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The Facts about Medical Malpractice Liability Costs

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There is a lot of talk in Washington about cutting wasteful health care spending and, more specifically, cutting costs associated with medical malpractice liability. The dollar figures used by various groups and lawmakers often diverge widely. This paper presents what we know, and don't know, about medical malpractice liability costs.

1. Medical Malpractice Tort Losses

There are three sources of data on medical malpractice tort losses, defined as payments in a given year to compensate individuals for injuries or damages claimed to result from medical negligence.

We rely on data from A. M. Best Company (AMB), which compiles composite financial data for the U.S. insurance industry. These data are considered the gold standard because they are subject to audit and are reviewed by state insurance regulatory agencies.

As shown below, we arrive at a total for medical malpractice tort losses in 2008 of $5.894 billion. The insured losses data come directly from AMB. We calculated the self-insured losses using the Tillinghast-Towers Perrin (T-TP) methodology for calculating commercial self-insurance tort costs.[1] Interestingly, T-TP does not use its own methodology to calculate medical malpractice tort costs—more on this below.

$3.831 billion, insured losses
\+ $2.063 billion, self-insured losses
$5.894 billion total losses

Giving added confidence to our insured-losses figure, we note that the AMB number for insured losses ($3.831 billion) is relatively close to the 2008 number we received from the National Practitioner Data Bank (NPDB) of $2.50 billion for insured losses.[2]

The average insurance payment for a closed medical malpractice claim has risen from $95,000 in 1986 to $320,000 in 2002.[3] The average jury award for medical liability was $637,134 in 2006 and the average settlement was $335,847.[4]

2. Medical Malpractice Direct Tort Costs

In addition to payments for tort losses discussed above, there are legal defense costs for those sued, underwriting costs, and general administrative expenses, for the insured and self-insured. This section adds these costs together to arrive at total medical malpractice direct tort costs.

Using the relatively simple formula developed by T-TP for the commercial sector, which is based on total premiums earned,[5] total insured medical malpractice direct tort costs are $10.496 billion in 2008.

The T-TP formula above cannot be used for the self-insured sector because technically there are no premiums to plug into the formula. Instead, we apply the same methodology used in section 1 to calculate total self-insured tort costs.[6] After crunching the numbers, total self-insured medical malpractice direct tort costs are $5.504 billion in 2008. As shown below, total medical malpractice direct tort costs equal $16 billion in 2008.

$10.496 billion, total insured direct tort costs
\+ $ 5.504 billion, total self-insured direct tort costs
$16.000 billion, total direct tort costs

In contrast, T-TP puts total medical malpractice direct tort costs at $30.41 billion in 2007, nearly twice our estimate. T-TP bases its figure on "internal estimates of state-by-state medical malpractice costs," not on AMB data or the T-TP formulas it uses for the other sectors.[7]

When we asked T-TP if they would provide their data, they stated in an e-mail: "We do not share, publish, or sell that information as they are a key component of one of our business units."[8] Without more transparency,

it is difficult to use this $30 billion figure since it is much higher than our estimate, which is based on AMB data and also supported by NPDB data.

3. Medical Malpractice Liability Insurance Premiums

Premiums for medical malpractice insurance are set so that, over time, insurers' income from premiums plus income from investing premium receipts they hold in reserve equal their total costs, including the opportunity cost of providing owners a competitive return on invested capital. Total costs include claims payments for losses—roughly two-thirds of total costs—legal defense costs for policyholders who are sued, underwriting costs, and general administrative expenses. On average, claims are settled five years after the premiums for these claims were collected, resulting in investment income.[9] In the actuarial world of insurers, each year's premiums are based on the expected future payments they expect to make for claims filed in that year.

According to AMB, medical malpractice liability insurance premiums are $10.888 billion in 2008 or 0.46 percent of total health care expenditures.[10] We have not seen any data on the amount of money reserved each year to pay self-insured medical malpractice claims.

Skyrocketing malpractice premiums facing individual doctors influence their decisions as to where to practice, which patients to see, what types of medicine to practice, and even whether to leave a state or retire from the profession.

Opponents of medical malpractice liability reform make much of the small percentage of total health care expenditures accounted for by malpractice premiums. These critics flunk Econ 101. Even though premiums are a small percentage of *total* health care expenditures, they can be a very high, even crippling, percentage of health care providers' operating expenses.[11]

This is the ratio that matters. Nobody chooses hamburger or steak based on the respective percentage of each item in the nation's total grocery expenditures. Individuals choose hamburger or steak based on the price for each that they face in the grocery store. Likewise, health care providers make choices based on the prices they face, especially the price of malpractice insurance.

In some areas of the country, and for some medical specialties, doctors pay more than $400,000 a year for malpractice insurance. Premiums have risen by more than 80 percent a year in certain parts of the country. Skyrocketing malpractice premiums facing individual doctors influence their decisions as to where to practice, which patients to see, what types of medicine to practice, and even whether to leave a state or retire from the profession. And even when a physician prevails at trial, average defense costs per claim were $94,284 in 2006.[12]

4. Defensive Medicine Costs

Defensive medicine costs result from health care providers ordering tests, procedures, and referrals not medically necessary for the patient's care and treatment but performed to protect the provider from lawsuits and allegations of medical negligence. According to a survey of doctors published in the *Journal of the American Medical Association*, 93 percent of physicians admit practicing defensive medicine.[13] Another survey of physicians published by the Massachusetts Medical Society in 2008 reported that about 25 percent of medical procedures are defensive in nature.[14]

Retired general surgeon Joseph H. Entine, MD, candidly describes the current situation: "All physicians are so aware of the threat of a malpractice action that tests, x-rays, imaging studies, and consultations are ordered, not because of any medical necessity, but to be able to answer 'yes' in court when asked by a plaintiff's attorney whether a 'blood rhubarb level' was obtained. During the last 10 to 15 years of my practice, I ordered millions of dollars of medically useless studies in order to protect myself from malpractice vulnerability."[15]

Three research studies are typically discussed regarding defensive medicine costs. As detailed in the Pacific Research Institute (PRI) study *Jackpot Justice*,[16] our estimate of defensive medicine costs is based on a seminal academic journal article by Daniel Kessler and Mark McClellan (K&M)[17] and work by PricewaterhouseCoopers (PWC).[18] We estimate that 8 percent of total health care expenditures each year are the result of defensive medicine or more than $191 billion in 2008. The 8 percent figure is in the range specified by K&M (see below) and also supported by PWC (see below). Stopping defensive medicine and saving $191 billion each year is likely the largest benefit of malpractice reform.

PWC, on the other hand, arrives at a higher total of $239 billion for 2008 or 10 percent of total health care expenditures.[19] We believe this is an overestimate. PWC states: "Kessler and McClellan estimate that the cost of defensive medicine was in the range of 5 percent to 9 percent of medical costs. The direct cost of medical

liability insurance is roughly 2 percent. This suggests that total medical liability costs are in the 7 percent to 11 percent range."[20]

PWC settles on 10 percent, which includes 2 percent for the cost of medical liability insurance (we are not sure how they arrived at this 2 percent figure since it is much higher than received figures reported earlier). A portion of medical liability insurance premiums, however, pays for legitimate torts; so, this 2 percent portion cannot be considered pure waste, as defensive medicine costs are in theory, and should not be grouped in with the defensive medicine costs. We believe that core defensive medicine costs are closer to 8 percent, which is also supported by the PWC formula (10 percent minus 2 percent) and supported by the original K&M study.

Finally, Ronen Avraham and Max Schanzenbach (A&S) examined the effect of tort reform on private health insurance coverage for three groups of price-sensitive consumers, 1981 through 2004.[21] They found that tort reforms increase insurance coverage by as much as two percentage points. Also, by making some assumptions about the price elasticity of demand for insurance, A&S backed out what the health insurance premium savings (and roughly the health care cost reductions) must have been to yield the increases in coverage (they conclude as much as two percentage points). Some people have labeled these health expenditure reductions as cuts to defensive medicine,[22] but they are not necessarily so.

For example, the reductions in health care spending after tort reform, and the accompanying fall in insurance premiums, could be due to doctors not ordering procedures that are medically necessary because they perceive less liability exposure. This risky response could harm patient outcomes. The key contribution of K&M is that they looked for that portion of medical expenditure reductions that did not substantially affect mortality or medical complications.

This is why K&M is the gold standard of studies on defensive medicine. A&S, in fact, acknowledge this unique aspect of the K&M study but do not seem to grasp its significance. The A&S study is not really a study of defensive medicine, but rather, a study of insurance coverage.

5. Responses to the Congressional Budget Office Report

Critics of defensive medicine studies often point to a 2004 report by the Congressional Budget Office (CBO).[23] But a close examination of what the CBO actually said reveals criticisms that are weak at best.

First, the CBO did not conclude that the K&M study was flawed. They simply noted that it, and similar studies, "were based on a narrow part of the population and considered spending for only a few ailments." All academic studies, however, are limited by the extent of reliable data. A narrower approach can actually be a plus, too, because it can eliminate confounding factors and yield more precise results.

Second, the CBO said that it could not find similar results to K&M when it applied the same methodology to "a broader set of ailments" in one study, and to "a different set of data" in another study. Curiously, the CBO does not explain the studies, discuss the methodologies, describe the datasets, present the results, nor even cite the studies. It is impossible to give the CBO's statements much weight given this opaque, non-scientific approach.

Third, the CBO concludes: "The question of whether such [liability] limits reduce spending remains open." Thus, even the CBO's own conclusion does not deny the existence of defensive medicine.

The CBO also speculates: "so-called defensive medicine may be motivated less by liability concerns than by the income it generates for physicians . . ." But if this were true, health care spending would not fall, holding other factors constant, after liability reforms are implemented because physicians would still want that income. But scholarly academic studies confirm that health care spending does in fact fall after legal reforms are implemented, refuting the CBO's argument.[24]

6. The Costs Associated with Reduced Access to Health Care due to Defensive Medicine and Lawsuit Abuse

As detailed in *Jackpot Justice*, defensive medicine costs are passed on to consumers in the form of higher health care insurance premiums.[25] These higher premiums squeeze some people out of the market for health insurance—we estimate at least 3.4 million Americans. People without insurance have higher mortality rates and higher rates of absenteeism and "presenteeism," which lowers their productivity. This reduction of workers and productivity results in lost output of $41.65 billion in 2008. In health care terms, this additional output that would result from stopping defensive medicine is equivalent to 1.74 percent of total health care expenditures. This is admittedly an imperfect analogy, offered to compare this figure to other figures listed above.

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There are certainly other costs associated with reduced access to health care due to excessive malpractice liability and lawsuit abuse. For example, doctors, especially in high-risk specialties, are leaving certain states or regions of states; hospitals are closing; maternity centers, trauma centers, and clinics are closing; people are needlessly dying or suffering injuries due to chronic shortages of doctors in their immediate vicinity, and there are costs associated with people traveling to see a primary or specialty-care doctor because nearby health care services are no longer provided or inadequate. Our figure above, which does not include these costs, is certainly an underestimate.

7. Medical Malpractice Liability Reforms to Improve Health Care and Lower Costs

We propose the following fair and comprehensive reforms to the medical malpractice liability system to improve health care for all Americans and lower health care costs:

- Statute of limitations of three years after the date of manifestation of injury or one year after the plaintiff discovers the injury.
- Mandatory pre-trial settlement hearings to encourage negotiated compensation with apologies to avoid lengthy and costly trials.
- Plaintiff's lawyers are paid based on their value added defined as the difference between the final judgment and the final settlement offer. This rule would encourage both parties to reveal their true evaluations of the merits of the case and to avoid costly litigation while promoting timely, fair compensation.
- Create specialized health courts to handle medical malpractice trials. The cases would be adjudicated by judges who are either MDs themselves or have medical expertise and extensive experience overseeing medical trials.
- In health courts, physicians would be shielded from liability if they demonstrate that they used clinical best practices in the care and treatment of patients.
- Apply the *Daubert* standard to the introduction of evidence by expert medical witnesses, who themselves must actively practice in the same specialty of medicine as the defendant.
- No limit on the full recovery of actual economic damages.
- Limit the recovery of non-economic damages for pain and suffering to $250,000.
- Permit periodic payments of future damages.
- Each party is liable only for the amount of damages proportional to such party's percentage of responsibility.
- The losing party pays the attorney fees and the court costs of the winning party.
- A losing defendant shall not be required to post a bond to appeal a judgment.
- Punitive damages, which must conform to U.S. Supreme Court guidelines, are awarded only when *a unanimous 12-person jury determines beyond a reasonable doubt* that the doctor acted with malicious intent to injure the plaintiff either through action or omission. This separate phase of the trial would essentially operate under rules for criminal trials since the purpose of this phase is to *punish* a physician for willful and wanton conduct, not to compensate an injured person.
- All punitive damage awards (essentially criminal fines) are earmarked to a state fund used to increase the representation of individuals who typically or otherwise would not serve on a jury due to financial hardship.

These medical malpractice tort rules would fairly compensate truly injured patients in a timely fashion while protecting their access to health care by lowering costs and keeping doctors, nurses, and other health care providers in practice and hospitals and clinics open. These tort rules would also promote the development of an open, public record of adverse events and medical errors so others can learn from past experiences and improve best practices to avoid future occurrences.

Based on our estimates, comprehensive medical malpractice liability reform would provide substantial benefits and cost savings totaling at least $242 billion per year or more than 10 percent of total health care expenditures.[26] These benefits and cost savings would result from achieving optimal liability by stopping lawsuit abuse.

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Endnotes

[1] Tillinghast-Towers Perrin, *2008 Update on U.S. Tort Cost Trends* (New York: Tillinghast-Towers Perrin, 2008), appendix 4, p. 17. This approach assumes that the proportion of total costs attributable to non-loss costs is the same for insurers and self-insurers.
[2] E-mail correspondence between co-author Hovannes Abramyan and Jiaying Hua of NPDB, August 20. 2009.
[3] Perry Beider and Stuart Hagen, *Limiting Tort Liability for Medical Malpractice*, Economic and Budget Issue Brief (Washington, D.C.: Congressional Budget Office, January 8, 2004), pp. 3–4.
[4] Physician Insurers Association of America, *PIAA Claim Trend Analysis: 2006 Edition* (2007).
[5] Tillinghast-Towers Perrin, 2008, appendix 3, p. 16. The formula is: medical malpractice premiums earned multiplied by 0.964.
[6] Tillinghast-Towers Perrin, 2008, appendix 4, p. 17.
[7] Tillinghast-Towers Perrin, 2008, p. 10.
[8] E-mail correspondence between co-author Lawrence J. McQuillan and Russ Sutter of T-TP, August 19, 2009.
[9] Beider and Hagen, 2004, p. 4.
[10] Notice that, as they should be, total premiums earned and total insured costs differ slightly, only by $392 million. This difference could be attributable to actuarial miscalculations or economic profits to insurers. Total national health care expenditures, 2008, totaled $2.389 trillion (projected). This figure includes personal health care expenditures plus program administration costs plus net cost of private health insurance plus costs of government public health activities (http://www.cms.hhs.gov/NationalHealthExpendData/downloads/proj2008.pdf).
[11] Joseph H. Entine, MD, "Definitely a Need for Medical Tort Reform," *South Florida Sun-Sentinel*, August 31, 2009.
[12] Physician Insurers Association of America, 2007.
[13] David M. Studdert, Michelle M. Mello, William M. Sage, Catherine M. DesRoches, Jordon Peugh, Kinga Zapert, and Troyen A. Brennan, "Defensive Medicine among High-Risk Specialist Physicians in a Volatile Malpractice Environment, J*ournal of the American Medical Association* 293, no. 21 (June 1, 2005).
[14] Massachusetts Medical Society, *Investigation of Defensive Medicine in Massachusetts* (Waltham, Mass.: Massachusetts Medical Society, November 2008).
[15] Entine, 2009.
[16] Lawrence J. McQuillan, Hovannes Abramyan, and Anthony P. Archie, *Jackpot Justice: The True Cost of America's Tort System* (San Francisco: Pacific Research Institute, 2007), pp. 19–20.
[17] Daniel Kessler and Mark McClellan, "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics* 111, no. 2 (1996), pp. 353–90.
[18] PricewaterhouseCoopers, *The Factors Fueling Rising Healthcare Costs 2006* (Washington, D.C.: America's Health Insurance Plans, 2006); and PricewaterhouseCoopers' Health Research Institute, *The Price of Excess: Identifying Waste in Healthcare Spending* (New York: PricewaterhouseCoopers, 2008).
[19] PricewaterhouseCoopers' Health Research Institute, 2008, endnote 18, p. 18.
[20] PricewaterhouseCoopers, 2006, footnote 4, p. 7.
[21] Ronen Avraham and Max Schanzenbach, *The Impact of Tort Reform on Private Health Insurance Coverage*, Northwestern University School of Law Public Law and Legal Theory Series No. 07-16, December 2007.
[22] See, for example, Theodore H. Frank, *Protecting Main Street from Lawsuit Abuse*, Statement Presented to the Senate Republican Conference, March 16, 2009, p. 8.
[23] Beider and Hagen, 2004. All references and quotes in this section come from pages 6–7 of the report.
[24] See, for example, Ronen Avraham, Leemore S. Dafny, and Max M. Schanzenbach, "The Impact of Tort Reform on Employer-Sponsored Health Insurance Premiums," *NBER Working Paper No.* 15371 (September 2009); and Lisa Dubay, Robert Kaestner, and Timothy Waidmann, "The Impact of Malpractice Fears on Cesarean Section Rates," *Journal of Health Economics* 18, no. 4 (August 1999), pp. 491-522.
[25] McQuillan, Abramyan, and Archie, 2007, pp. 20–21.
[26] $191 billion from stopping defensive medicine, $41.65 billion from increasing output, and $9.44 billion from lowering direct tort costs by stopping abusive lawsuits. The latter figure is 59 percent of total direct tort costs of $16 billion based on the comparative international framework developed in *Jackpot Justice* (McQuillan, Abramyan, and Archie, 2007, p. 34).

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