Safety* in September 2013 estimated that as many as 400,000 patients die every year due to preventable harms and that 10-to-20 times as many suffer non-fatal serious harms.

- In 2016, authors writing in *The BMJ*, a prestigious British medical journal, concluded that medical errors are the third-leading cause of death in the United States, behind only heart disease and cancer.

- The consensus view of researchers who have looked closely at this issue is that only "2 to 3 percent of patients injured by negligence file malpractice claims and, of these, only about half recover compensation through the litigation process."

V. Medical Liability System Plays an Unheralded Role in Spurring Safety Improvements

Public policy debates over the medical liability system tend to include little discussion of potential benefits of the system. But, aside from compensating patients who have been harmed, the system has spurred reforms to prevent adverse medical outcomes. This phenomenon has been particularly profound in the field of obstetrics, which has historically experienced among the highest litigation

costs. Public Citizen in 2015 summarized initiatives by several healthcare providers to improve safety in childbirth. Among the results:

- Hospital Corporation of America, the nation's largest obstetrical services provider, reduced its obstetrics-related litigation claims by two-thirds over about a decade after instituting certain safety practices. "We are absolutely confident that adoption of our approach on a national level could, within 5 years, both dramatically reduce adverse perinatal outcomes and to a large extent eliminate the current national obstetric malpractice crisis," leaders of that initiative wrote in a top obstetrics journal.

- New York Presbyterian Hospital-Weill Cornell Medical Center virtually eliminated obstetrics-related sentinel events after initiating a safety initiative. Sentinel events are unexpected, preventable injuries in a healthcare setting not related to the patient's illness.

- New York Presbyterian also reduced its payments for obstetrics-related malpractice claims by 99 percent over the first six years of its safety initiative. "Any hospital could do it – it's not about money, it's about changing the culture to make it safer to deliver babies," a New York Presbyterian obstetrician wrote in a journal article summarizing the hospital's reforms.

Conclusion

An abundance of evidence disproves arguments that medical malpractice litigation is to blame for rising healthcare costs. Avoidable tragedies in care, regardless of whether they prompt litigation, however, remain unacceptably high. Policymakers should concentrate on policies to address the epidemic of injuries and fatalities due to medical errors and ignore calls to limit providers' accountability.

I. Medical Liability Costs Are at or Near the Lowest Levels on Record

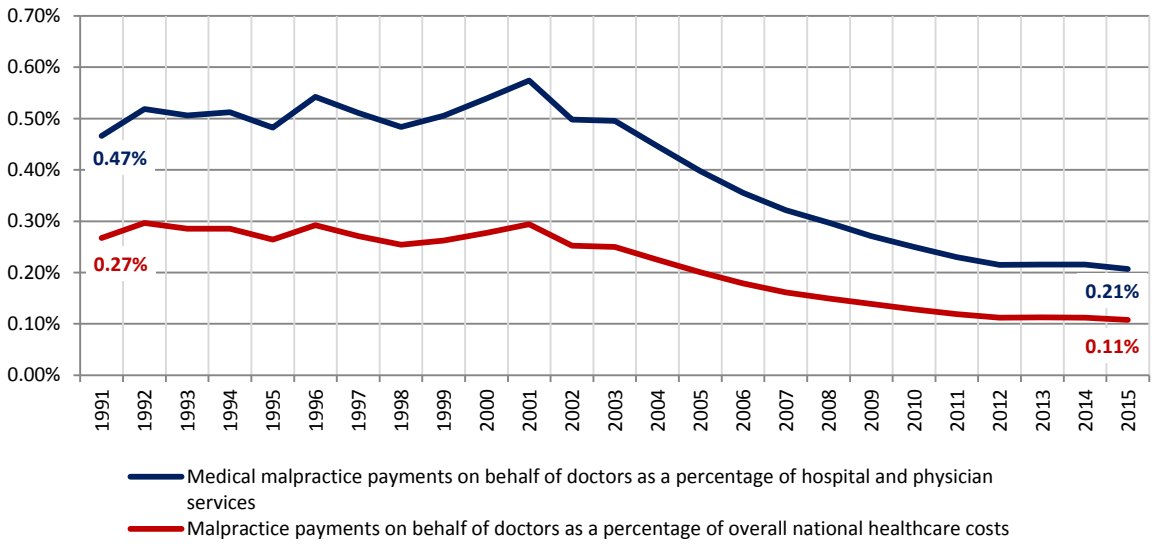
Whether measured in actual dollars, inflation-adjusted dollars or as a percentage of healthcare costs, medical liability expenditures have declined over the past decade. This finding holds true by various measures.

A. Payments on Behalf of Doctors Have Steadily Declined

The federal government began collecting the details of medical liability payments made on behalf of doctors in mid-1990. This information is maintained in a database called the National Practitioner Data Bank (NPDB). Over the life of the NPDB, malpractice payments have never made up more than a tiny fraction of overall healthcare costs. But now they are lower than ever.

The value of payments made on behalf of doctors in 2015 equaled 0.11 percent of the national healthcare expenditures estimate put forth by the Centers for Medicare and Medicaid Services. Expressed as a percentage of spending just on hospital and physician services – the portions of the healthcare expenditures estimate that are most relevant to medical malpractice claims – payments equaled about 0.21 percent of costs in 2015. [Figure 1]

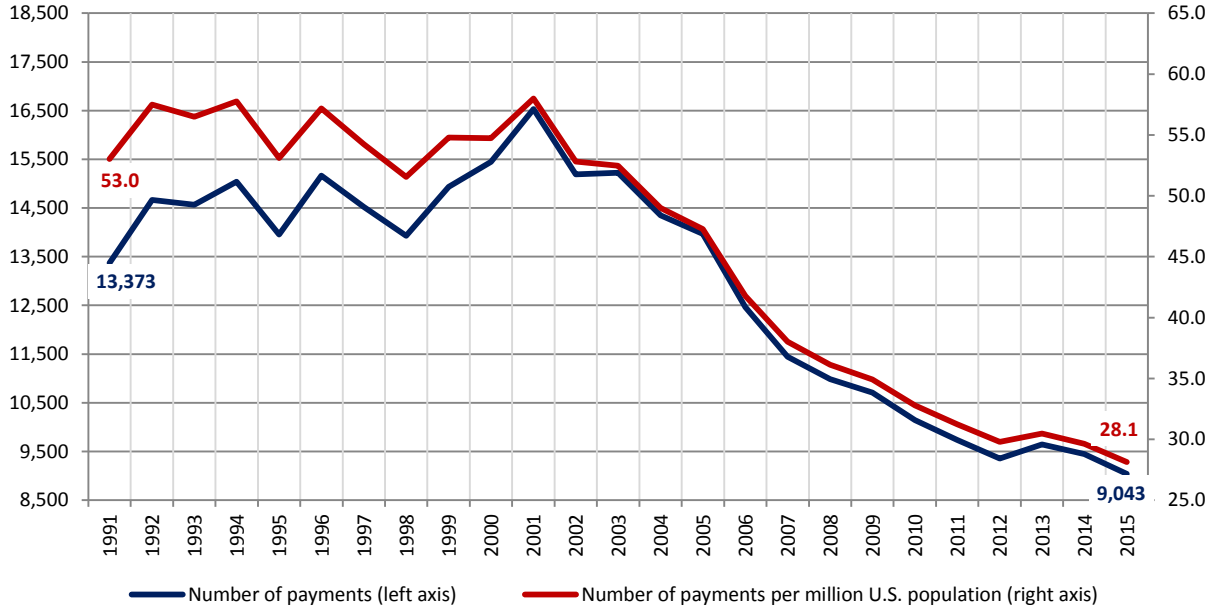
Figure 1
Medical Malpractice Payments Made on Behalf of Doctors as a Percentage of National Healthcare Costs



Sources: Public Citizen analysis of the National Practitioner Data Bank (NPDB) and Centers form Medicare and Medicaid Services.

The number of payments in 2015 was the lowest on record, both as measured in absolute terms (left axis, below) and on a *per capita* basis (right axis). [Figure 2]

Figure 2
Number of Malpractice Payments Made on Behalf of Physicians, 1991-2015



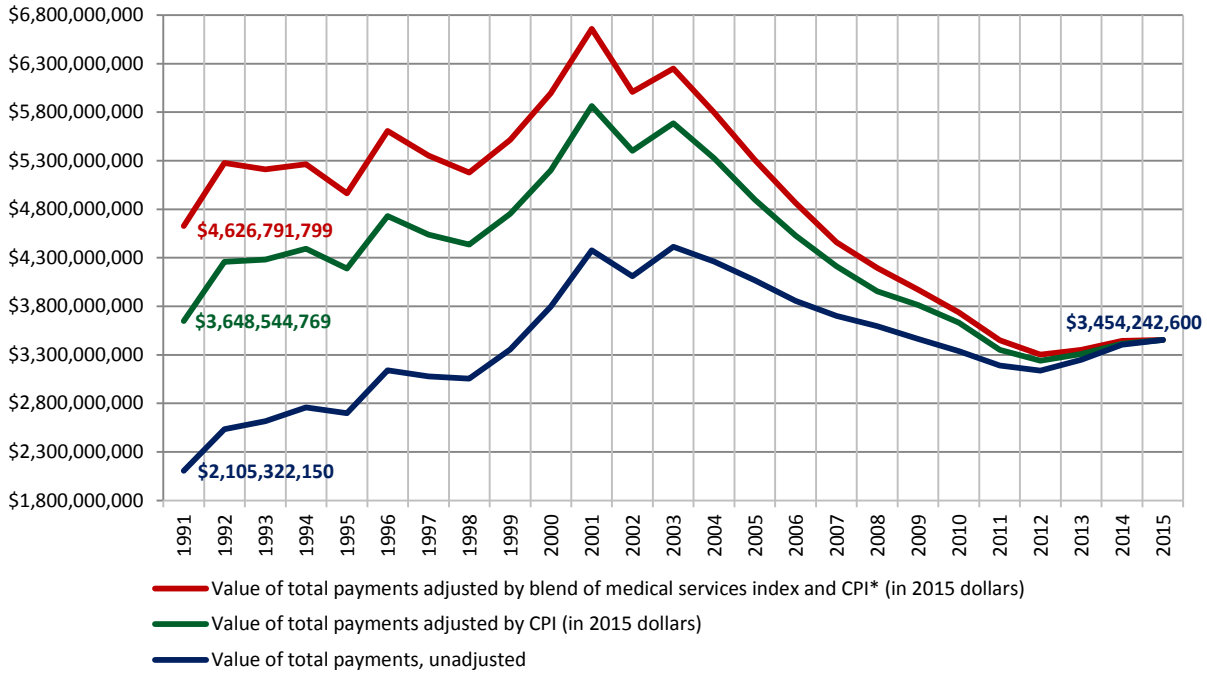
Sources: Public Citizen analysis of the National Practitioner Data Bank (NPDB) and U.S. Census Bureau.

On an inflation-adjusted basis, the five years with the lowest cost of payments have occurred in the last five years (although not sequentially). In actual dollars, payments in 2015 were lower than in 2000. That is to say, setting aside considerations for inflation, medical malpractice payments were lower in 2015 than they were 15 years earlier.

The red line in the figure below is adjusted for inflation according to a 53-47 percent blend of the medical inflation rate and the consumer price index. This formulation reflects the view of experts that about half of medical malpractice payments, on average, compensate for future medical costs necessitated by the harm to the patient.[2] Taking that into consideration, it makes sense to use the medical inflation rate (which is traditionally higher than the consumer price index) to adjust about half the value of malpractice payments and to use the consumer price index for the other half. [Figure 3]

[2] *See, e.g.*, David M. Studdert, *et al.*, *Beyond Dead Reckoning*, 33 INDIANA LAW REVIEW 1684 (2000).
The authors concluded by analyzing a prominent patient-safety study in Colorado and Utah that 53 percent of medical malpractice payments compensated for future healthcare costs.

Figure 3
Value of Medical Malpractice Payments on Behalf of Doctors, 1991 to 2015



Sources: Public Citizen analysis of the National Practitioner Data Bank (NPDB) and Bureau of Labor Statistics.
** Weighted 53% medical services index, 47% consumer price index.*

B. Medical Liability Insurance Premiums Have Fallen for Nine Straight Years

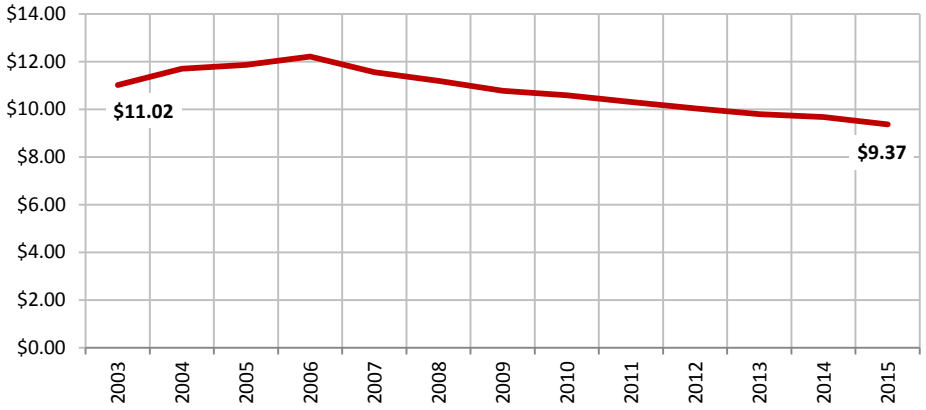
Critics have sometimes argued that the National Practitioner Data Bank underrepresents actual liability-related costs because it does not include payments made on behalf of hospitals or other institutions. The share of these payments may have increased in recent years because a greater percentage of physicians have become hospital employees, as opposed to being in business for themselves.[3] In such cases, hospitals may agree to allow malpractice settlements to occur in their names to spare their doctors the stigma of being associated with a malpractice payment.

Payments recorded in the NPDB also do not reflect litigation defense costs or liability insurance companies' profits and overhead. Medical malpractice insurance premiums account for all of these factors, thereby offering a broad measure of overall medical liability costs.

A.M. Best, an insurance industry information-services company, reports annually on national medical liability payments paid by both hospitals and doctors. A.M Best's figures also demonstrate falling costs. National medical malpractice premiums totaled $9.37 billion in 2015, according to A.M. Best, marking the ninth straight year they have declined. [Figure 4]

[3] Robert Lowes, *Malpractice Payments Still Declining, Says Disputed Study*, MEDSCAPE (May 27, 2011), http://wb.md/2iKtCir.

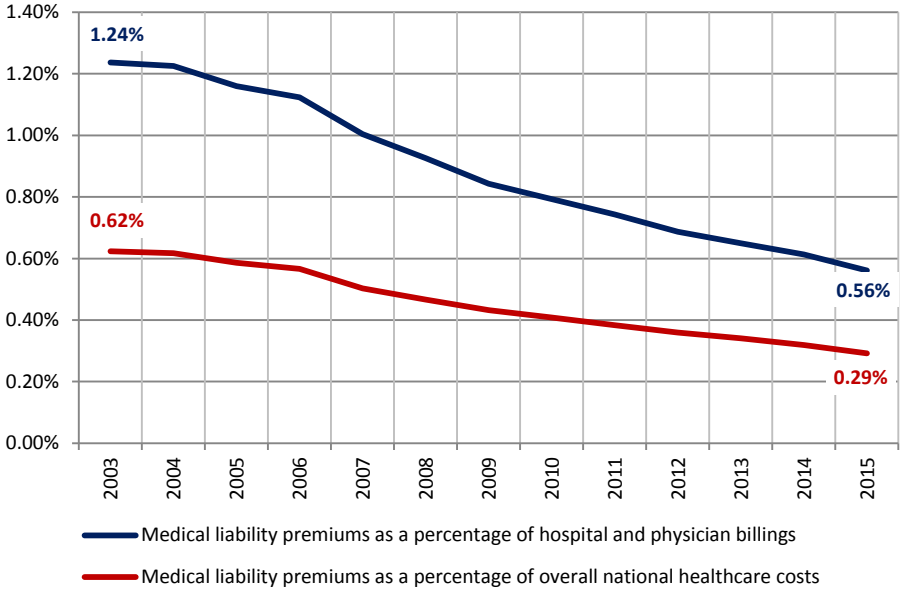
Figure 4
U.S. Medical Liability Premiums
(in billions of actual dollars)



Source: A.M. Best Company

Medical liability premiums' share of healthcare costs have been cut by more than half since 2003. They now equal about 0.3 percent of overall healthcare costs and a little more than 0.5 percent of costs for hospital and physician services. [Figure 5]

Figure 5
U.S. Medical Liablity Premiums as a Percentage of National Healthcare Costs



Sources: A.M. Best Company and Centers for Medicare and Medicaid Services.

C. Conclusion

The figures listed above plainly illustrate that medical malpractice costs make up a very small percentage of overall healthcare costs and are declining. Even taking a broad measure of liability costs (medical liability premiums) and a narrow measure of healthcare costs (those relating only to hospital and physician services), liability costs have not accounted for more than 1.24 percent of healthcare costs since 2003, the earliest data available. In more recent years, liability costs have been around one-half of 1 percent of healthcare costs by this measure.

II. Most Studies Indicate That "Defensive Medicine" Costs Are Relatively Small

Because the measurable costs of litigation are so small in relation to the nation's healthcare bill, it is not possible to make a persuasive case that they are significantly responsible for driving up costs.

Those seeking to indict the legal system for rising costs, therefore, invariably turn to the theory of "defensive medicine." This concept refers to "medical services ordered primarily for the purpose of minimizing the physician's liability risk," as researchers Mello, *et al.*, defined it in 2010.[4]

Most experts agree that some degree of defensive medicine exists. That is, fear of liability factors into some decisions by doctors to order tests and procedures. Precisely measuring defensive medicine is impossible, however, because it is a product of practitioners' private thoughts. Studies have used various strategies to try to gain insight into this phenomenon. They have generally found its prevalence to be fairly small. In contrast, a few studies relying solely on surveys of doctors have arrived at astronomical estimates of its prevalence and costs. Those estimates are not remotely credible, as the relevant section in this report demonstrates.

A. Studies Have Generally Found That Defensive Medicine Does Not Add Significantly to Healthcare Costs

Researchers have devised various strategies to estimate the prevalence of defensive medicine. Attempts to measure it have tended to break down into two categories: 1) those that scrutinize doctors' decisions and 2) those that compare the costs or volume of particular healthcare services in universes with different litigation risks.

i. Prominent Studies Reviewed by Public Citizen in 2012 Generally Concluded That the Costs of Defensive Medicine Are Small or Nonexistent

In 2012, Public Citizen issued a paper that reviewed 12 prominent studies on defensive medicine that had been published since 1989.

Six of these studies [Table 1, below] assessed individual doctors' decisions. Of these studies, the two that attempted to estimate actual costs put the price tag of defensive medicine at 0.13 percent and 0.25 percent of healthcare costs. Separately, an extensive study by the (now-defunct) U.S. Congress Office of Technology Assessment reported on interviews of doctors on hypothetical scenarios. That study concluded that physicians in high-risk specialties were influenced by concerns over liability but generally made their decisions based on their judgments of medical necessity.

[4] Michelle M. Mello, *National Costs of the Medical Liability System*, HEALTH AFFAIRS (September 2010), http://bit.ly/2jyjGwU.

Table 1: Studies Using Doctors' Decisions to Attempt to Measure Defensive Medicine

Year	Authors	Publication	Finding
2010	Thomas, *et al.*[5]	Health Affairs	Defensive medicine practices account for 0.13 percent of overall healthcare costs.
1999	Dubay, *et al.*[6]	Journal of Health Economics	Greater malpractice risk associated with higher caesarian rate for treatment of three-of-five socioeconomic groups, but change in practices increased total costs only by one-fourth of 1 percent.
1995	Baldwin, *et al.*[7]	JAMA	No correlation exists between physicians' liability risk and use of prenatal resources or caesarian deliveries in the care of low-risk obstetric patients.
1994	--	U.S. Congress Office of Technology Assessment[8]	Physicians in high-risk specialties evaluating high-risk scenarios are occasionally influenced by liability concerns but far more frequently are guided by judgments of medically necessity.
1993	Localio, *et al.*[9]	JAMA	The rate of cesarean section deliveries is strongly correlated to regional liability insurance rates but not to doctors' litigation histories.
1989	Goyert, *et al.*[10]	New England Journal of Medicine	The rate of cesarean section deliveries is not correlated to physicians' legal history.

Six of the studies reviewed in Public Citizen's paper looked at the overall volume or cost of care in the context of contrasting litigation risks – such as healthcare spending in jurisdictions with liability caps with spending for similar services in jurisdictions that do not have caps. These studies have tended to find a fairly small correlation between liability risk and healthcare costs. [Table 2, below]

Of those that attempted to quantify defensive medicine costs, one found that states with liability limits had 2.3 percent lower rates for self-insured health insurance, although those states had the same rates for non-self-insured health insurance. Another found that Medicare payments fluctuated by 1 percent for every 10 percent change in malpractice payments. These findings did not support a view that defensive medicine is a significant cost driver.

A partial exception was Kessler and McClellan's 1996 study, which found that states with limitations on liability experienced a 5-to-9 percent slower growth rate in Medicare spending in the treatment of two heart conditions in high-risk practice areas. The authors concluded, "If our results are generalizable to medical expenditures outside the hospital, to other illnesses, and to younger

[5] J. William Thomas, *et al.*, *Low Costs of Defensive Medicine, Small Savings From Tort Reform*, HEALTH AFFAIRS (September 2010), http://bit.ly/2kojwFF.
[6] Lisa Dubay, *et al.*, *The Impact of Malpractice Fears on Cesarean Section Rates*, 18 JOURNAL OF HEALTH ECONOMICS 491 (Aug. 1, 1999), http://bit.ly/2jVHBUF.
[7] Laura-Mae Baldwin, *et al.*, *Defensive Medicine and Obstetrics*, 274 JAMA 1606 (Nov. 22-29, 1995), http://bit.ly/2jjfaOG.
[8] U.S. CONGRESS OFFICE OF TECHNOLOGY ASSESSMENT, DEFENSIVE MEDICINE AND MEDICAL MALPRACTICE (July 1994), http://bit.ly/2kop8QC .
[9] A. Russell Localio, *et al.*, *Relationship Between Malpractice Claims and Caesarian Delivery*, 269 JAMA 366 (Jan. 20, 1993), http://bit.ly/2jBlZvY.
[10] Gregory L. Goyert *et al.*, *The Physician Factor in Cesarean Birth Rates*, 321 NEW ENGLAND JOURNAL OF MEDICINE 548 (March 16, 1989), http://bit.ly/2jBuh6X.

patients, then direct reforms could lead to expenditure reductions of well over $50 billion per year without serious adverse consequences for health outcomes."[11]

Because the Kessler and McClellan paper is likely the most often-cited study on defensive medicine, it warrants further discussion here. The study suffered from two key shortcomings. First, because the types of treatment it looked at were particularly high-risk, extrapolating to include all medical expenditures was not justified. Second, the study's findings were likely skewed by changes that had recently occurred in the Medicare payment formula that caused payments to providers in states with higher costs to be reduced and vice versa. States imposing liability caps tended to have higher costs.[12]

In 2004, the Congressional Budget Office (CBO) duplicated McClellan and Kessler's methodology, but included a broader scope of treatments. The CBO study "found no evidence that restrictions on tort liability reduce medical spending."[13]

Table 2: Studies Using Broad Cost Measures Studies Using Doctors' to Attempt to Measure Defensive Medicine

Year	Authors	Publication	Finding
2009	Avraham, *et al*.[14]	National Bureau Of Economic Research	Rates for self-insured health insurance in states with tort reforms were up to 2.3 percent lower than in other states; no difference existed in rates for non-self-insured health insurance.
2003	Lakdawalla and Seabury[15]	National Bureau Of Economic Research	Reductions in quality of care from limiting liability outweigh slight economic savings.
2003	Sloane and Shadle[16]	Journal of Health Economics	No significant correlation between direct liability reforms (such as caps on payments) and Medicare spending.
2007	Baiker, *et al*.[17]	Health Affairs	A 10 percent increase in average malpractice payments per physician within a state was associated with a 1 percent increase in Medicare payments.
2004	--	Congressional Budget Office[18]	No conclusive correlation exists between healthcare spending and changes in liability laws.
1996	Kessler and McClellan[19]	Quarterly Journal of Economics	States with limitations on liability experienced 5 to 9 percent lower growth rates in Medicare spending over five years for the treatment of two heart conditions than states without limitations.

[11] David P. Kessler and Mark McClellan, *Do Doctors Practice Defensive Medicine*, 111 QUARTERLY JOURNAL OF ECONOMICS 353 (March 1, 1996).
[12] CONGRESSIONAL BUDGET OFFICE, MEDICAL MALPRACTICE TORT LIMITS AND HEALTH CARE SPENDING (April 2006), http://bit.ly/2iXeEub.
[13] *Limiting Tort Liability for Medical Malpractice*, CONGRESSIONAL BUDGET OFFICE (2004), http://bit.ly/2j66ekl.
[14] RONEN AVRAHAM, *et al.*, NATIONAL BUREAU OF ECONOMIC RESEARCH (Working Paper 15371), THE IMPACT OF TORT REFORM ON EMPLOYER-SPONSORED HEALTH INSURANCE PREMIUMS, (September 2009), http://bit.ly/2jVEpZ6.
[15] DARIUS N. LAKDAWALLA AND SETH A. SEABURY, NATIONAL BUREAU OF ECONOMIC RESEARCH (Working Paper 15383), THE WELFARE EFFECTS OF MEDICAL MALPRACTICE LIABILITY, (September 2009), http://bit.ly/2j8PKI6.
[16] Frank A. Sloan and John H. Shadle, *Is There Empirical Evidence for 'Defensive Medicine'? A Reassessment*, 28 JOURNAL OF HEALTH ECONOMICS 481 (March 2009), http://bit.ly/2k5IYlM.
[17] Katherine Baicker, *et al.*, *Malpractice Liability Costs and the Practice of Medicine in the Medicare Program*, HEALTH AFFAIRS (May-June 2007), http://bit.ly/2jVSwxD.
[18] *Limiting Tort Liability for Medical Malpractice*, CONGRESSIONAL BUDGET OFFICE (Jan. 8, 2004), http://bit.ly/2j66ekl.
[19] David P. Kessler and Mark McClellan, *Do Doctors Practice Defensive Medicine*, 115 QUARTERLY JOURNAL OF ECONOMICS 577 (March 1, 1996), http://stanford.io/2k808PW.

ii. Two Major Studies Published in Recent Years Reached Nuanced Conclusions on the Role of Defensive Medicine

A study published in *Health Affairs* in 2013 attempted to gauge physicians' use of defensive medicine by measuring their likelihood of deciding in certain situations to order diagnostic tests, refer patients to the emergency room, or admit patients to a hospital. The study compared physicians' likelihood of making those decisions in relation to two factors 1) their perception of their litigation risk and 2) their actual litigation risk, based on state state-level indicators.[20]

The researchers found that "physicians who reported a high level of malpractice concern were most likely to engage in practices that would be considered defensive." The researchers also found that "no consistent relationship was seen, however, when state-level indicators of malpractice risk replaced self-rated concern." The researchers concluded that "reducing defensive medicine may require approaches focused on physicians' perceptions of legal risk and the underlying factors driving those perceptions."[21]

A study published in *JAMA* in 2014 reported on researchers' interviews of doctors at three Massachusetts hospitals on their decisions the preceding day. The researchers found that "13% of costs were judged to be at least partially defensive, but only 2.9% of [total] costs were completely defensive."[22] This supports a hypothesis that litigation is only one factor in decisions that may be partially influenced by litigation concerns.

Further confounding the defensive medicine theory, the JAMA study found that "physicians who wrote the most defensive orders spent less than those who wrote fewer such orders, highlighting the disconnect between physician beliefs about defensive medicine and their contribution to costs."[23]

B. Surveys on Defensive Medicine Yield Widely Varying Results Depending on Methodology

Many attempts have been made to estimate the prevalence of defensive medicine by surveying doctors on their opinions.[24] For instance, the 1994 Office of Technology Assessment and 2014 *JAMA* studies cited above involved querying doctors on specific scenarios or decisions.

In contrast to the detailed questions asked in those studies, some surveys have asked doctors to provide generalized estimates on the prevalence of defensive medicine. Surveys that specifically invoke litigation concerns have tended to yield conclusions that it is far more prevalent than open-

[20] Emily R. Carrier, *et al.*, *High Physician Concern About Malpractice Risk Predicts More Aggressive Diagnostic Testing in Office-Based Practice*, HEALTH AFFAIRS (August 2013), http://bit.ly/2joYO8w.
[21] *Id.*
[22] Michael B. Rothberg, *et al.*, *The Cost of Defensive Medicine on 3 Hospital Medicine Services*, 174 JAMA 1867 (2014), http://bit.ly/2jMveto.
[23] *Id.*
[24] *See*, *e.g.*, David M. Studdert, *et al.*, *Defensive Medicine Among High-Risk Specialist Physicians in a Volatile Malpractice Environment*, JAMA (Aug. 2, 2005), Bob Roehr, *Defensive Medical Practices Consume 35% of Orthopaedic Imaging Costs, Study Finds*, BRITISH MEDICAL JOURNAL (Feb. 16, 2011), and JACKSON HEALTHCARE, QUANTIFYING THE COST OF DEFENSIVE MEDICINE SUMMARY OF FINDINGS (undated but issued at some time in 2010), http://bit.ly/2ja7rDg.

ended inquiries into the motivations behind treatment decisions, the Congressional Budget Office reported in 2006.[25]

"The phrasing and framing of questions in the surveys can substantially affect the results. When physicians are asked whether malpractice concerns affect their practice patterns, many say yes. If the survey is structured in a more open-ended way, the results are substantially different," the CBO reported.[26]

"For instance, instead of asking physicians whether malpractice has affected their practice, some surveys have presented clinical scenarios and asked physicians which tests and procedures they would order and why, with malpractice concerns included among many possible rationales," the CBO continued. "In those more open-ended surveys, malpractice concerns are infrequently cited as the primary reason for ordering particular tests or procedures."[27]

Two surveys (and corresponding analyses) that attributed extraordinary costs to defensive medicine were issued in 2010 by Georgia-based Jackson Healthcare, which is one of the largest healthcare staffing firms in the country.[28] Jackson Healthcare CEO Richard Jackson is chairman of a group that advocates replacing the medical malpractice system with a system similar to workers' compensation that would not leave physicians personally liable.[29]

These projects concluded that defensive medicine costs $650 billion to $850 billion a year in the United States. These estimates were wildly out of line with findings of academic studies of defensive medicine. But they warrant close examination because U.S. Health and Human Services Secretary Tom Price has often cited them as if they are credible. Price and others are likely to return to the Jackson Healthcare estimates in the upcoming debate over modifications to healthcare laws.[30]

Jackson Healthcare Online Survey Says Defensive Medicine Costs $850 Billion Per Year

Jackson Healthcare arrived at its $850 billion figure by conducting an online survey and extrapolating from the results. The company first invited nearly 140,000 physicians to participate in the survey. Its message to potential respondents included the following account of defensive medicine: "Fear of litigation has been cited as the driving force behind defensive medicine. Defensive medicine is especially common in the United States of America, with rates as high as 79 percent to 93 percent particularly in emergency medicine, obstetrics, and other high-risk

[25] MEDICAL MALPRACTICE TORT LIMITS AND HEALTH CARE SPENDING, CONGRESSIONAL BUDGET OFFICE (April 2006), http://bit.ly/2iXeEub.
[26] *Id.*
[27] *Id.*
[28] *See, e.g.*, *List Ranks Largest U.S. Healthcare Staffing Firms by Revenue,* STAFFING INDUSTRY ANALYSTS (Aug. 8, 2016), http://bit.ly/2iKyOmg.
[29] *State Solutions: A Proposed Solution to Reduce Defensive Medicine*, PATIENTS FOR FAIR COMPENSATION (undated; viewed Feb. 15, 2017), http://bit.ly/2liBNHX.
[30] Tom Price, *A Conservative Health-Care Plan Would Preserve Choice While Saving Taxpayers $2.34 Trillion*, NATIONAL REVIEW (Dec. 5, 2013), http://bit.ly/2iSLLhl.

specialties."[31] Recipients of the survey were then asked to estimate the prevalence of defensive medicine.

Slightly more than 2 percent of invitees responded to the survey. Jackson Healthcare reported that the respondents "estimated that 34 percent of overall healthcare costs is attributable to defensive medicine."[32]

From there, Jackson Healthcare coupled the 34 percent estimate with the Centers for Medicare and Medicaid Services' $2.5 trillion estimate of total national healthcare expenditures in 2009. Taking 34 percent of $2.5 trillion, Jackson Healthcare concluded that the annual cost of defensive medicine must have been $850 billion.[33]

This Jackson Healthcare analysis suffered from numerous, blatant flaws. First, the fact that only 2 percent of those contacted responded to the survey raises glaring response-bias concerns. "Response bias could undermine the validity of survey findings if physicians chose whether to respond on the basis of the depth of their (presumably negative) feelings about the malpractice system," the Congressional Budget Office wrote in a 2006 study on defensive medicine.[34]

A second flaw was the survey's characterization of defensive medicine as "especially common in the United States of America, with rates as high as 79 percent to 93 percent." This preface made a mockery of the need for survey questions to be asked in a neutral, non-leading manner.

Even if the 34 percent estimate on defensive medicine were credible, Jackson Healthcare's methodology of using overall national healthcare expenditures as a denominator to arrive at its $850 billion cost estimate was not. That is because the Center for Medicare and Medicaid Services' national healthcare expenditures estimate includes many categories of spending – such as administration, pharmaceuticals, dental care, medical equipment, and insurance company profits – that have little or nothing to do with medical malpractice or potential defensive medicine.[35]

"Hospital care" and "physician services" – the categories in the national healthcare expenditures estimate that are the most relevant to medical liability – accounted for about $1.3 trillion in spending in 2009. Therefore, in making its $850 billion estimate on defensive medicine, Jackson Healthcare was essentially claiming that about two-thirds of hospital care and physician services in 2009 consisted of unnecessary care that was provided to avoid potential litigation.

Even if the 34 percent estimate were accurate and Jackson Healthcare chose a justifiable denominator of relevant healthcare expenditures (such as hospital care and physician services), combining those figures to put a price tag on defensive medicine still would not be unjustified. That is because many healthcare costs – such as for equipment, facilities, advertising and administration – are relatively fixed and do not increase with each incremental test or procedure.

---

[31] JACKSON HEALTHCARE, QUANTIFYING THE COST OF DEFENSIVE MEDICINE SUMMARY OF FINDINGS (undated but issued at some time in 2010), http://bit.ly/2ja7rDg.
[32] *Id.*
[33] Press release, Jackson Healthcare, *Physician Study: Quantifying the Cost of Defensive Medicine; Lawsuit-Driven Medicine Creates $650-$850 Billion Annual Healthcare Costs*, (undated but issued at some point in 2010), http://bit.ly/2iSM8sg.
[34] *Limiting Tort Liability for Medical Malpractice*, CONGRESSIONAL BUDGET OFFICE (Jan. 8, 2004), at 6-7, http://bit.ly/2j66ekl.
[35] *Quick Definitions for National Health Expenditure Accounts (NHEA) Categories*, CENTERS FOR MEDICARE AND MEDICAID SERVICES (viewed on Feb. 2, 2017), http://go.cms.gov/2kZbSCc.

Jackson Healthcare Uses Gallup Survey to Conclude the Defensive Medicine Costs $650 Billion a Year

About the same time that Jackson Healthcare conducted its online survey of physicians, it hired the Gallup organization to survey physicians on the prevalence of defensive medicine.

Twenty-seven percent of respondents said they engaged in no defensive medicine. Those who said they had engaged in any defensive medicine attributed an average 21 percent of the care they personally provided to defensive medicine.

Separately, respondents were asked: "Thinking more broadly, what percentage of overall healthcare costs do you attribute to the practice of defensive medicine?" Respondents, on average, answered 26 percent.[36]

Jackson Healthcare, not Gallup, analyzed the results and chose what facts to emphasize. In its announcement of the results of the Gallup survey, Jackson Healthcare focused almost entirely on doctors' generalized estimate that 26 percent of medical care was "defensive" instead of their reports that 21 percent of their own care was. This was a bizarre methodological choice by Jackson Healthcare, given that doctors would almost certainty know more about their personal choices than those of others. Further, Jackson Healthcare's cost estimate ignored the fact that 27 percent of respondents said they engaged in no defensive medicine, whatsoever.

As with its online survey, Jackson Healthcare compared doctors' estimate on the share of care that is "defensive" (choosing the suspect 26 percent figure) to the nation's entire $2.5 trillion national healthcare bill to arrive at a defensive medicine "cost" – in this case $650 billion. This method suffers from the same flaws as that used to arrive at the $850 billion estimate, above.

C. Conclusion

Most studies on defensive medicine have concluded that cases of doctors rendering extra care solely to protect themselves against potential litigation are relatively rare. Studies that have attempted to put a price on the cost of defensive medicine have usually estimated it to be less than 2 percent of healthcare costs, and often a fraction of that.

Some outlier projects have arrived at conclusions on the prevalence of defensive medicine that border on being mathematically impossible. Details of these projects' methodologies reveal that they were engineered to support their funders' ideological views.

[36] JACKSON HEALTHCARE, QUANTIFYING THE COST OF DEFENSIVE MEDICINE SUMMARY OF FINDINGS (undated but issued at some time in 2010), http://bit.ly/2ja7rDg.

III. Two Big-Picture Lenses Discredit Defensive Medicine Theory

Nobody will ever be able to definitively or precisely determine the prevalence or cost of defensive medicine. However, one can test the hypothesis that the phenomenon is driving healthcare costs upward by comparing litigation trends to broad healthcare spending trends. Comparisons like this are similar to methods used in some of the studies cited in the previous section of this report. This section looks at litigation risk over time in two large universes, the state of Texas and the United States as a whole.

A. Healthcare Costs in Texas Rose Faster Than National Average While Litigation Dropped Precipitously

In a 2003 ballot initiative, Texas voters narrowly approved some of the most sweeping restrictions on medical liability in the country. The law imposed a $250,000 cap on the amount of non-economic damages patients could recover from doctors and shielded emergency room doctors from liability except in cases of "willful and wanton" acts of negligence.[37]

In the run-up to the ballot initiative, Texas Gov. Rick Perry (R) wrote: "Texans can help make healthcare more affordable and accessible" by voting for the proposal. The Texas Alliance for Patient Access, which spent the most in favor of the ballot measure, wrote: "Your YES vote on Proposition 12 means: Lower costs and more security in our healthcare system."[38]

Almost immediately after the law took effect, medical malpractice litigation in Texas began falling dramatically. But, as Public Citizen reported in 2009 and 2011, the promised reductions to healthcare costs did not materialize.[39] Between 2003 and 2009, the cumulative value of medical malpractice payments on behalf of doctors fell by 70 percent.[40] During this time period, per-enrollee Medicare spending in Texas rose 43 percent, compared to 38 percent for the nation as a whole. Texas jumped from being the seventh highest to second highest Medicare spender (on a per enrollee basis).[41]

A study published in the *Journal of Empirical Studies* in 2012 also looked at the effects of liability limitations on Medicare spending in Texas. Paik, *et al.,* postulated that "health providers and tort reform advocates … claim that defensive medicine is responsible for hundreds of billions of dollars in health-care spending every year. If providers and reform advocates are right, once damages are capped and lawsuits are otherwise restricted, defensive medicine, and thus overall health-care spending, will fall substantially."[42]

---

[37] Tex cp. Code ann. § 74.153. http://bit.ly/nGI1cF and Texas cp. Code Ann. § 74.301, http://bit.ly/pGO4qg. *See also*, Ralph Blumenthal, *Malpractice Suits Capped at $750,000 In Texas Vote*, THE NEW YORK TIMES (Sept. 15, 2003), http://nyti.ms/2jxfzkM.

[38] Mary Ann Roser, *Tort Reform Has Not Reduced Health Care Costs in Texas*, AUSTIN-AMERICAN STATESMAN (June 20, 2012).

[39] TAYLOR LINCOLN, PUBLIC CITIZEN, A FAILED EXPERIMENT: HEALTH CARE IN TEXAS HAS WORSENED IN KEY RESPECTS SINCE STATE INSTITUTED LIABILITY CAPS IN 2003 (October 2011), http://bit.ly/wsUmLV and PUBLIC CITIZEN, LIABILITY LIMITS IN TEXAS FAIL TO CURB MEDICAL COSTS (December 2009), http://bit.ly/2kRlP88.

[40] TAYLOR LINCOLN, PUBLIC CITIZEN, A FAILED EXPERIMENT (October 2011), http://bit.ly/2k1t6xx.

[41] *Id.*

[42] Myungho Paik, Bernard S. Black, David A. Hyman, and Charles Silver, *Will Tort Reform Bend the Cost Curve? Evidence From Texas*, 9 JOURNAL OF EMPIRICAL LEGAL STUDIES 173, (2012).

Paik, *et al.*, examined Medicare spending throughout the state in relation to varying county-by-county litigation risk. They concluded that litigation risk and spending levels were not correlated:

> Post-reform, we find no evidence that spending levels or trends in high-risk counties declined relative to low-risk counties and some evidence of increased physician spending in high-risk counties. We also compare spending trends in Texas to national trends, and find no evidence of reduced spending in Texas post-reform, and some evidence that physician spending rose in Texas relative to control states. In sum, we find no evidence that Texas's tort reforms bent the cost curve downward.[43]

In response to these studies, the executive director of the Texas Alliance for Patient Access, which led the charge for the 2003 medical malpractice ballot measure, denied that his group had predicted that liability restrictions would reduce costs. He called claims to the contrary a "straw argument."[44] Similarly, the head of the Texas Medical Association said, "when we campaigned for tort reform, we never promised it would lower the cost of medical care."[45]

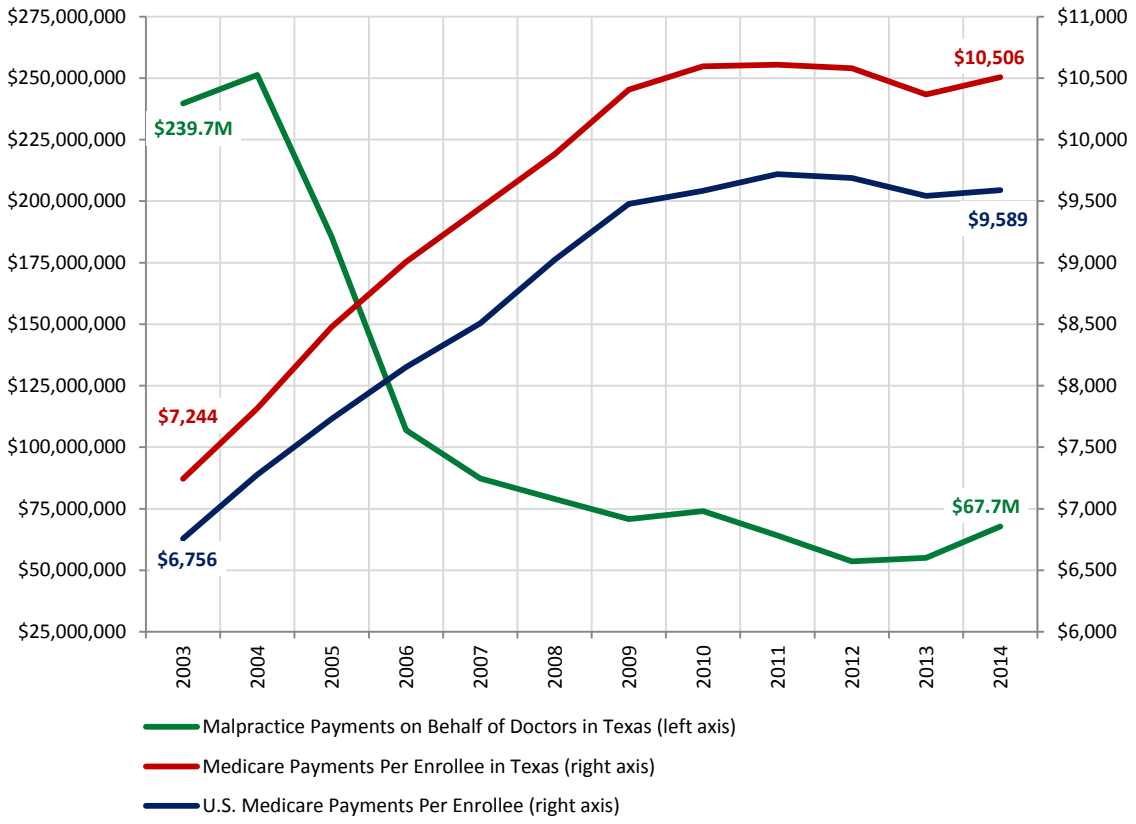
For this report, Public Citizen has updated medical malpractice and Medicare spending data for Texas. Although the trend lines have tapered off since we reported on these data points in 2011, the divergence remains between the medical liability costs and Medicare costs.[46]

Between 2003 and 2014, medical malpractice payments in Texas declined in actual dollars by 72 percent while per enrollee Medicare costs rose by 45 percent. Nationally, per enrollee Medicare costs rose by 42 percent in this time period.

In the figure below, the red and blue lines, referring to per enrollee Medicare costs in Texas and the United States as a whole, correspond with the left axis. The green line, referring to total medical malpractice payments on behalf of doctors, corresponds with the right axis. [Figure 5]

[43] Myungho Paik, Bernard S. Black, David A. Hyman, and Charles Silver, *Will Tort Reform Bend the Cost Curve? Evidence from Texas*, 9 JOURNAL OF EMPIRICAL LEGAL STUDIES 173, (2012).
[44] Mary Ann Roser, *Tort Reform Has Not Reduced Health Care Costs in Texas*, AUSTIN-AMERICAN STATESMAN (June 20, 2012).
[45] Aubrey Westgate, *Texas Tort Reform Not a 'Failed Experiment,' Healthcare Leaders Say*, PHYSICIANS PRACTICE (Oct. 17, 2011), http://bit.ly/2jAubzk.
[46] Note: Due to varying availability of data, this report uses a different dataset on per enrollee Medicare costs than Public Citizen used in its 2011 study. TAYLOR LINCOLN, PUBLIC CITIZEN, A FAILED EXPERIMENT: HEALTH CARE IN TEXAS HAS WORSENED IN KEY RESPECTS SINCE STATE INSTITUTED LIABILITY CAPS IN 2003 (October 2011), http://bit.ly/wsUmLV.

Figure 6
Malpractice Payments vs. Per Enrollee Medicare Payments in Texas, 2003-2014
(actual dollars)



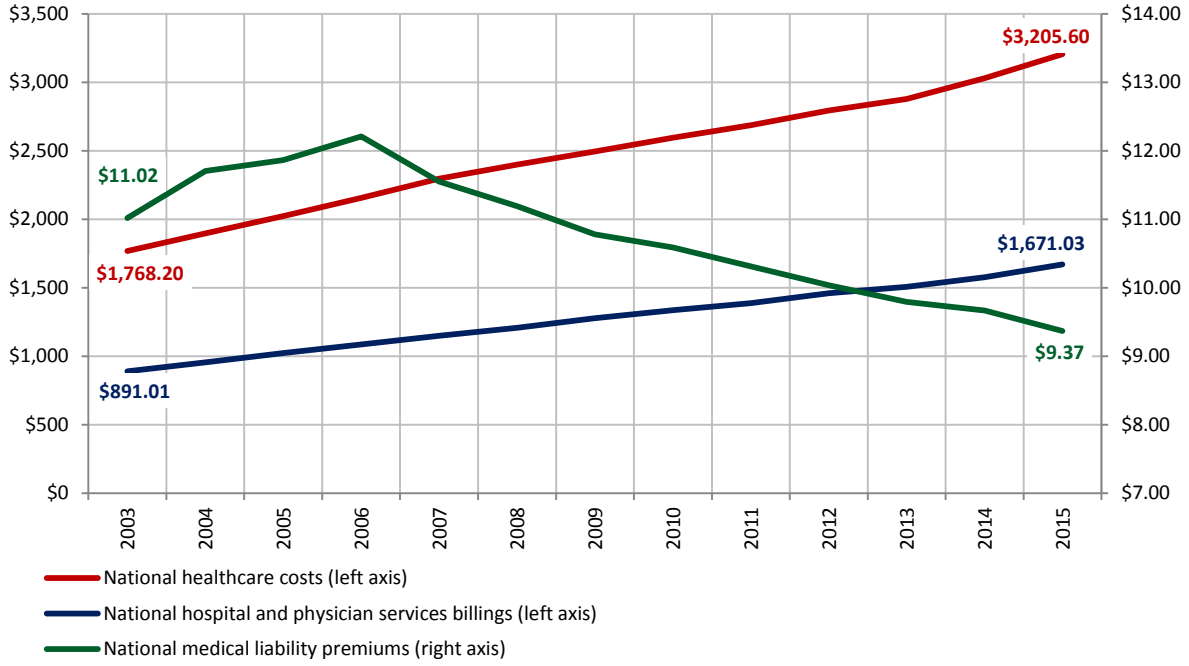
Sources: Dartmouth Atlas of Healthcare and National Practitioner Databank.

B. Steadily Declining Medical Liability Costs Nationally Have Not Bent the Cost Curve

National medical liability costs have declined over the past decade (although not nearly as steeply as in Texas), but healthcare costs have continued to rise. Malpractice payments declined by 22 percent from 2003 to 2015 and medical liability insurance payments declined by 15 percent. National healthcare costs, meanwhile, rose by 81 percent.

The red and the blue lines in the figure below reflect national medical malpractice payments and medical liability premiums back to 2003, the earliest year for which insurance premium payments are available. The green line regards medical liability premium payments. [Figure 7]

Figure 7
Medical Liability Costs vs. National Healthcare Costs, 2003-2015
(in billions of actual dollars)



Sources: A.M Best Company and Centers for Medicare and Medicaid Services.

C. Conclusion

The examples in this section contradict claims that reducing medical liability will lower healthcare cost. In Texas, litigation has plummeted dramatically but healthcare costs have risen faster than the national average. The experience for the United States as a whole is less dramatic. But national litigation costs have steadily declined, yet healthcare costs have steadily risen.

IV. Proposals to Limit Liability Ignore Prevalence Medical Errors

Criticisms of the medical liability system usually are founded on allegations that a high percentage of cases are unmerited and pernicious. Former President George W. Bush regularly pursued this line. For instance, he said in 2004: "One of the reasons people are finding their premiums are up, and it's hard to find a doc these days, is because frivolous and junk lawsuits are threatening medicine across the country."[47]

Allegations of abuse of the civil litigation system, such as those leveled by Bush, tend to incorporate assumptions that rampant unwarranted ("frivolous") lawsuits are filed and that defendants often settle the cases rather than expending the time and effort of litigating the cases. But comparing the frequency of medical malpractice litigation with the frequency of harms due to medical errors undercuts this argument.

In 1999, the prestigious Institute of Medicine (IOM) stunned the nation by reporting that between 44,000 and 98,000 patients were dying every year because of avoidable medical errors.[48] In contrast, fewer than 15,000 patients (or survivors) received malpractice payments in 1999.

Numerous studies released since then have reached findings as least as alarming as the IOM's. For instance:

- The inspector general for the U.S. Department of Health and Human Services in 2010 concluded that one-in-seven hospitalized Medicare patients suffered harm as a result of medical care, and that 1.5 percent suffered harms that contributed to their deaths. The study concluded that slightly fewer than half of these harms were avoidable. These findings extrapolated to 700,000 Medicare patients suffering preventable injuries annually, including 80,000 for whom the injuries contributed to their deaths.[49]

- A 2010 study of patients treated in North Carolina hospitals published in the *New England Journal of Medicine* found that nearly one-in-five patients suffered adverse events, of which more than 60 percent were avoidable and 2.4 percent caused or contributed to a patient's death.[50]

- An April 2011 study published in *Health Affairs* concluded that one-in-three patients admitted to a hospital suffers an adverse event.[51] Adverse events are generally defined as "medical interventions that cause harm or injury to a patient separate from the underlying

[47] Richard W. Stevenson, *As President, Not Candidate, Bush Renews Criticism of Suit*, The New York Times (Jan. 27, 2004), http://nyti.ms/2ju3607.
[48] To Err Is Human: Building A Safer Health Care System, Institute Of Medicine (1999), http://bit.ly/jfQLrX.
[49] Adverse Events In Hospitals: National Incidence Among Medicare Beneficiaries, Health And Human Services Office of Inspector General (November 2010), http://1.usa.gov/1uujA3s.
[50] Christopher P. Landrigan *et al.*, *Temporal Trends in Rates of Patient Harm Resulting from Medical Care*, 363 New England Journal Of Medicine 2134 (2010), http://bit.ly/dQnfpf.
[51] David C. Classen *et al.*, *Global Trigger Tool Shows That Adverse Events In Hospitals May Be Ten Times Greater than Previously Measured*, 30 Health Affairs 581 (2011), http://bit.ly/eGgg0G and Chris Flemming, *Sebelius and Berwick Highlight HA Study at Patient Safety Initiative Launch*, Health Affairs Blog (April 12, 2011), http://bit.ly/eaNDeq.

medical condition."[52] About 2 percent of the incidents were associated with the death of a patient.[53]

- A study published in the *Journal of Patient Safety* in September 2013 used data from the three studies referenced immediately above and an additional study published in 2008 by the HHS inspector general to conclude that "the true number of premature deaths associated with preventable harm to patients was estimated at more than 400,000 per year. Serious harm seems to be 10- to 20-fold more common than lethal harm."[54]

- In a review of these and other studies, a study published *The BMJ* in 2016 concluded that medical errors are the third-leading cause of death in the United States, behind only heart disease and cancer.[55]

Most of the figures above refer only to patients who die due to medical errors, not to those who suffer injuries. But the estimated figures on deaths alone – whether one chooses the IOM's low estimate of 44,000 or those as high as 400,000 – dwarf the 9,043 patients (or survivors) who received medical malpractice payments on behalf of doctors in 2015.

The results of studies on medical errors suggest that only a fraction of errors resulting in harm to patients results in medical malpractice payments. Mello, *et al.*, reached similar conclusions in a 2007 analysis published in the *Journal of Empirical Studies*. Only "2 to 3 percent of patients injured by negligence file malpractice claims and, of these, only about half recover compensation through the litigation process," the researchers wrote.[56]

[52] John C. Goodman, Pamela Villarreal and Biff Jones, *The Social Cost Of Adverse Medical Events, And What We Can Do About It*, Health Affairs (April 2011), http://bit.ly/2kabUt2.
[53] David C. Classen *et al.*, *Global Trigger Tool Shows That Adverse Events In Hospitals May Be Ten Times Greater than Previously Measured*, 30 HEALTH AFFAIRS 581 (2011), http://bit.ly/eGgg0G and Chris Flemming, *Sebelius and Berwick Highlight HA Study at Patient Safety Initiative Launch*, HEALTH AFFAIRS BLOG (April 12, 2011), http://bit.ly/eaNDeq.
[54] John T. James, *A New, Evidence-based Estimate of Patient Harms Associated with Hospital Care*, 9 JOURNAL OF PATIENT SAFETY 122 (2013), http://bit.ly/1tJhnqB.
[55] Martin A Makary and Michael Daniel, *Medical Error – The Third Leading Cause of Death in the US* 353, THE BMJ i2139 (May 3, 2016), http://bit.ly/2jVQgqi.
[56] Michelle M. Mello, *et al.*, *Who Pays for Medical Errors? An Analysis of Adverse Event Costs, the Medical Liability System, and Incentives for Patient Safety Improvement*, 4 JOURNAL OF EMPIRICAL LEGAL STUDIES, 835, 838 (2007), http://bit.ly/LD9TLt.

V. Medical Liability System Plays an Unheralded Role in Spurring Safety Improvements

Public policy debates over the medical liability system tend to include little discussion of potential benefits of the system. But, aside from compensating patients who have been harmed, the system provides the added benefit of motivating healthcare providers to implement safeguards to reduce bad outcomes for patients.

Public Citizen documented this effect in a 2015 paper that reported on four healthcare providers (three networks and a hospital) that adopted programs to reduce adverse events in childbirth.[57] Birth-related injuries have traditionally led to some of the highest medical liability costs, in part because they can necessitate lifelong care.[58] During periodic episodes in which doctors' liability insurance rates have risen, the specialty of obstetrics has often been deemed in "crisis" due to litigation.[59]

Over the preceding decade-and-a-half, certain obstetricians and other healthcare safety efforts have developed safeguards aimed at reducing adverse outcomes in childbirth. Many of these reforms have focused on implementing standardized procedures.

"One of the most fundamental principles in quality assessment and control is that unwarranted variation in a product or process generally equates to poor quality. Conversely, as quality improves, variation will diminish," obstetrician Steven L. Clark and co-authors wrote in 2007.[60] Clark was medical director of women's and children's services at Hospital Corporation of America (HCA) from 2004 to 2014, during which time HCA implemented several reforms.[61]

"We find it regrettable that when an obstetrician encounters a clinical situation likely to result in a suboptimal outcome, regardless of her or his actions, and sincerely desires to 'do it by the book,' there is often no such 'book' to which to turn," Clark, *et al.,* wrote in 2008.[62]

Concerns over litigation inspired each of the initiatives discussed in Public Citizen's 2015 paper. The initiatives are summarized here.

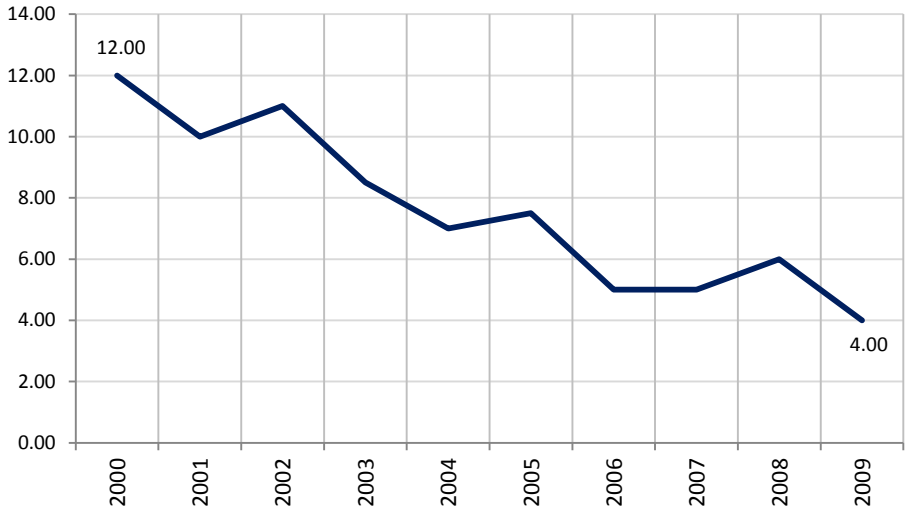
[57] TAYLOR LINCOLN, PUBLIC CITIZEN, SOLUTIONS IN SIGHT: SAFETY INITIATIVES HAVE DRAMATICALLY REDUCED HARMS DURING CHILDBIRTH BUT ARE UNEVENLY IMPLEMENTED, (March 12, 2015), http://bit.ly/1O6XqkG.
[58] *See, e.g.*, Linda Wilson, *An Evidence-Based Approach Is Born; Hospitals, Physicians Use Protocols to Cut Costs From Avoidable OB/GYN Injuries*, MODERN HEALTHCARE (Dec. 20, 2010), http://bit.ly/1LJKz5O.
[59] *See, e.g.*, Rita Rubin, *Fed-Up Obstetricians Look for a Way Out*, USA TODAY (June 30, 2002), http://usat.ly/2jk4xLr.
[60] Steven L. Clark, Michael A. Belfort, Gary D. V. Hankins, Janet A. Meyers, Frank M. Houser, *Variation in the Rates of Operative Delivery in the United States*, 196 AMERICAN JOURNAL OF OBSTETRICS & GYNECOLOGY 526.e1 (June 2007).
[61] Steven L. Clark, Michael A. Belfort, Gary D. V. Hankins, Janet A. Meyers, Frank M. Houser, *Variation in the Rates of Operative Delivery in the United States*, 196 AMERICAN JOURNAL OF OBSTETRICS & GYNECOLOGY 526.e1 (June 2007).
[62] Steven L. Clark, Michael A. Belfort, Spencer L. Byrum, Janet A. Meyers, Jonathan B. Perlin, *Improved Outcomes, Fewer Cesarean Deliveries, and Reduced Litigation: Results of a New Paradigm in Patient Safety*, 199 AMERICAN JOURNAL OF OBSTETRICS & GYNECOLOGY 105.e1, 105.e4 (August 2008), http://bit.ly/2jk2KWv.

A. Hospital Corporation of America

Hospital Corporation of America (HCA) is the largest obstetrical health delivery system in the United States and annually delivers about 220,000 babies. In response to obstetrics-related litigation costs, HCA began a safety initiative in 2000.[63]

- By 2009, obstetrics-related liability claims at HCA hospitals were reduced by two-thirds over what they had been prior to the beginning of the safety program.[64] [Figure 8]

Figure 8
Obsetrical Claims Per 10,000 Births at HCA Hospitals, 2000 to 2009



Source: American Journal of Obstetrics & Gynecology (chart is reproduced and may not be precise)

- Maternal deaths from hypertension were reduced by 77 percent.[65]
- Overall maternal deaths, excluding patients who entered the hospital with terminal conditions, declined by 19 percent.[66]

"We are absolutely confident that adoption of our approach on a national level could, within 5 years, both dramatically reduce adverse perinatal outcomes and to a large extent eliminate the current national obstetric malpractice crisis," Clark, *et al.*, wrote in 2011. "In reality, a relatively

[63] Steven L. Clark, Michael A. Belfort, Spencer L. Byrum, Janet A. Meyers, Jonathan B. Perlin, *Improved Outcomes, Fewer Cesarean Deliveries, and Reduced Litigation: Results of a New Paradigm in Patient Safety*, 199 AMERICAN JOURNAL OF OBSTETRICS & GYNECOLOGY 105.e1 (August 2008).
[64] Steven L. Clark, Janet A. Meyers, Donna K. Frye, and Jonathan A. Perlin, *Patient Safety in Obstetrics–the Hospital Corporation of America Experience*, 204 AMERICAN JOURNAL OF OBSTETRICS & GYNECOLOGY 283 (April 2011).
[65] Steven L. Clark, James T. Christmas, Donna R. Frye, Janet A. Meyers and Jonathan B. Perlin, *Maternal Mortality in the United States: Predictability and the Impact of Protocols on Fatal Postcesarean Pulmonary Embolism and Hypertension-Related Intracranial Hemorrhage*, 2011 AMERICAN JOURNAL OF OBSTETRICS & GYNECOLOGY 32.e1 (2014).
[66] *Id.*

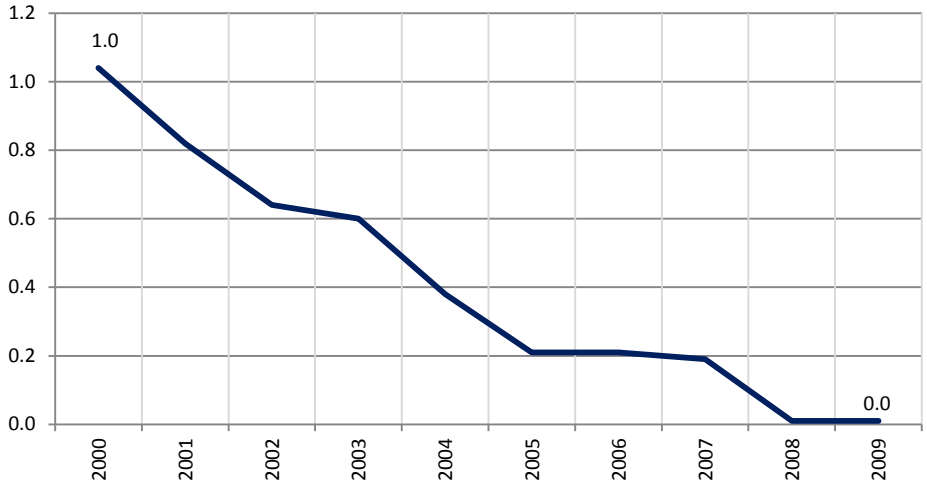
small number of repeated errors lead to most preventable adverse outcomes, and may be reduced by the approaches outlined above."[67]

B. New York Presbyterian Hospital-Weill Cornell Medical Center

From 2002 to 2009, as part of an initiative undertaken by its insurer, New York Presbyterian implemented a program to improve obstetric patient safety. The program was chronicled in a 2011 article in the *American Journal of Obstetrics & Gynecology*.[68]

- The hospital's obstetrics-related sentinel events fell almost every year from 2000 to 2008. In 2008 and 2009 New York Presbyterian reported zero sentinel events.[69] [Figure 9] A sentinel event is "unexpected occurrence involving death or serious physical or psychological injury."[70]

Figure 9
New York Presbyterian Hospital: Obstetrics-related Sentinel Events per 1,000 Deliveries, 2000 to 2009



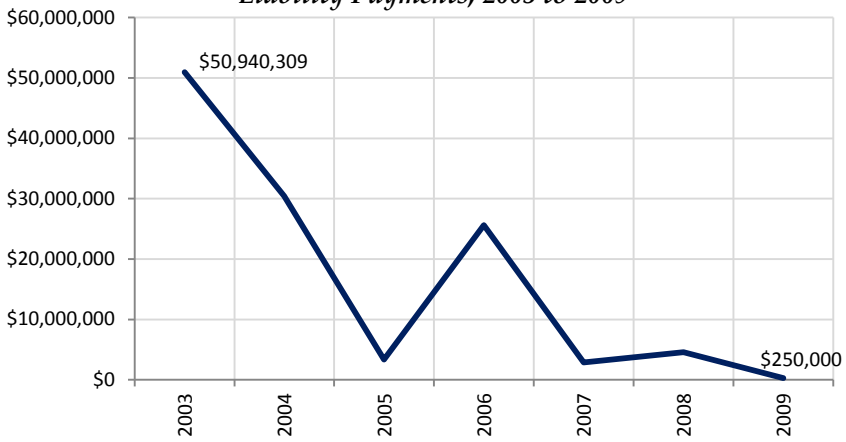
Source: American Journal of Obstetrics & Gynecology (chart is reproduced and may not be precise)

[67] Steven L. Clark, Janet A. Meyers, Donna K. Frye, and Jonathan A. Perlin, *Patient Safety in Obstetrics – the Hospital Corporation of America Experience*, 204 AMERICAN JOURNAL OF OBSTETRICS & GYNECOLOGY 283 (April 2011), http://bit.ly/2jutXta.
[68] Amos Grunebaum. Frank Chervenak and Daniel Skupski, *Effect of a Comprehensive Obstetric Patient Safety Program on Compensation Payments and Sentinel Events,* 204 AMERICAN JOURNAL OF OBSTETRICS & GYNECOLOGY 97 (February 2011), http://bit.ly/2j9eO1S.
[69] *Id.*
[70] *Sentinel Event*, JOINT COMMISSION (viewed on Feb. 25, 2015), http://bit.ly/1DUZLw4.

- Incidence of *hypoxic-ischemic encephalopathy*, a brain injury caused by oxygen deprivation among patients at the hospital, was 98 percent lower among New York Presbyterian patients than the national average in the final three years studied.[71]

- The hospital's payments for obstetrics-related malpractice claims dropped from $50.9 million in 2003 to $250,000 in 2009, a greater than 99 percent reduction.[72] [Figure 10]

Figure 10
New York Presbyterian Hospital: Obstetrics-related Liability Payments, 2003 to 2009



Source: American Journal of Obstetrics & Gynecology (chart is reproduced and may not be precise)

"Any hospital could do it – it's not about money, it's about changing the culture to make it safer to deliver babies," said Amos Grunebaum, an obstetrician and the lead author of the article describing the obstetrics safety initiative at New York Presbyterian Weill-Cornell Hospital.[73]

C. Ascension Health

Ascension Health, the third-largest healthcare network in the United States, began a perinatal safety initiative at four of its sites in 2003 and expanded the program to all 43 of its hospitals in 2006. The network reported:

- Reducing incidence of birth trauma at its safety program's pilot sites by 85 percent over the first three years and to zero in the fourth year. (Birth trauma refers to harm to a newborn that requires medical intervention.)[74]

---

[71] *See, e.g.*, *What is Hypoxic-Ischemic Encephalopathy, or HIE, also known as Intrapartum Asphyxia*, MY CHILD AT CEREBRAL PALSY.ORG (undated, viewed on Feb. 25, 2015), http://bit.ly/1BWyokp.
[72] *Id.*, at 103.
[73] Gale Scott, *Obstetricians Take Big Steps to Avoid Malpractice Medical; Journal's Report Shows How Breakthrough Obstetrics Reforms Tied to NY Presbyterian/Weill Cornell Hospital Dramatically Reduced Staff Errors and Sliced Medical Malpractice Payouts by More Than 99%*, CRAIN'S NEW YORK BUSINESS (March 4, 2011, updated March 7, 2011), http://bit.ly/1Flvd3y.
[74] Ascension Health, Grant Application to Agency for Healthcare Research and Quality (application materials undated; grant awarded Aug. 19, 2010).

- Achieving a systemwide 33 percent reduction in its birth trauma rate in the first two years after broadening its initiative to each of its 43 hospitals.[75]

- Reducing neonatal fatalities (referring to death in the first 28 days of life) by nearly 50 percent in first two years of systemwide implementation of its safety program[76] and achieving a neonatal mortality rate 89 percent lower than the estimated national rate.[77]

D. Premier Inc.

Premier Inc., a healthcare performance improvement alliance of approximately 3,400 U.S. hospitals, initiated a project in 2008 and 2009 that sought to establish perinatal best practices in 16 hospitals across the country. The network reported:

- Reducing birth trauma among full-term newborns by 74 percent.[78]

- Reducing birth hypoxia and asphyxia, which are associated with causing brain damage, by 31 percent.[79]

- Achieving a 38 percent reduction in preventable neonatal intensive care unit admissions of full-term babies.[80]

E. Conclusion

The initiatives summarized above were remarkably successful both in reducing both litigation and cases of infant mortality, maternal mortality and babies born with brain damage. These reforms likely would not have occurred if not for the incentives provided by the civil litigation system to make improvements in the quality of care.

[75] Margaret Elliott, manager, account strategy, communications, Ascension Health, e-mail to Taylor Lincoln, research director for the Congress Watch division of Public Citizen (Feb. 25, 2015).
[76] Margaret Elliott, manager, account strategy, communications, Ascension Health, e-mail to Taylor Lincoln, research director for the Congress Watch division of Public Citizen (Feb. 25, 2015).
[77] David Pryor, Ann Hendrich, Robert J. Henkel, James K. Beckmann, and Anthony R. Tersigni, *The Quality 'Journey' At Ascension Health: How We've Prevented at Least 1,500 Avoidable Deaths a Year – And Aim To Do Even Better*, HEALTH AFFAIRS (April 2011), at 607, http://bit.ly/2jumVEA.
[78] Carolyn Clancy, *From the Director: Research Activities*, *September 2012*, *No. 385*, AGENCY FOR HEALTHCARE RESEARCH AND QUALITY (September 2012).
[79] *Id.*
[80] *Id.*

VI. Conclusion

This report illustrates that medical malpractice litigation cannot possibly be to blame for the nation's inexorably rising healthcare costs.

In measurable terms, costs relating to litigation are far too small to have a significant influence. Even if one takes the broadest measure of liability costs (medical liability insurance premiums) and the smallest measure of overall medical costs (hospital and physician revenue), liability barely accounts for half of 1 percent of costs.

Claims surrounding "defensive medicine" are more difficult to assess because there is no tangible marker to reveal its existence. Studies have generally concluded that defensive medicine is responsible for 2 percent or less of all healthcare rendered. Some surveys that were plainly designed to produce a certain result have yielded preposterously high estimates.

Setting aside the merits of any of these studies or surveys, the central claim that medical liability is responsible for rising healthcare costs falls apart when one considers that liability costs and healthcare costs are moving in opposite directions This divergence has been starkly on display in Texas, where litigation has fallen precipitously since liability limits were put in place, while healthcare costs have risen faster than the national average. Supporters of the Texas liability limits have disavowed claims that they were intended to reduce healthcare costs.

Most calls to limit physicians' liability are premised on an assumption that the bulk of medical malpractice claims lack merit or, put more bluntly, are "frivolous." But bountiful evidence suggests that the injustice runs in in the opposite direction. Several times as many patients are killed or injured by medical errors than the number of patients and survivors who file malpractice cases, let alone receive compensation. Independent researchers have concluded that only about 2 percent of patients suffering injuries due to avoidable errors pursue litigation.

The medical litigation system has spurred improvements by healthcare providers. For example, concerns about litigation over episodes in childbirth prompted some providers to institute reforms to reduce adverse events. These initiatives have been remarkably successful both in limiting litigation and, more importantly, reducing tragic outcomes.

The success of these programs supports the conclusions of researchers that high numbers of patients suffer injuries and death due to avoidable errors. After all, if an initiative can significantly reduce tragic outcomes, a significant percentage of adverse outcomes preceding the initiative must have been avoidable.

Policymakers concerned with litigation should concentrate on the epidemic of injuries and fatalities due to avoidable errors that leads to litigation. They should encourage solutions to these problems.

Appendix

Figure 1: Medical Malpractice Payments Made on Behalf of Doctors as a Percentage of National Healthcare Costs

	Medical malpractice payments on behalf of doctors as a percentage of hospital and physician billings	Malpractice payments on behalf of doctors as a percentage of overall national healthcare costs
1991	0.47%	0.27%
1992	0.52%	0.30%
1993	0.51%	0.29%
1994	0.51%	0.29%
1995	0.48%	0.26%
1996	0.54%	0.29%
1997	0.51%	0.27%
1998	0.48%	0.25%
1999	0.51%	0.26%
2000	0.54%	0.28%
2001	0.57%	0.29%
2002	0.50%	0.25%
2003	0.50%	0.25%
2004	0.45%	0.22%
2005	0.40%	0.20%
2006	0.35%	0.18%
2007	0.32%	0.16%
2008	0.30%	0.15%
2009	0.27%	0.14%
2010	0.25%	0.13%
2011	0.23%	0.12%
2012	0.21%	0.11%
2013	0.22%	0.11%
2014	0.22%	0.11%
2015	0.21%	0.11%

Sources: Public Citizen analysis of the National Practitioner Data Bank (NPDB) and Centers form Medicare and Medicaid Services.

Figure 2: Number of Malpractice Payments Made on Behalf of Physicians, 1991-2015

Year	Number of payments	Number of payments per million U.S. population
1991	13,373	53.0
1992	14,663	57.5
1993	14,563	56.5
1994	15,037	57.8
1995	13,956	53.1
1996	15,163	57.2
1997	14,520	54.2
1998	13,929	51.5
1999	14,937	54.8
2000	15,445	54.7
2001	16,529	58.0
2002	15,189	52.8
2003	15,224	52.5
2004	14,350	49.0
2005	13,970	47.3
2006	12,462	41.8
2007	11,448	38.0
2008	10,987	36.1
2009	10,707	34.9
2010	10,145	32.8
2011	9,739	31.2
2012	9,354	29.8
2013	9,645	30.5
2014	9,448	29.6
2015	9,043	28.1

Sources: Public Citizen analysis of the National Practitioner Data Bank (NPDB) and U.S. Census Bureau.

Figure 3: Value of Medical Malpractice Payments on Behalf of Doctors, 1991 to 2015

Year	Value of total payments adjusted by blend of medical services index and CPI* (in 2015 dollars)	Value of total payments adjusted by CPI (in 2015 dollars)	Value of total payments, unadjusted
1991	$4,626,791,799	$3,648,544,769	$2,105,322,150
1992	$5,276,819,641	$4,259,315,591	$2,532,993,050
1993	$5,209,004,833	$4,282,489,205	$2,617,017,700
1994	$5,263,434,145	$4,393,552,038	$2,758,800,850
1995	$4,964,989,758	$4,187,711,634	$2,698,238,300
1996	$5,605,694,225	$4,730,450,997	$3,141,444,900
1997	$5,351,843,816	$4,539,676,686	$3,077,759,850
1998	$5,177,798,888	$4,436,104,528	$3,054,184,150
1999	$5,512,417,959	$4,751,523,480	$3,353,278,350
2000	$5,994,638,106	$5,200,637,173	$3,797,091,350
2001	$6,657,896,980	$5,862,762,059	$4,376,686,050
2002	$6,008,773,196	$5,400,258,160	$4,108,637,800
2003	$6,249,422,280	$5,684,298,467	$4,413,197,250
2004	$5,796,640,681	$5,327,345,643	$4,261,535,950
2005	$5,307,108,449	$4,896,677,962	$4,065,308,050
2006	$4,865,451,156	$4,526,923,013	$3,857,334,650
2007	$4,458,230,168	$4,210,536,437	$3,700,655,100
2008	$4,196,141,046	$3,953,807,595	$3,594,759,050
2009	$3,971,853,102	$3,813,844,655	$3,463,624,550
2010	$3,738,493,183	$3,631,034,203	$3,337,932,750
2011	$3,451,065,257	$3,352,704,982	$3,190,702,250
2012	$3,300,721,118	$3,238,818,158	$3,137,595,300
2013	$3,352,450,204	$3,309,335,052	$3,250,586,000
2014	$3,442,385,731	$3,414,407,989	$3,404,628,700
2015	$3,454,242,600	$3,454,242,600	$3,454,242,600

Sources: Public Citizen analysis of the National Practitioner Data Bank (NPDB) and Bureau of Labor Statistics.

** Weighted 53% medical services index, 47% consumer price index.*

Figure 4: U.S. Medical Malpractice Liability Premiums, 2003-1015

Year	Medical liability premiums (in billions of actual dollars)
2003	$11.02
2004	$11.71
2005	$11.86
2006	$12.21
2007	$11.55
2008	$11.19
2009	$10.78
2010	$10.59
2011	$10.31
2012	$10.04
2013	$9.79
2014	$9.67

Source: A.M. Best Company

Figure 5: U.S. Medical Liability Premiums as a Percentage of National Healthcare Costs, 2003-1015

Year	Medical liability premiums (in billions of actual dollars)	Total national healthcare costs (in billions of actual dollars)	Hospital plus physician services (in billions of actual dollars)	Medical liability premiums as a percentage of hospital and physician billings	Medical liability premiums as a percentage of overall national healthcare costs
2003	$11.02	$1,768.2	$891.0	1.24%	0.62%
2004	$11.71	$1,896.3	$955.7	1.22%	0.62%
2005	$11.86	$2,024.2	$1,022.7	1.16%	0.59%
2006	$12.21	$2,156.5	$1,087.0	1.12%	0.57%
2007	$11.55	$2,295.7	$1,150.5	1.00%	0.50%
2008	$11.19	$2,399.1	$1,208.6	0.93%	0.47%
2009	$10.78	$2,494.7	$1,278.4	0.84%	0.43%
2010	$10.59	$2,596.4	$1,335.6	0.79%	0.41%
2011	$10.31	$2,687.9	$1,388.4	0.74%	0.38%
2012	$10.04	$2,795.4	$1,460.7	0.69%	0.36%
2013	$9.79	$2,877.6	$1,507.4	0.65%	0.34%
2014	$9.67	$3,029.3	$1,578.1	0.61%	0.32%
2015	$9.37	$3,205.6	$1,671.0	0.56%	0.29%

Sources: A.M. Best Company and Centers for Medicare and Medicaid Services.

Figure 6: Malpractice Payments vs. Medicare Payments Per Enrollee in Texas, 2003-2014 (actual dollars)

	Medicare payments per enrollee in Texas	U.S. Medicare payments per enrollee	Malpractice payments on behalf of doctors in Texas
2003	$7,244	$6,756	$239,703,200
2004	$7,816	$7,276	$251,220,300
2005	$8,475	$7,731	$185,644,250
2006	$9,007	$8,150	$106,959,750
2007	$9,442	$8,507	$87,298,750
2008	$9,882	$9,021	$78,938,000
2009	$10,406	$9,477	$70,840,500
2010	$10,596	$9,584	$74,005,000
2011	$10,610	$9,720	$64,109,750
2012	$10,579	$9,687	$53,571,050
2013	$10,368	$9,541	$55,003,000
2014	$10,506	$9,589	$67,723,800

Sources: Dartmouth Atlas of Healthcare and National Practitioner Databank.

Figure 7: Medical Liability Costs vs. National Healthcare Costs, 2003-2015 (in billions of actual dollars)

Year	National medical liability premiums	National healthcare costs	National hospital and physician services billings
2003	$11.02	$1,768.20	$891.01
2004	$11.71	$1,896.30	$955.68
2005	$11.86	$2,024.20	$1,022.60
2006	$12.21	$2,156.50	$1,086.98
2007	$11.55	$2,295.70	$1,150.54
2008	$11.19	$2,399.10	$1,208.64
2009	$10.78	$2,494.70	$1,278.41
2010	$10.59	$2,596.40	$1,335.55
2011	$10.31	$2,687.90	$1,388.42
2012	$10.04	$2,795.40	$1,460.70
2013	$9.79	$2,877.60	$1,507.42
2014	$9.67	$3,029.30	$1,578.10
2015	$9.37	$3,205.60	$1,671.03

Sources: A.M Best Company and Centers for Medicare and Medicaid Services.

Figure 8: Obstetrical Claims Per 10,000 Births at HCA Hospitals, 2000-2009

Year	Number of claims per 10,000 births
2000	12.0
2001	10.0
2002	11.0
2003	8.5
2004	7.0
2005	7.50
2006	5.0
2007	5.0
2008	6.0
2009	4.0

Source: American Journal of Obstetrics & Gynecology

Figure 9: New York Presbyterian Hospital: Obstetrics-related Sentinel Events per 1,000 Deliveries, 2000 to 2009

Year	Number of claims per 10,000 births
2000	1.0
2001	0.8
2002	0.6
2003	0.6
2004	0.4
2005	0.2
2006	0.2
2007	0.2
2008	0.0
2009	0.0

Source: American Journal of Obstetrics & Gynecology

Figure 10: New York Presbyterian Hospital: Obstetrics-related Liability Payments, 2003 to 2009

Year	Liability Compensation Payments
2003	$50,940,309
2004	$30,464,590
2005	$3,326,605
2006	$25,624,937
2007	$2,852,620
2008	$4,545,787
2009	$250,000

Source: American Journal of Obstetrics & Gynecology